THE DEVELOPMENT AND VALIDATION OF A CHANGE AGENT IDENTIFICATION FRAMEWORK

by

MARZANNE VAN DER LINDE-DE KLERK

Submitted in accordance with the requirements for the degree of

DOCTOR COMMERCII

In the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

PROMOTOR: PROFESSOR N. MARTINS
JOINT PROMOTOR: PROFESSOR M. DE BEER

NOVEMBER 2010

STUDENT NUMBER: 44917309

DECLARATION OF INTEREST

I declare that this thesis, **"The development and validation of a change agent identification framework"** is my own work and that all the sources I made use of or quoted have been acknowledged by means of complete references.

_____ _____

MARZANNE VAN DER LINDE-DE KLERK DATE

ACKNOWLEDGEMENTS

I would like express my appreciation to the following individuals and institutions:

- My Lord, Jesus Christ, for affording me this opportunity, carrying me each and every step of the way, and providing me with the courage, strength and insight to complete my thesis.
- My promoters, Professors Nico Martins and Marie de Beer, whose guidance, advice and support encouraged me to follow through and complete my thesis with relevant information to contribute to our field of work.
- Rina, for the statistical analysis which had to be done and redone many times, her patience and support were never-ending.
- My husband, Nico, for his understanding and patience during all the weekends I had to work; his belief in me and his your prayers made the world of difference to me.
- My dad, Hennie, for his assistance, advice, support, encouragement and unconditional love.
- My mom, Ria and Uncle Johann, whose encouragement, kind words and love will never be forgotten.
- My employer, for allowing me to conduct this research and supporting me to the end.
- Everyone else, too numerous to mention by name, who played a role.

THE DEVELOPMENT AND VALIDATION OF A CHANGE AGENT IDENTIFICATION FRAMEWORK

by

MARZANNE VAN DER LINDE-DE KLERK

DEGREE: DOCTOR OF COMMERCE (DComm)
SUBJECT: Industrial and Organisational Psychology

PROMOTER: Professor N. Martins
JOINT PROMOTER: Professor M. de Beer

SUMMARY

The main aim of the research project was to develop a change agent identification framework, to be used by organisational change management specialists to identify change agents more effectively in large organisations moving forward. To date, little research has been conducted regarding the role and identification of change agents in large organisations. In the context of the research project, the sample of change agents used, referred to employees affected by the change, spread across the organisation, assisting in communicating key messages and ensuring that their peers become change ready. A thorough 12-step empirical research process was followed, which included both a qualitative and quantitative approach. The qualitative process consisted of the development of a change agent identification framework, comprising of four dimensions, each with supportive information and/or items. The aim of the quantitative process was to empirically test the personality trait dimension of the framework with a sample group of 27 change agents and 135 employees influenced by a transformation process. This was to determine which change agent personality traits has a positive impact/effect on employee change readiness levels during transformation.

Through a rigorous analysis process, only the phlegmatic, persuasive and optimistic personality traits resulted in having some positive effect on employees during a transformation process.

In support of these findings, the literature study findings as well as the qualitative empirical research findings indicated that the persuasive and optimistic personality traits need to form part of a change agents' personality profile. The phlegmatic personality trait was not evident throughout all literature findings.

The literature and empirical results contributed towards a comprehensive understanding of the way in which individuals should be identified as change agents in large organisations. The developed framework should assist industrial and organisational psychologists in the future to identify individuals as change agents, more efficiently. Recommendations were made on the future expansion of a knowledge base for organisational change agents.

KEY TERMS:
Organisational change, change agents, change champions, change leaders, change management, framework, personality traits, skills, knowledge, change agent network, occupational personality profile

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

CHAPTER 1: OVERVIEW OF THE RESEARCH

1.1 BACKGROUND AND RATIONALE FOR THE RESEARCH

In 1513, the researcher and philosopher, Niccolo Machiavelli, made the following memorable statement: *"There is nothing more difficult to plan, nor more doubtful of success or more dangerous to manage than the creation of a new order of things"* (Rogers, 2003, p.1). What is of interest is the date on which the statement was made. As early as 1513, negativity, uncertainty and doubt went hand in hand with change; and today still, change introduces chaos, difficulty, uncertainty and doubtfulness. Change undeniably has a tremendous impact on people. Becoming accustomed to a new idea or way of doing something is always difficult, even when considering the benefits.

Nowadays, organisations are employing increasingly more individuals to manage change, helping employees to become accustomed to "the new order of things." No matter what the causes of or reasons for organisations engaging in transformational change, the impact on employees may be significant or disastrous to both the organisation and its employees. If employees do not accept the proposed changes in the organisation and realise the benefits, the organisation could suffer tremendously or even transform from being a market leader to fighting to remain in the market, without any competitive advantage (Rogers, 2003).

Organisations employ change management specialists to manage the impact of change (process and/or technology adjustments or changes) on the organisation. Change management specialists are concerned with the human resource and organisational elements of change. Typically, the objective of organisational change management is to maximise the collective benefits for all the people involved in change and minimise the risk of failure of implementing the change. This needs to be driven by organisational change management specialists (Rogers, 2003). The responsibilities of change management specialists in organisations, include assessing the overall organisation and the organisational units affected by the change, defining a change management strategy, identifying the impact of the change on the organisation, developing and implementing a communication strategy, describing and, if necessary, designing the targeted jobs and organisational structures, developing and implementing training and education programmes,

planning specific change management interventions, implementing those interventions and monitoring the process and impact throughout. Due to the sensitivities and complexities of a change management specialist's job, individuals in this position need to be equipped with specific competencies to drive change meaningfully in the organisation (Borysowich, 2006).

In reality, the more people are affected by the envisaged change, the more difficult it becomes for organisational change management specialists to manage the process of smooth transition and create a change ready environment for employees. Change management has become a vital activity in today's world of work. The skill of managing change has been described by numerous successful business people as one of the most important skills for managers and employees (Rogers, 2003). In large corporate organisations, nowadays it seems almost impossible to manage change as there are too few change management specialists and too many impacted employees. If change management specialists are not visible in all areas of the business, directly communicating and liaising with the impacted employees, how can the employees be prepared for change and motivated to embrace it instead of rejecting it? It goes without saying that change management specialists cannot be everywhere. If organisations could have individuals acting as so-called "change agents", throughout the organisation serving as the eyes, ears and the voice of the change management specialists, keeping their fingers on the pulse, issues, concerns and questions could be addressed more quickly and appropriate solutions implemented. It would be highly advantageous to appoint individuals in the organisation as agents of change in order to ensure a smooth transition process with which employees would be comfortable, thus ensuring optimism and commitment throughout (Recklies, 2001).

A number of definitions indicate the distinct difference between a change management specialist and a change agent. The following are some of the definitions: A change management specialist is someone responsible for managing the impact of the change on the organisation, and is concerned with the human resources and organisational aspects of change (Borysowich, 2006). A change agent is an individual who may promote change, influence and motivate others to accept the change and lead change (Tearle, 2007). According to Tearle (2007) a change agent is similar to a medical doctor, because he or she needs to diagnose the real issues emerging within his or her areas and then propose clear directed solutions. From diagnosis to the achievement of the desired end state, a change

agent fulfils the following roles: facilitator, designer, educator, marketer, observer and influencer. Change agents are also seen as catalysts that start the ball rolling. Rogers and Kincaid (1987) describe change agents as people with one foot in the old world and the other in the new world, helping employees cross the bridge to the new world and providing support throughout the journey. In a nutshell, employees who are passionate about change can represent the organisation as change agents, influencing others to accept any proposed changes.

In instances where change is properly communicated, the fears and anxieties people may experience about the change may be overcome in a specific way or it may even relieve some of the resistances employees might have**.** Employees who are passionate about change and who communicate regularly with their peers, can have a significant positive impact on the overall outcome of a transformation process. According to Wertheimer (2001), it takes a special kind of individual to act as an agent of change, because he or she needs to have certain personality traits, skills and knowledge.

The following question arises: "What are the personality traits, skills and knowledge that individuals should display in order to be successful change agents?" The literature on the topic does not seem to provide a clear answer. It is therefore necessary to determine the competencies individuals need to act as change agents, ensuring, that the right individuals are identified to drive change across a large organisation. A thorough literature study was conducted to gather as much information as possible on the above. After information had been collected and analysed, certain steps were followed in the research process in order to compile a framework with key dimensions and supportive elements to be used to identify change agents in large organisations in the future.

Many industrial and organisational psychologists specialise in the field of change management, and through experience and knowledge become change management experts in organisations, mostly fulfilling an advisory role on how to implement change in a way that is least disruptive for the organisation (Wertheimer, 2001). Through the development of a change agent identification framework, other industrial and organisational psychologists would be able to use this framework to correctly identify appropriate individuals to act as change agents, who could actively assist them to manage change more effectively and efficiently (Wertheimer, 2001). A comprehensive literature search could not provide a validated framework, either

locally or internationally. This research should therefore fill an important gap in the existing knowledge.

1.2 PROBLEM STATEMENT

No dimensions and/or supportive elements have been established in the past that constitutes a change agent identification framework. At this stage, the way in which change management specialists identify change agents may be valid but there is no formally structured model or framework in place that could guide them when searching for individuals to act as change agents.

To date, a limited amount of research has been conducted on the role of a change agent or regarding possible change agent identification methods (McNamara, 2007). The research problem can be identified as:

There are no dimensions and/or supportive elements available that constitute a validated change agent identification framework.

1.3 RESEARCH QUESTIONS

The general research question is as follows:
What are the dimensions and supportive elements that constitute a valid change agent identification framework?

1.3.1 Research questions relating to the literature review:

- **Research question 1:** What are change, organisational change and change management?
- **Research question 2:** Why is it necessary to identify change agents to manage change in large organisations?
- **Research question 3:** What are the roles and responsibilities of change agents in large organisations?
- **Research question 4:** What are the main dimensions, such as skills, knowledge and personality traits that constitute a framework identifying change agents?

- **Research question 5:** What methods/tools have been used in the past to identify change agents?

1.3.2 Research questions relating to the empirical study:

- **Research question 1:** Is the change-readiness questionnaire a reliable questionnaire?
- **Research question 2:** Is there a statistically significant difference in mean change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network?
- **Research question 3:** What dimensions and supportive elements are perceived as critical to include in a change agent identification framework from the analysis of the dimensions/perception survey and the concept mapping workshop worksheets completed by **internal and external** change management consultants?
- **Research question 4:** Which tests, surveys or methods are most appropriate to measure the verified dimensions and supportive elements?
- **Research question 5:** Are there significantly larger improvements in the change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not showing that specific trait?
- **Research question 6:** Which of the personality traits are key personality traits?
- **Research question 7:** Did employees supported by change agents possessing **all** key traits from the profile show significantly larger improvements in the change-readiness scores than employees supported by change agents not showing any of the key traits?

1.4 AIMS OF THE RESEARCH

1.4.1 General aim of the research

The general aim of the research was to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

1.4.2 Specific aims of the research

1.4.2.1 Specific aims relating to the literature review:

- **Research aim 1:** to understand the meaning of change, organisational change and change management
- **Research aim 2:** to understand why it is necessary to identify change agents to manage change in large organisations
- **Research aim 3:** to understand the roles and responsibilities of change agents in large organisations
- **Research aim 4:** to determine the main dimensions, such as skills, knowledge and personality traits, that could constitute a framework for identifying change agents
- **Research aim 5:** to understand the methods/tools that have been used to identify change agents in the past

1.4.2.2 Specific aims with regards to the empirical study:

- **Research aim 1:** to determine whether the change-readiness questionnaire can be considered a reliable questionnaire
- **Research aim 2:** to determine whether there is a statistically significant difference in change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network
- **Research aim 3:** to determine which dimensions and supportive elements are perceived as critical to include in a change agent identification framework from the analysis of the dimensions/perception survey and the concept mapping workshop worksheets completed by **internal and external** change management consultants

- **Research aim 4:** to determine which tests, surveys or methods would be most appropriate to measure the verified dimensions and supportive elements
- **Research aim 5:** to determine whether the improvement in change-readiness scores of the group supported by change agents possessing a specific trait from the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not show a specific trait from the ideal profile
- **Research aim 6:** to determine which of the personality traits are key personality traits
- **Research aim 7:** to determine whether there are significantly larger improvements in the change-readiness scores of employees supported by change agents possessing **all** key traits from the profile than employees supported by change agents not showing any of the key traits

1.5 THE PARADIGM PERSPECTIVE

1.5.1 Defining the paradigm perspective

According to Mouton and Marais (1994), a paradigm perspective refers to the intellectual climate and variety of metatheoretical values or beliefs and assumptions underlying the theories and models that form the definite context of this research. Their origin is mainly philosophical and is not meant to be tested.

1.5.2 The discipline and subdiscipline of this research

This research focuses primarily on the discipline of psychology because this study conducted in the field of human behaviour. Human behaviour was researched by means of thoroughly structured, descriptive and exploratory research. The sub-discipline focuses on the field of industrial and organisational psychology, and this research project is concerned with determining the appropriate dimensions and associated items necessary to create a framework in order to identify change agents in the organisational context.

1.5.3 Applicable psychological paradigms

The first evidence of this school of thought was found in the words of Watson (1913). He stated that in order for research to be truly scientific in the field of psychology it is necessary to observe behaviour in a structured and planned way (Stratton & Hayes, 1993). This research lies within the domain of the behaviourism and within the trait theory of personality. The behaviourism approach focuses on the perception or idea that certain behaviour is displayed by means of a series of different influences. A well-known theorist, Bandura (1977), indicated that behaviour is generally influenced by environmental factors which include an individual's modelling of others' behaviour. Even if individuals do not obtain any formal qualification, life skills and competencies learnt throughout life are extremely valuable and provide individuals with different coping mechanisms when faced with challenges along the way (Meyer, Moore & Viljoen, 1989). In order to develop a change agent identification framework, it was important to understand what behaviour needs to be displayed by individuals in order to consider them as change agents. As indicated by Meyer *et al*. (1989), life skills and learnt competencies play a significant role in developing certain coping mechanisms. In shifting the focus to change agents specifically, it was also important to determine how these individuals cope in changing situations, how change ready they should be and how certain behaviour displayed by them can be detected.

The trait theory of personality suggests that individual personalities are composed broad dispositions. It focuses on differences between individuals and emphasises that the combination and interaction of various traits forms a personality that is unique to each individual (McCrae & Costa, 1997). Within the context of this research the quantitative section focuses on the validation of specific change agent personality traits.

1.5.4 Applicable metatheoretical concepts

Metatheoretical concepts are regarded as assumptions focusing on certain theories, models and paradigms applicable to this research. These concepts are part of an intellectual climate, and the concepts are known as certain values or beliefs held by someone practising in that particular field. These beliefs or values are not meant to be tested (Mouton & Marais, 1994). The following are viewed as metatheoretical concepts:

1.5.4.1 The role of the Industrial and Organisational Psychologist

Industrial and organisational psychologists apply the principles of psychology to issues relating to the work situation of relatively well-adjusted adults in order to optimise individual, group and organisational wellbeing and effectiveness (Guion & Gottier, 1965). Many industrial and organisational psychologists specialise in the field of change management, focusing on the effectiveness of an individual, group or organisation as a whole during times of change. Since people respond to change in different ways, many psychological factors come into play during a transformation process and it is best to have a psychologist on board to manage the "people side" of a transformation process (Wertheimer, 2001). Industrial psychologists working as change management specialists have become increasingly popular in the last few years, helping employees cope with change and assisting the organisation to implement change in a way that is the least disruptive. Industrial psychology involves the scientific relationship between humans and the world of work, in the process of making a living, the psychological issues and effects of this relationship and its impact on the external world. Industrial and organisational psychology is also an application or extension of psychological principles applied to solving problems relating to human beings operating in the context of business and industry (Guion & Gottier, 1965).

1.5.4.2 Change and change management

Van de Ven and Poole (1995) defines change as one type of event, resulting in the empirical observation of difference in form, quality or state over time in an organisational context. In simpler terms, change occurs when something becomes different. To contextualise, the field of this research related to organisational change and the focus was on the development and validation of a framework to identify change agents to more effectively, assist large organisations to become change ready.

Change management is a set of behavioural science-based theories, values, strategies and techniques aimed at planned change of the organisational work setting in order to enhance individual development and improve organisational performance, by identifying organisational members' on-the-job behaviours (Porras & Robertson, 1992). Change management refers to a systematic approach that deals with change, at both individual and organisational level. Change management comprises of three different elements involving adapting to, controlling, and effecting change. A proactive approach in dealing with change is at the core of all three

elements. In an organisation, change management refers to implementing procedures and/or technologies to deal with changes in the competitive and demanding business environment. Change management focuses more on people than anything else, and entails guiding and nurturing human capital because the very success of any change initiative depends on the people affected by the change (Beekdal, Hansen, Todbjerg, & Mikkelsen, 2006).

1.5.5 Applicable concepts and constructs

The following concepts formed an integral part of this research:

1.5.5.1 Industrial and organisational psychology

Industrial and organisational psychology is mainly known as a diverse field incorporating other disciplines such as social psychology and personality psychology. In general, industrial psychologists focus on the three interdependent categories, namely work, worker and workplace. Specialist areas such as psychometrics, coaching, development, organisational development and change are included in these categories. Change agents can assist change management specialists in detecting issues and concerns more efficiently across the organisation by means of regular interaction with employees affected by change. The feedback received from change agents could assist change management specialists to analyse employee behaviour through applying the skills and knowledge of an industrial psychologist. Hence, through the development of a change agent identification framework, change management specialists will be able to use this framework to more effectively identify individuals to act as change agents, because they will be aware of the individual characteristics they should be on the look out for in the organisation (Wertheimer, 2001). As mentioned previously, to date, no South African or international framework has been established through previous research. Hence this research should help to fill a gap in existing knowledge.

1.5.5.2 Change agents

The saying, “The only constant thing about systems or even life is change”, has been heard many times. In every domain of life humans are confronted with change. The way individuals deal with change and manage it, is basically up to each individual. The following questions arise here: “Which individuals serve or act as potential change agents, what are the roles and responsibilities of these individuals? What does a change agent look like”? A change agent in the business context does not

refer to the manager, supervisor or even the change specialist, but to any individual who plays a significant part in designing, running, improving and communicating the proposed change (Egan, 1985). Change agents are individuals who can promote change and motivate others to accept it. They are individuals who have the characteristics to lead the change and who are comfortable with whom they are. Change agents are usually people who understand the impact of change on people's lives as well as the benefits thereof (Perme, 1999).

The role of change agents is generally seen as dealing with the softer issues, but sometimes also includes a number of tangible "hard" objectives. Change agents are not seen as objective third parties that are part of a team, but are part of a group and like any other member of the team take part in discussions about, and decision making on general issues. Change agents do, however, provide guidance to team members and are usually regarded as the people others listen to (Hutton, 1994).

1.5.5.3 Framework

In developing a change agent identification framework, the focus was on various concepts verified by subject matter experts. Shields and Tajalli (2006) describe a conceptual framework as one built from a number of concepts linked to a planned or existing system of methods, behaviour, functions, relationships, and objects. In computing terms a conceptual framework could be deemed to be a relational model. A conceptual framework is known as a type of intermediate theory that has the potential to connect to all aspects of inquiry such as problem definition, purpose, literature review, methodology, data collection and analysis. According to Shields and Tajalli (2006) frameworks are linked to particular research purposes or approaches such as exploration, description, gauging, decision making and explanation/prediction. When the research purpose or approach and framework are aligned, other aspects of empirical research such as the choice of the methodology to be used, *inter alia* surveys, interviews, the analysis of existing data, direct observation, focus groups and type of statistical technique, become obvious to the researcher.

1.6 METHODOLOGICAL ASSUMPTIONS / BELIEFS

Methodological convictions concern the nature of social science and scientific research. Methodological beliefs are no more than methodological preferences or assumptions about what is known as effective research (Mouton & Marais, 1994). The following are the methodological assumptions/beliefs affecting the nature and structure of this research:

1.6.1 The sociological dimension

The sociological dimension focuses largely on the literature and research results of researchers who have conducted similar research in the past. This research was analytical and experimental, and followed a structured descriptive and exploratory approach (Mouton & Marais, 1994). This approach will be explained in detail later on.

1.6.2 The ontological dimension

Ontology is known as the reality or domain of the study. When used in psychology, it refers to the study of humankind and all its diversities (Mouton & Marais, 1994). The objective of this research was to develop a framework of applicable behavioural elements to be used by future change management specialists to identify change agents more effectively

1.6.3 The teleological dimension

Mouton and Marais (1994) suggest that research should be to the point and the objectives clearly defined. The problem statement forms the foundation of the research and should be well thought through. In this study research problems were described and the goal was clear, namely: To establish a change agent identification framework by following a comprehensive qualitative and quantitative research process and methodology.

1.6.4 The epistemological dimension

This dimension is regarded as the most critical in social science, and is referred to as the ideal of science, also known as a search for the truth (Mouton & Marais, 1994). In order to approximate the truth, it is crucial for internal and external change

management specialists to objectively verify the dimensions and associated items of a proposed change agent identification framework. The epistemological dimension also focuses on factors influencing the internal and external validity of the research project. Internal and external validity should be managed to ensure that the research results are regarded as valid. Certain ethical principles are essential, taking internal and external validity implications into consideration. According to Isaac and Michael (1971), internal validity refers to how well the study was conducted and how confidently one can conclude that the change in the dependent variable was produced solely by the independent variable and not extraneous variables. Examples of extraneous variables that could have an impact on the internal validity of the study include history, maturation, testing and selection (Mouton & Marais, 1994). In this study a number of ethical principles were established to guide the researcher and help her to put contingency plans in place to prevent the extraneous variables from influencing the internal validity of the research project.

External validity refers to the extent to which the results of this research can be generalised to other groups, people or settings. The most common factors that could influence external validity include pretesting, multiple treatments or the setting in which the research takes place (Isaac & Michael, 1971). For this study in particular, one factor that could have significantly influenced the validity of the results was the setting, with change agents functioning in different business units/divisions and in different circumstances in the organisation as well as certain business decisions taken during the transformation process. All these factors were taken into consideration throughout the study and reported.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

According to De Vos, Delport, Fouche and Strydom (2002) a research design is a plan or blueprint of how one intends conducting the research. Research design therefore refers to the research questions, formulates a research problem as a point of departure and focuses on the logic of the research. The research design influences the research activities such as what data to collect and how. An exploratory and descriptive research design was followed, in this study including multiple research methods in order to comprehensively explore change agent

identification elements and ensure that a valid and reliable research process was followed.

The research design chosen for this research project is known as a comparison group pre/post-test design. The dependent variable (the change-readiness improvement scores of impacted employees) was measured at two different levels of the independent variable.

1) Employee change-readiness improvement scores were determined in cases where employees had been supported by change agents possessing a specific trait from the ideal profile.
2) Employee change-readiness improvement scores were determined in cases where employees were supported by change agents not possessing a specific trait from the ideal profile.

The ultimate goal of the empirical research phase was to determine whether there was significantly larger improvement in employee change-readiness scores in instances where change agents displayed specific personality traits versus those employees supported by change agents not displaying those specific personality traits as per the ideal profile of a change agent. Two groups of employees were compared by determining pre-test and post-test ADKAR change-readiness assessment scores for each of the change agent personality traits. All employee pre-test results served as an anchor, making it possible to improve the two employee groups in terms of their improvement scores. A detailed process description and the reasons for specific steps followed in the research process regarding the above will be provided in Chapter 4.

Figure 1.1: Research approach

1.7.2 Research approach

A combined qualitative and quantitative research approach was followed in the research project. This method is known as a “multi-phased approach”, as described by Creswell (1994). The research started with a quantitative process, followed by a qualitative process, and lastly, a quantitative process was included once again, testing or validating the qualitative process information. This approach is mainly used when the researcher proposes following a qualitative and quantitative research approach.

Firstly, a quantitative process was followed, consisting of the completion of the ADKAR change-readiness assessment by a sample group of employees in the procurement and supply chain function of a large organisation.

Secondly, a triangulation approach was followed for the qualitative research phase of the research project, and included:

1) thorough literature review
2) use of a survey questionnaire
3) a concept mapping process

According to Mouton and Marais (1994), triangulation refers to the use of multiple methods of data collection with the view to increasing the reliability of observations. Neuman (2002) indicates that there are several types of triangulation, the most common being triangulation of measure. This type of triangulation refers to multiple measures of the same phenomenon, by measuring something in more than one way. This allows the researcher to see various aspects of a certain phenomenon. The advantages of this approach convinced the researcher even more that this approach would be ideally for the study.

According to Neuman (2002), some of the advantages of this method are that:

1) it allows for more accurate results
2) it can help to uncover the deviant or off-quadrant dimension of a phenomenon
3) the use of multimethods can lead to the integration of theories

Thirdly, on completion of the qualitative research phase it was essential to test whether verified qualitative information was indeed valid, by testing the information obtained. All of these steps followed in the quantitative research phase will be explained in detail in chapter 4.

Steps in the process of the quantitative research phase are contextualised as follow:

- Initially, in 2007, individuals in the procurement & supply chain function of a large organisation completed a change-readiness questionnaire known as the ADKAR. This was done to identify individuals as change agents from the group affected by change. When the results of the questionnaire had been analysed, the individuals who had indicated a high level of desire to change were identified as change agents to assist the change management team to drive the change initiative in their respective areas of the business.
- Through the developed change agent identification framework emerging from the process followed in the qualitative research phase, test batteries, surveys and methods were selected to measure the dimensions in the developed framework.
- The group of change agents were asked to complete an Occupational Personality Profile (OPP) to determine which of them matched the profile of an ideal change agent in terms of personality traits as per the developed framework.
- After the OPP results had been analysed a distinction was made per personality trait and subsequently for all personality traits, between those individuals that matched the ideal profile of a change agent and those who did not.
- All the change agents were then requested to ask five of their peers in their working environment, whom they supported throughout the change initiative, to complete the ADKAR change-readiness questionnaire once again (post-test). This served as a post-measure to determine whether the improvement in the change-readiness scores of the group of employees supported by the change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group of employees supported by change agents who did not meet the ideal profile. The reasons for change agent selecting only five employees within their respective areas to complete the post-test ADKAR was that each change agent had easy access to at least five employees that had been influenced in their areas.

1.7.3 Qualitative research phase

1.7.3.1 Participants

The focus on the qualitative research was two sample groups:

1) One group consisted of change management specialists working as external consultants in the project management environment. A sample group of 30 was initially targeted, but only 15 questionnaires were returned.
2) The second group consisted of change management specialists in a large organisation mostly involved in large-scale, organisation-wide projects, as internal consultants of the business. These participants were asked to participate in the concept mapping exercise, and the sample comprised 15 change management specialists.

1.7.3.2 Measuring instruments

Since only limited research is available on the concept "change agents", the researcher had to rely upon qualitative and quantitative information obtained from the South African sample to ensure that all possible factors and dimensions were considered and covered in the process through the following:

- **Explorative qualitative perception questionnaire (appendix D).** This questionnaire was sent to 30 external change management consultants and 15 questionnaires were returned. These individuals were required to provide information on various dimensions which they deemed change agents should have as part of their profile. All the questions were therefore open-ended, in order not to limit the input obtained from the participants.

- **Concept mapping.** Concept mapping refers to the method with which people's ideas on a certain topic in graphical form can be clarified and described. By mapping concepts in pictorial form it it easier to understand the relationship between the different concepts. The technique is especially useful for the development of a conceptual framework (Trochim, 2002). Fifteen internal change management specialists participated to verify which elements should form part of a change agent identification framework and which should be eliminated by discussing those elements from the qualitative perception questionnaire in focus groups. There was no time limit placed on the duration of the session, and it ran for four hours.

1.7.4 Quantitative research phase

1.7.4.1 Participants

1) Initially, in 2007, 100 employees were identified as change agents through the completion of a change-readiness assessment, known as the ADKAR. Individuals displaying a high level of desire to change, as indicated on the ADKAR assessment's five-point Likert-type scale, were identified as change agents. For a number of reasons, as explained in chapter 4, this group of 100 change agents decreased to 27. The remaining 27 were requested to complete the OPP questionnaire because this questionnaire measured almost all the personality trait elements in the ideal profile developed through the qualitative research phase.
2) A sample group of 135 employees (five per active change agent), supported by the remaining 27 change agents, was requested to complete the ADKAR questionnaire a second time, in order to once again determine their change-readiness scores (post-test). The reasons for requesting only 135 employees to complete the ADKAR once again will be discussed in chapter 4. The information was necessary to determine whether the improvement in change-readiness scores of the group supported by change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not meet the ideal profile.

The research hypothesis, answered by the quantitative research phase, will be formulated in chapter 4.

1.7.4.2 Measuring instruments

- **Occupational Personality Profile (OPP).** The OPP is a personality test developed for use in industrial and organisational settings. It was introduced in South Africa in 1995. South African-based research findings on reliability coefficients are provided in the next section. Since 1995, the OPP has been widely adopted by various South African organisations. It measures nine different personality dimensions in addition to the distortion scale/supportive elements, and consists of 98 items.

- **ADKAR change-readiness assessment.** At the end of 2007, a number of change-readiness assessments were reviewed before it was decided to make use of the ADKAR assessment. The reasons for selecting the ADKAR assessment and background regarding this assessment will be highlighted in chapter 4. The ADKAR represents the following dimensions / categories to an employee's readiness to change: **A**wareness, **D**esire, **K**nowledge, **A**bility, **R**einforcement, all linked to the proposed change (Hiatt, 2006). These five dimensions are linked to the following:
    1) **Awareness of the need to change.** This relates to the level of understanding of the business, customer or competitor issues that have created a need to change.
    2) **Desire to change.** This concerns the level of understanding of the impact change will have on the individual as well as the his or her motivation and commitment to change.
    3) **Knowledge of the change and how to change.** This involves the level of understanding of skills and behaviours required in the new environment.
    4) **Ability to perform during and after the change.** This relates to the level of proficiency in terms of managing a new environment and all related factors that the changes will effect.
    5) **Reinforcement of change.** This entails the level of agreement/confidence in terms of adequate mechanisms, processes and/or procedures in place to sustain change (Hiatt, 2006).

1.8 RESEARCH VARIABLES

The following were identified as the variables applicable to this research project: This research project intended to determine whether **improvement in change-readiness scores (dependent variable)** of the group supported by **change agents possessing a specific trait from the ideal profile (independent variable)** was significantly larger than the improvement in the change-readiness scores of the group supported by change agents not possessing a specific trait from the ideal profile.

1.9 UNIT OF ANALYSIS

One of the most significant factors in any research project is the unit of analysis. It is a major entity on which the researcher's analysis in the research project is based. The following are examples of a unit of analysis (Trochim, 2002):

- individuals
- groups
- artefacts (books, photos or newspapers)
- geographical units (towns, census tracts or states)
- social interactions (dyadic relations, divorces or arrests)

The unit of analysis for this research project was as follows: Individuals in a group (internal and external change management specialists / consultants) as well as the sample of change agents and employees in the procurement and supply chain function of a large organisation undergoing major transformational change formed the most vital part of the research project.

1.10 DATA ANALYSIS

Comprehensive data analysis was performed to determine the following:

1) the number of appointed change agents who matched the ideal profile of a change agent in terms of personality traits
2) whether the improvement in change-readiness scores of the group supported by change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not meet the ideal profile
3) the level of statistical significance in terms of larger improvement of employee change-readiness scores for each of the seven personality traits change agents could display, in order to determine which of the seven personality traits could be identified as **key** personality traits
4) whether there was a significantly larger improvement in employee change-readiness scores when supported by the change agents possessing **all** key traits by comparing the ADKAR pre-and post-test results

The research analysis methods adopted are explained in detail in chapter 4.

1.11 ETHICAL RESEARCH PRINCIPLES

It was essential to include the need for ethics in research because human beings are usually the objects of studies in social sciences. For many researchers in the social sciences, the ethical issues are pervasive and complex, since data should never be obtained at the expense of individuals. Any person involved in research needs to be aware of and understand the general agreements relating to proper and inappropriate research (De Vos *et al.,* 2002). Ethical principles/guidelines serve as standards according to which each researcher should evaluate his or her own ethical conduct. Ethical principles should be internalised in the personality of the researcher to such an extent that ethical guided decisions become part of the way in which he or she conducts research. Some of the best-known ethical issues include harm to the respondents, informed consent, deception of the subjects, violation of privacy and the competency of the research amongst others (De Vos *et al.,* 2002). The research principles formulated and communicated for this research project will be indicated in detail in chapter 4.

1.12 RESEARCH METHOD

Section 1.8 outlined the approach followed during the research project and indicated what measuring instruments and sample sizes of participants were involved during each step. To summarise, the research phases consisted of the following:

- **Phase 1: literature conceptualisation/theoretical review**
  - This phase comprised three steps, namely the reporting on three theoretical aspects of the field of study. These steps will be outlined in chapter 4.

- **Phase 2: empirical research**
  - This phase comprised of three subphases depicted in figure 1.1, namely
    - The initial quantitative subphase involving two steps.
    - Followed by a qualitative subphase entailing three steps.
    - Another quantitative subphase, consisting of seven steps.
  - These subphases and their various steps will be explained in chapter 4.

- **Phase 3: conclusions, limitations and recommendations**
    - This phase consists of three steps, including the overall research conclusions, research limitations and possible recommendations.
    - These subphases and their various steps will be highlighted in chapter 4.

1.13 THESIS LAYOUT

The layout of the chapters in this thesis is as follows:

- **Chapter 1.** The background on the research, problem areas, research objectives, significance, hypotheses and the psychological paradigms was provided.
- **Chapter 2.** The meaning of change, organisational change and change management will be discussed.
- **Chapter 3.** The concept "change agent", personality traits, skills, knowledge, level of desire to change, etc., and the roles and responsibilities of change agents in large organisations will be explored. Also, past approaches/methods used to identify change agents and the amount of evidence available according to the literature and possible dimensions and associated elements included to identify change agents in the past will be explained.
- **Chapter 4.** A description of the methodologies used will be provided. This includes the research design, type of research, data collection method(s), and sample group and research analysis.
- **Chapter 5.** All the research results will be explained in the different subsections.
- **Chapter 6:** Conclusions will be drawn from the results and limitations noted in the research and recommendations made for future research.

1.14 CHAPTER CONCLUSION

This chapter provided insight into the background to the research that was conducted as well as the applicable research aims, questions, hypothesis, paradigms, methodology and chapter layout. The foundation of all chapters to follow was highlighted by contextualising the research approach and setting the scene accordingly. This was necessary to ensure that from the outset, the researcher would work towards making a contribution to the field of industrial and organisational psychology by conducting this research.

CHAPTER 2: UNDERSTANDING CHANGE, ORGANISATIONAL CHANGE AND CHANGE MANAGEMENT

2.1 INTRODUCTION

"Most people hate any change that doesn't jingle in their pockets."

-Japanese Proverb -

The modern era is characterised by change. This is not unusual in the history of humanity. However, what is different is that change is now managed by humans and people are now more prone to change than ever before (Diefenbach, 2005). Many people perceive change as an increase in their workload as job security and real earnings after inflation decrease. Today, it is all about financial success. For many organisations, financial considerations are often one of the reasons for change. Even in cases where employees have been negatively affected, many organisations still continue implementing major change interventions (Robbins, 2005). Many organisations have failed to implement change successfully because individuals in the business were not involved and properly or thoroughly consulted during major transformational change. The concept "managing change" was introduced many years ago in an effort to focus on the impact change has on people. According to Robbins (2005), this is also referred to as the softer side of change.

The above illustrates that even though change is managed today, many people have still been negatively impacted by doing so. It is therefore critical to ensure that change is managed appropriately. The aim of this research project is to provide a tool that organisations can use to manage change more effectively in the future.

Each person is an individual in his or her own right, because of certain values, behaviours, cultures and beliefs. One only has to consider humanity, *inter alia* humankind, civilisation, kindness, the human race amongst others - in short, the way in which people do certain things, each person's daily life consists of certain elements of routine in the execution of his/her work functions (Dent & Barry, 2004). Routine provides stability, and a sense of knowing what to expect in various situations (Robbins, 2005). Routine is also known as knowledge and knowledge can

be routinised. Without daily routine in their lives most people experience life as disorganised, hectic and chaotic (Van Tonder, 2004).

Sudden changes in routine can leave a person feeling uncomfortable and nervous at the same time. Change can turn an individual's life upside down, and is one of the reasons why today there is still so much stereotyping relating to change all throughout the world. Life is currently lived in an "age of discontinuity", with the only constant in life being change, taxes and death. Back in the 1950s, the past was a pretty effective indicator of how the future would be. Tomorrow was essentially an extension of yesterday and today. This is no longer the case, because change happens on a daily basis and is becoming increasingly faster (Van Tonder, 2004).

Change is something that forces people out of their comfort zones. It is sometimes unfair and inconsiderate and does not respect human beings. Change is almost like a marriage, for better or for worse and requires an adjustment period varying from one individual to the next. It is uncomfortable to change from one state, the status quo to the next or new way of completing tasks or doing things, because it influences the level of control people have over their lives (Dent & Barry, 2004). Change has a rippling effect on those who will not let go of the past. Even a roller coaster ride can be extreme fun if one knows when to bend to the side to create new balance. In many instances, change is not facilitated by the statement "just hang in there" but with the statement "you can make it." Change cannot be fixed by crying, worrying or mental tread milling. Change is accepted by those victorious individuals and not by people who allow themselves to become the "victims" of change - this is a personal choice (Robbins, 2005).

The aim of this chapter is to provide a clear understanding of what change and change management are and ultimately to answer the following research questions:

1) What is change?
2) What is organisational change?
3) Why is it necessary to manage change in large organisations?

2.2 UNDERSTANDING CHANGE

Change, in general, has always been part of the human condition. Change is happening all around us, especially in recent years. A few examples include increased global competition, technological advancement and declining resources. Some implications of worldwide change may evoke less favourable responses such as global warming, overpopulation, increased ineffectiveness of social institutions and even pollution (St-Amour, 2001). The only noticeable difference regarding change is the pace at which it occurs now, and it is expected to become even faster, affecting every part of life. In many instances, the day and age we live in is changing at such an enormous speed that people sometimes do not have time to adapt and adjust before the next change is upon them. Sometimes change is planned and people have sufficient time to prepare themselves in advance, but in other instances change is unexpected and people have to adjust right on the spot (Laycock, 2002).

Change per se is happening at a much faster pace than it used to in the 1980s and 1990s. Anyone who does not keep up with the pace, will ultimately be left behind and lose his/her competitive advantage in the business world. Those who keep abreast of the pace of change will constantly reap the benefits (van Tonder, 2004).

2.2.1 Defining change

There are many definitions of change is and most of which are interlinked.

Ford and Ford (1994) see change as a sequence of activities emanating from disturbances in the stable force field surrounding the organisation, object or situation. Van de Ven and Poole (1995, p. 511) define change by looking at its end result: “Change, one type of event, is an empirical observation of difference in form, quality or state over time in an organisational entity.” Change can be viewed from an individual perspective, because new human behaviour may be required. It can also be seen from a business perspective, because it may imply new business processes or systems. From a societal perspective it can be viewed in terms of changes in public policies or legislation (Worren, Ruddle & Moore, 1999).

This indicates that change occurs in all areas of life and that change should be understood in the context in which it occurs.

Powell (2002, p. 2) has the following to say about the shift in new technology: “It will be messy and it will be confusing, and we will get a lot of it wrong and we’ll have to start over, but that is the creative process that is the evolutionary process.” Planned change is usually linear, because it focuses on all the steps in sequential order right through to the final step. However, change is usually implemented in just the opposite way - it is messy, timelines are not always met, people do not co-operate and unexpected decisions are made because of unanticipated consequences. Implementing change is not always a smooth process. Even though this process is usually messy, it is crucial to have a plan in place in order to remain focused on the change goal and end state (Burke, 2002).

Van Tonder (2004) provides a generic view by indicating that change can be seen as a process, and change is evident in the difference of a certain state. This indicates that change cannot be implemented successfully overnight. It is a process that requires a lot of preplanning before entering the execution phase. According to Robbins (2005), change occurs when something becomes different and planned change involves change activities that are intentional and goal oriented. Planned change is ultimately concerned with changing individual behaviour in order to respond to the changes the environment generates.

No change definition is perfect or even beyond criticism, but each definition ultimately has the same idea, namely that transformation of some or other kind takes place. It is evident from the above that most definitions of change contain some of the following: Planned or unplanned, disturbance, difference in form, shift, opposite and messy.

2.3 UNDERSTANDING ORGANISATIONAL CHANGE

Organisational change has a profound impact on the individuals in the organisation. Today, most organisations have accepted that the only constant is change. Continuous change is often viewed as “white-water turbulence” that forces the leaders of an organisation to examine the vision, values and essence of what they stand for (Beckhard & Pitchard, 1992).

According to Burke (2002), after the mid-1900s more researchers started focusing their energy and research capabilities on organisational change, and there was a wealth of literature on organisational, societal and cultural change. Through studying the management of organisational change it was found that the focus of past literature findings were sometimes not aligned with the essence of organisational change. Many organisations fell into the trap of defining and understanding change as “organisational change versus individual change.” In so doing, many organisations failed to implement change successfully in the past because organisational and individual change should not have been weighed up against each other or seen as competing with each other (Burke, 2002). A lack of participation, commitment, communication and involvement on the part of employees on account of the above misfit had serious repercussions for organisations (Beer & Nohria, 2000). St-Amor (2001) supports the above by indicating that most changing organisations struggle immensely with people-related issues because of the misalignment of different functional realities relating to management moving to the desired state at their own individual pace without moving together as a leadership team. Misalignment between different personal responses to change may lead to confusion, lack of commitment and high levels of resistance to change across the organisation. Misalignment may have a negative impact on individuals and the organisations.

Every employee needs to face and deal with change in his or her own way. This also depends on the impact change has on each employee, as well as on his or her beliefs, values and norms which are influenced by it. Every organisation is affected by the context of individual-level change, since the rate of organisational change is determined by the rate at which individuals deal with, accept and support the change (Naisbitt & Aburdene, 1990). The interdependence between individual and organisational change is currently unknown because many managers are still unaware of the need to focus on individuals in the change process, and therefore organisations repeatedly fail (Beer & Nohria, 2000).

Managing organisational change requires a clear understanding of what organisational change is, hence the importance of defining the term “organisational change” properly.

2.3.1 Defining organisational change

Although change was defined in the previous section it is necessary to understand the meaning of organisational change because focus of this research is in the context of organisational change.

Organisational change is literally as old as organisations themselves. The first change recorded can be traced back to the Old Testament in the Christian Bible. During the biblical times, pyramidal organisations were formed where many changes took place. The first scientific research conducted on organisational change was back in the late 1800s and early 1900s. This research was done by Taylor (1911). In his book, *Scientific Management*, Taylor (1911) explained an organisation in terms of a machine, because he was studying a manufacturing organisation. He made use of many scientific terms and principles and labelled his research *"scientific management."* His scientific research approach included the following five principles: data gathering, worker selection and development, the integration of science, the trained worker and re-division of the work of business. Taylor (1911) proved numerous times that his research approach was significant. Many organisations that followed his approach when dealing with change failed because managers applied the approach inappropriately to gain quick successes. Taylor's approach then became more controversial; some organisations supported his approach strongly while others viewed it as insignificant. It is interesting to note that Taylor was viewed as the first real "change management theorist" in history. He believed strongly that adapting a rational, scientific approach would provide the best opportunity for change (Taylor, 1911).

Plant (1987) conducted extensive research on organisational change, employee commitment and leadership. He indicated that change is undoubtedly painful process for any organisation, no matter how small or large. As soon as change impacts on core values and significant established systems with which employees are comfortable, emotional and technical factors came into play. Porras and Robertson (1992, p. 723) provide the following comprehensive definition of organisational change: "Change is a set of behavioural science-based theories, values, strategies and techniques aimed at the planned change of the organisational work setting for the purpose of enhancing individual development and improving organisational performance through the alteration of organisational members' on-the-job behaviours." From this definition, it is clear that a shift takes place. This may refer to

current organisational behaviour shifting to the ideal organisational performance by improving certain capabilities and skills of employees in the organisation.

According to research conducted by Moran and Brightman (2000), the following observations were made: Firstly, change is nonlinear, and often seems confusing and endless. Secondly, change interlinks multiple improvements in organisations. Thirdly, change is a top-down and bottom-up process. In cases where change is top down, clear direction is provided, whereas the bottom-up approach caters for participation and generates support. Lastly, organisational change is a key personal dimension because the more significant organisational change is, the more crucial it becomes to create opportunities for employees to revise and adjust their own values and beliefs accordingly (Moran & Brightman, 2000).

Organisational change mainly occurs in the context of failure or adjustment of some or other kind. In organisations, change involves the difference in the way an organisation functions, who its members and leaders are, what form it takes and/or how it allocates its resources (Huber & Glick, 1993). According to St-Amour (2001), organisational change occurs mostly as a result of mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining. Laycock (2002) argues that organisational change would have never emerged or would not have been necessary if individuals had simply done their jobs properly in the first place. Organisational change is usually triggered by the failure of people not doing what is expected of them, which leads to the organisation having to adapt continuously (Laycock, 2002). The above can also be considered a performance management issue, which does not necessarily result in organisational change, depending on the need for change.

The above definitions show that the reasons for organisational change can be debated and the reasons for managing organisational change differ from one organisation to the next. The views of these researchers indicate that organisational change is confusing but allows for realignment of values and beliefs, promotes employee involvement and allows the organisation to improve itself in order to maintain a competitive advantage in the market.

Changes in an organisation ultimately mean a change in the way the organisation functions, who its members and leaders are, what form it takes and how it allocates its resources (Huber & Glick, 1993). It is also necessary to focus on the tempo of organisational changes - in other words, on the rhythm and pattern or work activity,

because this will indicate how much and how fast an organisation will have to adapt to changes in order to maintain a competitive advantage (Van de Ven & Poole, 1995). Examining different types of change will provide an understanding of the impact change may have on individuals, because this research study focuses on the "people aspect" of organisational change. Dunphy (1996) developed five properties of change that he believed can be found in any comprehensive theory of change.

These properties are as follows:

1) a basic metaphor of the nature of organisation
2) an analytical framework to understand organisational change processes
3) an ideal change model focusing on effective functioning organisations, that focuses on both direction for change and the values used to assess the successes of implemented change interventions
4) an intervention theory that specifies exactly when, where and how to move an organisation to the ideal end state
5) a definition of the role of a change agent

According to Kuhn (1996), it is essential to understand that even when these five properties are the same across two organisations, there will be distinct differences in the change process, because this will depend on various elements, such as culture, values, vision, number of employees and levels of resistance in the organisation concerned.

Dunphy's (1996) five properties can be linked to two types of organisational changes, namely episodic or continuous change. Porras and Silvers (1991) suggest that episodic or continuous change usually emerges in organisations. These two types of change will be discussed to provide the reader with a clear understanding of the difference between the two.

Change in the business world is accelerating at a considerable rate. In the 21st century, organisations are dealing with vertical integrations, mergers, new technologies, diagnosis-related groups, re-engineering, total quality management, and so on. Past organisational successes do not guarantee future performance any longer. In the face of the intense competition in the business world today, simply meeting past performance will not result in the level of improvement in order to maintain a competitive advantage (Harrington & Harrington, 1996). If organisations

are to survive the next decade, it is critical to rethink and re-evaluate all their structures, products, processes and markets.

In summary, the most applicable reasons for undergoing organisational change relating to this research project were provided by Huber and Glick (1993). They indicated that change generally occurs in the context of failure or adjustment of some sort or other, and that by changing the way in which the organisation functions, it influences who its leaders are, what form it takes and/or how it allocates its resources. The reason for transforming the procurement and supply chain function of the organisation involved in this research project was restructuring and therefore the reasons for change indicated by St-Amour (2001) also apply. According to St-Amour (2001) organisational change occurs mostly because of mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining.

2.3.2 Types of organisational change

2.3.2.1 Episodic change

The phrase "episodic change" is used to group together organisational changes that tend to be irregular, alternating, and planned together. The assumption is that episodic change occurs during periods of disagreement when organisations are moving away from their current state (Mintzberg & Westley, 1992).

In general, a misalignment between the true nature of the current status and the perceived working environment by employees can lead to change. Episodic change tends to be uncommon; slower because of its extremely wide scope; less complete because it is seldom fully implemented, more strategic in content, more deliberate and formal than emergent change; more disruptive because programmes are replaced rather than altered; and initiated at higher levels in the organisation (Mintzberg & Westley 1992). This form of change is labelled episodic, mainly because it tends to occur in distinct periods during which shifts are caused by external events such as technological changes or a change in key individuals in the organisation (Weick & Quinn, 1999). Episodic change has a generic description that is applicable across all organisations and their diversities. If organisational change generally occurs in the context of failure to adapt, then the ideal organisation is one that continuously adapts (Weick & Quinn, 1999).

By linking Dunphy's (1996) five properties of change to episodic change, a well-rounded understanding of change theory in any organisation can be provided. Firstly, the analytical framework, which focuses on the episodic change process is usually dramatic and driven externally and occurs in an organisation failing to adapt its deep structure to a changing environment (Ford & Ford, 1994). Secondly, basic metaphors for organising episodic change indicate that organisations are inertial, and change is infrequent, discontinuous and intentional (Tushman & O'Reilly, 1996). Thirdly, the ideal episodic organisation is capable of adapting continuously. An ideal model should be in place to guide the organisation and its values to adapt accordingly throughout. This is extremely challenging but it is imperative that the implemented change model is revised frequently to ensure that it provides the organisation with direction and assist human resources to adjust accordingly (Brown & Eisenhardt, 1997). Fourthly, intervention theory in episodic change is known as "Lewinian", which means that it is linear, progressive and goal seeking and requires external interventions (Brown & Eisenhardt, 1997).

Lewin's (1951) change model remains central to episodic change today still, because the fact that change passes through a contemplation stage, means that people change before any alterations can be observed through their behaviour (Schein, 1996). Lastly, the primary role of a change agent in episodic change is to ultimately create change. The change agent focuses on internal processes and seeks points of central leverage. These individuals speak differently about the change - they communicate alternatives, reinterpret revolutionary triggers and build coordination and commitment (Kotter, 1996).

To summarise, episodic change linked to Dunphy's (1996) five properties of change provides a clear picture of how infrequent discontinuous change impacts on different areas of an organisation and also proposes how an organisation should function when faced with episodic change. Weick and Quinn (1999) indicate that the above properties linked to episodic change should be considered suggestive instead of definitive because some organisations may always agree that episodic change has a different impact on them than on others.

2.3.2.2 Continuous change

Continuous change refers to organisational changes that are grouped together and tend to be growing and increasing (Orlikowski, 1996). A common assumption made by numerous researchers in the past is that change is emergent or growing The one most distinctive quality of continuous change is that small continuous adjustments, created at the same time across units or divisions, can cumulate and create significant change. This can also refer to the well-known systems theory that states that the whole is better than the sum of its parts. Small, yet significant, changes in the organisation over a period of time may escalate, creating enormous change at the end. This process seems to be infinite (Orlikowski, 1996).

Organisations that are compatible with regard to continuous change include those built on the ideas of improvisation, translation and learning. These types of organisations usually have a number of change agents or organisational development (OD) practitioners who continuously manage change in the organisation. These people are generally regarded as creative individuals driving the change processes. This usually also involves skills development to ensure the employees are equipped with the necessary skills to stay in touch with the latest technological advances (Levinthal & March, 1993). The distinctive quality of continuous change lies in the idea that small continuous adjustments, created simultaneously across units, can create substantial change.

The following conclusions were drawn in linking continuous change to Dunphy's (1996) five properties: Firstly, the metaphor for organising change is hidden in conceptualisations of continuous change and not the reciprocal metaphor associated with episodic change. The dynamics are different in the sense that in continuous change everything changes all the time (Ford & Ford, 1994). Change is therefore constant, evolving and cumulative (Weick & Quinn, 1999). Secondly, change is a pattern of endless modifications in work processes with regard to its analytical framework. It is driven by organisational instability. Changes across the organisation cumulate continuously (Vaughan, 1996). Thirdly, the ideal organisation is capable of continuous adaptation. As mentioned earlier, because this is extremely difficult change models and interventions should be reviewed continuously (Brown & Eisenhardt, 1997). Fourthly, with continuous change, intervention theory focuses on the redirection of change that is already under way. According to Lewin (1951), change equals confusion, without an end state. Lewin's (1951) change process follows the stages evident in continuous change, that is: freeze, possessing patterns

through maps and stories; rebalance - reinterpret, relabel and resequence patterns; unfreeze - improvise through learning in ways that are more mindful.

Episodic and continuous change indicated that change starts with the failure to adapt and that it never really starts because it never stops. Hence, in order to understand organisational change, one must first comprehend the organisation's short- falls, contents and interdependencies. The focus should probably fall more on "changing" instead of "change", since this would refer to the fact that change was never "not there" and that it is ongoing (Weick & Quinn, 1999).

Various change models focusing mainly on the process/ stages of change have been developed. These will be explored next in order to grasp and define certain processes and stages as well as the meaning thereof in the context of human behaviour.

2.3.3 Organisational change models

2.3.3.1 Defining organisational change models

When an organisation decides to make a strategic change, a planning process is usually the next step, ultimately resulting in the implementation of the proposed change. The proposed change may relate to changing the way the work is done or clarifying reporting relationships through restructuring. According to Bridges (2000), organisations do not usually apply the same level of planning to personal transitions, which refers to the time it takes for individuals to accept and deal with change. The organisation needs to move from the status quo to the desired change by means of a well-designed process in order to ensure that the transition is as smooth as possible for those influenced by the change.

Over the years, many organisational models, focusing on different steps in a transition process, have been developed by researchers in the field of change. These models included organisational culture models, communication models and organisational effectiveness models. Before introducing a few of the models on change it is imperative to understand what an organisational model is and why it is necessary to use one when implementing change. Burke (2002, p. 176) defines an organisational model as a "standard to emulate, to imitate, or with which to compare" or "representation to show the construction or appearance of something."

A model is usually designed to assist the organisation to categorise, enhance understanding, interpret data, provide a common language and guide the action for change. Change models or frameworks were developed as early as the 1950s, shortly after World War II. According to Ford (1999), a model can come in many shapes, sizes, and styles. A model is not the real world but merely a human construct to help people better understand real world systems. In general, all models have an information input, an information processor, and an output of expected results.

2.3.3.2 Types of change models

The psychologist, Kurt Lewin, published two essays on behavioural change. Lewin's (1951) classic view of change focused on the role and context of the current state and of the end state after change has occurred. Lewin then compared the role and context of both scenarios and built on the outcome. This approach was his so-called "field theory" and is a well-known change model. Influencing structures, behaviour and/or systems in organisations may take years or even decades. Organisations need to find their own internal change dynamics in order to maintain synchronisation and control which is suited to their own needs. Lewin's three-step model supports the need for organisations to maintain control in the process of change. His model of organisational change focuses on unfreezing, moving and refreezing and includes a dynamic psychological process (Lewin, 1951). He recognised change at both individual and group levels, mainly because of his strong belief that organisational change is a relative concept and that there are indeed various levels of change that need to be tackled in an organisation (Lewin, 1951). Lewin's research caused many individuals to look into the concepts "change management and organisation development (OD)" as their curiosity was aroused. Friedlander and Brown (1974) provided a framework for understanding organisational change. They referred to two basic approaches: people and technology. Some years later Plant (1987) provided a model grounded in an open system theory. This model focused specifically on how input from the external environment is transformed into output-organisational performance. In essence, Porras's model is a clear description of how an organisation functions and what key elements are evident in its operations.

Another famous model is the transition model of Bridges (1991). The transition model is widely accepted by individuals and organisations because it is easy to use by understanding the change and its impacts. The model illustrates that the transition starts with the letting-go process, followed by the neutral zone which is characterised by low stability, personal stress and conflict. The last step focuses on the new

beginning, by leaning towards the future. This model has been widely used by many organisations and is seen as valuable and significant (Bridges, 2000).

Two other well-known change models are the action research model and the contemporary action research model (Cummings & Worley, 2001). The action research model includes eight steps of a change process and is also known as a cyclical process in which initial research about organisations provides information to guide further action. The main objective of this model is to help specific organisations to implement planned change and develop general knowledge that can be applied in other settings (Burke, 2002). These steps include: identification of the problem, consultation between the client and the behavioural science expert, data gathering process and preliminary diagnosis, feedback to the specific client, a joint diagnosis of the problem, a joint action planning process, implementation of the desired state and data gathering after implementation to measure success. In essence this model places significant emphasis on data gathering and diagnosis prior to action planning or implementation, as well a comprehensive evaluation process after action has taken place (Cummings & Worley, 2001).

The contemporary action research model underlines the most current approaches to planned change. During the development of this model, the focus was on movement from smaller subunits in organisations to total systems. Applying this model creates social change and innovation mostly demonstrated in global social change projects (Cummings & Worley, 2001). Throughout the development of different change models, many theorists offered new insights into these concepts. In focusing on OD, theorists agreed that an organisation should be viewed as an open system. This means that an organisation exists in constant interaction with its external environment and between its own internal elements. Organisational effectiveness can only be achieved if there is a significant degree of congruence between the organisation and various elements in the open system (Spector, 2007).

In essence, change models assist organisations to implement change in a more organised manner, and in many instances to gain an understanding of external market influences. Most models focus on human behaviour in the organisation. Each organisation should choose a model appropriate to its circumstances, size, the number of employees affected and internal and external influences.

2.4 UNDERSTANDING CHANGE MANAGEMENT

Successful change demands more than only new processes, structures or technology - it also requires the engagement and participation of people. Change management in an organisational context provides a framework for managing the people side of change. Even though change management has come a long way in the last ten years, many may wonder whether it is really taken seriously (Hutton, 1994). Change management is a painful process for any organisation. When change impacts on the core values of an organisation it is important to consider both the emotional and technical dimensions involved. Some of the primary dimensions of change management is time, the content, the context and the actual process of change (Newman, 2000). Today, change management as a discipline has become part of the mainstream business.

Change does not just happen - it is driven by a reason, thoughts or ideas. Change can impact on an organisation from outside or inside. If an organisation is influenced by external factors that require it to change, it may relate to, *inter alia,* market change, political events or natural disasters. Internally, an organisation may, for example, be faced with budget costs, interdepartmental conflicts, new systems or processes (Potts & Lamarsh, 2004).

According to Stassen (2006), many managers argue that they are individuals themselves and they know exactly what the needs, issues and concerns of people are during transformation. This is the first mistake managers can make. People have their own needs, fears, concerns and problems and it is naïve to think that people can be managed in the same way during transformation – hence the need to have change management specialists on board to manage the people side of change (Stassen, 2006). Owing to the fact that change may aggravate many emotional and psychological issues, it is recommended that the expertise of an industrial psychologist be used to drive change management (Stassen, 2006). The concept and role of an industrial psychologist were discussed in Chapter 1.

In many instances industrial psychologists act as change management specialists in organisations. This is because they are regarded as the most suitable individuals for the task, for the simple reason that they understand that different people react differently to change, and everyone has fundamental needs that have to be met. In addition, change often involves loss, expectations that need to be managed

realistically and fears that have to be dealt with appropriately (Guion & Gottier, 1965). Change management specialists understand the fact that some individuals anticipate a better future but regret what will be left behind, and some want to turn around and go back to what they are used to. Positive and negative behaviour should therefore be managed in a way best suited to the organisation and its culture (Stassen, 2006).

According to Hutton (1994), many employees travel the journey and in an effort to focus on the same vision, sweating through rough times during a transformation process, each experiences it differently. Some people see change as an adventure, others as a death sentence, and others again simply as a task that will be over in no time, with no impact whatsoever.

Even though every person is on his or her own journey, employees affected by organisational transformation cannot succeed in reaching the common vision developed by the organisation if each individual does not contribute something towards the processes to achieve those common stated goals. Some employees contribute patience and moral support throughout, others have courage and faith and others again add humour or play a significant role by motivating the employees (Hutton, 1994). According to Schalk, Campbell and Freese (1998), employees can only contribute significantly when they feel supported by their supervisors during the change efforts. Employees are also likely to become less defensive and more willing to become involved when they are supported accordingly (Van Yperen, Van den Berg and Willering, 1999).

Each organisation follows its own processes and methods in managing change effectively and views the successful elements contributing to effective change management differently. The next section focuses on comprehensively defining change management in order to gain an in-depth understanding of the way organisations deal with change.

2.4.1 Defining change management

Porras and Robertson (1992, p. 723) provide the following definition of organisational change: “Change is a set of behavioural science-based theories, values, strategies and techniques aimed at the planned change of the organisational work setting for the purpose of enhancing individual development and improving organisational performance through the alteration of organisational members’ on-the-job

behaviours." According to Hailey (2001), the process of change may take many years in order for it to become a reality with each impacted individual. Hence change does not need to always be all inclusive and can be implemented on smaller scales over periods of time. Doyle, Claydon and Buchanan (2000) disagree about this form of change management because they believe that successful change does not require spreading the milestones in the planning phase of change but rather implementing the change all at once (the "big bang" approach). Quy Nguyen (2001) disagrees with both the above change management approaches by stating that each organisation needs to find its own internal change rhythm that allows for an alternative between rapid and moderately paced change without losing synchronisation or control in the process. Change management can be viewed as a process of continuously renewing the organisation's direction, structures and capabilities in order to satisfy the needs of its internal and external customers (Moran & Brightman, 2000). Mastering techniques on how to manage change are deemed to be important in today's day and age, because marketplaces are changing overnight and technological advancements occur daily. Change management may also refer to effecting changes in a planned and managed or systematic fashion. It involves the effective implementation of new methods and systems in an organisation, which is controlled by the organisation itself (Bolognese, 2002).

It is clear from the above that there are different viewpoints on change management. As indicated earlier, every organisation has different reasons for undergoing change. It would therefore be ideal for each organisation to analyse its own situation and decide which approach would be best to follow. Each organisation is unique and should apply a change model suitable to its environment and conditions.

According to Stassen (2006, p.1) "Change management is like building a dam wall – you can show good progress even when it is done poorly, and by the time your work is really put to test, it is too late to fix it…"

The term "managing change" has at least two meanings. Firstly, it refers to making changes in a planned and managed or systematic fashion. In this instance, the aim would be to more effectively implement new methods and systems in an organisation. The changes to be managed vest within the organisation and are also controlled by it. These internal changes are often triggered by events that occurred outside the organisation or the external environment. A second explanation of managing change refers to the response to changes over which the organisation

exercises little or no control initiated through external factors. Examples would include legislation, social and political turmoil, increased competition in the market and shifting economic trends (Bennis, Benne & Chin, 1969; Hiatt, 2006).

The first time a proposed change is introduced to a group of individuals, it may be experienced differently and cause different reactions towards the message. Some individuals may regard it as a great idea and accept it, while others may agree but be hesitant about the proposed changes. Then there would always be those who do not agree with the proposed changes and will argue that it is impossible and will never work. These are the different schools of initial reaction (Kotter, 1990). All change is stressful and while some employees find it less stressful, others may even develop major health problems because of change. Many organisations follow the general change cycle developed by Kotter (1990). The phases in this cycle are as follows:

1) Establish a sense of urgency.
2) Create a coalition.
3) Develop a clear vision.
4) Share the vision.
5) Empower people to clear obstacles.
6) Secure short-term successes.
7) Consolidate and keep moving.
8) Anchor the change.

Kotter (1990) emphasises the importance of the chronological order of these phases and the fact that momentum should be maintained when implementing change. These change phases are known as “ideal” phases in a change cycle, and by following these phases change will probably be successfully implemented. According to Kotter (1990) even if a perfect change process is followed there will always be elements of concern and stress among individuals. He emphasises that it is essential for people to work through the stages of change at their own pace, in order to lessen the stress and pressures of reaching the required end state (Kotter, 1990). Stress is not all bad - a moderate level of stress can be regarded as beneficial in any change process and is seen as normal and healthy. Firstly, any improvement in any organisation that involves change affects the individual involved in change - no one can ignore this fact. Secondly, changes that seem to be minor to top management are often viewed as major change by the individuals who are affected across the organisation. Hence, employees struggling with accepting the change may experience stress levels that could disrupt people’s expectations of them. Lastly,

people who are overly stressed or reach a stage where burnout is experienced cannot focus their full attention or energy on their work (Kotter, 1990).

Each person has a certain role to fulfil in the change process (Hutton, 1994). In managing change, certain pillars need to be formed prior to the process that will serve as the foundation for managing change. These pillars are change goals, leadership, the change and journey plan, guidance, equipment and tools on how to reach the desired end state (Hutton, 1994). According to Schalk et al. (1999), managing change always starts with the individual. The individual should ensure that he or she understands and believes in the vision before he or she can join the journey with their peers.

Each organisation should choose its own methodology when managing change, this methodology should be most applicable to its organisational culture and climate. The impact of the change, size of the organisation and current context are some of the factors to consider when developing a change management approach. Suitable interventions should be designed to manage resistance to change depending on the reasons for change. The sooner change resistances are detected, the sooner mechanisms can be put in place to manage it accordingly.

2.4.2 Resistance to and readiness for change

Before focusing on resistance to or readiness for change, it is necessary to understand the difference between the two concepts. Resistance and readiness are not opposites – instead, they represent complex states, influenced by various organisational and individual factors. When faced with proposed change, the nature of change is evaluated and its impact on the organisation and on individuals are evaluated. From those evaluations, the following behaviours usually emerge - adapt to the change or resist the change (Self, 2007). According to Self (2007), organisations should focus on creating readiness for change instead of attempting to overcome resistance to it. In this section, the focus will be on understanding the core difference between resistance to change and readiness for change and possible methods to use in creating readiness for change.

2.4.2.1 Resistance to change

Organisational change efforts almost always involves some form of employee resistance. Even though experienced managers are generally aware of this fact, many still fail to take the time to systemically assess who might resist the change initiative and for what reasons. People affected by organisational change usually experience some emotional turmoil. Even changes that appear to be positive involve loss and uncertainty (Kotter & Schlesinger, 2008). Many individuals resist change because it is disruptive - it awakens fears about the future and the unknown and is unpleasant.

Various earlier researchers defined the concept "employee resistance." Zander (1950, cited in Dent & Goldberg, 1999, p.34) defined resistance to change as: "Behaviour which is intended to protect an individual from the effects of real or imagined change." Folger and Skarlicki (1999, p. 36) believed that resistance to change is: "Employee behaviour that seeks to challenge, disrupt, or invert prevailing assumptions, discourses, and power relations." Piderit (2000, p. 784) believed that the definition of the term "resistance" should have a far broader scope. She indicated that a review of past empirical research reveals three different emphases in conceptualisations of resistance - as a cognitive state, as an emotional state and as behaviour. Many "resistance to change" definitions relate to some or other kind of disruption known to people. Change has become a key part of organisational dynamics; people resisting the change will ultimately be left behind in the corporate world (Bolognese, 2002).

A well-known international organisation, known as Prosci, specialising in change management, conducted research in 2003, where 288 organisations participated in rating their ability to change (Hiatt, 2006). Participants were requested to complete a questionnaire, where they had to select the answer most applicable to them on a scale from 1 to 5, with 1 being the most rigidly opposed to change and 5 being in favour of change. The findings were as follow: Only a fifth of the participants representing the 288 organisations rated their organisation as a 4 or 5, indicating a low level of adaptability to change. More than 40% of participants rated their organisation resistant to change, with a score of either 2 or 1. These results indicate that most individuals are resistant to change, simply because it is human nature, and people feel uncomfortable when taken out of their comfort zone or when exposed to the unknown (Hiatt, 2006).

Scott and Jaffe (1988) highlighted the following four stages of reaction towards change: initial denial, resistance, gradual exploration and commitment. These stages were confirmed by Kotter (1990), because most employees move from a stage of total resistance and denial to a stage of commitment, acceptance and integration. In general, organisations seem to struggle in assisting employees moving from the stage of resistance to the next stage. Darling (1993) indicated that resistance to change is a natural, normal response since change usually involves going from the unknown to the known. In order for management to successfully lead an organisation through change it is essential to balance individual and organisational needs because organisational change is driven by personal change (Spiker & Lesser, 1995). Today, most organisational change programmes are directed towards managing resistance to change, because it is deemed to be the most common problem management faces when implementing change (Waldersee & Griffiths, 1997). According to these authors, resistance is resisted instead of being purposefully managed in many organisations.

Managing resistance to change is therefore crucial to ensure that change is implemented successfully, because the affected employees promote the change and will ultimately determine the success rate of the implemented change.

Resistance to change can be viewed as action taken by individuals and groups when it is perceived that the change that occurs could be a threat to them. Resistance may assume many forms - active or passive, overt or covert, individual or organisational, aggressive or even timid. Change is seen as something different that is believed to be for the better, even if there is no proof that the benefits of the change will be significant. People always want to see proof before believing, hence the famous saying “seeing is believing” (Schuler, 2003).

The reasons why people resist organisational change include some of the following: firstly, individuals resist change when they do not understand the implications of the proposed change. This usually occurs because of a lack of trust between the people initialising change and the employees (Argyris, 1970).

Secondly, the individuals influenced by the change believe they will lose something of value as a result of the change, and in such instances people will focus on their own best interests and not those of the organisation (Miles, 1978).

Thirdly, one of the best-known reasons why people resist change is due to their fear that they will not be able to develop the new skills and behaviours that will be required of them (Miles, 1978).

Finally, when individuals assess the situation differently from managers and cannot see the real benefits of the change for the organisation, resistance may set in (Kotter & Schlesinger, 2008). Organisational change may also require people to change too much too quickly.

According to Drucker (1954), a major obstacle to organisational growth is managers' inability to change their attitudes and behaviour as rapidly as the organisation requires. Even when managers do understand the need for change, they are still sometimes emotionally unable to make the transition (Kotter & Schlesinger, 2008).

If an organisation can guarantee benefits beforehand, employees would be more accepting of the changes. Most people prefer to remain connected to those they know, those who have taught them and those with whom they are familiar. If certain influential colleagues resist change, the individuals working closely with them will probably also resist it, because most people have a need to fit in (Schuler, 2003). Since change inevitably threatens the status quo, many leaders in the organisation may also become resistant to it because it could imply that organisational structures have to change and this will impact on their value to the organisation. This then creates the potential for other employees to gain more power at the expense of the current leaders. Internal politics suggest that the drive for change usually comes from employees who are new to the organisation and others removed from the main power structure. Often when leaders were forced to introduce change, they tended to implement first-order change because radical change (second-order change) was too threatening. Power struggles in an organisation will largely determine the speed and the quantity of change (Robbins, 2005).

There are thus many reasons why people resist change, and these should be assessed in order to ensure resistance to change is managed accordingly. In so doing, methods should be customised to ensure the success of each organisation.

2.4.2.2 Organisational resistance to change

An organisation may resist change because it is change-fatigued – in other words change is or has been happening throughout the organisation and it is therefore exhausted by all the change initiatives. The organisation may also be in a position, either financially, culturally or technologically, of being unfit to manage or welcome any change initiatives at certain stages (Del Val & Fuentes, 2003). Organisational resistance to change can be seen as a phenomenon that affects the change process in that it delays the start of the process, hinders the implementation of the change and increases the costs throughout (Ansoff, 1990). Van de Ven and Poole (1995) argue that when organisations find themselves in these difficult positions mentioned above and do not welcome change initiatives, it is actually then that they should consider changing for the better. Organisational resistance to change can also be seen as any conduct that tries to keep the status quo - in other words, the organisations will do anything in their power to avoid change (Maurer, 1996a, 1996b). In general, resistance is not always deemed to be negative, because change is not always inherently beneficial for an organisation. Resistance can also point out to managers those dimensions that are not properly considered in a change process (Waddell & Sohal, 1998).

Research conducted by Rumelt (1995), indicated that organisational resistance to change can be divided into five groups. The first group refers to the perception of the organisation's need to change. In the formulation phase, this refers to distorted perception, interpretation and vague strategic priorities. The second group refers to low motivation for the change on account of, *inter alia,* the costs involved, past failures, and different organisational interests or priorities. The third group of organisational resistance focuses on a lack of creative responses. Diminishing creative responses may be caused by the fact that the change will effect complex environmental changes, resignations of key personnel or lead to an inadequate strategic organisational vision. The fourth group focuses on resistance in driving the implementation stage. The first form of resistance that usually occurs in this group relates to political or cultural deadlock to change because of a possible misalignment between change values and organisational values. The last group focuses on leadership inaction, caused by, *inter alia,* leaders being uncertain about or afraid to change embedded routines, collective action problems or cynicism (Rumelt, 1995).

All of these factors lead to organisations resisting change, and through organisational resistance to change, individuals in the organisation resist change (Klein & Sorra, 1996). The impact on individuals and the reasons for individual resistance to change are explored next.

2.4.2.3 Individual resistance to change

According to Hullman (1995), there are many reasons why individuals resist change. He focused his research on the individual's paradigm regarding change resistance and suggested the following reasons why employees may resist change:

- Individuals are satisfied with the status quo because their current needs are being met.
- Individuals see organisational change as the main threat in their lives.
- Individuals may understand the increase in benefits and decrease in future costs if change is implemented, but that cost outweighs the potential benefits to them.
- Individuals may be resistant on account of feeling that management are using the change process for their own personal benefit and not for the benefit of the organisation.
- Employees are pessimistic about change implementation being likely to succeed.

In many instances employee resistance is created as a result of management actions on the way they pursue change. Employees who are regarded as passionate, optimistic and in favour of proposed change should be encouraged to engage with people resistant to the change and explain the reasons why it is necessary to change the status quo to a more favourable one. If employees do not feel involved, they could easily become resistant. According to Spector (2007), in order to understand how resistance to change should be dealt with in different areas of the business, the voice of the employees should not be excluded from the change process as they are the ones who know their customers, co-workers, demands and challenges in the organisation, which management may not be involved with on a daily basis.

In a longitudinal study of 500 large organisations, it was found that employee resistance is the most frequently cited problem encountered by management when implementing change (Waldersee & Griffiths, 1997). More than half the organisations that participated in this survey indicated that they experience difficulties with employees' resistance to change. Successfully managing resistance

to change is usually one of the most challenging factors facing the change initiators in an organisational change process (O'Connor, 1993). One should bear in mind that organisational change is driven by personal change and that the success of organisational change depends on individual (Evans, 1994). According to Kyle (1993), changing individual resistance to change depends on two related factors. Firstly, the degree to which an individual has control over the change and his or her ability to start, modify and stop the change process are vital. Secondly, the degree of impact the change has on individuals will determine how resistant employees become. During organisational change, individuals usually create their own interpretations of what is going to happen, how they perceive themselves and what others are thinking or intending (Coghlan, 1993).

Through individuals' own interpretations and perceptions, feelings of anger, denial or loss and grief are usually experienced. These emotions emerge as individuals may realise that the way in which they have done their work in the past may change and therefore changes and losses in role identity may lead to anger, sadness and anxiety, amongst other things (Sullivan & Guntzelman, 1991). Resistance occurs when individuals fail to adapt emotionally and hence emotions can be regarded as one of the key intervening variables (Sekaran, 1992).

Hiatt (2006) indicated that in research undertaken by the company, Prosci, the five primary reasons for employee and manager resistance to change were caused by a lack of understanding of the vision of the organisation; fear of the unknown; negative previous experiences with change; new competencies to be learned; new technology to be introduced by the change and the fear of employees losing their jobs. Managers however, were mostly opposed to change if they feared losing power and control, work overload in the long run, lack of skills to manage and drive the change process and disagreement and scepticism about the new way of doing business (Hiatt, 2006).

All of the above factors play a critical role in people unprepared for change. Questions such as, how to manage resistance to change and what it takes for people to become ready for change will be discussed in the sections to follow.

2.4.2.4 Managing resistance to change

There are various ways in which people can be helped to cope with change. Some of these include providing them with information about the need for change, possible benefits for the organisation, clear information on the processes, tools and time lines. Employees should be allowed to plan their own journey (Recklies, 2001). According to Hutton (1994) people cope much better with change if they were involved in generating it. It is therefore crucial to involve people as much as possible from the outset to make them feel part of the decision-making processes. People can easily form a sense of ownership when they understand why changes are necessary. Once all employees agree upon the way forward in managing the change, they will automatically figure out for themselves how to realise the goals. When a person becomes concerned about something, it helps to talk to someone and express feelings and emotions (Recklies, 2001).

When employees receive support for their ideas, they may be less resistant to the change. Employees receiving rewards or recognition for their involvement are more likely to act voluntarily in support of the change, which will lead to overall organisational effectiveness as well (Mintzberg & Wesley, 1992). Research by Bocchino (1993) indicated that the creation of an atmosphere in which trustful communication and collaboration can take place is essential for achieving change goals. Trust in management may also reduce feelings of uncertainty and a lack of information about the change. Furthermore, employees who trust management may support managerial values and thus tend to react more positively to the proposed changes (Martin, 1998). Other studies suggested that organisational change efforts could be more successful if employees felt supported during the change efforts. According to Eby, Adams, Russel and Gaby (2000), a work environment conducive to innovation and change is usually receptive to organisational change efforts. In instances where employees have previously been involved in planning and implementing change, this could help to reduce resistance to change and encourage employee commitment to it (Eby *et al*., 2000). Employees' trust, support for improvement and perceptions of managing organisational resistance to change can help to facilitate all change efforts. Few studies have gathered empirical data on changing attitudes before and after organisational change. Positive employee attitudes make the task of managing resistance to change less complex, and change initiators can then directly focus on ensuring that employees are ready to change, instead of managing resistance all the way (Weber & Weber, 2001).

According to Kotter and Schlesinger (2008), many managers underestimate the variety of ways in which people may react to organisational change. These authors suggested the following ways in which managers could manage resistance to change:

- **Education and communication.** One of the most common ways to overcome resistance to change is to educate the individuals concerned about the change beforehand. Communication of ideas helps people to see the need for change. This process could involve one-on-one discussions, presentations to groups, memos, reports and newsletters.
- **Participation and involvement:** If change initiators involve the relevant individuals in the design and implementation process of the change initiative, resistance could be prevented.
- **Facilitation and support:** Another way in which managers can deal with resistance to change is by regularly being supportive and re-emphasising their support for their employees. Facilitation could include providing training for new skills or simply listening to employees by means of focus group sessions.
- **Negotiation and agreement:** Incentives could be offered to active individuals with the potential to become involved in the change process. A negotiated agreement could be established between the change initiator and this person or party in order to obtain his or her buy in and commitment to the process.
- **Manipulation and co-optation:** In some instance, managers may also resort to covert attempts to influence others. Manipulation in this context refers to the selective use of information and the conscious structuring of events. Co-option is one common form of manipulation and refers to providing an individual with a crucial role in the change process because this could lead to the resistant individuals feeling valued and involved.
- **Explicit and implicit coercion.** Finally, managers can deal with resistance coercively. In this instance, people are forced to accept the change by explicitly or implicitly threatening the individuals involved (with the loss of jobs or promotion possibilities) (Kotter & Schlesinger, 2008).

The above strategies, available to managers to manage resistance to change, might work in some organisations and cultural settings but would not be relevant or applicable to all organisations. It is therefore necessary to analyse the organisation, its employees and the culture before deciding on a strategy to manage resistance to change (Kotter & Schlesinger, 2008).

Any change process can be dangerous if no one is prepared to listen, because destructive behaviour is more likely under these circumstances. Co-workers can help to prepare employees for change and listen to their fears and concerns. As indicated in chapter 1, it is difficult for change management experts to be everywhere in order for employees to familiarise themselves with these individuals and have easy access to them throughout the transitions period. Co-workers, identified as change agents, could fulfil a significant role by assisting employees to overcome resistance to change more comfortably (Self, 2007).

Employees influenced by change easily blame the manager and change specialist if their questions are not answered on time and in a satisfactory manner or if they received minimal communication throughout the project cycle. Resistance to change cannot be managed if change management specialists do not continuously interact with the employees concerned in order to communicate the benefits, issues, risks, processes and project time lines, among other things, to the employees (Moran & Brightman, 2000). According to McCabe (2004), the best-known approach to managing resistance to change is no longer necessarily the most effective one. Traditionally, the manager, organisational development and / or change management specialist would develop certain strategies or methods and apply them to the larger organisation. If they worked, they were deemed to be great, but if they failed at least they would have tried. This was often the attitude of the managers. The responsibility of ultimately ensuring the successful execution of planned interventions and managing resistance to change lie with the change management specialist and respective managers (McCabe, 2004).

When managing change, it is necessary to understand that a change process can only be learnt a little at a time, like riding a bike - no person riding a bike experiences it in the same way as another person (Robbins, 2005). In managing change throughout the change process, some setbacks may be experienced and may lead to individuals reverting back to their old ways, which is typically the situation in the following examples (Robbins, 2005):

- when top management becomes preoccupied with other crucial issues and lose heart in the change process, not being involved anymore as much as they should be
- when some divisions immediately reject the change initiative, because it will not fit into their environment on account of certain processes, structures and technology

- when the appointment of a new leader may cause a setback because employees have to develop trust all over again since the new leader may have many other ideas and a different vision for the organisation

The question now arises: What should be done to recover from setbacks or slowdowns as resistance to change probably increases? According to Hutton (1994), there is no process that cannot be diagnosed by simply looking at the situation as if one were starting from scratch and then adjust or develop new strategies to manage resistance to change more effectively, even when setbacks do occur. According to McCabe (2004) some individuals will have to start the journey right from the start, in their own minds, at least. With any setback, it is necessary to go back to the basics, review the steps and adjust them if necessary in order to start managing the resistance to the change process all over again. Change management specialists should carefully record all the reasons for the setback in order to ensure that the correct and most suitable interventions are planned to recover from the setback (McCabe, 2004). The earlier setbacks are identified, the better, as the problem/s could snowball and become something extremely difficult to correct later on in the process. It is vital to search intensively for all the answers, and sometimes organisations may find they have diagnosed the problem incorrectly from the start and that the interventions planned are unsuitable (Robbins, 2005).

When reviewing the process, the question “why” should be put more than once by the change management specialist to an independent third party to help analyse setbacks. An outsider may spot certain elements that could be easily overlooked by the change management specialist involved in the change process from the outset (McCabe, 2004). During long term transformation, the organisation could celebrate the following accomplishments: top management are still involved and committed to the approach, the plan has been updated for improvement to be embedded in the overall plan for the organisation, significant behavioural changes have been affected and tangible gains have been made (Robbins, 2005).

As indicated earlier, managing resistance to change and creating employee readiness to change are inextricably interlinked. According to Self (2007), an organisation should focus its effort on creating readiness to change instead of managing resistance throughout. If the focus is placed on managing resistance to change, the change management specialist’s key role would be to manage negative behaviour instead of focusing on positive behaviour and interventions to allow

employees to become ready for change. Methods and techniques that can be used to ensure that employees become ready for change are explored next.

2.4.2.5 Creating employee readiness for change

There are many ways in which organisations can create readiness for change, but the key question would be: How does one create and manage readiness leading to the adoption of change that produces success and performance? Armenakis, Harris and Field (1999) indicated that there are five critical elements necessary to create readiness for change:

1) the need for change
2) demonstrating that it is indeed the right change
3) key people supporting the change
4) members have the confidence they can succeed
5) an answer to the question –"What's in it for me?"

It is people who make up organisations - they are the real force behind and vehicle for change in organisations. Individuals are the ones who will resist or embrace change. By creating readiness, dual benefits can be achieved in the sense that positive energy goes into creating preparedness for the changes, and in turn, there can be a significant reduction in the need for the management of resistance once organisational revival is under way (Self, 2007).

If organisational change it to succeed, employees should be prepared for it. Change-readiness is not automatic; nor can it be assumed. As indicated earlier, failure to assess organisational and individual change-readiness may result in managers spending a significant period of time dealing with resistance to change (Smith, 2005). According to Smith (2005), there are three steps for achieving organisational change-readiness:

- creating a sense of need and urgency to change
- communicating the change message and ensuring participation
- providing anchoring points and a base for achieving change

Lewin's (1951) theory, particularly his theory on "refreezing" organisational culture in the wake of change, has been overridden by the later thinking of Kotter (1995) of the core notion of breaking the status quo and encouraging people to perceive and embrace the need for change. Kotter (1995) similarly argued that the first step towards achieving successful organisational change is the creation of a sense of

urgency and a need for change. By actively revealing discrepancies between the current and desired behaviour, motivation and readiness for change can be created (Kotter, 1995). Involving staff in the process of achieving a shift to a change ready organisational culture through staff training, team building and, role modelling from the top of the organisation are powerful tools (Palmer, 2004).

Individual and organisational readiness and capacity for change need to be based on a sound foundation of mutual trust and respect. Communicating the proposed change to staff, involving them in decision making and considering of options are all important elements in establishing a foundation of trust (Smith, 2005).

Awareness building is viewed as another significant method to create employee readiness for change. To determine whether or not awareness building was successful, it needs to be measured. The only way to successfully measure awareness building is through interaction and feedback between those individuals affected by the change and the change management specialist or project team (Hutton, 1994). When communicating for the purposes of awareness building multiple types of media / channels should be used. Some of these are face-to-face meetings, group meetings, emails, newsletters, one-on-one communication, magazine articles, the intranet, presentations by executives, training and workshops, telephone conferencing, memos and letters, flyers, posters and banners. These various channels of communication should only be utilised after a communication strategy has been formulated and the messages clearly thought through (Robbins, 2005).

When communicating change, audience segmentation is necessary to ensure that awareness messages are designed specifically for each target group. Questions such as “What type of communication will be effective for each group, when is the best time to send these messages and which communication channels should be utilised?” should be asked prior to sending of engaging messages. According to Hiatt (2006), frequent communication is necessary because no organisation can over communicate and organisations shouldn’t assume that people understand the message. Feedback should be obtained from the audience by the change management specialists on whether the message was easily understood; if not, the message should be redesigned and resent to the audience in order to prevent confusion, increased uncertainties and anxiety (Hiatt, 2006).

Once awareness has been created, the next objective in managing change should be to create energy and engagement around the change in order to produce momentum and support at all levels of the organisation. According to Hiatt (2006), there are numerous ways to create the desire to change. The following are some of the tactics used to instil a desire for change:

- Line managers and supervisors should be equipped to be change leaders. These individuals should be able to conduct effective conversations with their peers on any details of the change, manage resistance and demonstrate commitment to the change through their behaviour. In cases where employees may have questions that line management or supervisors cannot answer, responsibility should be taken to obtain answers from the appropriate source and report back to the employee(s) with an appropriate answer. The change agent should follow up with relevant supervisors or the line manager to understand where in the process they are in obtaining answers as promised to the employee on the ground, in order to manage expectations effectively (Kotter, 1995).
- Senior management should participate actively and visibly throughout, in order to send a message to employees of commitment to and support of the project. In some instances, organisations should even go so far as removing resistant managers, proving to employees the organisation's commitment and that they are serious about the change and conveying the message that there is no place for resistance from managers. Executive sponsors should communicate with all employees and managers on a regular basis, clearly stating the vision of the organisation, specific goals and objectives and their personal commitment should be reinforced every time when communicating (Armenakis, 1999).
- Risks should be assessed and resistance anticipated. Change-readiness assessments are useful tools to determine the employee's readiness to change. The results obtained from the assessment will help to identify risks and this will enable change management specialists to develop suitable interventions to deal with these potential risks appropriately. Palmer (2004) differentiates between two different types of assessments. Firstly, a change assessment evaluates the nature of change from organisational perspectives as well as from different groups. The assessment helps' to develop an overall view of the size and scope of change. The assessment results should be compared with the future state of change in order to determine the gap in different areas in the organisation. Secondly, an organisational readiness

assessment is used to evaluate the overall readiness of an organisation to change. A combination of change and readiness assessments allows for the evaluation of the overall impact of change in an organisation. An analysis can then be performed to determine the challenges facing the specific organisation/group in order to develop suitable interventions for the employees to become change ready (Palmer, 2004).

- Incentive schemes can be aligned to support the desired behaviour. This will motivate and almost force employees to adapt in order to enjoy the incentive rewards with others. Even in cases where financial benefits are not directly aligned to a performance matrix, the behaviour of employees is strongly driven by how they are measured (Smith, 2005a).

Developing knowledge about new processes, systems, tools, and so on, is a primary activity in any change management process. Many project team members are not skilled in adult learning processes and not professional trainers or educators (Palmer, 2004). However, it is the responsibility of the project team to provide the required knowledge and skills for change to be successful, in order to sustain the change after project completion. There are various ways to develop knowledge - the method chosen will depend on the target audience, depth of knowledge to be transferred and the resources available to train employees (Hiatt, 2006). The following are some examples of how to develop knowledge, as indicated by Hiatt (2006):

- Training programmes are known as a primary channel for creating knowledge. The best way to train employees is to allow hands-on activities during the training programme and not only lecture time and reading, since the more frequently employees participate, the more knowledgeable they will become. Training programmes should be designed according to the knowledge gap identified.
- Job aids such as checklists and templates can enable employees to follow more complex procedures. Job aids can also refer to paper documentation or quick reference cards that can be periodically reviewed.
- One-on-one coaching is another method of developing knowledge. People learn in different ways, and one-on-one coaching allows the trainer to customise his or her training approach for the specific individual. After a few months or even years of knowledge transfer, employees may need some refresher points, and in instances where one-on-one coaching took place, it may be quite easy for the individual to schedule a meeting with his or her coach to up-skill his or her knowledge base quickly and effectively.

- Learning from peers is also a very popular technique because employees identify with and relate to the experiences of their fellow employees. Employees teach one another in their own environment, in which they are usually comfortable. Employees initially need to undergo training in order to transfer their knowledge to fellow employees back at the office.

According to O'Brien (2008), developing abilities relating to new processes and job roles will vary from individual to individual. Some employees may find the new processes quite easy and adapt accordingly while others may struggle to feel fully comfortable and understand the new way of doing things. Employees may become change ready if they are allowed and equipped to put their knowledge into practice at the right time in the change process. O'Brien (2008) states the following:

- Supervisors need to be involved on a day-to-day basis to assist employees to exercise their knowledge in the correct manner and support them in cases where they may be struggling.
- Employees should have access to subject matter experts in order to obtain information on processes, systems, tools, and so on should they need it.
- Hands-on experience should be included in training in order to allow employers to test their newfound knowledge.

Everybody's eyes are usually on the leadership structure in a change process. It is therefore imperative for the leadership team to understand the culture and behaviours the changes intend to introduce to enable everyone to agree upon the most appropriate method to monitor the changes (Jones, DeAnne & Calderone, 2004). Leadership should not only be seen at the top but should also be identified at every level in order to display appropriate behaviours among peers and motivate them to accept the change. This structure should remain in place throughout the change process. It is also an efficient way for organisations to identify their next generation leadership. When the leaders communicate to different levels in the organisation, it is critical to customise the messages in such a way that employees easily understand the messages. It is also important that the same message should be communicated at all levels, even though the approach or wording may differ (Jones *et al*., 2004). Employees will observe commitment, support and excitement of the change by leaders. If leaders speak with one voice, repeatedly deliver the same message to employees and model the desired behaviour, resistance to change will be significantly reduced (Self, 2007). Employees will understand the reasons for

change and trust their leaders to drive the change and support them as employees right to the end.

Creating employee readiness for organisational change ultimately relates to reinforcing change by any event in the change process that helps to strengthen, embrace and sustain change in the long run. This requires intensive involvement on the part of the project team, the managers involved, the leadership team and the change management specialists to ensure no issues or concerns are overlooked when managing change.

2.5 CRITIQUE ON THE RESEARCH AND DEVELOPMENT OF CHANGE IN THE LAST 20 YEARS

There is an ongoing debate about whether research conducted in the field of change management has made significant contributions to the field over in last 20 years. According to Woodman (1989) various business people specialising in change management are referred to as “gurus” only because the word “charlatan” is difficult to spell. It was also found that planned change tends to be described as a controlled, orderly process. This message is seriously misleading albeit comforting to many. It is viewed as a chaotic process because of many external factors having an impact on it (Mintzberg & Westley, 1992).

Researchers such as Porras and Robertsen (1992), argued that planned change activities, usually demonstrated in change models, should be guided by information about the organisational features to be changed, as well as the intended outcomes and mechanisms whereby the outcome is to be achieved. These two researchers felt strongly about the fact that the information necessary to successfully guide change is only partially available and that a great deal of research is still required to fill these gaps. The majority of change models specify a general set of steps or stages intended to be applicable to most change efforts. Change models have therefore been criticised for not being situation specific.

Hutton (1994) argued that the significance of change management no longer lies with the change experts using the most appropriate change model to lead the organisation through the change cycle. He indicated that to make a true difference in the management of change, organisations need to start appointing change agents, to

manage the “people side” of change more effectively. The point Hutton made is that it is futile to develop new processes if employees do not know how to or do not wish to use them. These processes should ideally be managed by individuals whom employees trust, confide in and have the confidence to share expectations with those they believe understand what they are going through. Hutton believes there is a gap in research that should be filled, by focusing on all the intricacies of change agents and their significant value in large organisations.

Van de Ven and Poole (1995) tried to impose some order on developing new and exciting frameworks of change after the above became evident. They really tried to prove to past researchers that there is much research and development still needed and that new and significant findings could be added to the “older” information on change. Even though a great deal of criticism has been mentioned, Van de Ven and Poole (1995) encouraged other researchers to take this criticism and turn it into something positive, by shaping their focus of future research in the field of planned change and change models. Micklethwait and Wooldridge (1996) shared the same sentiments as Woodman (1989) indicating that a number of theoretical propositions are merely repeated, with no additional data or real development in the latest literature. Much information and advice are given or even observations quoted with references, but few explanations are provided (Micklethwait & Wooldridge, 1996).

The relationship between planned change and organisational performance is not always well understood. Organisations have failed to implement change because of not really understanding the complexity of their current situation, the lack of sophisticated analysis and the timeous process of implementing change. Past results indicated that organisations focus too much on the proposed change model, which is usually not considered to be a customised model, specific to their environment (Cummings & Worley, 2001).

Despite the critique on research in this field, some significant contributions have been made. Researchers and theorists in the field have different viewpoints on many aspect of change and change management. Such views provide a platform for possible future research to be conducted in that significant value can be added to past research through exploration of these different views.

2.6 CHAPTER CONCLUSION

This chapter dealt with the following topics:

1) understanding change
2) organisational change
3) change management

The first section focused on defining change in the broader context. It was discovered that change is difficult, and in many instances resisted, but when properly planned it can be exciting, linear and evolutionary. It was noted that change could also have a rippling effect on those who refuse let go of the past. Many definitions were provided from a number of researchers in the field and it was found that in all instances, these definitions captured more or less the same message in that change happens when something has to become different in order to improve the current situation. The section on organisational change focused on an overview of organisational change, different types of organisational change employees may experience and the reasons for this as well as the introduction of different types of change models and their usage. The last section focused on change management. This included a number of sub focus areas, namely various definitions of change management, the reasons for resistance to change and how to ensure employees become change ready during transformation. A critique on the research conducted on change was also provided in order to emphasise possible gaps in the field. Researchers argue that the research conducted focused on the same type of research undertaken in previous years, without actually making any new significant contributions to the field.

Chapter 3 will look at the concept "change agent" in order to provide a clear understanding of this phrase in change management in the organisational context. Research conducted on change agents in the change management framework could possibly fill some of the gaps, as indicated by the research critique. It is therefore necessary to unpack the essence of organisational change agents and the reasons behind why it is known as one of the latest focus areas in change management today.

"Change alone is eternal, perceptual, and immortal."

- Schopenhauer (1860) -

CHAPTER 3: THE CHANGE AGENT

"Tell me and I'll forget, show me and I may remember, involve me and I'll understand."

- Chinese proverb -

3.1 INTRODUCTION

The role or function of a change agent is unknown to many and the value that change agents may add to large organisations undergoing change has not been explored to date. This chapter looks at the value of a change agent. This will be linked to the way change can be managed after the identification of change agents for the purpose of managing the people side of change. This chapter introduces the concept "change agent", explores the importance for organisations to have employees to serve as change agents and the benefits thereof. Some of the skills and personality traits of the ideal change agent will be highlighted. The knowledge and experience change agents should ideally have will be explored as well as the required change-readiness level of potential change agents.

The term "change agent network" will be researched. This will provide insight into the significance of a group of people selected to serve as change agents in the same organisation, division or team. Other terms such as change leaders, change masters and change champions will be examined in order to understand the difference between the roles of these individuals versus those of change agents. The roles and responsibilities of a change agent will be discussed to provide insight into the magnitude of a change agent's task. Ultimately, all the intricacies of change agents in large organisations will be explored.

Back in the early 1990s, Porras and Robertson (1992, p. 755) emphasised the pressing need for research to examine the role of change agents in the organisational context: "Better specifications both of the conditions for effective change and of the characteristics of effective change agents are necessary to develop a more comprehensive understanding of how these various factors affect each other during the course of a complex process of planned organisational change."

The need to understand the meaning of the role of a change agent is therefore critical before a change agent identification framework can be developed. A limited amount of research has been conducted on the concept "change agent", and a limited number of arguments and perspectives are thus provided. According to Hartley, Benington and Binns (1997), a limited amount of literature is available on the role of change agents in organisations. Again, the researcher in this study drew the same conclusion about the paucity of literature on this topic. Nevertheless, literature that she did find provides insight into the term "change agent" and answered the research questions formulated below. After defining term "change agent", the main aim of this chapter is to answer the following research questions:

- What are change agents and what personality traits, skills, knowledge, experience and level of desire to change do they require?
- What are the roles and responsibilities of change agents in large organisations?
- What methods/tools have been used in the past to identify change agents?

3.2 THE CHANGE AGENT

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things."

- Niccolo Machiaveli, *The prince* -

3.2.1 Change agent defined

Every time an individual decides to assume the responsibility to create or manage change for the better of an organisation, a survival guide should be provided on day one, because the journey will be one of extreme challenges, obstacles and excitement. Few courageous individuals usually volunteer to take on this role, because many are only too aware of the challenges awaiting them (Massey & Williams, 2006). According to Hutton (1994), the world will become a duller and even poorer place without individuals who volunteer to improve the state of an organisation and to serve as implementers of change.

Throughout this chapter, definitions of and the role of the change agent will be compared with those of so-called "change leaders", "change masters "and "change

champions." The purpose of this is to provide comprehensive information and the researchers' viewpoints in the field, on the different roles key individuals, other than change management specialists, play in the field of change management.

The focus of this research is on the field of transformational change. A transformational change leader is someone who is extremely motivated, has concise approaches and executes strategies that he or she has developed (Katzenbach, 1996). Transformational change leaders are also viewed as those individuals able to complete a compelling picture. Their conviction demonstrates their belief in their vision and a high level of confidence in themselves and their resources (Chew & Gillan, 2005).

Burns (1978) first introduced the concept of transformational leadership in his research on political leadership. This term is widely used today in organisational psychology. According to Burns (1978), transforming leadership occurs when one or more persons engage with others in such a way that other leaders and followers raise one another to higher levels of motivation and morality. Transformational leaders offer a purpose that transcends short-term objectives and focuses on higher order needs. This results in followers identifying with the needs of the leader. If followers share the same need for change as the transformation leader then the battle to change is halfway won (Katzenbach, 1996).

Definitions of change leadership in this context refer to the following: "leadership is about change, moving people in new directions, realising a new vision, or simply doing things different and better" (Denhardt & Denhardt, 2006, p. 8). According to Wallace, Engel and Mooney (1997), more successful change leaders are able to gain the positive engagement of people in organisations to meet changing circumstances. Ultimately, change leaders need to define the reality of others (Morgan, 1986, p. 176). In most organisational change processes, the role of the leader is crucial, because he or she symbolises the culture, and plays a pivotal role in the construction of new behaviours (Trompenaars & Woolliams, 2003). Leaders of change ultimately show how to make change, where to effect change, and why to make change. Moreover, leaders need to demonstrate their commitment to change, to enable others in the organisation to see how it should be done (Denhardt & Denhardt, 2006).

According to Tearle (2007), a change master fulfils a pivotal role in any transformation process. A change master may be a full-time organisational

development professional, a leader of a division or a middle manager charged with the responsibility of effecting change in his or her area. Depending on the type of change he or she is tasked with, a change master fulfils some of the following roles: developing clear change roles and acting as a facilitator of change, a project manager, an educator, a marketer, a systems integrator and monitor of the whole change process (Tearle, 2007).

Another key term in the field of transformational change is “change champion.” Change champions can be regarded as those individuals who support the transformation project, helping to communicate the messages in respective areas of an organisation. Champions can also translate the new way of working into specific goals and create meaning and context for employees (Nadler, 1998).

Change champions are viewed as those individuals who play a key role in driving change. Champions are not individuals appointed in a formal representation role, but should broadly reflect the make-up of the workforce at all levels of the organisation (Nadler, 1997). According to Tearle (2007), the difference between the roles of change champions and change agents is small. The difference lies in that change champions have a more informal role than the change agents.

In many instances the change role models are regarded as existing leaders. However, Havelock and Zotolow (1995) indicate that nowadays, change role models are also viewed as change agents or change champions. Havelock and Zotolow (1995) argue that, change agents, like leaders, deliberately try to effect change or innovation and engage with others to see the benefits through powerful communication methods. Alternately, those organisations that have change champions who provide powerful symbolic means of communication, in turn manage and shape change (Peters, 1978). Leaders, change agents and change champions have the capacity to influence, but the extent to which they are able to influence content, process or context differs from each other (Weick, 1995).

The term “change agent” will be explored in an effort to understand its meaning, as well as the roles and responsibilities of an individual, acting as a change agent in a large organisation.

The role of a change agent is relatively new to the business world and many questions have been raised in the recent past about the meaning and role of change agents in organisations (Burnes, 2004).

During the 1950s through to the 1990s a number of industrial organisations in Japan and the USA developed ideas around appointing people to drive change into a practical approach - these people were named change agents (Egan, 1985). Today the role of the change agent is known to most industries throughout the world. The concept "change agent", however, does have different meanings for different people and organisations. Some organisations naturally see change agents as top management, while others feel it refers to line management or employees or even a combination of the two (Hartley *et al.*, 1997).

For the purposes of this research project, the concept of change agent does not only refer to the manager, supervisor or even to the change specialist; but to any individual appointed to play a significant part in designing, running, improving and communicating proposed change.

Many definitions are explored in this chapter in order to determine how the business world views the role of a change agent as well as finding a suitable definition for this research. Burnes (2004, p. 669) defines change agents as "the people responsible for directing, organising and facilitating change in organisations." This can be a difficult task, especially in dealing with large bureaucratic organisations. Pettigrew and Whipp (1991) describe change agents as individuals who operate at various levels in an organisation, because this caters for both operational and strategic change capacity. According to Doyle (2001), even though change agents are appointed at different levels of the organisation to manage change, it is essential to have a change management team in place to support appointed change agents and help them in developing their abilities.

Saka (2003) refers to organisational change agents as managers who shape the conditions for change. He also emphasises that managers should be known as the organisation's "internal" change agents rather than consultants because such individuals have a view of the overall organisational goals and vision. A manager as a change agent is beneficial in large transformation drives because he or she can reconfigure an organisation's roles, responsibilities, structures, outputs, systems and resources. According to Ticky and Devanna (1990), a change agent can be anyone

affected by the change, to the extent that the individual's personal involvement in reframing contributes to the successful outcome of the change. For all levels of change in an organisation, the change agent is known as a helper who intervenes as a facilitator in the process (Schein, 1987).

If change agents do assume the role of a facilitator, it is vital to develop such skills in order to deal with any psychological challenges that may arise during each phase in the process (Bartunek, 1988). It is evident from the above that even though organisations have recently only become familiar with the meaning of the term "change agent", conversations and theories on change agents were conducted and proposed by researchers in the 1980s.

A change agent can also be an individual who may enforce change, motivate others to accept change and someone with the characteristics to lead change. Large organisations usually make use of change management specialists to drive change in the organisation, but these specialists struggle to interact directly with employees affected by the change on a regular basis, because of the size of the organisation and the large number of individuals affected. Some organisations argue that individuals in the business with little or no change management background cannot be considered for the role of a change agent, even though they are well connected and could potentially fulfil a significant role in the implementation of proposed change (Hartley *et al*., 1997). Earlier, Egan (1985) clearly stated that a person does not have to be a change specialist in order to be a change agent.

Rogers (1987) describes change agents as people with one foot in the old world and the other in the new world. Change agents assist people to cross the bridge to the new world, provide support throughout the journey and start the ball rolling. De Caluwé and Vermaak (2002) supported Roger (1987) by stating that one of the primary ways to manage change is through a change agent. These authors define a change agent as a person taking responsibility for consciously and professionally designing and affecting change. De Caluwé and Vermaak (2002) go on to say that change agents can be managers, consultants and employees in an organisation or even network partners, and that they come in many shapes and sizes. Westra and Van de Vliert (1989) emphasised that the role of the change agent is also strongly linked to what he or she believes is "good" for the organisation and what he or she trusts to work best. According to Ulrich (2008) change agents are human resource (HR) professionals. These may include change management specialists,

organisational development experts or organisational effectiveness consultants. Ulrich (2008) argued that even though it is mainly HR professionals that manage change in large organisations, they should not be the only change agents in an organisation. Individuals in other departments or functions should also be able to assist in managing change.

These viewpoints indicate that researchers in the field each defined the concept of organisational change agents in a different way. However, most agreed that the core functions of these individuals are to manage and drive change in the organisation.

Hutton (1994) cited examples of why it is necessary to select and appoint change agents. In his first example, Hutton (1994) provided a scenario of a large organisation to be moved to a new building. An announcement was made that all employees should move to a new building by a certain date. Other than that, no logistical arrangements were explained. No proper messages were communicated to employees to ease their fears and concerns and no guidance was provided. Employees were expected to allocate themselves appropriate office space, with departments remaining as they were currently, in the same area. Also each individual was responsible for moving his or her own furniture and connecting the telephone lines. The likelihood of an orderly move was almost zero. According to Hutton (1994), whether an office move or major organisational transformation is involved, the same principles should apply. To manage change systematically, appropriate processes and strategies should be developed and the psychological wellbeing of employees should be addressed to ensure a smooth transition in all areas. By appointing change agents to assist in measuring the readiness levels of the employees concerned, their wellbeing and resolving issues and concerns of employees on the ground, many obstacles can be removed early on. Imagine how useful change agents could have been in the above scenario (Smith, 2005). Some researchers indicate that it is unwise to attempt major change without designated change agents, especially in cases where large numbers of employees are affected by the change (Saka, 2001).

Schein (1988), believed that as early as the 1980s change agents played a pivotal role in business, by indicating the following:

- Managers are often not aware of specific problems employees on the floor experience and change agents can therefore assist in diagnosing the actual problems.
- In many cases, managers are not aware of the help needed from employees to assist in solving problems, and better execution of their tasks, and so on. Change agents can determine what kind of help is necessary and request the appropriate assistance from management.
- Most managers have a constructive intent to improve certain things, but they need help in identifying what they have to change to improve the situation. Change agents can provide answers to these questions.
- Most organisations can become much more effective once they know how to diagnose and manage their own strengths and weaknesses.
- Unless remedies are determined jointly with members of the organisation, who knows what can and cannot work, the remedies are likely to be unsuitable and resisted by the organisation.
- Managers cannot make decisions about the implementation of certain solutions by themselves. If they do, this may have negative consequences for the organisation because staff feel left out and not valued. This may result in poor staff retention.

According to Margulies and Raia (1972), in order for change agents to be successful at managing change, the following should be considered:

- Change agents should be comfortable dealing with other people and building relationships. To this end, change agents should have the ability to listen to others and show empathy, which means that they require numerous people-oriented skills.
- Change agents should be able to enact the change process – hence the need for both analytical and diagnostic skills. This will enable change agents to identify and solve problems by using the techniques available in order to facilitate the change process in their areas with confidence.
- Lastly, change agents needs to have background information on the types of people, type of work and business environment where change has to be managed to ensure that suitable interventions and approaches are developed for the people and their environment.

For change agents to be successful, they need to demonstrate a level of expertise in establishing credibility with those who are affected by the change, demonstrating skills in managing the change and possess the personality traits that reflect certain social skills. To place oneself in such a position, the potential change agent has to be able to recognise and reconcile what type of person he or she intends being. A change agent, like most managers, is a person who fulfils a role for a certain period of time - hence the need for the organisation to determine the change agent's specific roles and responsibilities (Hartley *et al*., 1997).

In a study by Perme (1999) in Texas, it was found that change agents are skilled individuals who are comfortable with who they are, with clarity about their values and an understanding of their reasons for supporting the change initiative. Change agents understand the impact change will have on people's lives as well as the benefits. Change agents should be able to play different roles at different times, because in most instances, identified change agents still have another job to do, apart from serving as a change agent. According to Hartley *et al*. (1997), change agents will have a greater chance of succeeding if they are permanent employees of the organisation because they will have the ability to withstand initial unfavourable reactions from peers.

In the past, many organisations have debated whether all leaders are change agents, and vice versa. According to the above quotation, the perception is that not all leaders are necessarily change agents. According to Cheung, Jurman, Maguigad and Slaughter (2007), change agents can be found at all levels of an organisation, they can be leaders, managers or employees. Cheung *et al*. (2007), hold that change agents are people who see a need for constructive change and are willing to champion the cause and motivate people to see the benefits involved. According to Doyle (2001), change agents are risk takers and leaders. Like leaders, they look outward and into the future and challenge the status quo. Like a manager, a successful change agent will also look inward to understand the organisation and its culture in order to achieve change. A change agent will involve everyone and is willing to engage diverse groups. Typically, when one talks of change agents, one thinks of great leaders who have initiated new directions for their organisations. There are many examples of good leaders who maintain the status quo, achieve positive, new or better things for the organisation, but who never go beyond their comfort levels which are known to them (Kotter, 1996).

Bill Millar, President of the American Public Transportation Association, indicated that a change agent usually takes little steps in order to achieve the end result - the pace is usually even slower the larger the organisation becomes. The most significant difference between a leader and a change agent lies in the way they approach the challenges they are faced with (Doyle, 2001).

Literature findings on the topic “change master” written by Kanter (1989) stressed the importance of strong corporate entrepreneurs and innovators in transforming organisations. These change masters were referred to as leaders, testing limits and creating new possibilities by directing the innovation process. Behling and McFillen (1996) conducted similar research on leaders as change agents. They indicated that leaders should be the organisations’ greatest and most profound change agents. Transformational leadership focuses on a vision that can inspire people to embrace change and leaders of the organisation should promote that vision continuously throughout the transformation period. According to Dunphy and Stace (1993), in instances where leaders are identified as change agents, self-identification as change agents of these leaders is vital for role clarification and commitment. These leaders should be outspoken, have courage, believe in people, be open and also have the ability to deal with complexity and uncertainty.

The importance of change agents’ involvement in the process of managing change has been highlighted in that change agents should be identified to ultimately help employees cope better with change. Owing to the lack of research in this field, limited information is available about the reasons why and how change agents should be identified to manage change, yet the benefits found were clear. According to Luecke (2003), by identifying change agents, organisations experience some of the following benefits:

Change agents:

- engage passive resisters by means of one-on-one communication in order to start participating actively
- start the ball rolling by engaging with the employees affected in order to get key messages across regarding the reasons for change
- motivate their colleagues to accept the change
- diagnose problems in order to assist change management specialists to develop suitable interventions

- build trust by continuously engaging with employees and aligning the objectives of the change initiative with the organisation's vision
- stabilise the adoption of innovation
- diagnose existing issues or problems
- analyse the barriers preventing the organisation from achieving the desired state
- keep their fingers on the pulse continuously, serving as the eyes and ears of change management specialists and project leaders
- encourage individuals to take risks
- actively support or champion changes throughout the organisation
- answer project/initiative questions and promote bottom-up communication
- transmit formalised information to and encouraging informal discussions with the target audience
- communicates project messages to the target audience

According to Hartley *et al*. (1997), the process of managing the people side during transition is much more comprehensive when change agents have been identified to manage change in the organisation. Since change agents have the ability to engage with employees on a frequent basis, employees should not be allowed to feel excluded or not consulted during the change process. Research has shown that the greater the number individuals who participate in a transformation process, the easier it will be for any organisation to win the hearts and minds of its employees to accept change and adapt behaviour to the advantage of the organisation and its employees (Tearle, 2007).

In research conducted by Caldwell (2003), it was found that to act as change leaders, it is necessary to understand different attributes of individuals. This researcher indicated that a mix of skills, knowledge, capabilities, competencies and personality characteristics needs to be understood and determined in considering the importance of change leaders and their role. The process followed by Caldwell (2003) to determine change leaders' attributes was as follows: An overall list of attributes was compiled from newspapers and books. An expert panel consisting of senior HR practitioners reviewed the list of attributes and then ranked them in terms of importance. The advantage of this process is that it allowed for attributes considered to be important by HR practitioners to be negotiated and agreed upon. The chosen attributes were congruent with some of the attributes identified in the literature. A

similar process was followed in this research project. This is explained in detail in the results chapter.

The above highlighted that researchers view change agents as leaders in the organisation, who initiate change. In the context of this research project, a change agent is not viewed as the initiator but rather the individual assisting in driving the change to ensure the other individuals concerned become change ready through the management of fears and concerns and effective change communication. **The definition chosen that applies to this research project was the change agent definition of Cheung *et al*. (2007, p. 9): "*Change agents can be found in all levels of an organisation. They can be leaders, managers or employees. A change agent is someone who supports the need for change, is committed to championing the cause and motivates staff in their respective areas to see the benefits thereof.*"**

The above definition was chosen to define change agents in the context of this research project because it was deemed to be the most suitable.

Although a limited number of definitions were found, different valuable viewpoints and arguments were analysed.

The literature findings below focus, *inter alia,* on certain personality traits, skills and knowledge, amongst others, which individuals should portray if they are to be considered change agents. The literature findings were considered significant because the information provided a platform to structure the first part of the empirical research, focusing on a triangular research method.

3.3 PERSONALITY TRAITS OF A CHANGE AGENT

3.3.1 Personality and personality traits

Before focusing on the personality traits of a change agent, it is essential to have a clear understanding of the meaning of personality, different theories of personality and personality traits.

3.3.1.1 Personality defined

Definitions of personality generally try to show a set of qualities that distinguishes one person from another. A variety of approaches and theories are reflected in different definitions of personality. Many contemporary psychologists agree that personality can only be adequately explained if personality traits and the situation or environment of the individual are considered (Bergh & Theron, 1999).

The following definitions of personality can be viewed as systemic, interactional and integrated.

Allport (1937, p. 48) defined personality as "the dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to his environment." This implies that personality is the sum total of ways in which an individual reacts and interacts with others and that there are many external influences that form a person's personality (Allport, 1937). Mischel (1976, p. 2) referred to personality as "the distinctive patterns of behaviour that characterise each individual's adaptation to the situations of his or her life." Schultz and Schultz (1994, p. 10) viewed personality as "the unique, relatively enduring internal and external aspects of a person's character that influence behaviour in different situations." Cattell (1965, p. 25) adopted a broad view of personality and viewed it as "that which people will do, think or say when placed in a specific or given situation."

The above definitions refer to personality that is determined by the environment or the situation an individual finds himself or herself in. From a work perspective, personality may be viewed differently because personality traits may have to fit into the demands of the workplace. Neff (1977) defined "work" personality as semi-autonomous from other aspects of personality, which includes work styles, behaviours, abilities and feelings that are necessary to fulfil a productive role as required in the work situation. Linked to the above definitions, which indicates that an individual's personality will be formed through the current environment or situation the individual finds himself or herself in, Robbins (2001) stated that the three main determinants of personality are as follows:

- **Heredity.** This refers to genetics such as physical stature, facial attractiveness, gender, temperament, muscle composition and even reflexes and biological rhythms. This determinant indicates that an individual's personality is a molecular structure of genes located in chromosomes. Researchers have found that genetics account for more than 50% of a

person's personality. However, personality is not fixed because many other factors influence and form a person's personality.

- **Environment.** This involves the culture in which individuals are raised, as well as early conditioning and norms among family and friends. The environments to which individuals are exposed play a significant role in shaping personalities. Heredity sets personality parameters but an individual's full potential will be determined by how well he or she adjusts to the demands and requirements of the immediate environment.
- **Situation.** This factor influences the effects of heredity and the environment on personality. Research has shown that a person's personality does change, depending on the situation. Personality patterns should therefore not be studied in isolation, but in the context of various situations. Some situations obviously have a greater influence on a person's personality than others.

From personality definitions, many personality theories were developed by many well-known researchers in the field. These theories will be explained next in order to understand what the different elements are that make up a person's personality.

3.3.1.2 Personality theories

To understand the meaning of the term "personality theories" it is imperative to understand exactly what the term "theory" refers to. According to Hall and Lindzey (1970), theory exists in opposition to fact and it is known as an unsubstantiated hypothesis or a speculation concerning reality which is not yet definitely known to be so. Only when theory is empirically confirmed does it become a fact. Personality theory refers to a set of assumptions relevant to human behaviour together with the necessary empirical definitions (Bergh & Theron, 1999). At the very least, personality theories represent the clusters of attitudes concerning human behaviour, which in many ways limit the different kinds of investigations to be considered. In many instances personality theories were developed to generate ideas, stimulate curiosity and to stir doubts.

Personality theories refer to a number of dimensions to explain personality and personality functioning. Many researchers, better known as personality theory experts, formulated interesting theories about personality as far back as the early 1900s (Bergh & Theron, 1999). The personality theories of Sigmund Freud, Carl Jung, Kurt Lewin, Gordon Allport, Raymond B. Cattell, B.F. Skinner and Carl Rogers are widely known throughout the world. Allport (1961) and Cattell (1965) used traits

as examples of structural concepts. These structural concepts refer to basic building blocks that constitute personality. Freud (1970) proposed dimensions in three mental structures, known as id, ego and superego. Rogers (1973), however, utilised the self-concept of behavioural responses as an integrative structural concept. These are but a few examples of the theories developed by some of the researchers named above. It is also evident from the above examples that many personality theories were developed in the 1970s and all of which were known as significant perspectives (Bergh & Theron, 1999).

3.3.1.3 Personality traits and type

Personality **traits** can be defined as: "Enduring characteristics that describe an individual's behaviour" (Oliver & Mooradian, 2003, p. 110). Research has shown that there are many different personality traits. In their study, Cattell, Eber and Tatsuoka (1970) identified 17953 personality traits. Sixteen different personality **traits** were selected after many years of intense research and these are referred to as the source or primary traits of personality. The psychometric instrument, the 16 personality factors assessment, was the first instrument to introduce these 16 traits to be measured (Cattel *et al*., 1970). Over time the everyday concept of personality traits developed into the formation of two basic assumptions: traits are stable over time and directly influence human behaviour (Robbins, 2001). Matthews, Deary and Whiteman (2003) indicated that there is a major gap between the everyday concepts of traits and a concept that is scientifically useful. The simplest technique for personality trait measurement is to ask a person to indicate how well certain traits relate to him or her. This is usually done by means of a standardised, valid and reliable self-report questionnaire.

However, personality **type** is identified by a personality indicator, and is merely based on a person's preference for certain stimuli (McCrae & Costa, 1989). The Myers-Briggs Type Indicator (MBTI) is a well-known framework of personality type. This test taps into four characteristics and classifies people into one of 16 personality types. Individuals can be classified into the following categories: introverted or extroverted, sensing or intuitive, thinking or feeling and perceiving or judging (McCrae & Costa, 1989).

The above discussion indicates that a distinction can be made between traits and type. Traits refer to specific characteristics describing an individual's behaviour, while type refers to a personality indicator based on a person's preferences for certain stimuli.

Robbins (2001), believed that research differentiated between two different personality types: Type A and Type B. Type A personality refers to a person who is aggressively involved in a chronic struggle to achieve more and more in less and less time. These individuals usually do almost everything in a hurry. They eat, walk, talk and move rapidly and can become impatient fairly quickly. They find it hard to cope with leisure time (Friedman & Rosenman, 1974). Type B personalities are rarely interested in trying to prove themselves and usually play for fun and can relax without any guilt. They seldom suffer from a sense of urgency and do not have the need to display or discuss their achievements or accomplishments unless the situation demands it (Kogan & Wallach, 1967).

Are Type A's usually more successful in organisations that Type B's? Even though it would be assumed that Type A's works harder, Type B individuals appear to make it to the top more easily, as proven by research conducted by Robbins (2001). This research also indicated that Type A individuals can be extraordinary salespeople whilst Type B individuals are often senior executives (Robbins, 2001).

Personality is still influenced by the environment and situation a person finds himself or herself in - hence individuals need to adjust and adapt their personalities as required by the situation (Robbins, 2001).

Before exploring the personality traits of a change agent, the traits of individuals playing a key role in the change process will be researched. This will provide insight in terms of whether there is a degree of correlation between the traits of individuals such as change masters, change leaders and change champions versus those of change agents.

According to Katzenbach (1996), change leaders should portray the following personality traits in order to accomplish results:

- creativity
- motivation
- a sense of caring
- sense of humour

According to Ackerman and Anderson (2001) the most primary traits of change leaders are:

- emotional intelligence
- optimism
- motivation
- social boldness
- enthusiasm
- being influential

As per the earlier definition of change leaders, these traits seem appropriate for individuals who lead the proposed change by looking at the needs of the organisation and its people.

Tearle (2007) provided information on the traits change masters should portray, namely:

- trust
- credibility
- self-confidence
- sense of caring
- a sense of humour
- inspirational
- innovation

McEwan (2003) conducted research on different traits for executing different roles in an organisation. According to this author, change masters should portray the following traits:

- motivation
- optimism
- confidence
- being futuristic
- trust
- transformationism

As indicated earlier, change masters fulfil all of the following roles: a developer of clear change roles, a facilitator of change, a project manager, an educator, a marketer, a systems integrator and a monitor of the whole change process. The traits

listed seem to be relevant to the kind of roles change masters have to fulfil (Tearle, 2007).

Lastly, traits of change champions are evident in the work of Nadler (1998). This author listed the following traits:

- being an extrovert
- envisioning
- energising
- empathising
- being supportive
- personal confidence
- being excited
- being enthusiastic

Nadler (1998) indicated that an individual cannot call himself or herself a change champion without possessing the above characteristics. As per the definition, these individuals are the main supporters of change and share their beliefs and excitement regarding the change with other employees in their respective areas of the business.

Literature findings on the personality traits of change agents are discussed below.

3.4 CHANGE AGENT: THE IDEAL PROFILE

For the purposes of this research the ideal profile refers to the ideal personality traits an individual should have to be identified as a change agent with the capability to drive and manage change in his or her own business area. Literature was collected and researched in order to determine the above. For the purposes of the empirical research conducted, it was critical to understand the ideal personality traits and skills of change agents to ensure that individuals are identified according to the correct requirements to act as change agents. Tabulated below are the literature findings on the key personality traits of change agents from various researchers in the field.

3.4.1 The ideal profile

The table below provides information on certain key personality traits change agents should possess:

TABLE 3.1: CHANGE AGENT PERSONALITY TRAITS

Personality traits	Source
The ability to deal with complex issues	Hutton (1994), Dunphy & Stace (1993)
Integrity	Hutton (1994)
Being respected	Hutton (1994)
Being a team player	Hutton (1994), Tearle (2007)
Patience	Mott (2000), Hutton (1994)
Persistence/persuasive	Hutton (1994), Tan & Kaufmann (2000), Dunphy & Stace (1993)
A sense of humour	Tearle (2007), Katzenbach (2008), Hutton (1994)
Honesty	Hutton (1994)
Trustworthiness	Perme (2003), Hutton (1994), Tearle (2007), K Jha (2007)
Reliability	Hutton (1994), Burnes (2004)
Being positive/optimistic	Tearle (2007), Katzenbach (2008), Hutton (1994), Tan & Kaufmann (2000)
Enthusiasm	Hutton (1994), K Jha (2007), Tan Kaufmann (2000)
Confident	Tearle (2007), Hutton (1994)
Risk-taking	Hutton (1994)
Having a political nose	Hutton (1994), Wertheimer (2001), Recklies (2001), Tan & Kaufmann (2000)
Assertiveness	Powers (2003)
Creativeness	Tearle (2007), Katzenbach (2008), K Jha (2007)
Caring	Tearle (2007), Katzenbach (2008), K Jha (2007)
Empathy	Arrata, Arnaud & Kumra (2007)

The above personality traits are indicative of what researchers in the field deemed appropriate personality traits and were compared with information obtained from change management experts in the organisational field and recorded in the research results chapter to follow.

By comparing the ideal traits of a change agent with those of the change leader, change master and change champion, it is evident that many of the ideal traits of a change agent are reflected in the roles of either the change master, change champion or change leader.

3.5 CHANGE AGENT SKILLS

The word “skills” is commonly used to describe the abilities one acquires through education and practical experiences. Research indicates that when an individual believes he or she has obtained the necessary skills to perform a job by applying a certain set of qualifications or experience, no further experience and knowledge are necessary for further personal development. In practice, the rapid pace of change no longer allows this. Nowadays, one needs to obtain increasingly more skills throughout life in order to develop oneself and to become an expert in a certain field of work (Keep & Mayhew, 1995).

Most people have a common understanding of what is meant by the word “skills”, but a precise definition appears somewhat problematic. The difficulty in defining skills steams from the lack of common terminology, connotation and the historical traditions behind the word. In many instances gender also plays a major role in the definition of the word because jobs dominated by women are classified as the “softer skills” and males are more prone to apply “harder skills” to perform their jobs (Dench, 1997). According to Keep and Mayhew (1995), skills refer to more than the existence of certain attributes in people. They can include communication, being capable to work with others, taking responsibility, making decisions, negotiation and problem-solving, amongst others. These types of skills are becoming crucially important across all occupations and companies or industries because of the changing organisational structures, organisation-wide transformation initiatives and a drive for quality, to mention but a few (Keep & Mayhew, 1995).

According to Oliver and Turton (1992), people either exhibit skills or not and they are not necessarily developed in all cases. However, Keep and Mayhew (1995) argue that skills can indeed be taught and developed and that different people can achieve varying levels of competence.

Before exploring the skills of a change agent, the skills of the change leader, change master and change champion were researched in order to determine which of the skills of the latter three correlate with the skills of a change agent.

Katzenbach (1996) developed a core list of the following skills change leaders should possess:

- balancing the scorecard: the ability to set up and meet tough earning goals and plans
- establishing a working vision: developing the vision should be developed at the top, guiding employees to work towards achieving the desired end state.
- instilling conviction in others: determining how employees can be motivated throughout the change process
- setting clear objectives: ensuring all job assignments, work plans and time lines are clear
- shaping and using action flows: developing vertical action flows in order to work with others, in the decision-making processes in order to deliver value
- building momentum: understanding and managing the physics of change, in order to ensure momentum is built at the right time and during the right phase

It is evident from the above that these skills are different from a list or description of skills in general. These skills are more action oriented in that change leaders perform certain tasks to ensure a smooth transformation process (Katzenbach, 1996)

According to Ackerman *et al.* (2001), change leaders should have the following skills:

- communicating
- counselling
- selling
- conflict handling
- facilitating

Ackerman *et al.* (2001) emphasise the importance of change leaders in mastering transformational change in terms of style, behaviour and strategy. These authors felt that the above skills should be mastered by change leaders and developed continuously throughout.

As indicated earlier, a change master is someone who fulfils a number of different roles and, to that end, this individual requires a number of skills (Tearle, 2007).

These include the following:

- facilitation skills
- the skill to diagnose real issues
- the skills to design change processes
- project management skills
- marketing skills
- systems integration and coordination skills
- coaching skills
- monitoring skills
- communication skills

Change champions are known as the principal supporters of the change initiative and are spread across an organisation. According to Nadler (1998), in order for individuals to be seen as change champions in an organisation, they require the following skills:

- alignment skills: the ability to align project objectives with those of the organisation
- the skills to manage the expectations of peers
- listening skills
- communication skills
- interpersonal skills
- networking skills

According to Randall (2004), no matter where in an organisation's change champions or change agents are based, these individual need a generic list of skills. Randall (2004) indicates that these skills are necessary in order to be the vehicle for success throughout all phases of the change programme. Some of these skills are as follows:

- sensing needs
- building awareness
- creating credibility
- legitimising viewpoints
- broadening support
- changing perceived risks
- structuring needed flexibilities

- putting forward trial concepts
- eliminating undesired options
- managing coalitions
- formalising agreed commitments

Ulrich (2008) places a lot of emphasis on the criticality of change champions having extraordinary communication skills. He indicates that a change champion can never over communicate, and therefore, together with sound communication skills, also has the ability to develop positive interpersonal relationships with peers.

Change initiatives are usually executed as a project and have a start and end date. Before the skills of project managers can be assessed, the term "project" has to be defined. According to Randall (2004), a project refers to "an undertaking that has a set of activities that are linked together over a period of time to achieve an established goal or goals." Change initiatives are managed by project teams and it is therefore relevant to include some preferred skills project managers should demonstrate. Zimmerer and Yasin (1998) conducted empirical research by asking 100 project managers to list the characteristics they believe are crucial for effective project managers. The study found that effective project managers provide leadership by example, are visionaries, technically competent, decisive and outstanding, good communicators and motivators. The study also indicated that positive leadership contributes the most to project success (Schwalbe, 2006).

In studying the above skills sets for the three different roles, it is interesting to note the different viewpoints of various authors on the skills needed to manage change effectively. These skills will be compared with those of a change agent in the next section.

An international consulting firm, Accenture developed a handbook indicating that organisational change agents should possess some of the skills indicated below in order to drive and manage change effectively:

- persuasive and negotiation skills
- trustworthiness (perceived as reliable, competent and helps to perform work)
- listening skills
- negotiation skills
- conceptual thinking and organisation skills (e.g. organises thoughts, detects the main points of a discussion, etc.)

- leadership skills
- credibility in the team
- interpersonal skills
- planning abilities
- capacity for autonomy
- observation, analysis, and judgment
- communication
- enthusiasm
- coaching and facilitation skills
- expertise related to the content of the change project (Accenture, 2007)

Following the same process as in the personality traits section of this chapter, a number of important change agent skills as indicated by various researchers in the field, were identified and are summarised in the table below.

TABLE 3.2: CHANGE AGENT SKILLS

Skills	Source
Interpersonal skills	Hutton (1994), Mott (2000), Tan & Kaufmann (2000), Wertheimer (2001)
Communication skills	Hutton (1994), Perme (1999), Wertheimer (2001), Arrata, Arnaud & Kumra (2007), Recklies (2001), Canterucci (2000), Tan & Kaufmann (2000)
Listening skills	Hutton (1994), Powers (2003), Canterucci (2000), Mott (2000), Tan & Kaufmann (2000)
Conflict-handling skills	Hutton (1994), Arrata, Arnaud & Kumra (2007)
Facilitation skills	Wertheimer (2001), Powers (2003), Tearle (2007)
Networking skills	Accenture (2007), Recklies (2001
Influencing skills	Accenture (2007), Recklies (2001)

To summarise, change agents should ideally have a number of specific skills and, as indicated by Keep and Mayhew (1995), individuals can in fact be trained to learn and develop certain skills. Individuals should therefore receive the proper education in order to develop their skills accordingly.

By comparing the skills in the above table with those of change leaders, change masters and change champions, the following were noted: change leaders, change masters and change champions all need communication and facilitation skills. Change champions, however, appear to possess most of the skills required by the change agent as per the literature findings as well. These are: interpersonal, communication, listening, facilitation and networking skills.

3.6 KNOWLEDGE OF A POTENTIAL CHANGE AGENT

One of the key reasons why change agents need to undergo training and development is to provide them with the appropriate information in order to prepare them promptly and effectively to become leading change agents (Keep & Mayhew, 1995). According to Hayes (2002), it is critical for change agents to obtain knowledge regarding concepts and theories relating to:

- different diagnostic models of change that focus on the identification of *what* needs to be changed
- process models of change indicating *how* change management should take place

The diagnostics models refer to how environmental changes affect the organisation, as well as those models focusing on the alignment of various internal processes of the organisation. Change agents need to understand the alternative processes to be followed in the management of different kinds of change in the organisation. One other critical area that should be included when training change agents is practical approaches on how to manage employee resistance to change because this is invariably the most common reaction that change agents can expect when managing change. Most importantly, change agents need to understand that no change model or process is applicable to every change situation because the impact of change will differ each time it is introduced (Hayes, 2002). There are many factors to be considered before deciding on the best approach. According to Mitchell and Young (2001), change is a creative process and interventions and approaches should be adjusted continuously during the transformation process. Different techniques in identifying, adjusting and implementing these approaches should be included when training newly selected change agents.

Ultimately, organisations can reap the benefits by training and developing change agents, because knowledgeable change agents can help to achieve the objectives of the overall change by performing the following functions (Mitchell & Young, 2001):

- assisting the organisation to review its structures, processes and culture to adjust to the needs and demands of both the employees and the market
- assisting the project team to obtain buy-in from critical stakeholders and employees on the floor for smooth strategic execution
- assisting the project team to communicate effectively by understanding the objectives and benefits of the change initiative and by knowing just how to transfer this knowledge to employees across the organisation

According to Tan and Kaufmann (2000), change agents should have a clear understanding of how the business and the market work, who the organisation's customers are, how many people the organisation employed, the mission and vision and the culture of the organisation. These researchers believe that an individual cannot become a change agent without a clear understanding of the above, mostly because change agents should adopt their approaches in dealing with employees in their areas, according to the nature of the business and its culture.

A basic understanding of change management should be acquired before a change agent can start to drive change. It can be dangerous to both the people affected by the change and for the change agents to make certain assumptions about the emotional state of employees or develop certain interventions themselves without understanding the different factors to be taken into consideration. In many instances the change agents will act as counsellors and should therefore have the knowledge of how to deal with sensitive issues (Morgan, 1996).

Tearle (2007) maintains that a successful change agent should be able to educate people in what to expect from the change process. To this end, change agents should be knowledgeable about on the following:

- the psychological phases people go through when experiencing change
- different approaches to help others deal with negative feelings
- how to deal with resistance to change
- how to make the change process fun and exciting
- methods to overcome barriers to change

Communication approaches and methods need to be explained to the change agents to allow them to make use of the most appropriate communication media in their areas to get the message across. Different communication mediums should be used for different audiences. For example, people working in the warehouse / stores of the business possibly do not have electronic mail access and key messages should therefore be communicated to them by other means – hence the importance of the change agent knowing his or her audience (Tearle, 2007).

All the literature findings on change agent knowledge are summarised in the table below.

TABLE 3.3: CHANGE AGENT KNOWLEDGE

Knowledge	Source
Diagnostic models of change	Keep and Mayhew (1995), Hayes (2002)
Process change models	Keep and Mayhew (1995), Hayes (2002), Mitchell and Young (2001).
Understanding of the organisation and its culture, customers, vision and mission	Mitchell and Young (2001), Tan and Kaufman (2000), Keep and Mayhew (1995),
Ways to manage resistance to change	Tearle (2007), Tan and Kaufman (2000),
Overcoming barriers to change	Tan and Kaufman (2000), Morgan (1996), Tearle (2007),
Suitable communication methods and approaches	Keep and Mayhew (1995), Hayes (2002), Mitchell and Young (2001), Tearle (2007), Tan and Kaufman (2000), Morgan (1996).

3.7 LEVELS OF DESIRE TO CHANGE

Research has indicated that people with a desire to change are those who wish to participate, support the change initiative and make the change happen (Hiatt, 2006). In the past, these individuals were identified as typical change agents. According to Hiatt (2006), the enablers that encourage individuals to have a desire to change are:

- discontent with the current state
- imminent negative consequences
- career advancement
- acquisition of power or position
- hope for the future

According to Schuler (2002), change agents are usually known either as extremists or influencers. The following are some of those enablers they deem important:

- They are always keen to try out new things and are up for a challenge.
- They have a huge influence over their peers.
- They drive change with everything in them.
- They find it easy to adapt to new situations.
- They are usually the ones with whom others wish to check to determine whether the change is worth going through or not.
- They enjoy keeping track of new things happening with an immediate effect on them and can therefore justify change happening.
- They seize every opportunity and are optimistic.

In general, there are different reasons why people want to change the current status quo. People with the desire to change are usually individuals who can motivate others to accept change and explain the benefits of the change to their peers through their enthusiasm and belief (Tan & Kaufmann, 2000).

The research information on change agents' personality traits, skills, knowledge and the level of desire to change clearly indicated that these four dimensions should be taken into consideration when identifying individuals to act as change agents.

These four dimensions were introduced to industrial psychologists/change management specialists to enable them to verify whether they agree or disagree with these dimensions and statements relating to each, when identifying change agents in the future. These results will be used as the foundation to develop a change agent identification framework, as described in chapter 4.

3.8 ROLES AND RESPONSIBILITIES OF A CHANGE AGENT

In most large organisations, it is considered important for a change agent to understand the strategic issues and processes in order to explain questions about the change to their peers and subordinates. Questions around strategic issues will arise more over time as employees become interested and develop the need to learn more. It is therefore essential for a change agent to learn about the organisation at strategic level. This involves understanding systems thinking, what strategies and

methodologies are available and to understand strategic planning (Paton & McCalman, 2000). A change agent is there to provide guidance and support for his or her peers and subordinates. Someone should also give management guidance, interrogate them on certain decisions made and make possible suggestions that people on the floor came up with. This could form part of the following: explaining why a formal process benchmarking may not be a good idea, asking questions about the practicalities of implementing the change and discussing timelines and resources (Doyle, 2001). In doing so, the change agent can obtain confirmation on certain questions/concerns and then feed this information back to the employees affected by the planned change in order to prevent any uncertainties from the very onset (Hutton, 1994).

3.8.1 Roles of a change agent and the key role players in managing change effectively

"We can't wait for the storm to blow over. We have to learn to work in the rain."

- Pete Silas, Chairman of Phillips Petroleum –

The role of the change agent is generally seen as dealing with the softer issues, but sometimes includes a few tangible "hard" objectives. A change agent is not viewed as an objective third party who forms part of a team but form part of a group and like any other member of the team, participates in discussions and decision making on general issues (Hutton, 1994). According to Child and Smith (1987), those individuals known as champions in an organisation should be empowered to act as change agents. The roles of these individuals would be to promote change in every aspect of the business, facilitating and directing the proposed changes. Massey and Williams (2006) support the above view by indicating that change agents should play the role of a clinical facilitator, supporting employees throughout the organisation to deal with and adapt to the proposed changes.

3.8.1.1 Roles of key role players in managing change effectively

Before focusing on the role of the change agent as such, a number of other change management and project management roles in the context of transformational change were explored. In examining change leadership, Conger, Spreitzer and Lawler (1999) indicated that it is commonly assumed that top leaders make a difference in how well an organisation transforms. Change leaders need to assume some of the following roles in order to ensure the organisation changes for the right

reasons without becoming change fatigued. Katzenbach (1996) supports the above by indicating that without strong leadership, the organisation will not be able to transform successfully. This author indicates that direction needs to be provided by those leaders who initiated the change. According to Conger *et al*. (1999), the main area in which change leadership matters most are task environments in which there is a great deal of uncertainty among employees, technology changes rapidly, project team composition consists of young members, few resources are available, organisational culture is weak, the organisation's top management is weak and their commitment to change only moderate.

Miles (1978) maintains that almost all change processes should benefit from strong transformational leadership, establishing a new vision, but this vision should be owned and driven by individuals in the organisation and communicated by change champions across it. According to Chapman (2002), the organisation's CEO (chief executive officer) should be known as the main change agent to drive the change initiative and obtain buy-in from everyone affected by the change. This leader should provide a vision and make it possible for the changes to be implemented successfully. Senior leadership in the organisation should facilitate the change and participate as much as possible in the change process. For the purposes of this research it was deemed important for the leadership team of the organisation to provide the vision, but change agents from different levels in the organisation had to drive the vision and facilitate the change process, with support from the change leader.

These different viewpoints indicate that leadership teams should initiate the changes and the vision and drive it together with their employees, using change agents to ensure that people become familiar with the new vision and proposed changes as developed by the organisational leadership team.

When considering management versus leadership, there are many different roles these different functions can assume during a transformation process. There are numerous debates in the literature on the difference between management and leadership (Randall, 2004). One popular distinction made in the 1980s was that of Bennis and Nanus (1985, p. 21) namely that "managers are people who do things right and leaders are people who do the right thing." Currently, the view is that leadership is an outcome of social construction requiring the involvement of others (Randall, 2004). This kind of leadership consolidates, confronts and changes

prevailing wisdom and attempts to frame and define the reality of others (Alvesson & Sveningsson, 2003). Change leadership therefore focuses on creating change, whereas management focuses on creating stability (Barker, 1997). Randall (2004) suggests that the leader is more responsible for the process of change where the ethics of individuals are integrated with the needs of the employees. This would suggest that the leader takes on the role of the moral arbitrator. Schwalbe (2006) indicates that a leader focuses on longer-term goals and the "big picture" objectives, while inspiring people to achieve these goals. A manager on the other hand often deals with day-to-day details of meeting specific goals.

Another role is that of the change master. The main roles of these individuals are to diagnose and develop clear change goals, facilitate the change process, design the change process, act as a project manager, act as an educator when informing others of the change, market the change in the organisation and serve as an inspiration agent (Tearle, 2007).

A project team is usually formed to manage the planning, implementation and monitoring of a change initiative and a project manager is usually appointed to ensure that the deliverables are met. According to Young (1996), some key roles of project managers in the context of transformational change are to ensure that:

- clear project tasks are formulated and defined
- all work is well coordinated and fairly distributed
- all team members have a clear understanding of their roles and responsibilities

Burnes (2004) states that the role of a project manager includes the following:

- interpersonal roles: acts as a figurehead, liaise with other organisations and acts as a leader
- information roles: monitoring the change by asking for feedback, acts as a spokesperson and disseminates information through the organisation
- decision-making roles: acts as an entrepreneur, constructs budget and allocate resources and acts as a negotiator

Ultimately, a project manager should act as a change leader, change master, change champion and change agent in order to "sell" the change, help employees to become change ready and monitor and implement the change initiatives accordingly (Nahavandi, 2000).

Connor (1993) developed a triangular model that focuses on the three most important roles in any change process. Firstly, the role of the ***sponsor*** was described. A sponsor is an individual with the appropriate authority to approve the change. A change goal is usually formulated by the sponsor and then people are assigned to drive the change and make it happen. Planned change cannot be possible without high-level sponsors. Secondly, the role of an ***advocate*** was introduced. An advocate is someone who sees a need for change and then convinces the sponsor(s) to approve it. This is known as the so-called "selling" role - to buy into the change. The advocate must be able to provide the sponsor/s with detailed information on all aspects of the proposed change, as it is crucial to obtain buy-in. Thirdly, the role of the ***change agent*** was described. After the mandate has been granted by the sponsor(s), change agents should be selected and given the responsibility to assist in driving and communicating change. In many instances in the past, change agents were referred to as officially appointed individuals in the management team of the organisation.

According to Davenport (1993), all project team members involved in the change process need to act as change agents, fulfilling different roles. The project manager needs to clarify who is responsible for which part of the change, since certain functions may require different change agents. Some of the roles could include:

- the advocate who proposes the change
- the sponsor who legitimises it
- the targets who undergo it
- the agents who implement it
- the process owner

The roles of these different change agents differ and some will need different skills sets from others. Individuals fulfilling these roles should be chosen with care to ensure competency and commitment (Randall, 2004).

For the purposes of this research project, change agents do not refer to all individuals involved in the project team but only to those employees, assisting in communicating key messages, providing implementation guidance, offering moral support to other employees and encouraging those around them through the transition.

Next the role of change agents was explored in order to determine their real value in large organisations.

3.8.1.2 Role of change agents in managing change effectively

Change agents are those individuals in organisations who provide guidance to its team members and who are usually viewed as people others listen to. The more these individuals stay in the loop regarding any information that could potentially impact on them as a result of the changes, the better they can disseminate the information to employees, in order to keep everyone informed and valued as part of the business (Massey & Williams, 2006). The closer a change agent is to new information released, the sooner he or she can communicate the impacts and proposed change to his or her peers.

Hutton (1994) conducted extensive research on the role of change agents, and to date his research is the only research found to be significantly comprehensive and applicable to the objectives of this research project. He defined the role of a change agent as follows: A change agent is someone who is selected to help employees cope with change that is usually driven by a certain initiative or project. The focus is therefore specific and the change agent usually knows what is expected from him / her. The number of change agents selected usually depends on the size of the organisation, the number of employees affected and the extent of the change. In many organisations, a group of change agents is referred to as a “change agent network” (Hutton, 1994). This concept will be introduced later in this chapter.

In his research Hutton (1994) emphasised the following six important roles a change agent has to play in order to drive change effectively and to ensure proper alignment between project goals and organisational goals:

1) Help individuals to change the way they think and perform their jobs.
2) Help to change the norms of the organisation. This may include accepted standards, customer service, adjusting best practices, and so on.
3) Help to change the processes and systems of the organisation.
4) Establish and maintain alignment between the vision of the entire organisation and the responsibilities of the change agents, also ensuring alignment of messages across the organisations in order to prevent confusion and resistance.
5) Provide leadership, support and guidance to fellow change agents.

6) Ensure regular communication with other change agents for the purpose of sharing knowledge and experience, venting frustrations and celebrating successes.

In order to achieve all of the above, it is necessary for change agents to schedule regular meetings with other change agents. Change agents cannot start fulfilling these roles without consensus by all parties involved, what exactly is expected of them, the timelines and their immediate tasks (Hutton, 1994).

Many years ago, Rogers (1987) conducted research on the role of change agents and indicated that change agents should fulfil the following critical roles:

- articulating the need for change
- building credibility in order to be viewed by others as trustworthy and competent
- viewing and diagnosing problems, issues and concerns of the perspective of their audience
- motivating people to change
- working through others in order to translate intent into suitable actions
- stabilising the adoption of innovation
- promoting self-renewing behaviour in others

According to Ulrich (2008), change agents play a critical role in building a firm's capacity to handle change. These individuals ensure that all initiatives are properly defined, developed and delivered by working closely with the appointed project team. Ulrich (2008) refers to change agents as HR professionals spread across the organisation, assisting a project team to ensure that the employees affected become change ready.

Ideally, a change agent should be able to find the balance between being a technical expert, having all the answers and a process facilitator and allowing the organisation to find its own answers by providing some guidance (Paton & McCalman, 2000). Employees who are regarded as change agents and also known to be affected by the change are more likely to question the value of the changes, hence through the answers obtained they can easily become experts by having all or most of the answers sought by their peers (Senge *et al*., 1999). This indicates that change agents should seek information from other experts in the field to be able to assist their peers efficiently in understanding the intricacies of the proposed changes. This

will increase communication and may lead to employees becoming change ready early in the transformation period.

According to Saka (2001), change agents are also viewed as those individuals who have a passion for the proposed change and individuals who influence others on a daily basis. Not all change agents will start off with extreme enthusiasm about the change but as time passes some become increasingly excited about the change, playing a vital role in that moment in time to convince employees to change and drive the change in more than one significant way. These individuals are known for helping their peers, supervisors and subordinates along this path.

According to Accenture (2007), other roles mentioned in the literature over and above the roles already mentioned are as follows:

- Change agents actively support or champion changes throughout the organisation, but especially with those groups affected by the transformation initiative.
- They answer project/initiative questions and promote bottom-up communication.
- They accelerate change by transmitting formalised information to and encouraging informal discussions with target audiences.
- They watch and assess the local situation, diagnose problems and alert the relevant persons.
- They pilot the change distribution process in their specific areas.
- They communicate project messages to target audiences.
- They exchange experience and knowledge with other change agents.

Lippit and Lippit (1975) argue that the behaviour of a change agent runs along the continuum of eight different roles, depending on whether the he or she is directive or non directive. These roles are mutually exclusive and vary in terms of the stage in which the project is. These researchers placed emphasis on the multiple roles change agents should play during transformation. No matter what role the change agent has at any given point in time, he or she needs to work in close conjunction with the project team. The role of the change agent ideally changes as the project proceeds from one phase to the next. In this instance, the change agent will firstly take on the role of identifying the problem he / she will be faced with and agree with the project team that the problem identified is indeed correct. Secondly, the relationship between the change agent and the people influenced by the change

should be established and developed. Thirdly, the change agent should assist the organisation to implement the change successfully whilst managing the fears and concerns of employees. Lastly, the change agent should help the organisation to position himself or herself in order to manage itself from there onwards. These two authors indicate that change agents should take on some of the following roles (Lippit & Lippit, 1975):

- They help the organisation to define the problem.
- They help the organisation to examine what causes the problem by interacting with the employees on the ground and obtaining proof from them.
- They assist the organisation to offer alternative solutions that would be best for its employees.
- They provide direction in the implementation of the solutions.
- They help the organisation to maintain the change by ensuring that employees are comfortable with the new way of work.

The role the change agent fulfils relies on the process of issue resolution and its stages. Change agents will therefore have to understand the different roles they should be able to fulfil at any given point in time. Only when change agents are comfortable with these roles and understand them, can they adapt and familiarise themselves with the applicable roles required in any given situation.

Hutton (1994) describes appropriate and inappropriate roles of a change agent. A clear distinction should be made to prevent change agents from spending time and wasting energy on the roles they are not supposed to play. Some appropriate roles would include: visionary, advocate, navigator, confidant, supporter and role model while inappropriate roles include: personal assistant, commander, spy, progress chaser, self-promoter, and the like.

Randall (2004) supports the roles of change agents as indicated by Hutton (1994). According to Randall (2004), the following are a number of key change agent roles: visionary and catalyst, analyst, case builder and risk assessor, team builder, implementer, action driver, reviewer, critic, navigator and auditor. The time allocated to the change agent's real job-related tasks and supporting function in driving the change should be carefully agreed upon by the change agent and his / her supervisor. With reference to this, Hutton (1994), developed a number of guiding principles for change agents on how they should manage change according to the appropriateness of their roles:

- Change agents should start with the needs and ambitions of individuals in order to gain their commitment to change from the start.
- They should make the change process a team effort and ensure that everyone is involved and takes part in decision making.
- Partnerships should be built with all key stakeholders throughout in order to obtain continuous commitment from them.
- They should strive for a few tangible early successes, and make use of recognition and publicity.
- They should provide as much information as possible to those individuals affected by the change, the information should be based on the needs for change, benefits and the effect the change will have on the organisation and its people.
- They should celebrate any progress made and ensure that the process is fun.

In summary, the main role of a change agent relating to this research project is to provide employees with support, helping them to understand and accept the change. This was done through regular communication feedback sessions with employees concerned.

Accenture (2007) stipulates that a change agent has various contact points during his or her involvement in the change initiative. Representations of these interactions are provided in the table below. These interactions usually happen concurrently and occur, in many instances, through the establishment of a change agent network, which is described later in this chapter.

TABLE 3.4: CHANGE AGENT CONTACT POINTS

With project team members	With other change agents	With peers	With direct supervisors
Provides requirements for communications and change activities.	Receives support.	Promotes the project.	Informs about change activities.
Tracks project communication.	Exchanges ideas.	Monitors change progress among peers.	Presents actions and has them validated.
Assists with distributing communication to impacted employees.	Presents solutions on the implementation of hints.	Receives information about possible issues.	Seeks advice.
Helps facilitate training and development.	Provides coaching.	Receives suggestions for project improvements from peers.	Informs about questions, issues and/or concerns raised by members of the business unit.
		Provides information and communicates project messages.	
		Acts as a leader in their environment and involves peers.	

To summarise, the proposed contact points as illustrated in the table above, numerous interactions on certain areas take place on a daily basis with various stakeholders. It is crucial for a change agent to establish favourable working relationships with all four of the above groups because the change agent being the central point of contact between his or her peers and supervisor and the project team. The change agent needs to report back on issues, concerns and comments received from his or her peers to the project team to help them develop suitable action plans, together with the change management specialist in order to resolve any issues/problems. The project team should report information on the project's progress, possible obstacles and any other relevant information to the change agent, who, in turn gives feedback to the people concerned in the respective areas. During

these interactions the change agent's supervisor has to be kept informed of all change agent activities taking place. It is crucial that this communication cycle should be kept alive because it could have serious repercussions if neglected, owing to change agents filling a tremendous communication gap in the change management process by directly engaging with employees on the floor.

A change agent is also known as an effective advocate, understanding and functioning in cooperation with many different systems. In order to promote the proposed changes, the change agent has to be knowledgeable about the reasons, processes and benefits of the project for the organisation and its employees (Wertheimer, 2001). This researcher also indicated that a change agent is bound to become unpopular with some employees at a certain point in time, especially if the change is highly resisted by them. Change agents therefore need to focus most communication on the "what's in it for me" factors in order to win over those resisting the change.

Even when guiding principles are followed by the best change agents in a large organisation, there are no guarantees that there will not be any setbacks or slowdowns. In order for employees to fully accept, understand and master the challenges change effects, it is necessary to communicate a correct and clear message to these employees concerned. It is essential for change agents to be comfortable with the changes to be implemented and the reasons for this in order to promote change successfully and minimise resistance throughout.

3.8.2 Responsibilities of a change agent

Even though there is not much literature available on the specific responsibilities of change agents, valuable information was found.

According to Nadler (1998) there are a number of day-to-day practices that change agents should follow to solidify their role. These are as follows:

- They should demonstrate personal involvement in the change process.
- They should communicate proper alignment between employee's current work and the new direction.
- They should model the new behaviours and ensure they are in line with the organisation's values and culture.

- They should communicate effectively throughout the change process.
- They should engage with the affected employees on a regular basis.

Nadler (1998) stressed the importance for change agents to work closely with the change leader in order to ensure that the right messages are communicated and the correct behaviour is demonstrated.

Accenture (2007) indicates that the following change agent responsibilities are critical, in order to support the successful delivery of any project/initiative:

- Champion changes on the ground:
    - Show strong commitment to project changes, both publicly and privately.
    - Make sure the actions in the workplace support the change agent's words.
    - Help to create enthusiasm for project changes.

- Address target audiences' questions and concerns:
    - Answer questions honestly.
    - Seek out additional information from other change agents or transformation project team contacts, as required.
    - Give feedback to the transformation project team on commonly asked questions.
    - Admit to not having all the answers, while reassuring the target audience that they will be contacted by the project team.

- Identify and escalate potential "hot spots":
    - Be alert - watch for potential "hot spots" or areas of possible concern.
    - Raise issues with the project team before they become problems.

- Roll out transformation communications, as required:
    - Help communicate project changes to co-workers once the project team has communicated key messages.
    - Prepare for any presentations by running through presentation material and anticipating audience questions.
    - Note any audience questions that cannot be answered and find out further information after the presentation.

- Encourage, coach, and support the individuals in the business area throughout the delivery of the transformation change initiatives:
    - Support the adoption of transformation changes.
    - Help the affected business area sustain “business as usual”, post implementation.
    - Encourage the impacted business area to integrate transformation changes into their daily work practices.
    - Show sustained support for transformation changes.

- Assist the project team to review progress towards achievement of change objectives:
    - Understand change objectives.
    - Monitor progress, as directed.
    - Process findings on a timely basis.
    - Feed results back to the project team.

- Seek out and squash rumours:
    - Listen.
    - Be proactive in searching for rumours.
    - Try to replace rumours with facts.
    - Notify the project team of widespread rumours.

Ulrich (1997), who refers to change agents as HR professionals in an organisation, developed the following four critical steps change agents should follow to ensure the success of the change initiative:

1) Identify the key success factors for building capacity for change.
2) Profile the extent to which the key success factors are being managed.
3) Identify the improvement activities for each success factor.
4) Manage the key factors for change as an iterative process and not as an event.

According to Recklies (2001), some of the responsibilities of change agents include: being able to evaluate facts from different points of view, identifying and involving opinion leaders in the process, motivating staff, communicating face to face with staff

and obtaining and studying information from the project team, in order to provide regular updates on the project progress to peers.

Ulrich (2007) holds that organisations are the ones creating initiatives and HR professionals should act as change agents, managing the people side of the proposed change. Following the above four steps could result in a higher proportion of change initiatives happening much faster and more successfully.

It has been mentioned many times that change agents should work closely with the project team to ensure a successful transformation process. The project team therefore also has some responsibilities in order to ensure they supply change agents with the right tools to manage change throughout the organisation (Young, 1996).

The responsibilities of project teams include the following (Schwalbe, 2006):

- Develop a project charter and hold an initial meeting with all relevant parties.
- Develop a scope statement to plan the work that needs to done.
- Develop a detailed schedule for all team members, stating when specific work will start and end.
- Engage with the key stakeholders and employees concerned throughout the change process.
- Provide training where necessary.
- Monitor the change process closely.
- Adjust the project charter where necessary.
- Report on the project outcomes .

In many instances, roles and responsibilities are divided amongst change agents in order to ensure that certain individuals are not overloaded with specific change agent tasks because these individuals still have their usual job functions to perform as well. The roles and responsibilities of change agents should be qualitative rather than quantitative. There should be continuous feedback between the change agent, change management specialist and the change agent's supervisor in order to ensure continuous alignment and support throughout the process (Chapman, 2002).

3.9 CHANGE AGENT NETWORK

According to Lockyer and Gordon (1996), a network of people is known as a group of people working towards a similar goal or a group that share similar views or beliefs in certain things. A network is also known as a team of people working together. A team is defined as "A number of people with complementary skills who are committed to a common purpose, a common set of performance goals, and a common approach for which they hold themselves accountable" (Cobb, 2006, p. 81). The concept "change agent network" provides insight into the significance of a group of people selected to serve as change agents in the same organisation, division or team. Hutton (1994), was the only researcher that highlighted this type of network, according to the literature found. He referred to a change agent network or CAN, as many organisations refer to it nowadays, as a structure of individuals throughout the different layers of an organisation, forming part of a certain group. He also emphasised that a change network is a communication channel to support change throughout different organisational layers.

According to Randall (2004), a change agent network can also be regarded as a marketing structure, relaying communication efforts from the project to the stakeholders in different organisational layers and feeding information back to the project about expectations. It also refers to a group of centre-led individuals belonging to the same group, focusing on the same objective during the transformation process, namely to drive change and minimise risks

The majority of obstacles in a transformational process involve organisational and people issues. The main objective of a change agent network is to facilitate and support the implementation of a change initiative in order to maximise the success and benefits of the changes. Individuals belonging to the CAN are closer to the "ground" and can therefore act as the link between the project team, implementing the change with employees on the ground (Hutton, 1994).

Accenture (2007) maintains that on the basis of research conducted in the past it is clear that a change agent network serves the following purposes:

- to provide information and guidance on how to implement a quality approach
- to offer moral support and encourage people around it
- to ensure recognition for hard work and milestones achieved during the process

- assist in fostering communication and cooperation between different divisions in the organisation

A change agent network should not only consist of the employees across the organisation selected as change agents but should also comprise the leaders of the change initiative. This includes the sponsor, advocate and divisional heads. Management are also seen as the drivers of change, and without their support and buy-in, selecting other change agents will be futile. Individuals forming part of this network function in different areas in the business, working with their own group of people in their respective areas. This network does not refer to a division or function within the business because people still work in their own areas, but cooperate in order to achieve a common purpose. The size of the network will depend on the size of the organisation, as well as on the number of employees influenced by the change (Accenture, 2007).

According to Katzenbach (1996), the project team in support of the change leader should form a network. This author believes that the project team should provide guidance to any other teams or individuals impacted by the change or involved in the project. It may be challenging for the project manager to put together a skilful project team to lead the change.

The project manager must ensure that the individuals in the team are able to work together and are committed to the process. It is therefore also essential for the organisation to appoint the right project manager to make sound decisions Young (1996). Often, when establishing a project team, the team is new and most members might not know one another (Schwalbe, 2006). Such a team might typically pass the following five stages of team development (Schwalbe, 2006):

1) forming: introducing team members
2) storming: team members having different opinions on how the team should operate
3) norming: team members testing one another which often results in evolving conflict
4) performing: shifting take place to the achievement of team goals as opposed to working on the team process
5) adjourning: breaking up the team on completion of the project

The typical roles and responsibilities of a project team were discussed earlier, and by examining the advantages of establishing a project team, focusing on the completion of certain tasks is often one of the most effective ways to help a team become productive and meeting the project objectives (Verma, 1996).

A change agent network, like a project team, can also be viewed as highly effective because of the fact that management do not see this network as a separate department but as part of them. The network can also reduce the amount of pressure on management in their area with regards to managing the people side in a transformation process (Hutton, 1994). A group of change agents can help to pass on crucial messages, and individuals in the network can provide tips and guidelines on how to minimise the risks and fears of the employees concerned (Randall, 2004).

In the same way as project team members, change agents can learn from one another by means of mutual support. If team members motivate one another, the change initiative would have a much bigger chance of succeeding. Project team members often adopt the attitude of the team leader, and one of the main motivational factors ensuring an effective team is for the leader to have a positive attitude (Verma, 1996). Change agents working as part of team should have the opportunity and suitable mechanisms, allowing them to regularly communicate with and motivate one another. These individuals should be aware of who the other selected change agents are to ensure proper communication (Randall, 2004). The network may be a team with enormous power, because they are individuals volunteering to help drive the change and they are prepared to put their hearts and souls into it and believe in it (Accenture, 2007).

Before an organisation decides to select individuals to form part of this network it is vital to obtain buy-in from the management team to establish such a network. Management should clearly understand the reasons behind it as well as the roles and responsibilities of individuals in the network and the methods used to select members (Hutton, 1994). One of the first questions to be asked is: How many change agents are needed? Carnell (1999) indicates that before a project team can make this decision, the different roles and responsibilities of change agents should be determined and documented. He suggests that input should be received from employees outside the project environment about their expectations of a change agent. In cases where different roles need to be fulfilled by different change agents,

suitable individuals should be selected, with the necessary skills to be able to fulfil those roles (Dawson, 2003.)

The group responsible for selecting the right number and type of individuals to act as change agents, should select employees who are constructive, have the best interests of the organisation at heart and have trust and confidence in their colleagues and supervisors (Randall, 2004). All employees should also be made aware of the upcoming network as well as the process to be followed in becoming a change agent. After selection, these individuals should be contacted to obtain their approval and consent, in cases where they were nominated by others to act as change agents. Individuals who volunteer to fulfil this role should clearly understand what it entails and what will be required from them (Accenture, 2007).

In the past, there was confusion because change agents selected from different divisions were not always sure to whom they should report on change agent activities. According to Randall (2004), the easiest way to resolve confusion is to obtain buy-in from selected change agents' line managers beforehand and request them to obtain feedback from selected change agents in their area on a monthly basis. This will also afford line managers the opportunity to determine whether the change agents are still on track and whether they are able to cope with their given tasks and with their original jobs, which they are paid to do.

It is crucial to sustain the network after establishment in order to accomplish the task at hand. Hutton (1994) provides the following suggestions for sustaining a change agent network:

- Schedule meetings or bi weekly touch points with change agents, according to their availability. It is important to work around their schedules because they have other responsibilities too.
- Recognise the need for moral support in the group, emphasise their problems and develop suitable interventions to resolve or minimise their problems as soon as possible.
- Change agents should share successes and recognise one another's achievements - this will keep them focused and motivated.
- Knowledge should be shared. Through the experiences of the change agents, they might develop possible solutions on behavioural problems in their area. The solutions may just be what another change agent was looking for and this shows that sharing knowledge is a powerful tool in this network.

- The network can also be used to scout for more talent. Some individuals may approach change agents and volunteer to be involved in the process and possibly also become a change agent. Change agents should therefore be on the lookout for other influential individuals with lots of energy and enthusiasm.
- Change agents should occasionally forget about their tasks, come together and celebrate their achievements to date.

As indicated earlier, before an organisation can start to manage change through a group of change agents it is essential to ensure that the right individuals are selected to fulfil these roles. In essence, the key role of a change agent network is to provide information and guidance on how to implement a quality approach, offer moral support and encourage those around them and assist in building communication and cooperation between different business units in an organisation.

3.10 CHANGE AGENT IDENTIFICATION

"If we want things to stay as they are, things will have to change."

- Giuseppe di Lampedusa (1957) -

According to Tan and Kaufmann (2000) it is critical for change agents to guide an organisation during times of change and it is therefore imperative for these individuals to become involved and to participate in the decision making processes.

As indicated, ideally, change agents should have certain personality traits and skills to be able to execute their responsibilities as change agents in the most effective way. The key question that now arises is how to identify individuals who have suitable personality traits and skills. The same factors should be taken into consideration when identifying individuals to form part of a project team. According to Lockyer and Gordon (1996), personal and technical skills should be considered when identifying individuals to form part of a project team – hence the need for the project manager it be involved in the selection process.

Lockyer and Gordon (1996) developed the following guidelines a project manager should consider when identifying individuals for the project team:

- Appoint individuals who will
    - behave innovatively
    - openly discuss ideas
    - communicate freely between functions
    - sell the ideas and work of the team
    - obtain cooperation from people outside the team
    - ensure work progresses at an acceptable level
    - assess their own and other people's work pragmatically
    - remain cohesive as a group

It is clear that potential project team members need to have certain characteristics, to ensure team cohesion and harmony. If individuals with suitable skills, knowledge and personality traits are selected, the success of the project in achieving its stated objectives will increase (Schwalbe, 2006).

According to Hutton (1994), when searching for individuals who could ideally act as change agents, certain factors should be taken into consideration: Personal skills and attributes, knowledge and experience of the business and knowledge and experience of quality. The following should form part of the selection process when searching for individuals with specific skills and personality traits. Search for individuals who

- identify with the aims of the change process, values and culture
- are able to deal with their complex issues of their peers and subordinates
- demonstrate integrity as well as the ability to earn the respect of others
- portray the urge to always help, involve others and collaborate with others - in other words be a team player
- display effective interpersonal and communication skills
- demonstrate patience, persistence and even an appropriate sense of humour

According to Tan and Kaufmann (2000), another factor to consider is the amount of knowledge and experience the individuals has of the business. Such individuals should understand the kinds of problems employees face and help them to resolve their problems. In doing so, it is important for a change agent to have a good understanding of the organisation's processes, procedures, systems, policies, and so on. He or she should understand the structure of the organisation, what the organisation stands for and the functions and roles of the organisation's executives.

A change agent, like a change leader, should be someone who has knowledge and experience of quality. This means that the he or she should be able to explain the current status of the organisation, and the importance of the quality of its products, services, global trends and best practices (Conger *et al*., 1999).

According to Katzenbach (1996), change agents should be individuals who have been part of the organisation for a while, because they require an in-depth understanding of all organisational-related processes, structures and policies. Even though the above focus areas need to be taken into consideration when selecting change agents, probably the most important quality, underpinning the above, lies in the individual's attitude.

It is evident from the above, that when selecting team members for a specific purpose, certain characteristics play a role in the identification processes.

3.10.1 Methods/approaches to follow in identifying change agents

Before exploring methods or approaches to follow in identifying change agents, some of the fundamentals of the composition of a project team were researched. These findings on the identification of project team members will be compared with methods and approaches found in change agent identification. When compiling a project team, project managers should consider a number of fundamentals (Cobb, 2006). Firstly, it is necessary to determine the size of the team that will be required. The project managers should review and analyse the nature of the project, and the duration and scope of the work so that they can determine the number of resources required. Secondly, the project managers should determine exactly what skills are necessary to achieve the stated project objectives, and cluster these accordingly. Thirdly, the level of individuals to be identified should be determined through team governance. The team governance approach will indicate whether the project will be manager led or self-managed. In cases where teams manage themselves throughout the process, more senior personnel will be required to lead their specific functions in the team. Fourthly, the project manager needs to determine whether these individuals need to be on board in a full-time or part-time capacity. Lastly, discussions should be held by the project manager with different functional heads in the specific area where the initiative will be implemented, in order for those functional heads to advise on which individuals with a specific skill set can be considered to join the project team or whether external recruitment will be necessary (Cobb, 2006).

Hackman (2002) also indicates that in order for a team to function effectively; the right candidates should be identified to fulfil the project roles. He also emphasised that the team members' identification process is one that should not be rushed, because this could ultimately impact on the end results. Members should be chosen carefully and judiciously.

As indicated above, it is necessary to understand that the approach followed in the identification of individuals for this role, could have a significant impact on the change initiative itself. Hutton (1994) provides some valuable information on the recruitment of these individuals. It is usually the task of change management experts and senior management to select the right individuals. Management should be a part of this process since they are aware of the capabilities, skills and personality traits of people in their area and can help to recommend specific individuals. However, change agents may also be required to identify other potential change agents to assist them in the process. Research shows that it is unusual to find individuals with the appropriate quality-related knowledge and skills to serve as change agents. How would these individuals have acquired this knowledge? If no suitable internal candidates can be found, external individuals can be recruited, but this is not always ideal. Ideally, someone from inside the organisation who is familiar with the organisation's people, structures and vision should rather be selected and developed to serve as a change agent (Luecke, 2003).

Some of the benefits of selecting individuals from within the organisation include the following: the characteristics and abilities of internal candidates are generally known, and the individual knows the organisation as well as the type of business, the process, people and the politics (Hutton, 1994). Often these individuals are already known and respected by others. The time it will take to recruit an outsider, allowing him or her enough time to familiarise himself or herself with the business and build relationships may be too time-consuming and this may then interfere with approved change initiative timelines. Also, new employees selected as change agents may become involved in the change process too late, when fears, uncertainties and anxieties are almost unmanageable (Randall, 2004).

Strebel (1998) provides significant information on how to attract the potential change agent's attention. A subtle approach can be used to attract change agents. In organisations where one can solicit the support of change agents publicly, one can

- approach individuals directly and sell the idea of becoming change agents to them
- ask managers to nominate and select change agents in their unit/division

In cases where it might be possible to select change agents and utilise them to act as change agents in the long term, it could be worthwhile for an organisation to invest in them by continuously training and developing them (Luecke, 2003).

Strebel (1998) distinguishes between two types of change agents: task-oriented and people-oriented change agents. Task-oriented change agents tend to be skilled at analysing formal economic dimensions, but have poor interpersonal relationship skills. These individuals are effective in driving processes and technology and highlighting the trends in the marketplace. People-oriented change agents however, focus on aligning the change initiative to the needs of their fellow employees. These individuals usually have excellent interpersonal skills and find it easy to communicate and drive change among their co-workers. This research project focuses on the people-oriented change agents, since these individuals need to work closely with others affected by change to ensure that they become change ready.

Luecke (2003) provides insightful information on the ways to identify change agents. Organisations should do the following:

- Determine who people listen to. Change agents often lead with the power of their ideas.
- Be alert to recognise people who think “otherwise.” Change agents are usually not satisfied with the current state of affairs and encourage any suggestion that brings about change.
- Focus attention on new employees, because they may enter the organisation with a different mind-set that brings different ideas and creativities to the table.
- Search for people with unusual training or experiences, because these people sometimes see the world through a different lens.

Arrata *et al*. (2007) hold that there are a number of distinct factors an organisation should take into consideration in order to identify credible change agents. They stress that when considering identifying change agents it is necessary to anticipate other staff members’ reactions when the change agents’ names are announced.

Selecting individuals who are known as high performers and are usually already well respected and well-known, would indicate that management take the programme seriously by placing these credible individuals into the roles of change agents. Arrate *et al.* (2007) argue that by forming a credible team of change agents, change will be driven and implemented more effectively. Recruiters should focus on identifying people with sound interpersonal skills - in other words people who find it easy to communicate with others in their area.

The procedure or tools used in the selection of change agents can be customised specifically for each division in the organisation, depending on where the change agent is located in the organisation, as well as considering the planned nature of work they will be asked to accomplish (Strebel, 1998).
According to Strebel (1998), the two most favourable and frequently used methods organisations use to select change agents are

- change-readiness questionnaires
- nominations by respective line managers

In cases where questionnaires are used, the organisation selects an appropriate questionnaire that will help to identify potential change agents according to their needs. The literature findings merely stipulated that many organisations request impacted employees involved to complete a certain change-readiness questionnaire in order to determine the level of readiness, and in so doing to identify those individuals with high change-readiness scores as potential change agents (Strebel, 1998).

In cases where questionnaires are not used, potential change agents are identified through nominations by direct managers or supervisors. These managers usually nominate individuals in their area who they believe have influential abilities, communicate well with others and have powerful relationships with their colleagues. No individual nominated to act as a change agent should ever be forced to act in this role. It should be voluntary, and the individual should have a clear understanding of what will be expected from him or her. Only in cases where an individual and his or her direct manager are satisfied with their roles and responsibilities, as well as the time the individual spend in this role, should a change agent be appointed and introduced (Strebel, 1998).

Wertheimer (2001) developed a number of criteria for finding individuals for change agent positions. He indicated that the identification process will differ, depending on the location in the system at which change agents will be placed and the nature of the work they will be asked to accomplish. However, the following are some generic characteristics the recruiter should consider when identifying suitable change agents:

- the level of experience in rendering a service to both internal and external stakeholders
- the level of experience in supervising or assisting others to solve multiple problems
- the communication skills of the individuals, which should include reading and writing skills
- the facilitation skills, which should be tested in practice by requesting the individual to facilitate a specific workgroup session

The recruiter should have a check-list handy to indicate which skills are visible or invisible, to enable him or her to draw up a short-list from the pool of candidates evaluated.

The recruiter should also consider a proven track record of trust in the community and capabilities developed by the potential change agent thus far. Strebel (1998) and Wertheimer (2001), like Hutton (1994), also indicate candidates with the right interpersonal skills and personality traits should be considered for this role, instead of focusing on the qualifications of a preferred change agent. Wertheimer (2001) argues that skills and traits that potential change agents possess are far more important than any qualification or specialised training.

To summarise: When identifying change agents it is important to consider the following: specific skills, personality traits, knowledge of the organisation and the level of trust and the relationships between the potential change agents and others in the organisation.

Every organisation should ask the above questions before deciding at which level change agents should be represented. Arguments regarding to two of the above questions are as follows (Hutton, 1994):

1) it may be extremely difficult for the functional heads to shift some responsibilities and take the time and effort to become an effective change agent

2) many employees feel more comfortable with change agents being their peers and not their supervisors

Since these arguments will differ from one organisation to the next, it is critical to ask these questions and not use a generic approach previously adopted by other organisations.

3.11 REWARDING CHANGE AGENTS

Even though minimal research has been conducted on change agent rewards and recognition, in-depth research has been undertaken on employee rewards and recognition. Since change agents are part of the employees in a large organisation, the literature findings in this regard were deemed appropriate. Some of the greatest challenges most organisations face today are efficient and effective employee rewards and recognition programmes (Milne, 2007). Many organisations are currently implementing reward and recognition programmes, believing that these will assist to effect the desired culture change. Vast amounts of money are being invested in these types of activities in many organisations across the world. The rationale for investing in employees is based on the assumption that financial incentives will encourages employee loyalty and teamwork and develop the desired culture (Milne, 2007).

A large body of literature exists on employee reward and recognition programmes and many of these studies focused on the effects of rewards on task interest and performance. A distinction can be made between two types of motivation, namely intrinsically and extrinsically motivated behaviour. The former focuses on a reward for the task itself, and the latter focuses on an activity that is rewarded by incentives not inherent in the task (Deci, 1971).

Understanding what motivates employees is one of the key challenges for managers today (Milne, 2007). According to Bruce and Pepitone (1999), it is imperative to know how to influence that, which others are motivated to do, with the overall aim of having employees identifying their own welfare with that of the organisation.

In general, the term “reward” refers to overall compensation, since many organisations use promotions and bonuses to reward employees, in the “financial”

sense of the word (Lawler & Cohen 1992). Kanter (1989) added another dimension to this discussion in the 1980s when she noted that many organisational rewards are differentiated on the basis of status and this is often the only way an individual can increase his or her chances of promotion.

Employee recognition is slightly different from employee rewards. Recognition is viewed as a nonfinancial reward given to employees selectively. Recognition can be as simple as giving someone feedback on outstanding performance, commitment and learning or giving an individual a certificate or thank you letter (Milne, 2007).

It is generally accepted that incentives such as rewards and recognition programmes are used to reinforce an organisation's values, promote outstanding performance and foster continuous learning by openly acknowledging role model behaviour and ongoing achievement. Both types are dependent on managers recognising the subordinates' achievements, whether as individuals or part of a team (Milne, 2007).

The literature review included information on project teams and change agent networks and it seemed appropriate to include some information on rewarding of teams. Since teams are becoming the primary work units, many organisations are attempting to adopt team-based reward and recognition programmes. Several factors have contributed to the growing popularity of team-based reward and recognition programmes. Some factors include a growing interdependence between tasks (Johnson, 1993). Changes in the way work is organised, the flattening of organisations and changing technology have created interdependencies between tasks that often make it difficult to separate the contributions and performance of individual workers (Nickel, 1990).

Research on performance appraisal indicates that performance can be more accurately assessed by measuring the success of larger units in the organisation instead of individual performances (Gerber, 1995). Group-level rewards have also been shown to influence the motivational levels of team members positively (Lawler, 1992).

Other studies conducted in the field have questioned the ability of team rewards to foster cooperation within teams. Wageman (1996), for example, found that the level of task independence among group members was positively related to cooperation, helping, job satisfaction and the quality of group processes, while the type of reward system - individual or group rewards, or both - exerted no independent effects on

these criteria. Team rewards may also lead to competition between teams and this may mean that teams move into a competitive, instead of a cooperative relationship with other teams with whom they have to interact (Lawler, 1992).

It is evident from the above that there is a need to design a team-based incentive programme to sustain team progress and reinforce the team structure (Hoffman, 1998). The work of Strebel (1998) was the only material that could be found on the remuneration of change agents. According to him, individuals are often hesitant to act as change agents because of a high workload in their day-to-day tasks. If individuals' performances are not measured and they are not remunerated for fulfilling a specific role, they might also become hesitant to voluntarily assume that role.

Strebel (1998) suggests that change agents should be compacted on their performance. A compact refers to a performance measurement indicator and an individual's key performance indicators. When it is performance bonus time, a rating should be allocated to employees' efforts as change agents. This initiative was introduced by an organisation named Eisai, a Japanese pharmaceutical company. The psychological attraction of a change agent's newly updated performance compact provided the opportunity to start up something new with more confidence, commitment and enthusiasm.

Once change agents have been identified, an organisation should help the individuals commit to the change initiative and process to be followed. According to Strebel (1998), the following should be considered when trying to establish commitment by the change agent:

- When no compact is in place, change agents may experience a dip in morale owing to the fear that their other job-related tasks will be negatively affected. This can be rectified by placing a performance compact in place in order to lessen other job priorities and adding change agent tasks into their performance compacts with which both parties are satisfied.
- Once a change agent understands his/her change priorities, and his or her manager should agree on the level of involvement in driving the change. This should also be included in the individual's performance compact.
- The individual has the right to signal commitment. Once this has been provided his or her supervisor has to commit to support the change agent and

encourage him or her to be involved in the change initiative for a certain period in time.

The above illustrates that even though it is essential to follow the correct procedure in identifying change agents. It is also critical to follow the correct process to obtain commitment from individuals identified, as well as a clear understanding of the organisational levels from which individuals should be selected.

The following conclusions can be drawn from the literature analysed in this chapter: There is a significant gap in literature on possible approaches, tools or techniques to be used to effectively identify change agents. This fact once again emphasises the gap this empirical research would fill. Most organisations seem to have utilised their own, customised approaches to identify change agents. Organisations compile their own criteria that individuals should comply with in order to become change agents. In most instances these criteria include years/level of experience, personality traits and interpersonal skills.

These focus areas are explored in the empirical phase of this research project in which a qualitative perception questionnaire was compiled, forming the foundation for the development of what seems to be one of the very first change agent identification frameworks. Future researchers could find the empirical research results useful and advantageous because of the change agent identification information, which is currently almost nonexistent in the literature in terms of a formal change agent identification framework.

3.12 CHAPTER CONCLUSION

This chapter dealt with the meaning of the term “change agent”. Various definitions were provided in order to understand the meaning of the concept from different viewpoints as well as information on the roles and responsibilities of these individuals in large organisations. The following is the most applicable definition found for the purposes of this research project: “*Change agents can be found in all levels of an organisation. They can be leaders, managers or employees. A change agent is someone who supports the need for change, is committed to championing the cause*

and motivates staff in their respective areas to see the benefits thereof" (Cheung *et al*., 2007, p. 9).

The key characteristics found in the literature were also discussed. These include certain personality traits, skills, knowledge and levels of desire to change a change agent should ideally possess. Most of the personality traits, skills and knowledge required for change agents were found in the work of researchers. This indicates that there is a significant level of agreement regarding the attributes of change agents. Tools and methods used in the past to identify change agents were mentioned. According to Strebel (1998), the two most favourable and frequently used methods used by organisations to select change agents are questionnaires or nominations by respective line managers. A gap in the existing literature was detected because of the limited amount of research regarding the identification of change agents.

The information provided in this chapter once again highlighted the fact that there is still much to be researched on the concept "change agents." The conclusion drawn is that there is definitely a need for change agents to become part of the process of managing change, especially in instances where transformation occurs in large organisations and where many employees are affected by the proposes changes.

"You may be the Pied Piper, but if there is too much distance between you and everyone else, they will never hear the music."

(Cheung et al., p.2. 2007)

This quotation aptly highlights the reason why a change agent can be viewed as the ideal link between the change management specialist and the employees in the organisation.

Chapter 4 will focus on the methodologies used in the empirical study to ensure that the scientific research processes are followed throughout in order to obtain valid and reliable research results.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

The comprehensive literature review in chapters 2 and 3 provided the theoretical context of the research. This chapter will focus on the research methodology for both the qualitative and quantitative research approach. Research methodology explains the process followed to perform an empirical study and described the population, sample, tools and techniques used within the study. The research design will be described, providing the foundation for the research process followed (De Vos *et al*., 2002).

As indicated, this research project adopted a multi-phased approach, which included the following qualitative and quantitative research approach characteristics (Creswell, 1998):

- Qualitative
    - The topic had to be widely explored.
    - There was a need to present a detailed view of the topic.
    - Sufficient time and resources were necessary to execute the research.
    - The research shaped continuously as the project progressed.
- Quantitative
    - A highly formalised and explicitly controlled approach was followed.
    - The researcher's role was that of an objective observer.
    - The research focused on specific questions and hypotheses.
    - Statistical methods were used to determine whether the improvement in the change-readiness scores of the group supported by change agents meeting the ideal profile were significantly larger than the improvement in change-readiness scores of the group supported by change agents who did not meet the ideal profile.

This multiple-phased research approach as well as the steps followed in the research process will be explained in this chapter. The reason for choosing a specific research design will be discussed for the sample sizes justified. The way in which data were collected and the measuring instruments utilised in doing so will also be indicated. Provision of this information indicates how the researcher carefully planned the

execution of the research project in an effort to improve the scientific quality and validity of the outcome (Mouton & Marais, 1994).

4.2 RESEARCH DESIGN

According to De Vos *et al*. (2002) research design refers to a plan or blueprint of how one intends conducting the research. The research design serves as a point of departure, and while focusing on the logic of the research, emphasises what the end product should be. In this instance a comprehensive three-step qualitative and nine-step quantitative research process were designed, which will be schematically illustrated and explained.

The research design is determined by the research question(s) which in turn influence the research activities, such as what data to collect and how. An exploratory and descriptive research design was chosen for the purposes of the research, incorporating multiple research methods in order to compile a change agent identification framework, whilst ensuring the validity and reliability of the research process.

The research design chosen for this research project is known as a comparison group pre- and post-test design. The dependent variable (the change-readiness scores of the employees concerned) was measured before the “treatment”, which is also referred to as the independent variable (support by change agents). This variable is then re-measured after the introduction of three different levels of the independent variable or “treatment”, as indicated in chapter 1. These “treatment” levels refer to no support from change agents, support from change agents meeting the ideal profile and support from change agents not meeting the ideal profile, in terms of personality traits.

The ultimate goal of the empirical research phase was to determine whether the improvement in change-readiness scores was significantly larger for the group supported by change agents possessing a specific personality trait from the ideal profile compared with the improvement in change-readiness scores of the group supported by change agents not possessing a specific personality trait from the ideal profile.

The two groups of employees were contrasted by comparing the improvement of employee change-readiness score, that is the difference, between pre-test and post-test ADKAR change-readiness assessment scores. Difference (improvement) scores involve subtracting the pre-test scores from the post-test scores. The pre- and post-test ADKAR change-readiness scores will be provided in chapter 5. The overall empirical research question (Are there significantly larger improvements in the change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not having that specific trait?) was answered by means of the comparison scores. All employee pre-test results served as an anchor, making it possible to compare the two employee groups. A detailed process description and the reasons for specific steps followed in the research process will be provided.

The sample groups were not obtained by random assignment but by purposive sampling. Purposive sampling falls under the category of probability sampling (Seaberg, 1988). The type "purposive sampling" in this category refers to researcher's judgement. The sample of change agents was purposefully chosen because they showed a high-level of change-readiness in the ADKAR change-readiness assessment results.

This research was conducted in a South African utility organisation consisting of approximately 32 000 employees across the country. The research was performed in the procurement and supply chain function of the organisation. During the period of the research this function experienced major transformational change. The objective of the transformational change was to change the way in which the organisation procures goods and services. All procurement and supply chain processes, as well as organisational structures, had to be reviewed and changed. Approximately 1002 employees were impacted by these changes. Not all of the 1 002 affected employees were assessed by the ADKAR change-readiness assessment, because only a certain number of roadshows were undertaken. The reasons for not visiting all the sites where the employees concerned were based were because of time constraints and overall business priorities, that is, the financial year-end and a cost-saving initiative throughout the organisation. In many instances the site managers themselves shared the objectives, benefits and processes of this project with their employees. In total, 350 of the 1 002 employees completed the ADKAR change-readiness assessment, and for these individuals, baseline ADKAR results were therefore available.

Since the 1 002 employees affected by the change were scattered throughout the country and a huge number of employees were involved, it was decided to establish a change agent network. The main purpose of this network was to appoint individuals to assist the change management team in supporting the affected employees throughout the transition period, and also ensuring that all project-related communication messages would filter through. This was the first time ever that the concept “change agent network” had been introduced to the organisation.

The organisation welcomed the establishment of such a network, and was eager to have this research done, to determine the ideal personality traits that employees should portray in order to act as change agents. 100 employees were identified as change agents based on their high levels of change-readiness (desire to change). Owing to a number of reasons, as explained in chapter 5, the 100 selected change agents reduced to 27 after a few months. Firstly, the remaining 27 change agents were later-on requested to complete an Occupational Personality Profile (OPP) questionnaire to determine which of them indeed display those personality traits that form part of the ideal profile of a change agents. Secondly, it had to be determined whether the change agents with the key personality traits from the ideal profile resulted in employees showing significantly larger improvements in change-readiness versus employees supported by change agents not possessing key traits. The ideal profile was compiled by means of a qualitative research phase, to be explained later. The sample group from which final change-readiness measures were obtained consisted of 135 impacted employees in the procurement and supply chain function who were supported by the change agents involved in the research and who were responsible for guiding them through the transformation change process. The method of selecting the 135 employees to complete the ADKAR will be explained later.

Initially, the literature on the roles and responsibilities of change agents were researched. Limited information was found on the identification of individuals as change agents, and the organisation therefore used its own discretion by selecting change agents through the use of the ADKAR change-readiness survey (Arrata *et al*., 2007). This survey will be explained comprehensively later.

During the quantitative phase of this research project, certain steps were followed in order to compare the improvement in change-readiness scores respectively of employees supported by change agents with a specific personality trait that forms

part of the ideal profile and those employees supported by change agents not meeting the ideal profile. Both the qualitative and quantitative steps followed in this research project are explained in sections 4.3 and 4.4.

4.3 RESEARCH APPROACH

As indicated in chapter 1, a combined qualitative and quantitative research approach was adopted in the research project. This method is known as a “multiple-phased approach”, as described by Creswell (1994).

On completion of the initial quantitative and qualitative research phase, it was essential to test whether the verified qualitative information was indeed valid, by empirically and quantitatively testing the elements in the developed theoretical framework. A detailed quantitative research approach was followed which included a multiple group pre- and post-test design approach, as indicated earlier.

4.3.1 Steps in the research process

The research process is presented schematically in figure 4.1, and captures the key focus areas of the research project and the process followed in obtaining the results as per the research objectives stated. Each of these steps will be explained in detail in sections 4.4 and 4.5.

Step 1: Quantitative process

Reliability coefficients were determined for the ADKAR change-readiness assessment. The ADKAR was completed by means of a convenience sample of 350 from a population of 1 002 employees in the specific division's procurement and supply chain function of a large organisation.

Step 2: Quantitative process

On completion of the ADKAR questionnaire, 100 change agents were chosen on the strength of their ADKAR results, indicating a high level (score of four or five on a five-point Likert-scale) of desire for change. This group was reduced to 27 change agents over a period of six months. Reasons for the decrease in the number of change agents and an analysis of the ADKAR results are provided. A t-test for independent samples was conducted to determine whether the means of the two groups differed significantly from each other in terms of overall change-readiness scores. Two groups were compared: 73 change agents who decided to leave the network and the 27 who remained as part of the change agent network.

Triangulation approach

Step 3: Qualitative process

3.1 Qualitative perception questionnaire (sample = 15 external change management specialists)

3.2 Concept mapping workshop (sample = 15 internal change management specialists)

3.3 Change agent identification framework and dimensions descriptions

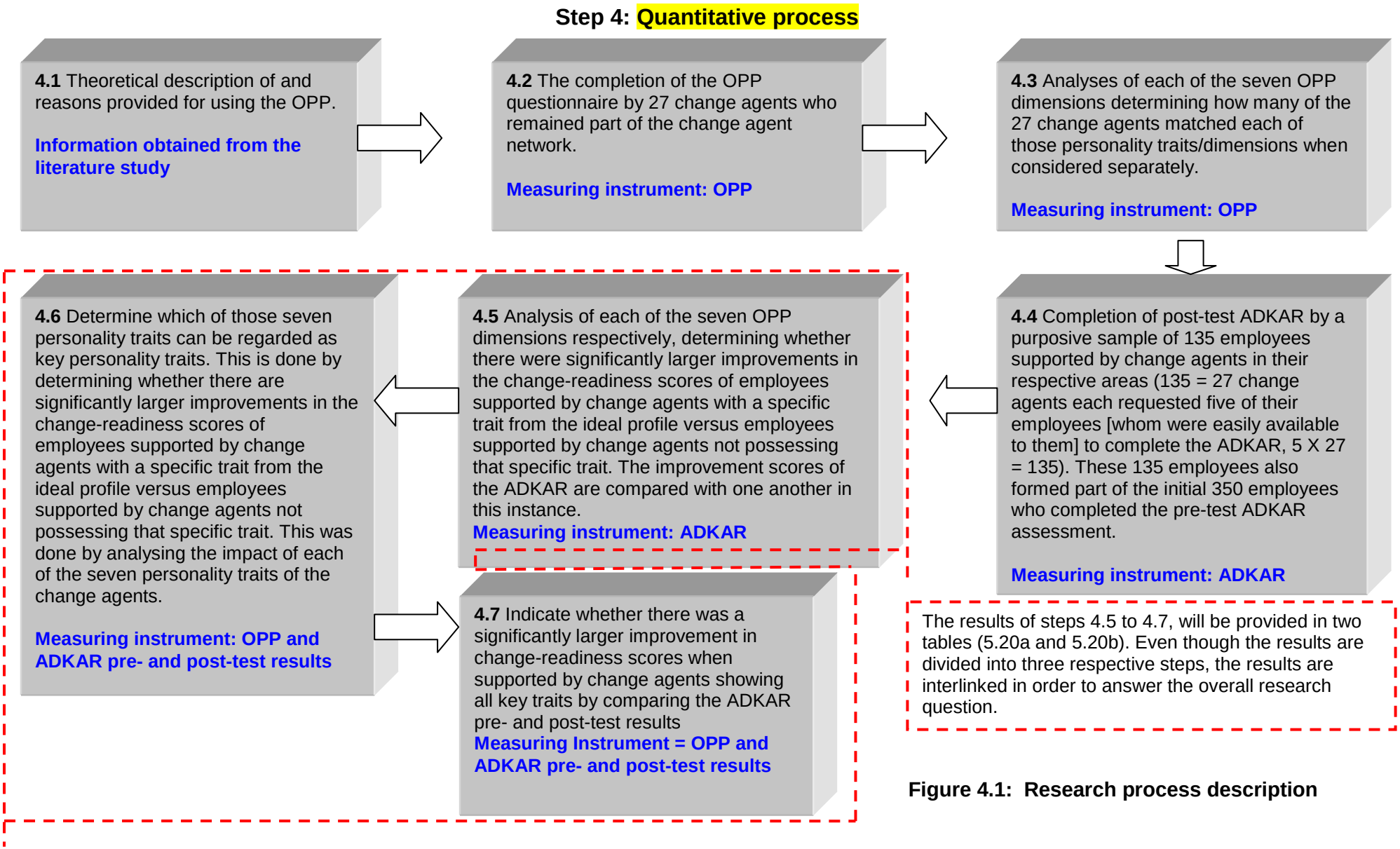


Figure 4.1: Research process description

4.4 RESEARCH PROCESS DESCRIPTION

Since the research process consisted of a number of qualitative and a number of quantitative steps, the research design, description of the measuring instruments, sample group description and the data collection method in each step are interlinked and are described as part of the same process in this section. This will allow for a more substantive and clearer picture of what needed to be achieved.

4.4.1 Step 1: quantitative process: completion of ADKAR and its reliability coefficients

4.4.1.1 Background

A number of roadshows were undertaken during the period mid-2007 to the beginning of 2008 within the procurement and supply chain function of the utility organisation. The objective of these roadshows was to ensure that the employees to be affected by transformation were fully aware of the objectives of the change, the benefits for them and the organisation and the way forward. A sample group of 350 from the total population of 1 002 procurement & supply chain function employees were engaged with during the roadshows undertaken - all employees were part of this functionality where a new operational model had to be implemented. The employees completed a change-readiness survey known as the ADKAR change-readiness questionnaire. This questionnaire was used to determine the change readiness levels of those affected by the change and to identify individuals to act as change agents. The reasons for the selection of this questionnaire are outlined in the following section. All 350 employees completed the ADKAR questionnaire. A detailed description of this questionnaire will be provided in section 4.4.1.2.

Employees who indicated a high level of desire to change were selected as change agents. This means that all employees who indicated a number 4 or 5 (Agree or strongly agree) on a Likert-type scale, next to the statements in the “desire” category of the ADKAR questionnaire, were identified as change agents. This was the first time the organisation had selected change agents, and it was not clear how to ideally identify individuals as potential change agents. Key stakeholders in the organisation then recommended that the employees who indicated a high desire to change, as per the ADKAR questionnaire results, should be identified as change agents. According

to the ADKAR principles, individuals with a high desire to change are eager to participate in the change and motivate others to accept and participate in the change process as well (Hiatt, 2006). This was the first time the ADKAR change-readiness questionnaire had been administered and served as the initial pre-test measure. The ADKAR served as the post-test measure as well, determining whether there was a significantly larger improvement in employee change-readiness scores when supported by change agents displaying a specific personality trait that forms part of the ideal profile versus employees supported by change agents not displaying that specific personality trait as per the ideal profile from the developed change agent identification framework. The ADKAR pre-test and post-test results had to be compared in order to determine whether or not there was a significantly larger improvement in change-readiness.

4.4.1.2 Reasons for selection of the ADKAR and instrument description

The organisation decided to make use of the ADKAR change-readiness assessment owing to the limited time it took to complete the questionnaire and its simplicity. Two other change-readiness assessments were reviewed before deciding to use the ADKAR. First, the change-readiness assessment of Maurer (1996) was reviewed. This assessment consisted of nine questions. However, because the items were not being grouped categorically, it would have been difficult to identify people with a passion for and desire to change. Secondly, a change-readiness assessment developed by Performance Programs Incorporated was reviewed (Performance Programs Incorporated, 2008). This assessment tool consisted of 41 standardised questions that are sub-divided into the following categories: employee involvement, preparation for change, attitudes towards change, reaching the goal and project activities (Maurer, 1996). This assessment was deemed appropriate and valuable but because it consisted of more than 40 items, it would take the participants longer than could be accommodated to complete.

The instrument chosen, namely the ADKAR, was developed by the Prosci Change Management Learning Centre. According to Hiatt (2006), every organisation uses different assessments, to measure an employee's readiness to change. The assessment consists of 18 questions and represents the following dimensions/categories of an employee's readiness to change: **A**wareness, **D**esire, **K**nowledge, **A**bility, **R**einforcement, all linked to the proposed change. These five dimensions relate to the following:

1) **Awareness of the need to change.** This relates to the level of understanding of the business, customer or competitor issues that have created a need to change.
2) **Desire to change:** This concerns the level of understanding of the impact change will have on the individual as well as his or her motivation and commitment to change.
3) **Knowledge of the change and how to change:** This involves the level of understanding of skills and behaviours required in the new environment.
4) **Ability to perform during and after the change:** This relates to the level of proficiency in terms of managing the new environment and all related factors that the changes will effect.
5) **Reinforcement of change:** This entails the level of agreement/confidence in terms of adequate mechanisms, processes and/or procedures in place to sustain change (Hiatt, 2006).

This model was first published by Prosci in 1998 after research at more than 300 companies undergoing major change. Even though this is a change-readiness assessment tool, it has been used in past research to identify change agents (Hiatt, 2006). As indicated, individuals who showed a high level of desire to change, on a five-point Likert-type scale were identified as change agents. An example of the ADKAR questionnaire used is included in appendix A.

The following table provides an example of the questions asked in the "desire" dimension of the questionnaire.

TABLE 4.1 : ADKAR QUESTIONNAIRE: DESIRE DIMENSION

	DESIRE
2a	**I am excited to be part of this change.**
2b	**There are great opportunities for me in the change.**
2c	**I support the implementation of the Procurement and Supply Chain Management (P&SCM) Transformation Programme.**
2d	**I will benefit from the P&SCM Transformation Programme.**

These questions were customised, indicating the specific project name in most of the statements in the questionnaire. Employees indicating a score of four or five next to each of the above statements were identified as change agents. As indicated earlier, the reason for looking only at the “desire” dimension scores for change agent selection was mainly influenced by the ADKAR principles, which state that individuals indicating a high desire to change are eager to participate in the change and motivate others to accept and participate in the change process as well (Hiatt, 2006). This was the role expected from selected the change agents.

4.4.1.3 Participants

Initially, a sample group of 350 from a population of 1 002 employees completed the ADKAR during transformation awareness roadshows. These employees were all part of the procurement and supply chain function in the organisation and consisted of white- and blue-collar workers.

4.4.1.4 Data collection description

Hard copies of the ADKAR questionnaire were provided to participants during the roadshows. Employees in that the specific division and function at a particular site were invited to attend a two-hour session. During this session, an overview of the project was provided and employees were afforded the opportunity to ask questions. After instructions on who should and how to complete the questionnaire were provided, participants had 20 minutes to complete the assessment.

4.4.1.5 Measuring instrument

The questionnaire consisted of 18 questions. The questions were grouped as follow:

- Questions 1 to 4: Measure awareness to change.
- Questions 5 to 8: Measure desire to change.
- Questions 9 to 11: Measure knowledge of the change.
- Questions 12 to 14: Measure ability to perform during and after change.
- Questions 15 to 18: Measure reinforcement of change.

The participants responded by writing down only the number of their response in terms of a Likert-type scale on the right-hand side of each statement.

The Likert-type scale was as follows:

- 1 – strongly disagree
- 2 – disagree
- 3 – unsure
- 4 – agree
- 5 - strongly agree

The following table is an example of the first section of the questionnaire, that is the awareness dimension:

TABLE 4.2 : ADKAR QUESTIONNAIRE: AWARENESS DIMENSION

	AWARENESS	PLEASE PLACE OUR ANSWER IN THIS COLUMN
1a	I understand the business reasons for the introduction of the P&SCM Transformation Program	
1b	I understand the issues that are being addressed by the P&SCM Transformation Program	
1c	I understand the impact of the P&SCM Transformation Program	
1d	I understand the goals and objectives of the P&SCM Transformation Program	

4.4.1.6 Scale reliability description

The data from the questionnaires were used to determine scale reliability. According to literature, reliability coefficients are usually determined in order to evaluate the reliability of scales already in use (Hatcher, O'Rourke & Stepanski, 2005). For the purpose of this research, the reliability coefficients determined were also used to evaluate the properties of the ADKAR change-readiness assessment.

A reliability coefficient can be defined as the percentage of variance in an observed variable that is accounted for by true scores on the underlying construct (Hatcher *et al*., 2005, p. 157). According to Cohen, Manion and Morriso (2001), reliability is known as the consistency of a set of measurements or measuring instruments. It is necessary to understand that reliability does not imply validity because these are two different concepts with different meanings, and they serve different purposes. Reliability focuses on measuring the consistency of items or scales, not measuring what was supposed to be measured, which is the purpose of

the validity measurement. Reliability therefore refers to an instrument consistently yielding similar results, over repeated tests of the same subject.

Reliability scores are indicated by an index of internal consistency known as the coefficient alpha or Cronbach alpha. The Cronbach alpha is referred to as a coefficient of reliability because it indicates the extent to which the individual items that constitute a test or subtest correlate with one another (Hatcher *et al*., 2005). It also measures how well a set of items measures a single construct. One should note that in instances where the data have a multi-dimensional structure, the Cronbach alpha will be relatively low.

Correlation refers to the relationship between two variables or sets of data. For the purposes of this research project, the correlation was determined between each item and the total score on the subscale of the AKDAR change-readiness assessment. High correlations indicate that the same construct is being measured by all items of the scale. The correlation coefficient is indicated by means of a statistical value ranging from -1.0 to +1.0, expressing the relationship in quantitative form. A correlation coefficient of +1.0 would indicate a perfect positive correlation between two factors and -1.0 a perfect negative relationship. These perfect negative and positive correlation coefficients are rarely found (Cohen *et al*., 2001).

The statistical computer program, SAS Proc Corr function was used to determine the reliability coefficients (Hatcher *et al.,* 2005). The alpha option in SAS Proc Corr is an effective tool for measuring Cronbach's alpha, which is a numerical coefficient of reliability. Alpha is therefore based on the reliability of a test relative to other tests with the same number of items, and measuring the same construct of interest (Hatcher *et al.,* 2005). The results in Chapter 5 focus on the following key area:

- The non-standardised alpha, known as the Cronbach alpha reliability coefficient, was provided. This coefficient indicates the scale reliability based on internal consistency (Hatcher *et al*., 2005).

4.4.2 Step 2: quantitative process: change agent selection and the decrease in the number of originally selected change agents

4.4.2.1 Background

Of the 1 002 employees affected by the change, 350 completed ADKAR change-readiness questionnaires were received, of which 100 employees indicated having a high desire to change. As indicated earlier, these employees indicated a score of 4 (agree) or 5 (strongly agree) on all the "desire to change" questions and they were thus identified as change agents. Employees indicating a score of below 4 for any of the "desire to change" questions were not selected as change agents. Roles and responsibilities were defined, and these 100 employees were informed of their selection. Participation was voluntary. Employees were generally interested in this new concept and all of the identified change agents agreed to fulfil this role.

During 2008, some employees resigned from the organisation, others were transferred to other divisions in the organisation, while others again felt that they did not have the capacity to fulfil this role because of other day-to-day responsibilities. The most common reason employees gave for exiting the network was limited capacity to perform the role of a change agent. By September 2008, 27 change agents had agreed to remain part of what was known as a change agent network, as explained in Chapter 3. An analysis was conducted to determine whether there was a statistically significant difference in the overall ADKAR change-readiness scores between employees who decided to exit the network and the 27 employees who remained part of the change agent network. This approach will be described later-on.

The 27 remaining change agents fulfilled the following responsibilities during the duration of the transformation project:

- They championed changes on the ground.
- They addressed the target audiences' questions and concerns.
- They identified and reported potential concerns or problems.
- They shared communication received from the change management team with the employees in their respective areas.
- They encouraged, coached and supported other individuals who were affected throughout the transformation process.

Throughout the transformation process, the 27 change agents attended four workshops, each held once a quarter, obtaining critical information to share with their co-workers.

The remaining 27 change agents were requested to participate in the quantitative phase of this research project.

4.4.2.2 Statistical analysis

A t-test was conducted, comparing the ADKAR change-readiness scores of the 27 change agents (experimental group) who participated in the empirical part of the research project to the 73 change agents who had decided to exit the change agent network.

A t-test ultimately determined the difference between two means of two comparison groups, by calculating a variability score and a p-value score (Trochim, 2006).

The t-test used is known as the t-test for independent sample groups. These two groups were regarded as independent because the two means were not based on the same people, and the AKDAR change-readiness questionnaire was completed only once by these groups. Employees were not purposively assigned to either one of these groups because the researcher did not have any control over who remained or who decided to exit the change agent network (Gray, 2004).

In order to determine whether there is a significant difference between the two sample groups, it is necessary to statistically evaluate the difference between their mean scores.

This test therefore calculates the differences between each set of pairs and then ranks the absolute values (PRISM values) of the differences from low to high, before adding the ranks of the differences. If the PRISM (P) value score is smaller than 0.05, it indicates a significant difference in change-readiness scores between these two groups at the 10% level (Bland, 1995).

To summarise, a p-value of less than 0.05 would therefore suggest that the null hypothesis is rejected, and one can conclude that the two groups are indeed significantly different (Dunlop, Corina, Vaslow & Burke, 1996).

4.4.3 Step 3.1: qualitative process: qualitative perception questionnaire

4.4.3.1 Background

The information obtained in a comprehensive literature study showed why it is important to identify change agents, their characteristics, personality traits and skills and the knowledge they should possess to be considered effective change agents. This information was used to compile a qualitative perception questionnaire. Existing methods to identify change agents were reviewed as well as identification suggestions identified by past researchers. From the literature, key focus areas were identified that could form part of a change agent identification framework. Each main focus area represented associative descriptive elements identified in the literature. As indicated earlier, little research is available on the concept "change agent", and the researcher therefore had to rely heavily on qualitative and quantitative information obtained from the South African sample of change management specialists who participated in this research project in order to ensure that all possible factors and dimensions would be considered and covered in the process. All the literature findings were set out in chapter 3.

After analysing the literature findings, a qualitative dimensions/perception questionnaire was developed (appendix D). This questionnaire was exploratory in nature because no existing standardized questionnaire was available, and therefore open-ended questions were used to determine the perceptions of experts in the field. These experts were individuals specialising in change management, as external consultants, based at the organisation where the research project was undertaken for a certain period of time.

4.4.3.2. Participants

The questionnaire was emailed to 30 external change management consultants, from a consultancy organisation, but who were working in the organisation where the research was conducted, for a certain period in time. The reasons for deciding to include these individuals in this research project were the fact that change management specialists are viewed as individuals who know the change management process, the required ideal change-readiness levels of employees affected by change and factors leading to resistance or readiness to change. Only 15 completed questionnaires were electronically returned to the researcher. These individuals were required to provide information on various dimensions which they believe change agents should have as part of their profile. All the questions were

therefore open ended, in order not to limit the input obtained from these participants. Participants were also required to provide biographical information. The purpose of this questionnaire was to determine what change management experts, through their experiences, perceive as important to include in a change agent identification framework. A number of suggestions, identified in the literature findings, regarding possible dimensions to form part of the framework, were made to the participants as a guideline.

4.4.4 Step 3.2: qualitative process: concept mapping workshop

4.4.4.1 Background and concept mapping description

As indicated in chapter 1, a second qualitative verification phase was included, to verify whether the information obtained from the participants in the completion of the qualitative perception questionnaire was relevant and applicable. Adding this step in the qualitative research phase increased the validity and reliability of the research process. For verification purposes, it was decided to use the technique known as concept mapping. This technique is especially useful for the development of a conceptual framework (Trochim, 2002). Trochim, Cook and Setze (1994) indicate that concept mapping involves a different emphasis altogether. There are no assumed correct answers, and at best it is usually assumed that there might be a typical arrangement of statements. A concept mapping process usually consists of involving a sample group of people from the same homogeneous culture group, or people with the same interests. By involving a homogeneous group, the concept mapping results are viewed as more reliable.

Concept mapping suggests that with pictorial representation and its participant-oriented features, it can be a powerful method to organise complex methods and ideas. This process requires participants to brainstorm a large set of statements relevant to the topic of interest, and then to individually sort these items into “piles” of similar statements and rate each statement according to the scale and then interpret the maps resulting from the data analyses (Trochim, 1993). Several methodologies and approaches are known, say, as idea mapping, mind maps, causal mapping or even cognitive mapping. In most instances, the above terms are used and designed for individuals in order to enhance creative thinking or problem-solving abilities. Concept mapping however, is mainly used in a structured group conceptualisation

process. Concept mapping consists of several notable characteristics such as the following (Trochim, 1993):

- It is designed to integrate input from multiple sources with a vast range of content, expertise or interest.
- It uses sophisticated and rigorous multivariate data analyses to construct the maps, used in the process.
- It creates a series of maps that visually show the complex thinking of the sample group.
- The maps consist of a framework or structure that can be used immediately to guide action planning.

The concept mapping process consists of the following major steps (Trochim *et al*., 1994):

- In the preparation step, the focus of the mapping process is identified, a sample group selected and the schedule and logistics determined.
- The generation of ideas is usually accomplished through some form of brainstorming in a focus group session.
- The ideas generated are captured and the group then sorts all the ideas generated and then rates them in terms of their importance.
- Participants should be actively involved in the interpretation of the resulting maps.
- During the utilisation phase, the maps and associated results are used to address the purposes of the focus group session.

The core data for a map are obtained from the unstructured process where each participant in the focus group session generates statements into piles of similar statements. Participants are free to use as few or as many piles as they deem necessary to arrange the statement set meaningfully in terms of similarity. These data are decidedly judgmental and qualitative in nature (Trochim, 2002).

4.4.4.2 Participants

Concept mapping workshop participants were the change management specialists within the organisation generally involved in large-scale projects, serving as internal consultants of the business. All 21 divisional change management specialists in the business were invited by means of an appointment via email. These participants were asked to participate in the content-mapping exercise. Fifteen accepted and attended the workshop.

The group of internal change specialists who attended the focus group/concept mapping workshop, were allowed to be creative, generate different ideas and sort and prioritise those ideas. A focus group session plays a vital role in discussing the appropriateness of each element with internal change management specialists with a number of years experience in the field (Trochim, 2002). The assumption was that the latter could possibly provide other suggestions on elements or dimensions to be included and/or excluded from the list and had to be taken into account by the researcher. Conducting a focus group session, decreases the possibility of exclusion of other important dimensions or elements (Trochim, 2002).

4.4.4.3 Concept mapping workshop process

The steps followed in the actual concept mapping session with the 15 internal change management specialist were as follows: the session started by introducing the research project and explaining why and how these individuals had been selected to participate in the exercise. The objectives of the session were also thoroughly explained and participants were afforded an opportunity to ask questions. Before the exercise started, the following process was followed during the session:

- The 15 participants were divided into smaller focus groups of four to six, seated at round tables. They were given 30 minutes to brainstorm all possible elements and dimensions that could be included in a change agent identification framework.
- Each group was provided with two documents/worksheets (appendix E). Each document represented a specific dimension and its supportive elements as per the qualitative perception questionnaire results. Each dimension and its supportive elements were divided as follows:
    - group 1: personality traits and skills documents
    - group 2: knowledge and experience documents
    - group 3: change curve readiness levels and dimensions verification documents
- Each group had to review its two documents and discuss which of them were essential and not essential to be included in a change agent identification framework and then rank those items in terms of importance (based on their perception).
- Each group had to select a scribe and a spokesperson.
- Each group had to give feedback to the larger group and obtain input from the larger group on its choice of dimensions/elements.

- The facilitator (researcher) captured all the information provided electronically, and on completion, displayed the total list of elements to the rest of the groups by means of visual equipment.
- The facilitator took the wider audience through the information provided by the smaller focus groups and requested them to prioritise all the elements by means of agreed appropriateness/importance and to eliminate inappropriate dimensions or elements on the flipcharts provided.
- The participants discussed the potential importance of each dimension and/or element and prioritised them accordingly, by discussing and ranking each dimension and/or element. The facilitator played an observatory role in order to place the number in sequence of importance next to each element/ dimension.
- After prioritising all the elements and dimensions in order of importance, the session was adjourned. No time limit was placed on the total duration of the session and it ran for four hours. The researcher then compared the results of the questionnaire and concept mapping exercise elements and dimensions with one another to determine which elements/dimensions correlated with one another, in order to finalise the framework scientifically.

4.4.5 Step 3.3: qualitative process: change agent identification framework and dimensions descriptions

The results of the concept mapping process were analysed and a change agent identification framework was then developed, which consisted of five dimensions and their supportive elements identified by the questionnaire and as agreed to at the concept mapping workshop. All the identified dimensions will be described in chapter 5.

For each of the five dimensions included in the framework, possible measuring instruments were researched. The purpose of this was to introduce possible instruments or methods in measuring each dimension when using the framework to identify change agents. Chapter 5 provides detailed information on how to measure each dimension as well as the reasons for selecting certain instruments or methods. Two of the proposed measuring instruments, namely Senge's commitment level model and the Occupational Personality Profile (OPP) are described in this chapter, because they form part of the theoretical measuring instrument descriptions.

According to Rice, Eggleton, Eggleton and Rice (1996), commitment cannot be measured without change agents having a comprehensive understanding of the vision, mission or objectives of the transformation programme. In these authors' research on high-performing teams, one of their focus areas was measuring commitment. A model developed by Senge (1990) on measuring commitment was included in Rice *et al's*.,(1996) textbook. Senge (1990) conducted extensive research on different levels of commitment and developed a model to assist learning organisations to measure commitment in terms of a certain mission/vision and objectives. Senge (1990) indicated that almost 90% of the time commitment is confused with the term "compliance". Today, it is common to hear management talking about obtaining "buy-in" from their employees into the vision / mission. The term "enrolment" also plays a key role in this context because the change agent will "enrol" to act as a change agent. Enrolment is known as free choice and a process. When it comes to real commitment towards a certain formulated vision or mission, there are still many contemporary organisations in which only a few people are enrolled and even fewer are committed. Senge (1990) therefore indicated that there are several different levels of compliance which lead to behaviour such as enrolment and commitment.

From the work done by Senge (1990), Rice *et al*., (1996) compiled a questionnaire measuring commitment, for organisations to use Senge's theory to help them determine the commitment levels among employees. The researcher could not find any other commitment level questionnaire, applicable to measure the commitment levels of change agents, and this questionnaire could easily be used in a project-related environment.

The format of this model requires each individual to indicate his or her own level of commitment. Each individual should then indicate his or her answer to the vision/mission of the project and for each of its objectives. Their level of commitment should be indicated on a seven-point Likert-type scale, and each individual should be asked for any comments relating to the anticipated level of commitment for each element. The level of commitment scales according to this questionnaire is as follows:

- 1 = apathy: neither for nor against the vision/mission
- 2 = non-compliance: cannot see the benefits of the vision/mission and will not do what is expected

- 3 = grudging compliance: do not see the benefits of the vision/mission, but will do what is expected because there is no choice in the matter.
- 4 = formal compliance: sees the benefits of the vision/mission and will do what is expected, but nothing more
- 5 = genuine compliance: sees the benefits of the vision/mission, and do everything that is expected of the individual and more
- 6 = enrolment: will do whatever can be done within the “spirit of the law”
- 7 = commitment: will make the change happen no matter how difficult it may be

An example of the commitment questionnaire used for team direction is provided below.

EXHIBIT 6.1

Measuring Commitment: Possible Attitudes Toward the Team's Direction

KEY

Commitment: Wants it. Will make it happen. Creates whatever "laws" (structures) are needed.

Enrollment: Wants it. Will do whatever can be done within the "spirit of the law."

Genuine Compliance: Sees the benefits of the vision. Will do everything expected and more. Follows the "letter of the law." "Good soldier."

Formal Compliance: On the whole, sees the benefits of the vision. Will do what's expected and no more. "Pretty good soldier."

Grudging Compliance: Does not see the benefits of the vision. But, also, does not want to lose job. Will do enough of what's expected because have to, but also will let it be known that he/she is not really on board.

Noncompliance: Does not see benefits of vision and will not do what's expected. "I won't do it; you can't make me."

Apathy: Neither for nor against the vision. No interest. No energy. "Is it five o'clock yet"?*

		COMMITMENT	ENROLLMENT	GENUINE COMPLIANCE	FORMAL COMPLIANCE	GRUDGING COMPLIANCE	NONCOMPLIANCE	APATHY
Vision	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Mission	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						

* Senge, Peter M., *The Fifth Discipline: The Art & Practice of the Learning Organization*, Doubleday Currency, New York, 1990.

Measuring Commitment

EXHIBIT 6.1 (concluded)

		COMMITMENT	ENROLLMENT	GENUINE COMPLIANCE	FORMAL COMPLIANCE	GRUDGING COMPLIANCE	NONCOMPLIANCE	APATHY
Objective 1	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 2	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 3	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 4	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 5	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						

99

Figure 4.2: Senge's model of commitment measuring possible attitudes towards the team's direction

Source: Rice *et al*. (1996, p.98-99)

The other dimensions described in chapter 5 do not require a measuring instrument and are therefore background/literature is provided on these dimensions in this chapter.

Following the qualitative research description, the major research hypothesis was to be answered by a seven-step quantitative research process as described in the next section.

The research hypotheses were as follows:

H0: Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

H1: Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

4.4.6 Step 4.1: quantitative process: description of and reasons provided for using the OPP

4.4.6.1 Background

After the development of the change agent identification framework, it was necessary to test the dimensions of the developed framework empirically. It was decided to validate the personality traits' dimension. The reason for deciding to assess this particular dimension was the fact that the organisation had indicated a need to focus on the personality traits. This need was highlighted by the internal change management specialists who participated in the concept mapping workshop.

4.4.6.2 Reasons for selecting the OPP

The OPP was selected since almost all of the dimensions from the developed framework were measurable by the OPP. Other personality assessments such as the MBTI, OPQ and the 15FQ+ were also considered, but the theoretical list of personality traits showed less of a match with those traits or types that these tests

measure. The OPP measured seven of the twelve personality traits identified in the developed framework.

The traits measured by the OPP are

- assertive
- flexible
- trusting
- phlegmatic
- gregarious
- persuasive
- optimistic

As indicated in the results in chapter 5, the five traits from the developed framework not measurable through the OPP were

- willing
- open-minded
- being a good listener
- sociable
- self-assured/self-aware

4.4.6.3 Description of the OPP

One of the major reasons for utilising psychometric tests in general is to make valid and grounded selection decisions, because information for selection cannot be easily obtained in other ways. Psychometric tests are often used to support or confirm findings from a selection interview. In order to gather information on a person's specific aptitudes and abilities and their personality, attitudes and values, it is usually preferable to use psychometric tests (Budd, 1991). Psychometric tests not only provide additional information about an applicant, but also add a degree of reliability and validity to the selection procedure that is impossible to achieve otherwise (Psytech, 2002).

The interest in psychometrics can be traced back to the Second World War (Kline, 1990). During the war there was an urgent need to select military personnel for air crew training. This need led to the development of a number of psychometric tests. The focus at that time was on the development of intelligence (IQ) tests, as opposed to personality tests. Even though psychological theory and trait theory, which underlie personality testing, was developed by Allport in the 1930s it was still some time before personality testing was used in an attempt to construct personality measures.

The development of personality tests (e.g. the 16PF, CPI, EPI, etc.) only came into play after the Second World War. During this period, a great deal of interest was shown in personality measurement, human behaviour and psychological characteristics. A link between personality and behaviour was discovered in Allport's work in the 1930s (Kline, 1990). In practice, the basic principles that underpin personality measurement are not as complex as it may first appear (Michell, 1990).

A personality test simply consists of a collection of questions, or "items", which assess an individual's characteristic way of thinking, feeling and acting in different situations. Personality tests take items that measure different aspects of the same personality characteristic and combine them to form subscales or dimensions. Personality questionnaires attempt to develop a broad picture of how the applicant usually acts in different settings and with different people (e.g. with friends, colleagues at work and at formal social engagements) (Michell, 1990)

The OPP is a personality test developed for use in industrial and organisational settings. It was introduced in South Africa in 1995. Initially, the adoption of this instrument was relatively slow. Only when an organisation, Psytech South Africa, was formed in 1998 and comparative reliabilities with other tests were computed, was the potential of the OPP for use in South Africa realised. Further data were collected by Psytech, and reliabilities and norm groups were compiled. Through this process, some of the items were revised to raise the internal consistency reliabilities and make the test questions better understood. South African-based research findings on reliability coefficients are provided in the next section. Since then, various South African organisations have adopted the OPP (Psytech, 2002).

The OPP measures nine different personality dimensions in addition to the distortion scale/supportive elements, and consists of 98 items. Each of the nine dimensions measured by the OPP is bipolar. This indicates how high or low scores on each supportive element in each dimension are. The personality characteristics measured by the OPP are selected for two reasons (Psytech, 2002):

- for their relevance to personnel assessment and selection decisions
- extensive research evidence demonstrating their validity

There was a need to balance the length of the test against the need for it to be valid and reliable. The OPP attempted to achieve an optimal balance between these two conflicting demands, to seek a short and reliable, but measurable, broad, meaningful

measure of personality constructs. To this end, a five-point response scale was chosen instead of the more common three-point scale (i.e. strongly agree to strongly disagree as opposed to true, uncertain, false). Five-point scales have the advantage of increasing item variance with the result that fewer items are needed to achieve the same level of reliability (Psytech, 2002).

4.4.6.4 Validity and reliability of the instrument

The OPP is regarded as a reliable measuring instrument. It consists of ten sub-scales, namely assertive, flexible, trusting, phlegmatic, gregarious, persuasive, contesting, pessimistic, pragmatic and distortive. The Cronbach alpha was computed for all subscales, with a sample group of 942. The results indicated reliability coefficients between 0.66 to 0.83 for these subscales (Psytech, 2002). For a scale to be viewed as reliable, the coefficient alpha estimates should always equal or exceed 0.70. A score lower than 0.70 indicates poor scale reliability (Cronbach, 1951). As a rule of thumb, Allen and Yen (2002) indicate that a reliability score of 0.70 or higher is deemed to be satisfactory. Two of the ten OPP subscales, namely gregarious and distortive indicated coefficients of 0.67 and 0.66 respectively. This indicates lower than required subscale reliability for these two subscales. The reliability coefficients of the other eight subscales were higher than 0.70, which indicates acceptable subscale reliability (Psytech, 2002).

The standardisation sample of the OPP was based on approximately 1 900 UK adults almost equally represented by males and females. The norm comparison is therefore an adequate representation of the general population. The GeneSys software programme was used to include a number of specialised norm groups. A total of seven constituent sample groups were used to form the total norm base of the OPP (Budd, 1991). South African-based research was also conducted numerous times with different sample groups. One research project included a group of 176 South African citizens employed by the mining sector. Reliability was computed for all subscales and the Cronbach alpha obtained was 0.59. In another research project a group of 93 consultants employed by some of South Africa's major consulting firms were requested to complete the OPP. The Cronbach alpha resulted in a coefficient score of 0.64 (Psytech, 2002). Even though the Cronbach alpha was smaller than 0.70, it was still the most favourable assessment to use since most of the dimensions measured by the OPP formed part of the ideal profile in terms of personality traits as per the theoretical developed change agent identification framework.

4.4.7 Step 4.2: Quantitative process: completion of the OPP questionnaire by change agents

4.4.7.1 Background

The 27 change agents were requested to attend a change agent workshop in September 2008. Before the start of the actual workshop, the change agents were requested to complete a hard copy of the OPP questionnaire and the completed questionnaires were handed to the researcher.

4.4.7.2 Data collection method

Booklets, answer sheets and pencils were handed to all the participants by the facilitator. She explained the objective of completing the questionnaire, namely that research was being conducted on the identification of change agents. As personality traits are part of the developed framework, it needed to be assessed. Everyone was comfortable with the objectives and also signed an informed consent form indicating that information would only be used for research purposes.

The instructions were read out and the participants were afforded the opportunity to ask questions. No time limit was allocated for completing the questionnaire. The participants had to complete 98 Likert-type scale response questions. They had to indicate their answer by ticking the block most appropriate to themselves. The scale allocation was as follows:

- 1: strongly agree
- 2: agree
- 3: between
- 4: disagree
- 5: strongly disagree

All the employees completed the questionnaire within 20 minutes.

4.4.8 Step 4.3 quantitative process: analysis of each of the 27 change agents' personality traits

4.4.8.1 Background

The first step after completion of the OPP was to determine how many of the 27 change agents matched the ideal profile by analysing all seven of the measured traits respectively.

The following serves as an example of the profile in graph format provided to each change agent as part of his or her OPP results report. The words highlighted in red indicate the ideal personality traits. Results are plotted on the nine-point scale. From the seven personality traits highlighted, the figure below indicates that this individual lean towards two of the seven personality traits, namely trusting and gregarious.

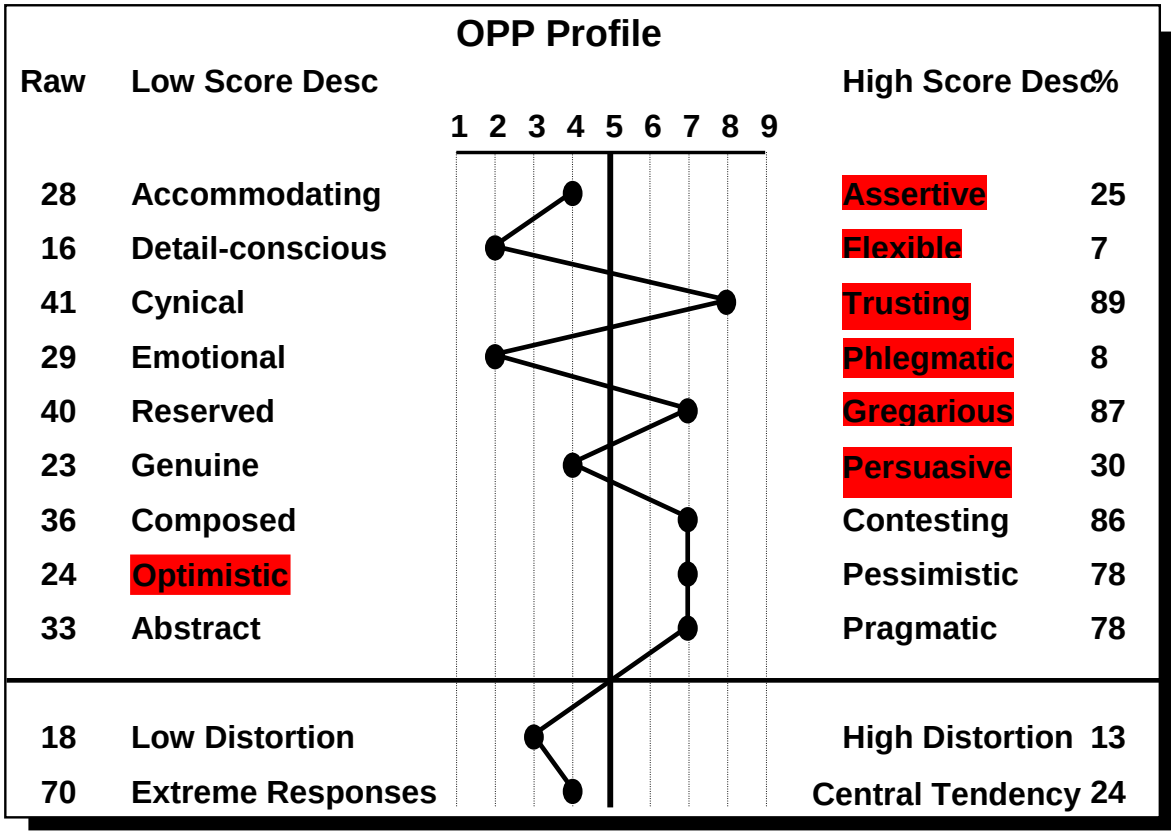


Figure 4.3: Occupational Personality Profile example

Source: Psytech (2002, p.2)

The following assumptions were made: One would consider an employee a change agents if they matched the ideal profile, in terms of personality traits, as per the OPP profile. (**All** personality traits marked in red indicated those elements that form part of the change agent identification framework.) The table below indicates these ideal profile match boundaries.

TABLE 4.3: IDEAL PROFILE MATCH BOUNDARIES

1. Assertive	>=8
2. Flexible	>=8
3. Trusting	>=8
4. Phlegmatic	>=8
5. Gregarious	>=8
6. Persuasive	>=8
7. Optimistic	<=2

The chances were viewed as slim that change agents would meet all seven personality traits as per the ideal profile indicated in the above table, and therefore cut-off points were adjusted accordingly. The following cut-off points were decided upon on the nine-point scale of the OPP: A range from 7 to 9 (on the right-hand side of the continuum) for the first six personality traits were linked to the ideal profile personality traits and a range of 1 to 3 for the seventh and last personality trait, namely optimism. After analysing this information, it was found that none of the selected change agents fell into **all** seven personality trait dimension ranges, even after cut-off points were adjusted to less stringent ones.

On the basis of the above, it was decided to analyse each personality trait separately and compare employee ADKAR improvement scores for each of the personality traits. The employees were divided into two groups, namely those supported by change agents who matched that specific trait and those supported by change agents not matching that specific trait.

It would have been extremely difficult to defend the approach because only two change agents fell into the ranges for all seven personality traits that form part of the ideal profile, after cut-off points were revised to less stringent ones. Furthermore, it should be kept in mind that the development of the ideal profile of the change agents up to this point in time was purely theoretical – based on the literature review and the qualitative process to determine important characteristics. It therefore made sense to adapt a broader perspective in the empirical investigation of the effect of the

identified traits / dimensions on the actual change-related behaviour / attitude of the individuals working with the particular change agent.

4.4.8.2 Statistical analysis method description

The statistical program used in the quantitative phase of the research project was the Statistical Analysis System (SAS) statistical package, Version SAS 9.1.3. The SAS 9.1.3.version was released in 2005 and includes an enlarged function library with new parameters on standard functions (McDaniel & Hemedinger, 2007).

Firstly, the frequency of scores of the change agent sample group that fell within particular categories was determined. This indicated how many of the change agents matched the ideal profile in terms of each dimension/personality trait measured. Once again, these results were provided per personality trait since only two change agents fell into the ranges for all seven personality traits that form part of the ideal profile, after cut-off points were revised to less stringent ones.

Secondly, the Friedman two-way analysis of variance test was used to compare the different averages of all the OPP dimensions with one another. The Friedman test is known as a nonparametric test that compares three or more paired groups. This test ranks the values in each matched set from low to high. Each dimension is ranked separately and the total of each group then ranked (Hatcher *et al*., 2005).The reasons why the different means (averages) of all dimensions were compared was to indicate what the sample group looked like in terms of personality traits – that is, which dimensions the group measured high on and which dimensions the group measured low on.

The standard deviation calculated, measures the spread of the data for the mean (average) value. It is useful in comparing sets of data which may have the same mean but a different range (Hatcher *et al*., 2005). Relatively low standard deviation scores imply that data were not that widely dispersed. In instances where the standard deviation scores are relatively low, data were compressed.

4.4.9 Step 4.4: quantitative process: the completion of the post-test ADKAR questionnaires by a sample of 135 employees supported by change agents in their respective areas

4.4.9.1 Background

In November 2008, shortly before the conclusion of the project, each of the 27 change agents who had completed the OPP, was requested to ask five (27 X 5 = 135) of the employees, easily available to them, in their respective areas, whom they supported throughout the change initiative, to complete the ADKAR questionnaire again (post-test). These 135 employees also formed part of the initial sample group of 350 employees from a population of 1 002 who had completed the pre-test ADKAR assessment during transformation awareness roadshows. The change agents were initially provided with a list of names, geographical locations and job titles of the 350 individuals who had completed the pre-test ADKAR assessment, at the first change agent workshop. This was necessary to ensure that the change agents selected five individuals to complete the ADKAR again, in their respective areas who formed part of the list of 350 employees who had initially completed it. The 1 002 employees all worked in the procurement and supply chain function of the organisation, spread over 15 geographical areas country wide.

The change agents indicated that they would ask five of the employees in their areas to complete the ADKAR questionnaire, because it was feasible to assume that five employees would be readily available on site, at one point in time, to complete the ADKAR questionnaire. All five selected employees from each area, who were readily available at the time, agreed to complete the questionnaire. A 100% completion rate was thus achieved. This served as a post-measure to determine whether there was a significantly larger improvement in the change-readiness scores of employees after they had been supported by change agents possessing a specific personality trait that formed part of the ideal profile. This indicated whether the specific personality trait in a change agent resulted in the significantly larger improvement in the employee change-readiness scores of employees supported by him/her.

4.4.9.2 Data collection method

The ADKAR change-readiness questionnaire was sent to change agents via electronic mail. The change agents printed hard copies of these questionnaires and handed them to the procurement and supply chain management employees in their area to complete. On completion, the questionnaires were returned to the researcher.

The statistical analysis process followed in analysing the post-ADKAR results are described in sections 4.4.10 and 4.4.11.

4.4.10 Step 4.5: quantitative process: analysis of each of the seven OPP dimensions.

Analysis of each of the seven OPP dimensions was conducted in order to determine whether there was a significantly larger improvement in the change-readiness scores of employees supported by change agents possessing that specific trait versus those supported by change agents not showing that specific trait by comparing employee pre-and post-test ADKAR results.

4.4.10.1 Background

Each of the seven OPP traits measured was analysed respectively for all 27 change agents. The employee ADKAR pre- and post-test results were then compared to determine whether there was a significantly larger improvement of change-readiness scores for each of the seven traits respectively. This information indicated whether the change agents possessing a specific trait when supporting others (those five employees were each requested to complete the ADKAR) through change did in fact help to improve the employee change-readiness scores.

4.4.10.2 Statistical analysis method description

To determine whether there was a significantly larger improvement in the employee change-readiness scores in cases where they were supported by the change agents meeting the ideal profile for each of the seven traits respectively, the following method was used: A nonparametric test, known as the Kruskal-Wallis test was used for this purpose. Nonparametric tests, instead of parametric tests are normally used when certain assumptions about underlying populations are questionable, say, when comparing two independent samples or when the sample groups are not that large. The tests involving ranked data are classified as nonparametric (Kravchuk, 2005). Nonparametric tests are also generally used for smaller sample groups, and because this research involved the use of ordinal-level data (Likert-type response scales), this was deemed to be a plausible alternative to the more stringent parametric tests (Pett, 1997).

According to Pett (1997), some of the best-known characteristics of non-parametric tests are as follows:

- The level of independence of randomly selected observations is important.
- Fewer assumptions are made about the population's distribution.
- The scale of measurement of the dependent variable is either categorical or ordinal.
- The primary focus is either on rank ordering or frequency of data.
- Hypotheses are often formulated on ranks, medians or frequencies of data.
- Sample size requirements are less stringent than for parametric tests.

The above characteristics were relevant to this research project. The sample group was small, the focus was on ordinal data, and the data were ranked.

The Kruskal-Wallis test is a well-known nonparametric test and is generally used to test the median difference in paired data. The test was designed to test the hypothesis on the location or median of a population distribution (Crichton, 1998). It often involves the use of matched pairs - in other words, before and after data. In many instances the assumption is that the population probability distribution is symmetric. The test is also applied in cases where observations of a sample of data are ranked (Panchapakesan, Ng & Balakrishnan, 2006).

This test first calculates the differences between each set of pairs and then ranks the absolute values (PRISM values) of the differences from low to high before adding the ranks of the differences. The Prism (P) value answers the following question: If the median difference is zero, what is the chance that the random sample would result in a median far from zero (Bland, 1995)? If the two columns of ranks are markedly different, the P-value will be tiny.

If the P-value score is smaller than 0.05 it indicates a significant improvement in the change-readiness scores of employees when supported by a change agent possessing a specific trait. The larger the score, the smaller the difference will be, in the improvement of the change-readiness scores as per the ADKAR pre- and post-test scores. A P-score larger than 0.05 would mean that the particular trait displayed by change agents who support employees experiencing transformational change, does not result in the significant improvement of those employees' readiness levels.

The difference between the pre- and post-test change-readiness scores was calculated at a 10% level of significance. As the results in chapter 5 will indicate, if the sample group size (N) was larger, this difference could have been calculated on a 5% level, which is a more effective measurement, because it indicates that the improvement in the change- readiness level is not at all coincidental. The 10% level indicates a 90% certainty that the difference between change-readiness scores is not coincidental, whereas a 5% level indicates a 95% level of certainty that differences between change-readiness scores are not coincidental (Pett, 1997).

4.4.11 Step 4.6: quantitative process: key personality traits identified

This step involved determining which of the seven personality traits could be regarded as **key** personality traits by analysing whether there were significantly larger improvements in employees' change-readiness for those employees supported by change agents possessing a specific trait from the ideal profile and those employees supported by change agents not showing a specific trait from the ideal profile for each of the relevant seven personality traits.

4.4.11.1 Background

Further analysis was done listing each of the identified seven OPP dimensions, by indicating whether there was a significantly larger improvement in employee readiness levels in cases where employees were supported by change agents possessing a specific personality trait from the ideal profile compared with employees supported by change agents not showing that specific trait. If it was found that the change-readiness scores did not show a significantly larger improvement for the group of employees supported by change agents possessing that particular personality trait compared with those supported by change agents not showing that particular personality trait then the trait could not deemed to be a **key** trait and vice versa.

This process of evaluation determined which of the seven personality traits measured, were in fact key change agent personality traits.

4.4.11.2 Integrated results table description

Integrated results tables (5.20a and 5.20b) will be included in chapter 5, to indicate the results of steps 4.5 – 4.7. The reasons for showing the results in these integrated tables were the fact that these results were interlinked. The methods used to calculate the results were explained in this chapter. The table will therefore achieve the following:

- step 4.5: reporting whether there is a significantly larger improvement in change-readiness scores of the employees supported by change agents possessing that specific personality trait compare to those supported by change agents not showing that specific trait
- step 4.6: indicating which of those seven personality traits can be regarded as **key** personality traits by analysing the improvement in employee change-readiness scores for each of the seven personality traits change agents could possess
- step 4.7: indicating whether there is a significantly larger improvement in employee change-readiness scores when supported by the change agents possessing **all key** traits by comparing the ADKAR pre- and post-test results

4.4.12 Step 4.7: quantitative process: significant larger improvement of employee change-readiness scores when supported by change agents with all the key traits

An overall analysis was conducted determining whether or not there was a significantly larger improvement in employee change-readiness scores in the ADKAR pre-and post-test in instances where the employees were supported by change agents possessing **ALL** those key traits. These results were reported from the findings in step 4.6 and will be indicated in two detailed results tables in chapter 5.

4.5 RESEARCH VARIABLES

The following were identified as the variables applicable to this research project: This research project intended to determine whether the **improvement in the change-readiness scores (dependent variable)** of the group supported by **change agents possessing a specific trait from the ideal profile (independent variable)** was

significantly larger than the improvement in change-readiness scores of the group supported by change agents not showing a specific trait from the ideal profile.

4.6 UNIT OF ANALYSIS

As per the definition in chapter 1, the unit of analysis in this research project was based on the measurement at individual level, but the analysis was done at group level because two groups were compared with each other each time.

4.7 ETHICAL RESEARCH PRINCIPLES

Definitions and the reasons for including ethical research principles as part of a research project were explained in chapter 1. For the purposes of this research project, the research participants were properly informed and the following ethical principles were stated and communicated:

- All the participants were involved on a voluntary basis - no one was forced to complete the qualitative perception questionnaire, participate in the concept-mapping exercise or complete the ADKAR assessment. All the participants signed an informed consent form which was distributed to them by means of email or at the workshop held. This formed part of the biographical information form.
- All the participants were assured that the research would not inflict any physical, psychological or emotional harm on them.
- The participants were informed about the purpose of the research before completing the questionnaires or participating in a focus group session.
- Selected individuals were assured that the information would only be used for the research purpose and no information would be used against them in any way in the future.
- Signed written consent was obtained from the organisation, allowing the research to be conducted, which involved the participation of a number of permanent employees in the organisation.

4.8 SUMMARY OF THE RESEARCH METHODS APPLIED

The research phases of this project were described in detail and the content of this chapter could be summarised as shown in the table below.

TABLE 4.4: DESCRIPTION OF THE RESEARCH METHODS

PHASE 1	**LITERATURE CONCEPTUALISATION/THEORETICAL REVIEW**
Step 1	Change, change management and organisational change were explained, as the context in which this research project was conducted because of organisational change.
Step 2	Firstly, the main reasons were advanced of identifying change agents in managing change in large organisations. The differences between change agents and change management specialists were described to ensure clarification of roles. Secondly, the personality traits, skills, knowledge, and level of desire to change of these individuals were reviewed, and information gained on the possible traits of change agents. Lastly, the change agent roles and responsibilities performed in large organisations served as key elements to consider when identifying individuals to act as change agents.
Step 3	The research results highlighted the methods or tools used in the past to identify change agents. No clear evidence was found on existing change agent identification methods or tools. This indicated a gap that the empirical research had to fill.
PHASE 2	**EMPIRICAL RESEARCH**
Step 1	**Quantitative phase, step 1.** ADKAR assessment item analysis was conducted to determine the reliability of this assessment. The results were indicated by means of Cronbach alpha coefficients.
Step 2	**Quantitative phase, step 2.** A t-test of independent samples analysis was conducted to evaluate the significant difference in the ADKAR change-readiness scores between the 27 change agents who remained part of the change agent network and the 73 change agents who decided to exit the network.

Step 3 **Qualitative phase, step 1.** An explorative, qualitative perception questionnaire was compiled and completed by 15 external change management specialists. This was done after the findings in literature had been reviewed to determine what information could possibly be used to include in a change agent's profile. These participants were asked to provide additional information on possible supportive elements and dimensions that could be part of a change agent's profile.

Step 4 **Qualitative phase, step 2.** A concept mapping workshop was conducted. The participants were asked to attend a focus group session. The sample of participants consisted of 15 internal change management specialists in a large organisation.

Step 5 **Qualitative phase, step 3.** All the information on the supportive elements and dimensions from the qualitative perception questionnaire with the verified items and dimensions that resulted from the concept mapping exercise were compared. The results were compared, indicating which elements and dimensions need to form part of the change agent identification framework. The overlapping dimensions and items were tabulated in a framework, named the "change agent identification framework."

Step 6 **Quantitative phase, step 3.** Reasons were advanced for the selection and use of the OPP.

Step 7 **Quantitative phase, step 4.** The OPP questionnaire was completed by 27 change agents.

Step 8 **Quantitative phase, step 5.** An analysis was conducted of each of the seven OPP dimensions determining how many of the 27 change agents matched each of those personality traits/dimensions.

Step 9 **Quantitative phase, step 6.** The post-test ADKAR was completed by a sample of 135 employees supported by change agents in their respective areas.

Step 10 **Quantitative phase, step 7.** An analysis was done for each of the seven OPP dimensions, determining whether there was a significantly larger improvement in the change-readiness scores of employees supported by the change agents possessing the specific personality trait compared to those supported by change agents not showing that specific trait.

Step 11 **Quantitative phase, step 8.** The researcher determined which of these seven OPP personality traits could be regarded as **key** personality traits by comparing the improvement in the employee change-readiness scores for each of the seven personality traits per group supported by change agents possessing a particular personality trait versus the group supported by those change agents not showing a particular personality trait of the ideal profile.

PHASE 3	CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS
Step 1	**Conclusion.** Conclusions will be drawn on the outcomes of the research project.
Step 2	**Research limitations.** Possible limitations detected throughout the research project will be discussed.
Step 3	**Recommendations.** Recommendations or suggestions will be made for future research.

4.9 CHAPTER CONCLUSION

A schematic process flow description was provided on the research approach followed to answer all the research questions stated in chapter 1. All three of the qualitative and all seven of the quantitative research steps were explained in detail. The results and findings derived from these steps in the research process will be reported on and discussed in chapter 5.

CHAPTER 5: RESEARCH RESULTS AND FINDINGS

5.1 INTRODUCTION

The empirical part of this study was conducted to provide data that could be used to satisfy the aim of this research project. All the qualitative and quantitative research results will be provided in this chapter. The results will be used to answer the research questions below, which were formulated in chapter 1.

The general aim of this research is to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

To increase the scientific quality of the research project, an empirical research phase was added to the theoretical phase of the research project. In order to answer all research questions, the following results are provided in this chapter:

- the ADKAR item analysis results
- the difference between the overall change-readiness scores of those individuals who decided to exit the change agent network and those who remained part of the change agent network
- the qualitative perception questionnaire results as well as biographical information (explorative)
- the concept mapping workshop results, and biographical information (verification)
- the comparative results between the information emanating from the questionnaires as well as from the workshop (explorative and verification)
- the change agent identification framework development
- the OPP questionnaire results, together with specific biographical information of the sample group
- an indication of the number of change agents possessing personality traits of a change agent as per the developed framework, by providing results that led to the answer by means of frequency tables

- the ADKAR questionnaire results, as completed by employees in respective areas of the business
- an indication of whether there were significantly larger improvements in change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not showing that specific trait.
- the identification of key personality traits
- the indication of whether employees showed significantly larger improvement of change-readiness scores when supported by change agents possessing **all** key traits compared to those supported by change agents not showing all key traits

5.2 RESEARCH FINDINGS

All the research findings will be presented according to the steps followed in the research process, schematically presented in figure 4.1 in chapter 4.

5.2.1 Research findings step 1: completion of the ADKAR questionnaire and reliability coefficient results

As indicated in chapter 4, 350 employees completed the ADKAR change-readiness assessment during the awareness roadshows, in the procurement and supply chain function of the organisation. These employees comprised of white- and blue-collar workers. The purpose for completion of this questionnaire was to determine each employee's overall change-readiness scores at the initial stage of a transformation process, for all five of the ADKAR dimensions.

In order to determine the reliability of the ADKAR change-readiness assessment, the reliability coefficients of this questionnaire were statistically determined by means of the SAS Proc Corr function (Hatcher *et al*., 2005).

Table 5.1 indicates the reliability coefficients by means of the Cronbach alpha reliability coefficient values, detecting whether the same construct was in fact measured by all items of the scale. These values were calculated for each of the five ADKAR dimensions, as well as for the overall scale.

5.2.1.1 T*he ADKAR assessment reliability coefficient results*

In order for a scale to be viewed as reliable, the alpha coefficient estimates should equal or exceed 0.70. A score lower than 0.70 indicates poor scale reliability (Cronbach, 1951). According to Allen and Yen (2002), a reliability score of 0.70 or higher is deemed to be acceptable.

The table below indicates that four of the five ADKAR dimensions yielded acceptable alpha coefficient values, which means that the awareness, desire, ability and reinforcement dimensions' items yielded consistent results. The "knowledge" dimension's alpha coefficient value indicated that the items did not yield consistent results.

TABLE 5.1: ADKAR QUESTIONNAIRE ALHPA COEFFICIENT RESULTS

	Alpha
Awareness	0.907859
Desire	0.878058
Knowledge	0.470452
Ability	0.777230
Reinforcement	0.819423

Overall scale Cronbach Alpha: 0.77

The only item with low subscale reliability was the knowledge dimension, with a score of 0.47. By conducting an item analysis it would have been possible to detect which items in this subscale contributed to its low reliability coefficient. Since the purpose of this research project was not focused on analysing the ADKAR assessment and its psychometric properties, only overall scale reliability was computed. An item analysis was therefore also not conducted in an attempt to improve the reliability coefficient of the knowledge dimension.

It is evident that the reliability of the ADKAR questionnaire was acceptable for the current sample group.

5.2.2 Research findings step 2. Reasons for the decrease in number of change agents over the transformation period

As indicated in chapter 4, from the 350 completed ADKAR change-readiness questionnaires received, 100 employees indicated that they had a high desire to change. These were employees who indicated a score of 4 or 5 (agree or strongly agree) on all the questions in the "desire to change" dimension. These individuals were then identified as change agents. Roles and responsibilities were defined and these 100 employees were informed of their selection. Participation was voluntary. The employees were generally interested in this new concept and all of the identified change agents initially agreed to perform this role.

During 2008, some employees resigned from the organisation, some moved to other divisions in the organisation and others again felt that they did not have the capacity to fulfil this role because of other day-to-day responsibilities. The most common reason for employees exiting the network was because of limited capacity to perform the role of a change agent. By September 2008, only 27 change agents remained and agreed to still remain part of what was known as a change agent network, as explained in chapter 3. An analysis was conducted to determine whether there was a statistically significant difference in the overall change-readiness scores of the employees who decided to exit the network and the 27 employees who remained part of the change agent network.

In order to determine whether there was a significant difference in the overall change-readiness scores between those 73 change agents who decided to exit the network and the 27 change agents (experimental group) who remained part of the network, a t-test for independent groups was conducted, after testing for equality of variances to determine the appropriate formula. As mentioned in chapter 4, if the p-value is less than 0.05, it indicates a significant difference in the change-readiness scores between these two groups at the 5% level (Bland, 1995). A p-value of less than 0.05 would therefore suggest that the null hypothesis should be rejected and concludes that the two groups were in fact significantly different (Dunlop *et al*., 1996).

TABLE 5.2 T-TEST ANALYSIS RESULTS

Variable	Group	N	Mean	Std. Dev.	Variance	T-value	P-value
Awareness	**C**	73	4.4315	0.6085	Unequal	-4.37	
Awareness	**E**	27	4.8241	0.2843			<.0001
Desire	**C**	73	4.7055	0.3155	Unequal		
Desire	**E**	27	4.9537	0.099		-5.97	<.0001
Knowledge	**C**	73	4.4338	0.5711	Unequal		
Knowledge	**E**	27	4.7778	0.3922		-3.41	0.0011
Ability	**C**	73	4.4064	0.6168	Unequal		
Ability	**E**	27	4.8519	0.3247		-4.67	<.0001
Reinforce	**C**	73	4.1176	0.6939	Equal	-2.55	0.0122
Reinforce	**E**	27	4.4907	0.5023			

From the above, it was evident that for all the ADKAR dimensions, the 27 change agents who remained part of the change agent network obtained statistically significantly higher mean scores than the 73 individuals who decided to exit the network. It was therefore concluded that the change agents who decided to remain part of the network were more change ready than those who decided to exit the network.

In the development of a change agent identification framework, a comprehensive qualitative process was followed, in order to obtain critical information regarding the identification and selection of change agents. Sections 5.23 to 5.24 provide information on the outcomes of the process followed and the information obtained in formulating the framework.

5.2.3 Step 3.1: explorative qualitative perception questionnaire background

A qualitative open-ended questionnaire was developed and sent to a sample of external change managements consultants. The objective of the questionnaire was to obtain information from the sample on their perception of supportive elements from a number of dimensions relating to the identification of change agents. The questionnaire was sent to a sample of 30 external change management specialists

on 25 July, 2008 via electronic mail. The participants were requested to return the completed surveys by no later than 8 August, 2008. The number of completed questionnaires returned to the researcher on this date was 15.

Background information was provided in the questionnaire to familiarise the participants with the objectives of and background information on the research. The questionnaire consisted of six open-ended questions and space was provided below each question for answers. Each question focused on a different category or dimension of change agent attributes, that had been identified in the literature findings. These were

- change agent personality traits
- change agent skills
- knowledge change agents should ideally have
- experience required in order to act as a change agent
- change curve readiness level individuals should possess to be classified as a potential change agent
- change agent identification dimensions - these could relate to the ones given (personality traits, skills, knowledge, experience, etc.) or other proposed dimensions by the sample group

Even though information on certain personality traits, skills, knowledge and change curve readiness levels were provided as part of the literature study, it was necessary to obtain information from the sample group in order to ascertain what dimensions or elements they viewed as important to include in a change agent identification framework through their experience in the workplace. This increased the comprehensiveness of the literature research process by means of an empirical qualitative research process.

The participants were requested to provide biographical information as part of completion of the questionnaire. A table was included in the questionnaire and the participants had to tick the block most applicable to them.

5.2.3.1 Research findings step 3.1 : explorative qualitative perception questionnaire results

The following biographical information was obtained through the completion of a one-page biographical questionnaire sent to participants, together with the qualitative questionnaire via electronic mail:

TABLE 5.3: BIOGRAPHICAL INFORMATION OF THE EXTERNAL CHANGE MANAGEMENT CONSULTANTS SAMPLE GROUP (N = 15)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	2	13.3	2	13.3
27 – 35	8	53.3	10	66.6
36 - 46	5	33.4	15	100
46 - 55	0	0	15	100
> 55	0	0	15	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	4	26.6	4	26.6
Female	11	73.4	15	100
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Black	3	20	3	20
White	9	60	12	80
Caucasian (Indigenous populations of Europe, North Africa)	2	13.3	14	93.3
Coloured	1	6.7	15	100
Indian/Asian	0	0	15	100
Number of years' change management or related consulting experience	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
0 – 3	**6**	40	6	40
4 – 6	**3**	20	9	60
7 – 10	**3**	20	12	80
10 – 13	**2**	13.3	14	93.3
>13	**1**	6.7	15	100

TABLE 5.3: BIOGRAPHICAL INFORMATION OF THE EXTERNAL CHANGE MANAGEMENT CONSULTANTS SAMPLE GROUP (N = 15) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Bachelor's degree	**1**	6.7	1	6.7
Honours degree	**2**	13.3	2	20
MBA	**2**	13.3	5	33.3
Master's degree	**9**	60	14	93.3
Doctoral degree	**1**	6.7	15	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	**8**	53.3	8	53.3
English	**4**	26.6	12	79.9
Northern Sotho	**1**	6.7	14	86.6
Zulu	**1**	6.7	14	93.3
Other	**1**	6.7	15	100

According to the above, the sample consisted of 27% males and 73% females. 53% were between the ages of 27 and 35; 60% were from the white race group; 40% had three or less than three years' specialist working experience; 60% had a master's Degree; 53% were Afrikaans-speaking; and 27% were English.

The following section indicates the questions from the qualitative perception questionnaire as well as the responses/information provided by the external change management expert group for each question.

Question 1

*In your view, what are the critical **personality traits** an individual should possess to be identified as a possible change agent? (Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations.)*

The sample group provided similar responses to the question relating to change agent personality traits. The researcher short-listed all the personality traits mentioned by the sample group, by comparing similar traits provided by most from the sample group. The 36 personality traits in table 5.4 had to be verified at the concept mapping workshop held. As indicated in chapter 4, a concept mapping

workshop was also held in addition to the completion of a qualitative perception questionnaire.

TABLE 5.4 PROPOSED PERSONALITY TRAITS

PROPOSED PERSONALITY TRAITS			
1	Willingness	19	Adaptability
2	People person	20	Influential
3	Results oriented	21	Team oriented
4	Personal confidence	22	Personal efficacy
5	Open minded	23	Energetic
6	Emotional maturity	24	Inspirational
7	Extrovert	25	Objective
8	Leadership characteristics	26	Patience
9	Self-starter	27	Emotional intelligence
10	Optimistic	28	Perseverance
11	Good listener	29	Results oriented
12	Objective	30	Empathetic
13	Integrity	31	Charismatic
14	Sociable	32	Self-reflective
15	Assertive	33	Analytical
16	Enthusiastic	34	Approachability
17	Integrity and honesty	35	Motivating
18	Diplomatic	36	Flexible

** The above personality traits are in no particular ranking order.

Question 2

*In your view, what are the critical **skills** an individual should possess to be identified as a possible change agent? (A skill is the learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy, or both.)*

The researcher short-listed all the proposed “skills a change agent should portray”, by means of comparing similar skills indicated by most from the sample group. The 25 proposed skills in the table below were also verified at the concept mapping workshop.

TABLE 5.5: PROPOSED SKILLS

PROPOSED SKILLS			
1	Presentation skills	14	Intrapersonal skills
2	Attentive listening skills	15	Time management skills
3	Problem identification skills	16	Systemic thinking ability
4	Problem-solving skills	17	Strategic thinking ability
5	Verbal communication skills	18	“Selling” skills
6	Facilitation skills	19	Non-verbal communication skills
7	Analytical skills	20	Networking skills
8	Planning and organising skills	21	Project management skills
9	Influential skills	22	Stakeholder management skills
10	Negotiation skills	23	Persuasion skills
11	Interpersonal skills	24	Deductive reasoning skills
12	Leadership skills	25	Conflict-handling skills
13	Motivational skills		

** The proposed skills above are in no particular ranking order.

Question 3

*In your view, what **knowledge** should an individual have to be identified as a possible change agent? (Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.)*

The researcher short-listed all the proposed “knowledge” elements the expert sample group indicated a change agent should have by comparing similar skills indicated by most from the sample group. The following 29 proposed skills in the table below were also to be verified at the concept mapping workshop.

TABLE 5.6: PROPOSED KNOWLEDGE

PROPOSED KNOWLEDGE			
1	Change management principles	16	Organisational political circumstantial knowledge
2	Knowledge of the specific project	17	Change network structure and functioning knowledge
3	Knowledge of the organisation	18	Value of being a change agent
4	Knowledge of the organisation's external environment	19	Benefits of the change and the positive impact of the change on the organisation
5	Knowledge of the roles and responsibilities of the change agent	20	Knowledge of communication principles
6	Understanding of the need for change	21	Project management methodology
7	Knowledge of change-readiness and change-readiness scores	22	Knowledge of group dynamics
8	Knowledge of organisational development models	23	Knowledge of stress management
9	Understanding of systems theory	24	Knowledge of organisational development and renewal
10	Understanding of various change interventions available	25	Understanding of the organisation's culture
11	Knowledge of behavioural science	26	Mentoring and coaching
12	Understanding of the cycle/phases of change	27	Deep understanding of the specific area/function in which the change is taking place
13	Knowledge of the subject of industrial psychology	28	Knowledge of the power maps of people in the organisation
14	Understanding of general HR issues	29	Intimate project-related knowledge
15	Understanding of people dynamics		

** The above knowledge elements are in no particular ranking order.

Question 4

*In your view, what **experience** should an individual have to be identified as a possible change agent? (The concept of experience generally refers to know-how or procedural knowledge of an event, instead of propositional knowledge.)*

The researcher short-listed all the proposed "change agent experience elements" the expert sample group indicated a change agent should have, by comparing similar elements relating to experience provided by most of the sample group. The 18 proposed change agent experience elements in the table below were also verified at the concept mapping workshop.

TABLE 5.7: PROPOSED EXPERIENCE

PROPOSED EXPERIENCE			
1	Experience in either dealing with change agents or being a change agent themselves	10	Exposure to implementing a change initiative or even having been on the receiving end of a change
2	Experience in dealing with changing work conditions/procedures	11	Networking experience with those affected by change
3	Experience in communicating in small groups	12	Any prior Union or Forum experience
4	Facilitation experience – even if minimal	13	Exposure to planning activities in a structured manner (i.e. MS Excel, MS Project, Outlook, etc.)
5	Leadership role experience, be that in church, community or work	14	Experience in having to relay hard messages to others in a manner that still instils confidence
6	Prior workplace change experience (i.e. have been part of change in a work environment)	15	Consulting or project environment-related experience
7	Experience in dealing with conflict and difficult people	16	Experience of "typical setbacks" that occur during the change process
8	Experience in an ever-changing environment either in a leadership or employee role	17	Working with individuals in a changing environment
9	Related project management experience	18	Experience in mobilising people behind a specific goal

** The above experience elements are in no particular ranking order.

Question 5

*In your view, where on a **change curve** should an individual be in order to be identified as a possible change agent (assuming that the change curve consists of the following change-readiness scores)?*

- ***awareness*** *(aware of the project but not its impact)*
- ***understanding*** *(understanding the project and its impact*
- ***acceptance*** *(buy-in and active demonstration of support)*
- ***commitment*** *(ownership and significant involvement demonstrated)*

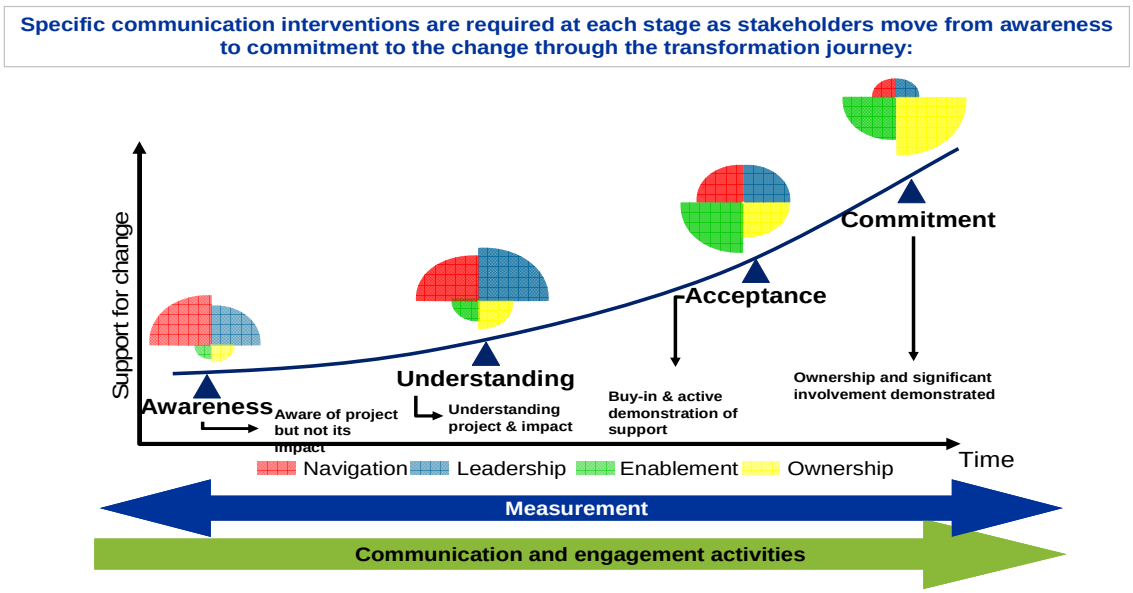


Figure 5.1: Change curve
Source: Accenture (2007, p.6)

The researcher showed figure 5.1 in the questionnaire, in order for the respondents to refer to it as part of the change-readiness scores question. The researcher analysed all the proposed change-readiness scores the sample group indicated a change agent should be at, by comparing similar elements relating to the change curve readiness level provided by most of the expert sample group. The following proposed change-readiness level recommendations were made:

TABLE 5.8: PROPOSED READINESS LEVEL

	PROPOSED READINESS LEVEL	Proposed readiness level survey responses
1	Awareness	1/ 15
2	Understanding	3 / 15
3	Acceptance	5 / 15
4	Commitment	6 / 15

Six of the 15 respondents indicated that a change agent should be at the "commitment" readiness level in order to drive change successfully in the respective areas of a business. Three of the 15 respondents indicated that a change agent should be at a level of understanding of what the change is about. Five of the respondents indicated that change agents should be at a level of acceptance of the

proposed change. Only one respondent felt that it is sufficient for a change agent only to remain in the awareness phase of the change curve, in order to drive change successfully. The above was verified at the concept mapping workshop.

Question 6

*Please mention important **dimensions** (from your experience) that a change agent should have as part of his or her profile (dimensions referring to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent).*

The researcher short-listed all the proposed dimensions the sample group suggested that a change agent identification framework should comprise. The following eight proposed dimensions were short-listed, to be verified at the concept mapping workshop:

TABLE 5.9: PROPOSED SHORT-LISTED DIMENSIONS

	PROPOSED DIMENSIONS
1	Knowledge
2	Ability
3	Skills
4	Level of commitment
5	Availability and willingness
6	Personality traits
7	Experience
8	Change curve readiness

All the above results were documented, to enable the concept mapping workshop participants (different sample group) to review the information provided from the first qualitative perception questionnaire sample group. The process followed and the outcome of the concept mapping workshop will be discussed next.

5.2.4 Step 3.2: concept-mapping workshop (verification step) background

A concept mapping workshop was held on 28 August 2008. Twenty-one internal (in the business where the research was conducted) change management specialists were invited by means of an appointment via electronic mail. Fifteen internal change management specialists accepted the appointment and attended the workshop. An informed consent form was sent to all the invitees by means of electronic mail and

distributed at the workshop held, affording everyone an opportunity to complete the form either electronically or on hard copy.

The workshop participants were requested to provide biographical information. A table was included in the questionnaire and participants had to tick the block most applicable to them.

The attendees were divided into three different focus groups of five individuals per group. Each group were provided with two documents. Each document represented a specific dimension and its supportive elements as per the qualitative perception questionnaire results. Each dimension and its supportive elements were subdivided as follows:
Group 1: personality traits and skills documents
Group 2: knowledge and experience documents
Group 3: change curve readiness levels and dimensions verification documents

The instructions were as follows:

- Each group received two documents and had to work through all the elements on each of the documents and discuss which of them are essential and which are not essential to be included in a change agent identification framework and then rank these items in terms of importance (based on their perception).
- Each group had to select a scribe and a spokesperson.
- Each group were requested to give feedback to the larger group and obtain input from the larger group on their choice of dimensions/elements.

Each group were allowed 30 minutes to work through their two documents, deciding which elements they perceived to be essential and nonessential. After doing this, each group had to rank all the essential items in terms of importance. A spokesperson from each group was selected to give feedback on the group's choice of dimensions/elements to be included in the framework. Many debates developed during the feedback session, and this helped the researcher to understand their thinking, motivation and reasoning for including or excluding certain elements from the framework.

5.2.4.1 Research findings step 3.2: concept-mapping workshop results

The following biographical information was obtained from a one-page biographical questionnaire, handed to participants at the start of the workshop:

TABLE 5.10: BIOGRAPHICAL INFORMATION OF INTERNAL CHANGE MANAGEMENT SPECIALISTS SAMPLE GROUP (N = 15)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	3	20	3	20
27 – 35	5	33.3	8	53.3
36 – 46	6	40	14	93.3
46 – 55	1	6.7	15	100
> 55	0	0	15	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	6	40	6	40
Female	9	60	15	100
Race	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
Black	8	53.3	8	53.3
White	6	40	14	93.3
Caucasian	0	0	14	93.3
Coloured	1	6.7	15	100
Indian/Asian	0	0	15	100
Number of years' change management or related consulting experience	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
0 – 3	6	40	6	40
4 – 6	4	26.7	10	66.7
7 – 10	1	6.7	11	73.4
10 – 13	2	13.3	13	86.7
>13	2	13.3	15	100

TABLE 5.10: BIOGRAPHICAL INFORMATION OF INTERNAL CHANGE MANAGEMENT SPECIALISTS SAMPLE GROUP (N = 15) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Bachelor's degree	1	6.7	1	6.7
Honours degree	3	20	4	26.7
MBA	1	6.7	5	33.4
Masters degree	10	66.6	15	100
Doctoral degree	0	0	15	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	4	26.7	4	26.7
English	3	20	7	46.7
African	8	53.3	15	100
Other	0	0	15	100

According to the above, the sample consisted of 40% males and 60% females. 40% were between the ages of 36 and 46; 54% were African; 40% had three or less than three years' of specialist working experience; 67% had a master's degree; 53% spoke an African language; and 27% were Afrikaans.

The results of the concept mapping workshop are provided in ranked order of importance in tables 5.11 to 5.16 below. A comparison was also made of the concept- mapping workshop results and literature review findings on each of the dimensions/elements. By comparing the results with the literature findings, it was possible to determine which dimensions/elements were deemed to be important by the specialist sample group and researchers in the field. These dimensions/elements, *inter alia*, were then used to form part of the change agent identification framework.

A total of 12 personality traits were verified during the concept mapping workshops. All 15 workshop participants concurred that these personality traits are important to enable an individual to act as a change agent.

TABLE 5.11: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: PERSONALITY TRAITS

	Concept mapping results	Literature findings
1	Willingness	Able to deal with complex issues
2	Integrity and honesty	Integrity
3	Assertive	Assertive
4	Flexible	Team player
5	Approachable	Patience
6	Perseverance	Sense of humour
7	Influential/Persuasive	Persistence/persuasive
8	Open minded	Honest
9	Good listener	Trustworthy
10	Emotional maturity – change to self awareness	Caring
11	Optimistic	Positive/optimistic
12	Sociable	Reliable
		Enthusiastic
		Confident
		Risk taking
		Political nose
		Respected
		Creative
		Empathy

When the concept mapping workshop findings were compared with the literature findings, the following personality traits overlapped with each other: assertiveness, honesty, persuasiveness, integrity and optimistic. This indicated that both researchers in the field and the internal change management specialists' sample group agreed that these are important personality traits for a change agent.

For the purpose of the development of the theoretical framework, the concept mapping workshop results were taken into consideration. The 12 traits verified at the workshop were thus included in the framework. A total of 12 change agent skills were verified during the concept mapping workshops. All 15 workshop participants agreed that these skills are important for an individual acting as a change agent.

TABLE 5.12: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: SKILLS

	Concept mapping results	Literature findings
1	Intrapersonal skills	Interpersonal skills
2	Influential skills	Influential skills
3	Selling skills	Listening skills
4	Deductive reasoning skills	Communication skills
5	Networking skills	Networking skills
6	Conflict-handling skills	Conflict-handling skills
7	Facilitation skills	Facilitation skills
8	Attentive listening skills	
9	Problem identification skills	
10	Problem-solving skills	
11	Negotiation skills	
12	Systematic thinking skills	

When the concept mapping workshop findings were compared with the literature findings on change agent skills, the following skills overlapped with each other: Interpersonal, conflict handling, facilitation, networking and influential. This indicates that researchers in the field and the internal change management specialists' sample group agreed that these are important skills for a change agent.

A total of 12 change agent knowledge elements were verified during the concept-mapping workshops. All 15 workshop participants agreed that these knowledge elements are important for an individual acting as a change agent.

The change agent knowledge elements the workshop participants agreed upon are highlighted below.

TABLE 5.13: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: KNOWLEDGE

	Concept mapping results	Literature findings
1	Knowledge of the organisation	Knowledge of the organisation, its culture and customers.
2	Knowledge of the organisation's external environment	Process change models.
3	Understanding the need for change	The organisation's vision and mission
4	Change management principles	Diagnostic model of change (Including change principles)
5	Knowledge of change resistance theories	Resistance to change and ways to manage it
6	Knowledge of roles and responsibilities of a change agent	Overcoming barriers to change and suitable communication methods and approaches
7	Understanding of various change management interventions	
8	Benefits of the change and its impact on the organisation and individual	
9	Deep understanding of the specific area/function where change is taking place	
10	Understanding of the cycle/phases of change	
11	The value of a change agent	
12	Group dynamics knowledge	

When the concept mapping research findings were compared with the literature findings on change agent knowledge elements the following overlapped: knowledge of the organisation, knowledge of change models/change principles and change resistance theory. This indicated that researchers in the field as well as the internal change management specialists' sample group agreed that these are important knowledge elements for a change agent.

A total of eight "change agent required experience elements" were verified during the concept mapping workshops. All 15 workshop participants agreed that these required experience elements are important for an individual acting as a change agent. The required experience elements of change agents that the workshop participants agreed upon are set below.

TABLE 5.14: CONCEPT MAPPING RESULTS: EXPERIENCE

1	Expert in dealing with changing work conditions/procedures
2	Exposure to implementing a change initiative
3	Networking experience with those affected by change
4	Consulting/project environment-related experience
5	Experience in mobilising people behind a specific goal
6	Experience in dealing with conflict and different people
7	Experience in having to relay hard messages to others in a manner that instils confidence
8	Facilitation experience – even if minimal

The researcher could not find any literature on the required experience of a change agent that could be compared with the concept mapping workshop results.

The workshop participants concerned that commitment and acceptance readiness levels are equally important readiness levels for individuals to be identified as change agents. Awareness and understanding were rated the second most important.

TABLE 5.15 CONCEPT MAPPING RESULTS: CHANGE CURVE READINESS LEVELS

1	Commitment
1	Acceptance
2	Awareness
2	Understanding

The researcher could not find any literature on the required change curve readiness levels of a change agent that could be compared with the concept mapping workshop results.

After all three focus groups had provided feedback on personality traits, skills, knowledge, experience, change curve readiness levels and dimensions verification, all the workshop participants discussed and agreed that, in their opinion, the following dimensions should form part of the change agent identification framework:

- Level of commitment of individuals to act as a change agent and to assist in implementing the proposed changes. The participants indicated that if an individual is not committed to the proposed change initiative, he or she will not execute his or her change agent responsibilities. They agreed that this is a vital dimension to consider when identifying individuals as change agents.
- Willingness to act in this role. The participants indicated that participation in a change agent network should be voluntary - it should remain the choice of the

individual whether he or she would like to act in this role for a certain period of time. They agreed that this is a vital dimension to consider when identifying individuals as change agents.

- Availability to perform certain tasks. The participants indicated that it would not be feasible to identify change agents to perform certain tasks if their day-to-day responsibilities did not allow them to fulfil this role as well. A certain percentage of their time should be allocated to perform their change agent duties. An agreement should be reached between the change agent identified and his or her manager to act in this role, as per the agreed key performance indicators. All of them concurred that this is a vital dimension to consider when identifying individuals as change agents.
- Personality traits: The participants indicated that they believe a change agent should have certain characteristics to be able to serve as an effective change agent. As per the literature findings, the participants concurred that there are 12 personality traits that should be considered when identifying change agents. These traits were indicated on the left-hand side of table 5.20a and 5.20b. They agreed that this is a significant dimension to consider when identifying individuals as change agents.

The meaning and/or supportive elements of each of these dimensions were captured in the developed theoretical framework. The methods proposed to measure each of the above stated dimensions is also provided in this chapter. The table below illustrate the dimensions workshop participants viewed as essential and non essential to be included in the developed theoretical framework.

TABLE 5.16: CONCEPT MAPPING RESULTS: PROPOSED VERIFIED DIMENSIONS

1	Level of commitment
2	Willingness
3	Availability
4	Personality traits
5	Skills **(not essential)**
6	Knowledge **(not essential)**
7	Experience **(not essential)**
8	Change curve readiness level **(not essential)**

From the initial literature findings it would seem that the following proposed dimensions needed to be included in a change agent identification framework: personality traits, skills, knowledge, experience and change curve readiness levels. The workshop attendees argued that it is not seen as essential to include skills, knowledge, experience and change curve readiness level dimensions in the identification framework itself. The agreement between workshop attendees was to focus instead on skills, knowledge and experience only after individuals had been identified as change agents. Even though they proposed that these elements should not be included in the framework, the elements deemed to be necessary to ensure that the change agent identified obtain the relevant knowledge, helping them to develop themselves and drive change more effectively. It was also proposed that change agents should be exposed to different change and transformation scenarios in an organisation in order to gain the experience needed to become more effective drivers of change.

Change curve readiness levels were not regarded as important to include or even to focus on after change agents had been identified. The reasons were that change-readiness scores work in parallel with the timelines of a specific project and that the more information is shared throughout the project, the more ready employees should become ready for change. The workshop attendees also concurred that readiness levels for change should not be considered when identifying change agents - instead change agents should be provided with a reliable tool such as the ADKAR assessment to determine the change-readiness scores of their co-workers.

It was also agreed that it is necessary for change agents to undergo training soon after appointment in this role so that they can obtain the right knowledge and acquire the necessary skills before beginning their task as a change agent.

The workshop participants placed strong emphasis on the following: It is imperative for a change agent to be directly affected by the change initiative for which he or she is identified as a change agent, because the individual would then share the “pain” his/her co-workers are experiencing. If the change agent is personally affected by the change, it will help him or her to explain the “what’s in it for me” element, influencing peers to accept the change and to feed valuable information back to the change management team on possible issues and concerns identified in their area of work.

5.2.5 Step 3.3: change agent identification framework

All the verified information obtained from the concept mapping workshop was analysed and was then used to design the change agent identification framework. This was the very first framework developed to use as a guideline for identifying change agents in organisations - no other framework was found to have been developed either locally or internationally.

Figure 5.2 depicts the developed change agent identification framework, as per the verified concept mapping workshop outcomes.

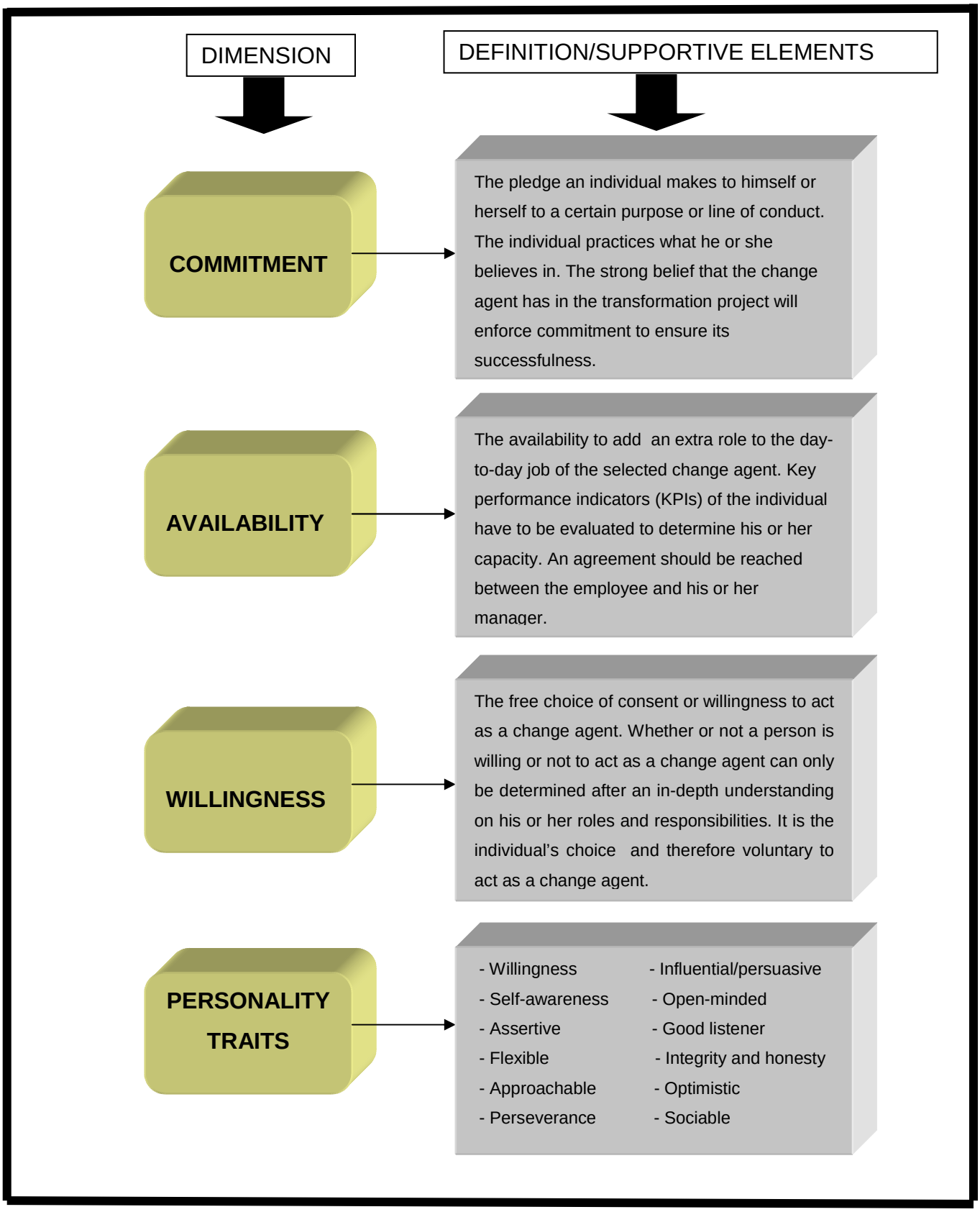


Figure 5.2: Change agent identification framework

5.2.6 Change agent identification framework dimensions and descriptions of supportive elements

This section highlights the various definitions and/or supportive elements for each of the theoretical change agent identification dimensions, as well as the method of measurement for each dimension.

5.2.6.1 Level of commitment

Level of commitment refers to the pledge an individual makes to himself or herself about a certain purpose or line of conduct. The individual practises what he or she believes in. The strong belief that the change agent has in the transformation project will enforce commitment to ensure its successfulness (Rice, et al., 1996).

- **Measured by Senge's measuring commitment level model.** The theoretical background of this questionnaire was explained in chapter 4 in order to illustrate that a commitment level questionnaire such as Senge's (1990) could be utilised by organisations in future to measure the commitment of potential change agents. It is suitable, as this questionnaire are mainly utilised in project type environments, where change agents could be identified, providing project support.

A similar level of commitment perception questionnaire was designed as part of the supportive documentation (ch. 6) of the designed framework. This questionnaire can be viewed in appendix B.

5.2.6.2 Availability

As discussed and agreed upon at the concept mapping workshop, availability refers to the availability to add an extra role to the day-to-day job responsibilities of the selected change agent. The key performance indicators (KPIs) of the individual have to be evaluated to determine his or her capacity. An agreement should be reached between the employee and his or her manager.

- **Measured by compact / key performance indicators.** An individual's key performance indicators should be reviewed in order to determine his or her capacity to act as a change agent. The manager and the respective employee/change agent identified should do this together.

5.2.6.3 Willingness

As discussed and agreed upon at the concept mapping workshop, willingness is the free choice of consent or will to act as a change agent.

- **Measured by voluntary participation.** Whether or not a person is willing to act as a change agent can only be determined after the selector has an in-depth understanding of the person's roles and responsibilities. It is up to the individual concerned whether he or she wishes to act as a change agent - it should be a voluntary act. No person should be forced or instructed to act as a change agent (Hutton, 1994).

  The willingness component forms part of these personality traits verified at the concept mapping workshop and was also measured as part of the personality traits measurement by means of the OPP.

5.2.6.4 Personality traits

Personality traits refer to a person's distinguishing qualities or characteristics, representing readiness to think or act in a particular fashion in response to a variety of different stimuli or situations (Oliver & Mooradian, 2003).

- **Measured by the OPP.** All the verified personality traits could be measured by the OPP psychometric instrument. This instrument is explained in detail in the section to follow.

As indicated in chapter 4, the OPP measures seven of the 12 personality traits identified in the developed framework. The OPP consists of nine different dimensions, each with opposing scales/poles. Each of the nine OPP dimension is supported by supportive elements. These elements as well as the nine different dimensions are provided below. Table 5.17 also highlights which of the verified personality traits from the developed framework were evident in each of the nine dimensions of the OPP. All these verified personality traits that form part of the developed change agent identification framework are highlighted in red.

TABLE 5.17 OPP DIMENSIONS

DIMENSION 1	
ACCOMMODATING	****ASSERTIVE**
Empathetic	Dominant
Accepting	****Challenging**
Sensitive to people's feelings	Unconcerned about feelings
Avoids confrontation	Confrontational
People-orientated	Task oriented
DIMENSION 2	
DETAIL CONSCIOUS	**FLEXIBLE**
Deliberating	Spontaneous
Controlled	Lacks of self-discipline and self-control
Rigid	****Flexible**
Enjoys attending to detail	Dislikes attending to detail
Conscientious	Disregards rules and obligations
DIMENSION 3	
CYNICAL	**TRUSTING**
Suspicious	Trusting
Inclined to question others' motives	Takes people at face value
Sceptical	****Has faith in others' honesty**
May disrupt other people	Sometimes a little credulous
DIMENSION 4	
EMOTIONAL	**** PHLEGMATIC**
Prone to worry	Self-assured
Moody	Emotional
Inclined to be anxious in social settings	Socially confident
Troubled by feelings of anxiety and self-doubt	Secure
Easily takes offence	Resilient

DIMENSION 5	
RESERVED	****GREGARIOUS**
Reserved	Outgoing and sociable
Cool and introspective	Lively and talkative
Prefers to work alone	Enjoys working with others
Enjoys own company	Has a high need for affiliation
Aloof and detached	Warm and appreciative

DIMENSION 6	
GENUINE	****PERSUASIVE**
Bases behaviour on own feelings and attitudes	Behaviour determined by demands of the situation
Forthright	Diplomatic
Honest and open	Manipulative and expedient
Genuine and sincere	Shrewd and calculating
May lack tact and diplomacy	Sensitive to “political” issues

DIMENSION 7	
COMPOSED	**CONTESTING**
Calm and composed	Ambitious and competitive
Able to delegate	May take on too much work
Keeps work separate from home life	Works long hours
Able to unwind and relax	Have difficulty relaxing
Tolerant	Impatient
Able to distance himself or herself	May be prone to stress-related work pressure

DIMENSION 8	
OPTIMISTIC	**PESSIMISTIC**
Achieving and striving	Resigned
Believe their own actions determine outcomes	Prone to feelings of helplessness
Positive approach to setbacks	Inclined to pessimism
****Optimistic**	Fatalistic
Believes he or she is in control of his or her own destiny	Have little faith in his or her ability to determine events

DIMENSION 9	
ABSTRACT	**PRAGMATIC**
Imaginative	Down to earth and concrete
Aesthetically sensitive	Not interested in artistic matters
Creative and artistic	Practical and realistic
Abstract and intellectual	Pragmatic
Have a theoretical orientation	More concerned with “how” than “why”

Note: ** Relevant dimensions and/or supportive elements.

Five of the verified supportive elements from the theoretical framework that are not measured by the OPP subscales are as follows: Willingness, open minded, being a good listener, self-awareness and perseverance. Seven of the twelve verified personality traits could be measurable by the OPP questionnaire, and the OPP was therefore selected as the appropriate assessment tool.

5.2.7 Research findings for steps 4.2 and 4.3: OPP results

As indicated in chapter 4, the sample group of 27 change agents were requested to complete the OPP questionnaire in order to determine how they compared with the ideal profile of a change agent in terms of each personality trait.

TABLE 5.18: BIOGRAPHICAL INFORMATION OF CHANGE AGENTS (N = 27)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	4	14.8	4	14.8
27 – 35	8	29.7	12	44.5
36 – 46	9	33.3	21	77.8
46 – 55	5	18.5	26	96.3
> 55	1	3.7	27	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	11	40.7	11	40.7
Female	16	59.3	27	100
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Black	15	55.6	15	55.6
White	8	29.6	23	85.2
Caucasian	0	0	23	85.2
Coloured	3	11.1	26	96.3
Indian/Asian	1	3.7	27	100

TABLE 5.18: BIOGRAPHICAL INFORMATION OF CHANGE AGENTS (N = 27) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Matric	**6**	22.2	6	22.2
Diploma	**7**	25.9	13	48.1
Degree	**8**	29.6	21	77.8
Honours degree	**3**	11.1	24	88.8
Master's degree/MBA	**3**	11.1	27	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	**8**	29.6	8	29.6
English	**7**	25.9	15	55.5
Northern Sotho	**2**	7.4	17	62.9
Zulu	**6**	22.2	23	85.1
Other	**4**	14.9	27	100

According to the above table, the sample consisted of 41% males and 59% females. 34% were between the ages of 36 and 46; 56% were African; 30% had a degree; 30% were Afrikaans speaking and 26% were English.

The occupational personality profile results were analysed to determine how many of the 27 change agents matched the change agent's ideal profile in terms of personality traits or how many change agents matched a personality trait that formed part of the ideal profile. The elements of the personality traits dimension in the framework that were measured by the OPP were:

- assertive
- flexible
- trusting
- phlegmatic
- gregarious
- persuasive
- optimistic

Note: The above traits are indicated with ** in table 5.17.

The chances were viewed as slim that change agents would meet all seven personality traits as per the ideal profile indicated in the above table, and therefore cut-off points were adjusted accordingly. The following cut-off points were decided upon on the nine-point scale of the OPP: A range from 7 to 9 (on the right-hand side of the continuum) for the first six personality traits were linked to the ideal profile personality traits and a range of 1 to 3 for the seventh and last personality trait, namely optimism. After analysing this information, it was found that none of the selected change agents fell into **all** seven personality trait dimension ranges, even after cut-off points were adjusted to less stringent ones.

On the strength of the above results, it was decided to consider each personality trait and compare the ADKAR improvement scores for each of the personality traits separately. The employees were divided into two groups, namely those supported by change agents who possessed that specific trait (fell within the indicated range on that specific personality trait) and those supported by change agents without that specific trait (fell outside the indicated range on that personality trait).

It would have been extremely difficult to defend the approach in terms of a change agent matching the ideal profile in totality, because not a single change agent fitted the **exact** ideal profile in terms of all seven personality traits as measured by the OPP with initial stringent cut-off points. Only two change agents fell within the ranges for all seven personality traits that form part of the ideal profile, after the cut-off points had been revised to less stringent ones.

5.2.7.1 Interpretation of frequency results

The frequency of scores of the sample group that fall within particular categories was determined. This indicated how many of the change agents matched the ideal profile in terms of each dimension/personality trait measured. These results were provided for each personality trait. The results indicated that not one of the 27 change agents matched the exact ideal profile for all seven of the personality traits.

The frequency of responses for each dimension of the OPP on both sides of the continuum was calculated. All the areas highlighted in yellow indicate the number of responses that matched the ideal profile for that particular dimension.

TABLE 5.19: OPP FREQUENCY RESULTS

Dimensions	Scale indicators	Frequency	Percent
Dimension 1: accommodating vs. assertive	**1-5**	13	48.15
	6-9	14	51.85
Dimension 2: detail conscious vs. Flexible	**1-5**	24	88.89
	6-9	3	11.11
Dimension 3: cynical vs. trusting	**1-5**	16	59.26
	6-9	11	40.74
Dimension 4: emotional vs. phlegmatic	**1-5**	16	59.26
	6-9	11	40.74
Dimension 5: reserved vs. gregarious	**1-5**	15	55.56
	6-9	12	44.44
Dimension 6 : genuine vs. persuasive	**1-5**	17	62.96
	6-9	10	37.04
Dimension 8: optimistic vs. pessimistic	**1-5**	7	25.93
	6-9	20	74.07

Note: Only the results of the seven personality traits from the ideal profile are provided and not all traits measured by the OPP.

The above indicates the following:

- **Dimension 1.** Thirteen of the 27 change agents inclined towards being accommodating, while 14 of them inclined towards the ideal profile of being assertive.
- **Dimension 2.** Twenty four of the 27 change agents inclined towards being detail-conscious, while 3 of them inclined towards the ideal profile of being flexible.
- **Dimension 3.** Sixteen of the 27 change agents inclined towards being cynical, while 11 of the 27 of them inclined towards the ideal profile of being trusting.
- **Dimension 4.** Sixteen of the 27 change agents inclined towards being emotional, while 11 of them inclined towards the ideal profile of being phlegmatic.
- **Dimension 5**. Fifteen of the 27 change agents inclined towards being reserved, while 12 of them inclined towards the ideal profile of being gregarious.

- **Dimension 6.** Seventeen of the 27 change agents inclined towards being genuine, while 10 of them inclined towards the ideal profile of being persuasive.
- **Dimension 8.** Seven of the 27 change agents inclined towards the ideal profile of being optimistic, while 20 of them inclined towards being pessimistic.

From the above results, it is clear that, in most instances, fewer than half of the 27 change agents inclined towards the ideal profile for each personality trait. The only instance in which more than half of the change agents inclined towards an ideal personality trait was for dimension 1. All the other dimension results indicated that more than half of the change agents inclined towards the other side of the continuum, that is not displaying a specific, ideal personality trait.

5.2.8 Step 4.4: completion of the post-test ADKAR by a sample of 135 employees supported by change agents in their respective areas

As indicated in chapter 4, the change agents were requested to ask five of their peers in their working area to complete the ADKAR questionnaire again (purposefully selected). The objective was to determine whether the employees supported by the change agents who had a specific personality trait that forms part of the ideal profile, showed a significantly larger improvement in change-readiness scores compared to those employees supported by change agents who did not have that particular personality trait - or whether the specific personality trait did not have any impact on the employee change-readiness scores. These selected employees had also completed the pre-test ADKAR questionnaire during earlier roadshows, because they were part of the 350 employees who had completed the ADKAR initially. On completion of the post-ADKAR questionnaire, the pre-test ADKAR questionnaires were collected from the archives in order to compare pre- and post-test ADKAR scores for these specific employees. A possible limitation, influencing the true ADKAR results, could have been due to the fact that employees subjectively decided that they wished to be perceived as accepting the change even though they actually resisted it.

No biographical information was obtained from these 135 (27 change agents X 5 employees per change agent) individuals who completed the post-ADKAR

assessment. These employees however were employed in the procurement and supply chain management function in the utility organisation.

The ADKAR change-readiness questionnaire was sent to change agents via electronic mail. The change agents printed hard copies of these questionnaires and handed them to procurement and supply chain management employees in their area to complete. On completion the questionnaires were sent back to the researcher for analysis.

5.2.9 Findings for steps 4.5, 4.6 and 4.7: combined research results – determining key personality traits

Steps 4.5, 4.6 and 4.7 were described respectively in chapter 4, where it was also indicated that all the results were analysed simultaneously and would be indicated in two integrated tables (tab. 5.20a and 5.20b). This section therefore focuses on the provision of the following results:

- **Step 4.5.** This entailed reporting whether there was a significantly larger improvement in the change-readiness scores of employees supported by the change agents possessing a specific personality trait compared to those supported by change agents not displaying that specific trait.
- **Step 4.6.** This involved reporting which of those seven personality traits could be viewed as **key** personality traits by comparing the improvement in employee change-readiness scores for each of the seven personality traits per group supported by change agents possessing a particular personality trait versus those change agents not showing a particular personality trait for the ideal profile.
- **Step 4.7.** This entailed indicating whether employees showed a significantly larger improvement in employee change-readiness scores when supported by change agents possessing **all** key traits compared to the group supported by change agents not showing all key traits.

The aim of this quantitative analysis is to answer each the following research hypotheses:

- **H0:** Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

- **H1:** Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

All the results are indicated in table 5.20a and 5.20b below. Owing to the vast number of results, it was necessary to provide the results in two separate tables. Below are descriptions of the different columns for both of the tables.

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Assertive	Awareness	65	1.15	3.63	65	1.03	3.36	70	1.05	3.41	70	0.98	3.09
Dd1	Desire	65	1.08	3.69	65	1.06	3.32	70	1.03	3.54	70	0.89	3.11
	Knowledge	65	0.73	4.01	65	0.96	3.28	70	0.66	3.82	70	0.87	3.07
	Ability	65	0.78	4.14	65	0.64	3.19	70	0.92	3.95	70	0.74	3.14
	Reinforcement	65	1.10	3.35	65	0.90	3.14	70	0.90	3.37	70	0.86	2.93
Flexible	Awareness	120	1.10	3.53	120	1.02	3.23	15	1.09	3.37	15	0.96	3.12
Dd2	Desire	120	1.04	3.64	120	1.00	3.23	15	1.14	3.40	15	0.78	3.10
	Knowledge	120	0.71	3.89	120	0.94	3.19	15	0.65	4.09	15	0.72	2.96
	Ability	120	0.86	4.04	120	0.71	3.17	15	0.77	4.07	15	0.56	3.18
	Reinforcement	120	0.96	3.43	120	0.91	3.05	15	1.08	2.78	15	0.62	2.87
Trusting	Awareness	80	1.18	3.40	80	1.00	3.28	55	0.96	3.69	55	1.02	3.13
Dd3	Desire	80	1.13	3.66	80	0.99	3.21	55	0.94	3.54	55	0.99	3.22
	Knowledge	80	0.70	3.92	80	0.90	3.19	55	0.71	3.90	55	0.93	3.13
	Ability	80	0.79	4.13	80	0.69	3.18	55	0.93	3.92	55	0.69	3.14
	Reinforcement	80	1.10	3.27	80	0.84	3.02	55	0.82	3.49	55	0.97	3.05

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS CONTINUED

TRAIT	**CHANGE READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Phlegmatic	Awareness	80	1.18	3.39	80	0.96	3.33	55	0.94	3.70	55	1.06	3.05
Dd4	Desire	80	1.09	3.55	80	0.93	3.23	55	1.00	3.71	55	1.04	3.19
	Knowledge	80	0.71	3.87	80	0.87	3.17	55	0.69	3.97	55	0.99	3.16
	Ability	80	0.82	4.04	80	0.69	3.18	55	0.91	4.04	55	0.68	3.15
	Reinforcement	80	1.07	3.19	80	0.82	3.01	55	0.82	3.60	55	0.98	3.06
Gregarious	Awareness	75	1.05	3.52	75	0.94	3.08	60	1.16	3.52	60	1.07	3.38
Dd5	Desire	75	1.05	3.61	75	0.89	3.11	60	1.06	3.62	60	1.07	3.37
	Knowledge	75	0.73	3.87	75	0.87	3.11	60	0.66	3.97	60	0.97	3.25
	Ability	75	0.79	4.03	75	0.68	3.13	60	0.93	4.06	60	0.71	3.21
	Reinforcement	75	0.97	3.34	75	0.75	2.98	60	1.04	3.37	60	1.03	3.10
Persuasive	Awareness	85	1.06	3.60	85	1.05	3.35	50	1.15	3.37	50	0.89	2.99
Dd6	Desire	85	1.03	3.68	85	1.04	3.34	50	1.10	3.50	50	0.81	2.99
	Knowledge	85	0.68	3.92	85	0.98	3.31	50	0.74	3.90	50	0.75	2.93
	Ability	85	0.80	4.02	85	0.73	3.29	50	0.94	4.08	50	0.55	2.96
	Reinforcement	85	0.99	3.39	85	0.92	3.20	50	1.03	3.30	50	0.73	2.73

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS CONTINUED

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Optimistic	Awareness	35	1.14	3.62	35	0.91	3.17	100	1.09	3.48	100	1.05	3.23
Dd8	Desire	35	1.01	3.51	35	0.90	3.22	100	1.07	3.65	100	1.01	3.20
	Knowledge	35	0.60	3.85	35	0.94	3.09	100	0.73	3.93	100	0.91	3.19
	Ability	35	0.99	3.94	35	0.62	3.08	100	0.80	4.08	100	0.71	3.19
	Reinforcement	35	0.86	3.56	35	0.87	2.86	100	1.03	3.29	100	0.90	3.09

Notes: As indicated earlier in the chapter, change agents were considered to be those **with** the elements of the ideal profile in terms of the first six traits (assertive, flexible, trusting, phlegmatic, gregarious and persuasive), if they scored between 6 and 9 on the OPP continuum scale and from 1 to 5 in terms of trait number 7 – trusting on the OPP stanine scale (scale from 1-9). D1 = the first personality trait, namely "assertiveness". The ADKAR pre-test and post-test results are provided per dimension for both groups, where employees were supported by change agents **with** or **without** the particular trait.

Table 5.20a:

- Column 1 (trait) refers to the seven relevant personality traits measured by the OPP questionnaire in terms of the change agent profile. These seven personality traits form part of the ideal profile of a change agent according to the theoretical framework developed.
- Column 2 (change readiness level) refers to all five change readiness dimensions of the overall ADKAR change readiness questionnaire. Each of the seven personality traits was assessed against all five change readiness scores, to determine whether there was a significant improvement in the employee change readiness scores in instances where employees were supported by change agents with or without a specific personality trait that forms part of the ideal profile of a change agent.
- Columns 3 and 4, D (1-5), refer to that group of employees supported by change agents with that specific personality trait that forms part of the ideal profile, while columns 5 and 6 refer to the group of employees supported by change agents without that specific personality trait.
    - The N columns represent the sample sizes of the employees who completed the pre- and post-ADKAR questionnaires, either supported by change agents possessing and not possessing the specific personality trait for each dimension. By examining the first personality trait in the above table, for example, which refers to assertiveness (Dd1), the sample sizes between the results of change agents with and without a specific personality trait differ. Frequency results table in section 5.2.7.1 showed that 14 change agents possessed the assertiveness personality trait. Since each of the change agents was tasked to obtain a second round of ADKAR results from five of the people he or she supported in his or her area, there would be five ADKAR post-test results available for each change agent. The same employees' pre-test ADKAR results are also reported. The remainder of the 13 change agents who did not possess that specific trait would each have obtained the ADKAR post-test results from five of the employees they worked with, resulting in a comparison of post-test and pre-test scores for 65 individuals (13 x 5 = 65) (see the above explanation). All of the other N values for all the remaining personality trait dimensions reflect the same approach. Before answering some of the empirical research questions posed below, it is necessary to

provide information on the way in which some of the results were calculated.

5.2.9.1 Interpretation of the results in table 5.20a

- By inspecting columns 3 and 4 (D1-5), it was evident that, contrary to expectations and to the original hypothesis, there was a decrease in the mean score values of the ADKAR post-test scores when compared to the pre-test scores in instances where employees were associated with change agents **with** specific personality traits from the ideal profile. This tendency was evident for all the personality traits dimensions.
- The same tendency was observed for columns 5 and 6 (D6-9), because there was also a decrease in ADKAR post-test mean scores values in comparison with the pre-test scores in instances where employees were associated with change agents **without** specific personality traits from the ideal profile.
- Owing to the above observation, a different approach was required to analyse the results. Since the ADKAR levels decreased for both groups, further investigation would be required in order to compare the decrease in the mean scores for each of the ADKAR levels and for all personality trait dimensions between the employees associated with change agents with and without specific personality traits.
- The hypothesis refers to an increase in employee change readiness scores when supported by change agents possessing specific traits compared with those employees supported by change agents not possessing those specific traits from the ideal profile. However, this was not reflected in the empirical results since table 5.20a indicates no improvement in any of the mean score values.

TABLE 5.20b: DIFFERENCES IN ADKAR PRE- AND POST-TEST SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONAILTY TRAITS

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (diffwith)**			**D1 (6–9) Associated with change agents without personality trait (diffwithout)**			**P-value (Kruskal-Wallis test)**	**Key trait: yes /no?**
		N	Std dev.	Mean diff with	N	Std dev.	Mean diff without		
Assertive	Awareness	65	1.51	-0.27	70	1.30	-0.32	0.9648	No
Dd1	Desire	65	1.63	-0.37	70	1.24	-0.42	0.6322	No
	Knowledge	65	1.24	-0.72	70	1.06	-0.75	0.7691	No
	Ability	65	0.93	-0.94	70	1.11	-0.81	0.6211	No
	Reinforcement	65	1.30	-0.20	70	1.22	-0.44	0.2327	No
Flexible	Awareness	120	1.40	-0.30	15	1.44	-0.25	0.7549	No
Dd2	Desire	120	1.45	-0.41	15	1.39	-0.30	0.8115	No
	Knowledge	120	1.14	-0.69	15	1.16	-1.13	0.1369	No
	Ability	120	1.04	-0.87	15	0.94	-0.88	0.9692	No
	Reinforcement	120	1.26	-0.38	15	1.20	0.08	0.2499	No
Trusting	Awareness	80	1.52	-0.12	55	1.17	-0.55	0.2282	No
Dd3	Desire	80	1.57	-0.45	55	1.23	-0.32	0.5919	No
	Knowledge	80	1.12	-0.72	55	1.19	-0.76	0.9893	No
	Ability	80	0.98	-0.94	55	1.09	-0.78	0.3517	No
	Reinforcement	80	1.33	-0.25	55	1.15	-0.44	0.4271	No
Phlegmatic	Awareness	80	1.45	-0.05	55	1.24	-0.65	**0.0517**	**Yes**
Dd4	Desire	80	1.50	-0.31	55	1.35	-0.52	0.4337	No
	Knowledge	80	1.11	-0.69	55	1.20	-0.80	0.7654	No
	Ability	80	1.03	-0.87	55	1.03	-0.89	0.8911	No
	Reinforcement	80	1.29	-0.18	55	1.18	-0.54	0.1024	No

TABLE 5.20b: DIFFERENCES IN ADKAR PRE- AND POST-TEST SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONAILTY TRAITS CONTINUED

TRAIT	**CHANGE READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (diffwith)**			**D1 (6–9) Associated with change agents without personality trait (diffwithout)**			**P-value (Kruskal -Wallis test)**	**Key trait: yes/no?**
		N	Std dev.	Mean diff with	N	Std dev.	Mean diff. without		
Gregarious	Awareness	75	1.36	-0.43	60	1.43	-0.13	0.2550	No
Dd5	Desire	75	1.54	-0.49	60	1.31	-0.28	0.2890	No
	Knowledge	75	1.13	-0.76	60	1.17	-0.71	0.6317	No
	Ability	75	0.97	-0.90	60	1.10	-0.85	0.7527	No
	Reinforcement	75	1.22	-0.37	60	1.31	-0.27	0.3797	No
Persuasive	Awareness	85	1.41	-0.25	50	1.38	-0.38	0.6187	No
Dd6	Desire	85	1.47	-0.33	50	1.39	-0.52	0.3783	No
	Knowledge	85	1.14	-0.60	50	1.13	-0.96	**0.0599**	**Yes**
	Ability	85	0.99	-0.73	50	1.05	-1.12	**0.0158**	**Yes**
	Reinforcement	85	1.23	-0.19	50	1.28	-0.56	**0.0569**	**Yes**
Optimistic	Awareness	35	1.19	-0.45	100	1.47	-0.25	0.5147	No
Dd8	Desire	35	1.32	-0.27	100	1.48	-0.44	0.4735	No
	Knowledge	35	1.10	-0.75	100	1.17	-0.73	0.9438	No
	Ability	35	1.13	-0.86	100	0.99	-0.88	0.8523	No
	Reinforcement	35	1.13	-0.20	100	1.28	-0.69	**0.0525**	**Yes**

Notes: The p-values in bold: significant at the 10% level in the employee concerned.

Table 5.20b

- Columns 1 and 2 represent the same information as columns 1 and 2 in table 5.20a.
- Columns 3 and 4, D (1-5) and D (6-9) refer to the differences in the ADKAR pre-and post-test mean scores. The pre-ADKAR scores were subtracted from the post-ADKAR scores for each of the individual employees in the groups respectively supported by change agents **with** and **without** a specific personality trait. The Kruskal-Wallis test was then used to compare the two

sets of difference scores for each of the personality dimensions involved. The significant p-values, at the 10% level, are highlighted in bold.

- One should bear in mind that since the ADKAR scores DECREASED in all cases for BOTH groups, the present comparison involves negative (difference) scores – labelled “diff with” and “diff without” in the table. Hence in layperson’s terms, if it can be shown that the group supported by change agents who **possessed** the particular personality characteristic showed a STATISTICALLY SIGNIFICANT **SMALLER** difference score (DECREASE in change readiness) than those supported by changes agents who **did not possess** that particular personality characteristic, then one could infer that characteristic in question is important in the profile of a successful change agent. Column 5 refers to the p-value score. In instances where the p-value was lower than 0.10, it demonstrates a significant difference in the “DIFFERENCE SCORES” for the group supported by change agents **possessing** a specific personality trait compared employees supported by change agents **not possessing** that specific trait. The magnitude of the mean difference scores for these traits (mean diff with and mean diff without) will indicate which of the two is larger, and indicate the statistical significance of the difference between the “mean diff with” and “mean diff without” scores.

5.2.9.2 Interpretation of the results in the table 5.20b

Owing to the fact that there was a decrease in all the mean scores throughout between the pre- and post-test ADKAR scores in instances where employees were associated with change agents with and without specific personality traits, it was necessary to review each of the mean scores respectively, in the above table, in order to determine the level of the decrease between each of the mean value scores. Should the mean value scores decrease significantly less in instances where employees were supported by change agents with specific personality traits, then a positive contribution is made by these change agents. This is determined by subtracting the “diff with” mean scores from the “diff without” mean scores.. An analysis of these results yielded the following information:

- **Assertiveness (Dd1).** No statistically significant differences between the mean scores were found in this dimension. The explanation below shows how the scores were interpreted.
    - The difference in mean value scores (-0.27 and -0.32) indicates 0.05 less of a decrease in the **awareness** change readiness score in instances where employees were supported by change agents with

this specific personality trait. The p-value of 0.9648 indicates that the mean difference scores for the two groups did not differ significantly. Hence this is not considered a key dimension in the profile of a ”successful” change agent.

The same approach, as indicated in the above discussion, was followed for all the ADKAR dimensions and personality traits. The results below highlight which of the personality traits did and did not positively affect the ADKAR change readiness levels.

- **Flexible (Dd2).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Trusting (Dd3).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Phlegmatic (Dd4).** One statistically significant difference between the mean difference scores was found for awareness in this dimension.
    - The difference in mean difference value scores (-0.05 and -0.65) indicates a statistically significant smaller decrease in the **awareness** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.
- **Gregarious (Dd5).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Persuasive (Dd6).** Three statistically significant differences between the mean difference scores were found, namely for knowledge, ability and reinforcement, in this dimension.
    - The difference in the mean value scores (-0.60 and -0.96) indicates a statistically significant smaller decrease in the **knowledge** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.
    - The difference in the mean value scores (-0.73 and -1.12) indicates a statistically significant smaller decrease in the **ability** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.01 highlights this significant difference.
    - The difference in the mean value scores (-0.19 and -0.56) indicates a statistically significant smaller decrease in the **reinforcement** change

readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.

- **Optimistic (Dd8).** One statistically significant difference between the mean difference scores was found, namely for reinforcement, in this dimension.
    - The difference in the mean value scores (-0.69 and -0.20) indicates a statistically significant smaller decrease in the **reinforcement** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.

Although only a few of the dimensions were indicated as making a positive contribution to the ”success” of change agents, these results can be used in support of the compilation of a change agent selection profile.

For those columns in which the p-values were highlighted in **bold,** there was a statistically significant smaller decrease in the mean values between the pre-and post-test results for the group who received support from change agents with specific personality traits compared with the decrease in the mean values between the pre- and post-test results for the group who received support from change agent without those specific traits.

To summarise with reference to the original hypothesis, there was no statistically significant larger improvement in the ADKAR post-test change readiness scores whatsoever because of the decrease of all the mean values in both instances (i.e. where employees were supported by a change agent **with** and **without** specific personality traits forming part of the ideal profile respectively). On the basis of the empirical results and the fact that all change readiness scores showed a decrease, all difference scores (post-test ADKAR minus pre-test ADKAR) were negative. However, there was some evidence of the positive **effect** of some personality traits manifested by change agents on change readiness scores with reference to those instances in which there was a statistically significantly smaller decrease in change readiness scores for change agents who possessed a particular trait.

On the strength of the information in the above tables, the researcher was able to answer the following three research questions:

Question 1. Are there significantly larger improvements in the change readiness scores of employees supported by change agents possessing a specific trait from the profile, versus those supported by change agents not possessing that specific trait?
Answer. There was no significantly larger improvement in **any** of the change readiness scores of employees supported by change agents possessing a specific trait from the profile, versus those supported by change agents not possessing that specific trait.

The tabled results indicate that there no significant improvements at all for employee change readiness levels – neither for those supported by change agents with a specific trait nor for those supported by change agents without a specific trait. However, there was a statistically significant (at the 10% level) smaller decrease in the mean values for the following personality traits and readiness levels:

- Phlegmatic personality traits manifested by the change agent resulted in a statistically significant smaller decrease in the awareness levels of employees.
- Persuasive personality traits manifested by change agents resulted in a statistically significant smaller decrease in the knowledge, ability and reinforcement readiness levels of employees.
- Optimistic personality traits manifested by change agents resulted in a statistically significant smaller decrease in the employees' reinforcement levels.

In support of these findings, the literature study findings and the qualitative empirical research findings indicated that the persuasive and optimistic personality traits need to form part of a change agent's personality profile. The phlegmatic personality trait was not evident in any of the findings.

Question 2. Which of those seven personality traits can be regarded as key personality traits by analysing the level of the significantly larger improvement in employee change readiness scores for each of the seven personality traits change agents could possess?

Answer. Because there was no significantly larger improvement in any of the change readiness scores in instances where employees received support from change agents with specific personality traits from the ideal profile, none of the personality traits from the ideal profile can be viewed as key traits. From the previous discussion

with a changed focus on the interpretation of negative difference scores, it was indicated that only the phlegmatic, persuasive and optimistic personality traits showed statistically significantly smaller decreases in the employee change readiness post-test scores. The statistically significant smaller decrease was only evident in the following traits and change readiness levels.

- **Phlegmatic personality traits**. There was a statistically significant smaller decrease between the pre- and post-test awareness levels only, and not in any other of the four readiness levels.
- **Persuasive personality trait**. There was a statistically significant smaller decrease between the pre- and post-test knowledge, ability and reinforcement levels when supported by change agents with this personality trait.
- **Optimistic personality trait**. There was a statistically significant smaller decrease between the pre- and post-test reinforcement levels only, and not in any other of the four readiness levels..

It can be concluded that the phlegmatic, persuasive and optimistic change agent personality traits do have some sort of positive effect on employees during transformation.

Question 3. On the basis of a comparison of the ADKAR pre- and post-test results, did employees show a statistically significantly larger improvement in change readiness scores when supported by change agents possessing all the key traits?

Answer. On the basis of a comparison of the ADKAR pre- and post-test results, there was no statistically significant larger improvement in any of the change readiness scores when supported by change agents possessing specific traits. The above question could not be answered because none of the change agents had all the key traits.

An in-depth process was followed in the development of a change agent identification framework. Even though the ADKAR is deemed a reliable questionnaire, in this research study it did not indicate changes in all change readiness scores through the appointment of change agents with specific personality traits as per the ideal profile.

To summarise, the following conclusions were drawn from all of the above results as indicated in chapter 5:

- The ADKAR change readiness questionnaire is reliable because the scale coefficient alpha was 0.77.
- For all the variables, the group 27 change agents who remained part of the change agent network obtained statistically significant higher scores than the 73 individuals who decided to exit the network.
- The frequency table results indicate that more than half of the 27 change agents were optimistic and assertive.
- The results indicated that there were no significantly larger improvements in the employee post-test change readiness scores when supported by change agents displaying specific traits from the ideal profile. However, when considering the negative difference scores found, there were some traits that led to statistically significant smaller decreases in scores – which provides positive support for identifying that trait as important in the profile of change agents.
- None of the personality traits resulted in a significantly larger improvement of all change readiness scores as per the significant difference score, as indicated by the p-value. The only three personality traits that did result in a statistically significantly smaller decrease of some of the AKDAR change readiness scores were the phlegmatic, persuasive and optimistic traits. Only these change agent personality traits can be deemed to have some sort of positive effect on employees during transformation.

5.3 CHAPTER CONCLUSION

The research project achieved its primary objective of developing a change agent identification framework. A vigorous qualitative research process was followed in establishing the theoretical framework. It can therefore be regarded as a beneficial framework to be used by industrial and organisational psychologists, specialising in change management in organisations undergoing change.

The personality traits dimension of the framework was tested and even though it did not yield significant results with regards to any significantly larger improvement regarding employee-change-readiness scores, empirical evidence in support of the

objectives were provided in throughout tables 5.1 to 5.20. The results indicate the comprehensive qualitative and quantitative approach followed in an effort to determine the impact of change agent personality traits on the change-readiness levels of employees.

The next chapter focuses on the research conclusions, their meaning and impact, possible future considerations and the ultimate success of the research project. The research project limitations faced are also explained and key recommendations made for future research in the field.

CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter focuses on phase 3 of the research process as indicated in chapter 1. Firstly, the conclusions in this research project are supported by the findings in the literature review and the results of the empirical research. Secondly, the research limitations and the impact thereof on the research results will be discussed. Lastly, recommendations will be made for future researchers in the field of industrial and organisational psychology, encouraging them to conduct further research in the field and to extend the theoretical knowledge base of the concept "change agent."

A comprehensive literature and empirical research process was followed, in order to achieve the following overall research objective: ***Determine the dimensions and supportive elements that constitute a valid change agent identification framework.***

This research aim served as the guiding principle for all the steps followed throughout the research process. These steps were schematically presented and explained in Chapter 4 (Figure 4.1).

Sub objectives were formulated in support of the primary objective in order to facilitate the overall research process. Five sub objectives/research questions were formulated for the literature study and seven sub-objectives/research questions for the empirical study.

Conclusions will be drawn from the literature review and empirical study in accordance with the research aims as elucidated in chapter 1.

6.2 CONCLUSIONS

All the literature study research findings in terms of the research aims formulated were indicated in chapters 2 and 3 and all empirical research findings in chapter 5.

6.2.1 Research questions relating to the literature study:

6.2.1.1 ***Research aim 1:*** *to understand the meaning of change, organisational change and change management.*

a. Conclusions regarding the meaning of change

A number of definitions were found on the concept of change, as indicated in chapter 2. Ford and Ford (1994) viewed change as sequence of activities that emerge from a number of disturbances. Change can also be viewed from an individual, business or societal perspective (Worren, Ruddle & Moore, 1999). Individual change may require adapting to new behaviour, whereas business change may require new business processes or systems. Societal change could imply changes in public policies or legislation (Burke, 2002).

Since this research project focused on planned, as opposed to unplanned change, definitions were sought for in this research project. Many researchers view the concept planned as linear, as it focuses on all the steps in sequential order right through to the final step. Other researchers argued that change cannot always be viewed as linear, because it is usually implemented in the exact opposite way. It is messy, timelines are not always adhered to, people do not cooperate and unexpected decisions are made because of unanticipated consequences.

Most of the definitions found on change, reflected the same idea, namely that transformation of some or other kind occurs. It is evident from the above that most definitions of change involve some of the following: planned or unplanned, disturbance, difference in form, shift, opposite and messy.

b. Conclusions regarding the meaning of organisational change

A vast amount of literature was found on the term “organisational change”. Some of the viewpoints on and definitions of organisational change, according to the literature findings are provided below.

Most definitions imply that a shift occurs, which could refer to current organisational behaviour shifting to ideal organisational performance by improving certain capabilities and skills of the employees in an organisation. According to Porras and Robertson (1992), the purpose of planned organisational change is often a result of enhancing individual development and improving organisational performance by altering organisational members' on-the-job behaviours.

It was noted that organisational change mostly occurs in the context of some or other failure or adjustment. With reference to organisations, change involves the difference in how an organisation functions, who its members and leaders are, what form it takes and/or how it allocates its resources. St-Amour (2001) advanced more specific reasons for organisational change, because they contend that it could refer to, *inter alia,* mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining. Laycock (2002) argued that organisational change would not be necessary if individuals have simply done their jobs correctly in the first place. The above could also be deemed a performance management issue, which does not necessarily result in organisational change, depending on the need for change. For the purpose of this research project this viewpoint was not deemed to be applicable to the reasons for change.

In essence organisational change is usually planned and the need for change usually emerges as a result of poor organisational or individual performance, failure in systems, process, technology or overall organisational functioning. Organisational change therefore entails improvement and changing the status quo to a new desired, well-defined end-state.

c. Conclusion regarding the meaning of change management

The literature findings on change management referred to the process whereby an organisation aligns its people, processes and structures with its vision and business strategy, maximising its ability to achieve success through involved and committed people. It was noted that the process of change can take many years to become a reality for each individual affected by it. Hence change does not always have to be all-inclusive and may be implemented on smaller scales over periods of time.

Change management is also viewed as a process of continuously renewing the organisation's direction, structures and capabilities in order to satisfy the needs of its internal and external customers. It involves the effective implementation of new

methods and systems in a growing organisation, which is controlled by the organisation itself.

To summarise: All the literature findings on the above three key terms were explored and documented and these primary research aims were therefore achieved in chapter 2.

6.2.1.2 ***Research aim 2:*** *to understand why it is necessary to identify change agents to manage change in large organisations.*

Before identifying the importance of the change agent's role on the basis of the literature consulted, term "change agent" was defined.

Many definitions were examined in chapter 3 in order to determine how the business world views the role of a change agent and to find a definition applicable to this research project. According to Burnes (2004), change agents can be viewed as the individuals responsible for directing, organising and facilitating change in organisations. This was classified as a potentially difficult task, especially in large bureaucratic organisations. Saka (2003) argued that change agents are individuals directly affected by change, and through their involvement in the change process, they shape the way in which the end state should be achieved. It was evident from all the definitions researched that a change agent is someone who helps to drive, communicate and market change throughout the organisation or functional area in which employees are affected.

Saka (2003) argued that change agents should only be selected from the leadership team's senior managers. Ticky and Devanna (1990) felt that change agents should be spread across the entire organisation and represent all levels in the organisation that are affected by the change, in order to significantly relate to the issues and concerns of employees, and thus to support them properly.

Doyle (2001) agreed that change agents should either be supported by the change management team, thus helping them to communicate change messages effectively and supporting employees in their areas of work. These viewpoints indicate that researchers in the field tend to define the concept "organisational change agents" in different ways. However, most researchers concur that the core functions of these individuals are to manage and drive change in the organisation.

The definition of a change agent adopted for this research project was that a change agent does not only refer to the manager, supervisor or even a change specialist, but to any individual who is appointed to play a significant part in designing, running, improving and communicating any proposed change.

The importance of the role of change agents in organisations can be summarised as follow: to manage change systematically, appropriate processes and strategies should be developed, and the psychological wellbeing of employees should be addressed to ensure a smooth transition in all aspects of the proposed change. By appointing change agents to assist in measuring the readiness levels of the employees concerned and their wellbeing and to resolve any issues and concerns of employees on the ground, many obstacles can be removed early on in the process. According to Saka (2001), it would be unwise to attempt major change without designated change agents, especially in cases where large numbers of employees are affected by the change.

Owing to the fact that few organisations appointed change agents to manage change in the past, meaningful research still needs to be conducted on the significance of their role in large organisations.

For the purpose of this research, all possible literature findings on the above matters were explored and documented – hence, the primary research aim was achieved in chapter 3.

6.2.1.3 ***Research aim 3:*** *to understand the roles and responsibilities of change agents in large organisations.*

Most of the research studied provided information on the roles and responsibilities of change agents. In chapter 3, the roles of change agents were described and the findings on responsibilities highlighted. The following literature on the **role** of a change agent was documented: Most researchers agree that change agents are those individuals in organisations who provide guidance to their team members, and are usually viewed as the people others listen to. The more these individuals stay in the loop regarding any information that could potentially impact them as a result of the changes, the better they can disseminate the information to employees in an effort to keep everyone informed and valued as part of the business. The closer a change agent is to new information released, the sooner he or she can communicate

the impacts and proposed change to his or her peers. A change agent is also viewed as someone who is selected to help employees cope with change that is usually driven by a certain initiative or project. The focus is therefore specific, and the change agent usually knows what is expected of him or her. The number of change agents selected usually depends on the size of the organisation, the number of employees affected by, and the extent of the change. Hutton (1994) and information derived from Accenture (2007) provided valuable information on the roles of change agents. These key roles applicable to this research project are summarised in the table below.

TABLE 6.1: CHANGE AGENT ROLES

Change agent roles (Hutton, 1994)	Change agent roles (Accenture, 2007)
To help individuals change the way they think and perform their jobs	Actively supports or champions changes throughout the organisation, but especially with those groups affected by the transformation initiative
To change the norms of the organisation, including accepted standards, customer service, adjusting best practices, etc	Answers project/initiative questions and promotes bottom-up communication
To help change the processes and systems of the organisation	Accelerates change by transmitting formalised information to and encouraging informal discussions with target audiences
To establish and maintain alignment between the vision and the entire organisation and responsibilities of change agents, also ensuring alignment of messages across the organisation in an effort to prevent confusion and resistance	Watches and assesses the local situation, diagnoses problems and alerts the relevant persons
To provide leadership, support and guidance to fellow change agents	Pilots the change distribution process in their specific areas
To ensure regular communication with other change agents for the purpose of sharing knowledge and experience, venting frustrations and celebrating successes	Communicates project messages to target audiences
	Exchanges experiences and knowledge with other change agents

In essence, the role of change agents includes but is not limited to the support they provide to employees and other change agents, communication efforts, ensuring alignment, diagnosing problems and answering employees' questions on the change.

Little information was found on change agent responsibilities, because most researchers focused their research on the role of change agents. In conclusion, the findings on the responsibilities are summarised in the table below.

TABLE 6.2: CHANGE AGENT RESPONSIBILITIES

Change agent responsibilities (Ulrich, 1997)	Change agent responsibilities (Nadler, 1998)	Change agent responsibilities (Accenture, 2007)
Identify the key success factors for building capacity for change.	Demonstrate personal involvement in the change process.	Champion changes on the ground.
Profile the extent to which the key success factors are being managed.	Communicate proper alignment between employee's current work and the new direction.	Address the target audiences' questions and concerns.
Identify the improvement activities for each success factor.	Model the new behaviours and ensure it is in line with the organisation's values and culture.	Identify and escalate potential "hot spots."
Manage the key factors for change as an iterative process and not as an event.	Communicate effectively throughout the change process.	Roll out transformation communications as required.
	Engage with the employees affected on a regular basis.	Encourage, coach and support the individuals in the business area throughout the delivery of the transformation change initiatives. Assist the project team to review progress towards achievement of change objectives. Seek out and quash rumours.

Note: The reason for only summarising some of the change agent responsibilities, as highlighted in chapter 4, is that only those responsibilities **relevant to this research project** were summarised. In this project, the responsibilities of change agents included those summarised in the above table.

From the above it is clear that a change agent has a number of responsibilities in the process of managing change, which mainly include but are not limited to communicating and liaising with the correct audience and minimising overall resistance.

To summarise, all the literature findings on the change agent's roles and responsibilities were explored and documented, thus achieving the primary research aim formulated in chapter 3.

6.2.1.4 ***Research aim 4:*** *to determine the main dimensions, such as skills, knowledge and personality traits, that could constitute a framework for identifying change agents.*

From the findings in the literature, it is evident that most researchers in the field indicate that skills, knowledge, personality traits and level of desire to change are key change agent identification dimensions. Each of these dimensions comprises a number of supportive elements. All literature findings on change agent skills, knowledge and personality traits were indicated in chapter 3.

Tables 3.1, 3.2 and 3.3 illustrated these findings.

Research has indicated that people with a desire to change are those who wish to participate, support the change initiative and make the change happen. In the past, these individuals were identified as typical change agents.

By comparing the ideal traits of a change agent with those of the change leader, change master and change champion, it was evident that many of the ideal traits of a change agent are reflected in the roles of either the change master, change champion or change leader.

It was also found that change leaders, change masters and change champions all need communication and facilitation skills. Change champions, however, appear to

possess most of the skills required by the change agent as per the literature findings as well. These are: interpersonal, communication, listening, facilitation and networking skills.

As the change agents' personality traits formed a critical part of this research, it was necessary to clearly analyse the overlap between literature findings and empirical findings. The overlapping personality traits were: assertiveness, honesty, persuasiveness, integrity and optimism.

By analysing this in accordance to the conversations held with subject matter experts during the concept mapping workshop, it seemed critical for individuals to communicate their viewpoints and to take a clear stance when communicating with their audience. Change messages are sometime difficult to communicate and therefore the importance of honesty is critical in order to manage employee expectations accordingly, and to ensure individuals impacted by the changes receives the correct information upfront, assisting them to become change-ready.

As indicated in chapter 3, change agents need to have the ability to convince people to accept the changes introduced to them. Hence, it seems important for individuals acting in this role to convince their audience that the changes are beneficial, in order to minimize resistances that may occur.

Stemming from these conversation, it also seemed that if messages are shared with integrity and honesty, employees will accept changes quicker and view it as an opportunity rather than a threat. Messages therefore needs to be communicated in a manner that demonstrates the positive nature of the change and its favourable impact on those that will be required to adapt or change the way in which they perform their tasks.

Even though a number of skills, knowledge and personality traits were examined and tabulated in chapter 3, there is not much literature on these terms.

For the purpose of this research and because of the limited amount of research conducted to date on the role of change agents in large organisations, the researcher did manage to find valuable information. Hence, the research aim was achieved in chapter 3.

6.2.1.5 ***Research aim 5:*** *to understand the methods/tools that have been used to identify change agents in the past.*

Little information was found on change agent identification tools and methods. This was therefore also identified as a focus area for future research.

The purpose of this research was to investigate and recommend ways in which change agents should be identified, because of the limited amount of literature available on the identification approach/method, as highlighted in chapter 1.

However, the literature indicated that the most widely used change agent identification methods used today include but are not limited to: nominations from employees or line managers or completion of a typical employee engagement-type questionnaire (Hutton, 1994).

From all literature examined, it was clear that a limited number of change agent identification tools have been used or identified in the past.

For the purpose of this research and owing to the limited amount of research conducted to date on the identification of change agents in large organisations, the researcher did manage to trace useful information. Hence, the research aim was achieved in chapter 3.

6.2.2 Research questions relating to the empirical study:

6.2.2.1 ***Research aim 1:*** *to determine whether the change-readiness questionnaire can be considered a reliable questionnaire.*

The research results showed that the reliability of the ADKAR questionnaire was acceptable for the sample group used. As indicated in chapter 5, the only item with low subscale reliability is the knowledge dimension. Conducting an item analysis would have indicated which items in this subscale contributed to its low reliability coefficient. Since the purpose of this research project was not to analyse the ADKAR assessment and its psychometric properties, only overall scale reliability was computed. The overall scale reliability indicated a Cronbach alpha coefficient of 0.77.

Due to the acceptability of the ADKAR questionnaire, it was viewed as appropriate to utilise this questionnaire in determining the change-readiness levels of the sample group used.

Table 5.1 illustrated these findings.

According to these empirical findings, this research aim was achieved in chapter 5.

6.2.2.2 ***Research aim 2:*** *to determine whether there is a statistically significant difference in change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network*

The research findings indicated that for all the ADKAR dimensions, the 27 change agents who remained part of the change agent network obtained statistically significantly higher scores than the 73 individuals who decided to exit the network. This was demonstrated by the mean scores, which were statistically significantly higher in all instances. It was therefore concluded that the change agents whom decided to remain part of the network, were more change ready than those who decided to exit it. These results provided insight regarding the true reliability of this questionnaire as it confirmed the willingness of individuals to remain part of the network, which was evident in their active participation afterwards, as reported.

Table 5.2 illustrated these findings.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.3 ***Research aim 3:*** *to determine which dimensions and supportive elements are perceived critical in a change agent identification framework from the analysis of the dimensions/perception survey (appendix D) and the concept mapping workshop worksheets (appendix E) completed by* ***internal and external*** *change management consultants.*

From the questionnaires completed by the external change management consultants (outside the organisations where the research was conducted) it was evident that, according to their perception, eight proposed dimensions need to be included in a

change agent identification framework, namely knowledge, ability, skills, level of commitment, availability and willingness, personality traits, experience and change curve readiness levels.

Table 5.9 illustrated these proposed short-listed dimensions.

From the analysis of the above-mentioned eight dimensions, external change management consultants proposed a total of 40 personality traits, 26 specific skills necessary for change agents to fulfil their roles, 29 topics on the knowledge change agents should ideally have and 18 elements of experience. Most agreed that change agents should ideally be at the commitment level on the change-readiness curve. The above were viewed as supportive elements in each of the proposed dimensions.

Tables 5.4 to 5.8 illustrated these supportive elements.

At the concept-mapping workshop held, most of the internal change management consultants agreed that skills, knowledge, experience and change curve readiness levels are regarded as necessary for inclusion in a change agent identification framework. It was argued that change agents could be trained to acquire the necessary skills and knowledge after they had been identified.

The dimensions/perception survey is viewable in appendix D and the concept mapping workshop worksheets in appendix E.

The workshop participants agreed that only level of commitment, willingness, availability and personality traits dimensions should be considered in identifying individuals as change agents. The reasons for this were described in Chapter 5.
Table 5.16 illustrated these proposed verified dimensions.

The participants indicated that 12 personality traits (supportive elements) should form part of the overall personality trait dimension of the framework. These 12 were identified through the review and elimination of the proposed list of 40 personality traits from the qualitative perception questionnaire completed by the external change management consultants.

Table 5.11 illustrated these personality traits.

Even though skills, knowledge, experience and change curve readiness levels were not verified as change agent identification dimensions, but as dimensions to consider in developing / training change agents during the post-identification phase, the participants agreed upon a number of supportive elements for each of the dimensions.

Tables 5.12, 5.13, 5.14 and 5.15 illustrated these supportive elements for the skills, knowledge, experience and change curve readiness level dimensions.

The input from the above-mentioned sample groups was a critical step in the research project, in order to utilise their feedback as the first step in creating a platform of criteria in identifying change agents. The debates during the workshop illustrated the participants' knowledge and strong viewpoints regarding the topic.

According to these empirical findings, this research aim was achieved in chapter 5.

6.2.2.4 ***Research aim 4:*** *to determine which tests, surveys or methods would be most appropriate to measure the verified dimensions and supportive elements*

As indicated, the verified dimensions forming part of the framework were level of commitment, willingness, availability and personality traits. Descriptions of each method or tool used to measure each dimension are provided below.

- **Level of commitment.** Senge's measuring commitment level model was identified to measure the commitment of individuals who could be identified as possible change agents. On the basis of Senge's (1990) work, Rice *et al*. (1996) compiled a questionnaire measuring commitment, to enable organisations to use Senge's theory to help them to determine commitment levels among employees. No other commitment level questionnaire was found that was applicable to measuring commitment levels of change agents, because this questionnaire can easily be used in a project-related environment. This questionnaire could be used in future to determine the commitment levels of employees who could act as change agents. An example of this questionnaire is attached as appendix B.
- **Availability.** Compact/key performance indicators were identified in the literature findings to determine an individual's capacity to act as a change

agent and measure his or her performance through the deliverables of certain tasks in the role of a change agent.

- **Willingness.** The willingness to voluntarily act as a change agent can only be determined after the selector has provided an in-depth understanding on the roles and responsibilities of change agents. It is the individual's choice whether he or she wishes to act as a change agent, and it is therefore voluntary. No person should be forced or told to act as a change agent. The willingness element can therefore be captured in terms of an individual who volunteers to fulfil this role.
- **Personality traits.** All the verified personality traits were measured by the OPP psychometric instrument. This measuring instrument seemed most appropriate because it entails most of the verified personality traits as per the concept mapping workshop results.

According to the above findings, this research aim was achieved in chapter 5.

6.2.2.5 ***Research aim 5:*** *to determine whether the improvement in change-readiness scores of the group supported by change agents possessing a specific trait from the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not show a specific trait from the ideal profile*

The tabled results (5.20a and 5.20b) indicate that there are no significant improvements at all for employee change-readiness levels – neither for those supported by change agents possessing nor for those supported by change agents not possessing a specific trait. However, there was a statistically significant (at the 10% level) smaller decrease in mean values for the following personality traits and readiness levels:

- Phlegmatic personality traits displayed by the change agent resulted in a statistically significant smaller decrease of awareness levels of employees.
- Persuasive personality traits displayed by change agents resulted in a statistically significant smaller decrease in knowledge, ability and reinforcement readiness levels of employees.
- Optimistic personality traits displayed by change agents resulted in a statistically significant smaller decrease in reinforcement levels of employees.

In support of these findings, the literature study findings (chapter 3) as well as the qualitative empirical research findings (chapter 5) indicated that the persuasive and optimistic personality traits need to form part of a change agents' personality profile. The phlegmatic personality trait, as an essential change agent personality traits, was not evident throughout all literature findings.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.6 ***Research aim 6:*** *to determine which of the personality traits are key personality traits*

In the previous answer, it was indicated that only the phlegmatic, persuasive and optimistic personality traits showed a statistically significant smaller decrease in mean values. These personality traits are thus not viewed as key traits , because of no significant improvement in change readiness scores. It was therefore concluded that the phlegmatic, persuasive and optimistic change agent personality traits have some positive effect on employees during a transformation process.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.7 ***Research aim 7:*** *to* determine whether there are significantly larger improvements in the change-readiness scores of employees supported by change agents possessing **all** key traits from the profile than employees supported by change agents not showing any of the key traits

There was no statistically significant larger improvement in any of the change-readiness scores when supported by change agents possessing specific traits by comparing ADKAR pre- and post-test results. None of the change agents displayed **all** key traits and in essence no key traits were found, so the above question could not be answered.

The reason for including this research question during the inception of the research project was based on the perception that a few of the selected change agents, that remained willing and commitment to the process, would display most or all key traits.

The opposite demonstrated that even though individuals might show a high level of desire to change, it does not have any linkage to displaying the “right” personality traits as identified in this context.

According to the empirical findings, this research aim was achieved in chapter 5.

The interpretive conclusion from the factual results reported in chapter 5 therefore refers: The results of the research aims demonstrated the systematic process followed in order to comprehensively understand the value-add of change agents in large organisations. Most importantly, it was found that change agents who remained part of the change agent network were more change ready opposed to those who decided to exit the network at one point, as per the ADKAR change readiness questionnaire. Even though there were only two change agents that fell into some of the less stringent ranges of the personality trait continuums, none of these change agents or others demonstrated all of the key traits. Due to the phlegmatic, persuasive and optimistic personality traits demonstrating p-value scores that were significant at the 10% level, it could have been concluded that these personality traits were key traits, but due to no significant improvement in change readiness scores, it was concluded that these change agent personality traits only have some positive effect on employees during a transformation process but are not seen as key traits.

By gathering and analysing literature as well as empirical research findings, it was evident that there are still valuable research to be conducted in future regarding key personality traits of change agents. This research ~~project~~ however, provided a platform for future researchers, as these findings are the first in creating a theoretical body of knowledge regarding the identification of change agents.

6.3 GENERAL RESEARCH AIM

The overall research methodology was designed to work towards achieving the general aim of this research project. As indicated in chapter 1, the general aim of the research was to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

The 12-step research process followed provided the researcher with the necessary approach and information to develop the change agent identification framework, depicted in figure 5.2. The personality traits dimension of the framework was then empirically tested and supportive information provided for the remaining three dimensions in the framework.

According to the empirical findings, the general aim of this research project was achieved, the dimensions and supportive elements determined and a valid change agent identification framework developed.

The conceptual conclusion therefore refers: There was no evidence of a change agent identification framework in the existing body of knowledge in either previous empirical research or literature, encapsulating change agent identification methodologies. No process has been followed, to date, in determining characteristics of change agents in large organisation by means of a qualitative and/or quantitative process. The process followed as well as the results obtained, are the first in establishing this specific body of knowledge in the field of industrial and organisational psychology.

6.4 RESEARCH HYPOTHESES

Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

The reason for rejecting H0 was that a change agent possessing certain personality traits that forms part of the ideal profile does have some effect in the significantly smaller decrease of change-readiness scores compared to change agents not

displaying any traits that form part of the ideal profile of employees in terms of the following:

- Phlegmatic personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement of awareness levels of employees versus to employees supported by change agent not possessing this personality trait.
- Persuasive personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement in knowledge, ability and reinforcement readiness levels of employees compared to employees supported by change agent not possessing this personality trait.
- Optimistic personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement in reinforcement levels of employees compared to employees supported by change agent not possessing this personality trait.

Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

H1 was rejected as only some personality traits displayed by change agents resulted in the significantly smaller decrease and not in the improvement of certain change-readiness scores of employees. Employees receiving support from change agents possessing a specific trait from the ideal profile **did not** show a significantly larger improvement in any of the ADKAR change-readiness scores compared to the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

6.5 RESEARCH LIMITATIONS

The following research limitations were evident in the research.

- 73 change agents decided to exit the change agent network during the transformation process, and only 27 change agents remained. The researcher did not have any control over their decision to exit the network, because it was influenced by various extraneous factors. A larger sample group would have been more valuable.
- In particular, limited amount of literature was found regarding the term "change agent." Little information was available on the roles and responsibilities of change agents and the methods or tools used in the past to identify change agents.
- No biographical information, e.g. age, gender, race, level of education, was taken into account in determining the selection criteria of change agents. This information could have contributed to even more stringent selection criteria.
- The difference in change-readiness scores were only calculated at a 10% level of significance, which only demonstrated a 90% certainty that the difference between change-readiness scores were not coincidental. A bigger sample group would have allowed for a 5% level which would have demonstrated a 95% level of certainty that differences between change-readiness scores were not coincidental.
- The following epistemological factors that may have influenced the empirical results were identified throughout the research process:
    - changing the overall transformation project mandate by the organisation after six months into the project initiation phase
    - the resignation of a number of senior project sponsors
    - a lack of support from direct managers for employees affected by the change
    - prolonged project timelines
    - more critical departmental priorities other than the project
    - inconsistent departmental communication
    - increased negative organisational publicity
    - change agents functioning in different business units/divisions and in different circumstances in the organisation

These factors did not necessarily influence the empirical results but were noted as part of the observations made that could have had an impact on the overall research results.

6.6 POST CHANGE AGENT IDENTIFICATION CONSIDERATIONS

As indicated earlier, at the concept mapping workshop, the participants discussed and agreed that there were three dimensions of their verified supportive elements that did not need to form part of the change agent identification framework, but instead should have served as supportive documentation after the change agent identification phase.

These were:

Figure 6.1: Post change agent identification considerations

Even though these dimensions were not included in the change agent identification framework, they could help the change management specialist to determine the identified change agents' level of skills, knowledge and experience in order to design training material or identify appropriate training courses for change agents, developed accordingly. The descriptions of each dimension and its verified supportive elements:

6.6.1 Skills

According to the literature findings, skills are referred to as a learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy or both (Keep & Mayhew, 1995). Skills that could be developed during the post identification phase include:

- intrapersonal skills
- influencing skills
- selling skills
- deductive reasoning skills
- networking skills

- conflict-handling skills
- facilitation skills
- attentive listening skills
- problem identification and solving skills
- Negotiation skills
- Systemic thinking

Note: All of the skills listed above were verified at the concept mapping workshop.

6.6.2 Knowledge

According to the literature findings, knowledge refers to the confident understanding of a subject with the ability to use it for a specific purpose (Hayes, 2002). Some theoretical knowledge that change agents could obtain afterwards, during the post-identification phase are as follows:

- knowledge of the organisation
- knowledge of the organisation's external environment
- an understanding of the need for change
- change management principles
- knowledge of change readiness and change-readiness scores
- knowledge of the roles and responsibilities of a change agent
- an understanding of various change management interventions
- the benefits of the change and its impact on the organisation and individual
- a thorough understanding of the specific area/function being affected by change
- an understanding of the cycle/phases of change
- knowledge of the value of a change agent
- knowledge of the group dynamics

Note: All of the knowledge elements listed above were verified at the concept mapping workshop.

6.6.3 Experience

Experience refers to knowledge of or the skill of some event gained through involvement in or exposure to the particular event (Popper & Eccles, 1977). The following are experiences that change agents could undergo during the post-identification phase:

- becoming an expert in dealing with changing work conditions/procedures
- exposure to implementing a change initiative
- networking experience with those affected by the change
- consulting/project environment-related experience
- experience in mobilising people behind a specific goal
- experience in dealing with conflict and different people
- experience in having to relay hard messages to others in a manner that instils confidence
- facilitation experience – even if minimal

Note: All of the experiences listed above were verified at the concept mapping workshop.

A change agent skills, knowledge and experience checklist was developed, based on some of the research findings in the literature, the qualitative perception questionnaire and the concept mapping workshop. This is solely a perception questionnaire and has not been validated, but it could be used by organisational change management practitioners as a tool to determine the identified change agents' level of skills, knowledge and experience. Identified change agents could complete the perception checklist, and on the basis of this change management practitioners could either develop or identify appropriate training courses the change agents could be exposed to. This perception questionnaire is attached as appendix D.

6.7 RECOMMENDATIONS

This study identified the need for further research and the expansion of the theoretical knowledge base on the term change agent and change agent identification. A brief description of possible areas for further studies and theoretical knowledge base expansions in the field are provided in the statements below:

- Future research could be conducted on change agent networks and change agent identification tools, in order to develop the knowledge base for this topic in the business world.
- A change agent identification tool could be developed in the form of a questionnaire, used by organisations to identify individuals as change agents.

- Similar research could be conducted that would include a larger sample group of change agents in a large organisation.
- Researchers could study the intricacies of change agents in their organisations and share this information with other specialists in other organisations. This would help to grow the concept of “change agents.”
- Organisations could appoint individuals as change agents and determine the real value of these “properly identified” individuals and their contribution to overall project success by measuring their impact on employee change-readiness levels.
- It is recommended that all four dimensions in the framework should be tested at the start of a next change agent identification process.
- The personality traits dimension, although tested in the quantitative part of this research process, did not yield significant results when tested against the ADKAR change-readiness assessment. If this set of personality traits could be tested against another change-readiness questionnaire, it could yield different results.
- Similar research could be conducted internationally because it will contribute significantly to global change agent research.
- In future, once change management practitioners have determined the necessary skills, knowledge and experience levels, change agents could be developed and equipped more appropriately, in order to manage change in their respective areas of the business.
- It is recommended that the organisation, in which this research was conducted should use the developed change agent identification framework to guide future change management consultants in identifying change agents.

6.8 CLOSURE

The word “closure” may be inappropriate here, because these research findings are only the “tip of the iceberg” for so many things still to be unearthed. The term change agent is developing all the time and there is still much more to be discovered through research in order to fully grasp all the intricacies of this role in a project-related environment. Hopefully this study has contributed to the body of knowledge pertaining to the field of change management in industrial and organisational psychology.

This research project should be regarded as a stepping stone in conducting more insightful, significant and meaningful research to feed the “hungry minds” in the business world of today.

“There is nothing wrong with change, if it is in the right direction.”

Winston Churchill

REFERENCE LIST

Accenture. (2007). *The change agent handbook*. Johannesburg: Accenture.

Ackerman , L. & Anderson, D. (2001). The change leader's roadmap. *How to navigate your organization's transformation.* San Francisco: Jossey-Bass/Pfeiffer.

Allen, M.J. & Yen, W.M. (2002). *Introduction to measurement theory*. Long Grove: Waveland Press.

Allport, G.W. (1937). Preface In K. Lewin (Ed), *Resolving social conflicts: Selected papers on group dynamics.* London: Souvenir Press.

Allport, G.W. (1961). *Pattern and growth in psychology*. Boston: Allyn & Bacon.

Alvesson, M. & Sveningsson, S. (2003). Good visions, bad micro-management and ugly ambiguity: Contradictions of non-leadership in a knowledge-intensive organisation. *Organisational studies, 24* (6), 961-988.

Ansoff, I.H. (1990). *Implanting strategic management.* London: Prentice-Hall International.

Argyris, C. (1970). *Intervention theory and method : A behaviour science view*. Reading, MA: Addison-Wesley.

Armenakis, A.A., Harris, S.G., & Feild, H.S. (1999). Making change permanent: model for institutionalising change interventions. In W. Passmore & R. Woodman. (Eds.). *Research in organisational change and development*, *12*, 289-319.

Arrata, P., Arnaud, D., Kumra, G. (2007). *Building an effective change agent team. Retrieved* January 09, 2008 from http://web.ebscohost.com/ehost/detail.

Bandura, A. (1977). *Social-learning theory.* Englewood Cliffs, New Jersey: Prentice-Hall.

Barker, R.A. (1997). How can we train leaders if we do not know what leadership is? *Journal of Human Relations*, *50* (4), 343-362.

Bartunek, J.M. (1988). The dynamics of personal and organisational reframing. In R.E. Quinn & K.S. Camerson. (Eds.) *Paradox and transformation: Toward a theory of change in organisational and management*. Cambridge: Ballinger, 137-162.

Beckhard, R. & Pitchard, W. (1992). *Changing the essence: The art of creating and leading fundamental change in organisations.* San Francisco: Jossey-Bass.

Beekdal, T., Hansen, K.L., Todbjerg, L., & Mikkelsen, H. (2006). *Change management handbook*. Retrieved July 09, 2007 from http://beekdal.com/downloads/ChangeManagement-EN.pdf.

Beer, M. & Nohria, N. (2000, May-June). Cracking the code of change*. Harvard Business Review*, 133 – 141.

Behling, O. & McFillen, J. (1996). Syncretical model of charismatic leadership. *Group and organisational management,* 12 (2), 163-191.

Bennis, W.G., Benne, K.D. & Chin. R. (1969). *The planning of change* (2nd ed.). NY: Holt, Rinehart and Winston.

Bennis, W.G. & Nanus, B. (1985). *Leaders: The strategies for taking charge.* New York: Harper & Row.

Bergh, Z.C. & Theron, A.L. (1999). *Psychology in the work context.* New York: Oxford University Press.

Bland, J.M. (1995). *An introduction to medical statistics*. (2nd ed.). Oxford: Oxford University Press.

Bless, C. & Kathuria, R. (1993). *Fundamentals of social statistics.* An African perspective. Cape Town: Juta.

Bocchino, R. (1993). Are you planning the future or fixing the past? *Journal of Staff Development, 14* (1), 48-52.

Bolognese, A.F. (2002). *Employee resistance to organisational change.* Retrieved June 26, 2007 from www.newfoundations.com/OrgTheory/Bolognese721.html.

Borysowich, C. (2006). *Hiring roles: The Change Management Specialist*. Massachusetts: EAI Community.

Bovey, W.H. & Hede, A. (2001). Resistance to organisational change: the role of cognitive and affective processes. *Leadership and Organisation Development Journal*, *22*(8), 372-382.

Bridges, W. (1991). *Managing transitions*. Reading, Massachusetts: Addison-Wesley.

Bridges, W. (2000). *The character of organisations.* Palo Alto, California: Davies-Black.

Brown, S.L. & Eisenhardt, K.M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organisations. *Admin Science Quarterly*, *42*, 1–34.

Bruce, A. & Pepitone, J.S. (1999). *Motivating Employees.* New York: McGraw Hill.

Budd, R. (1991). *The OPP technical manual.* Bedfordshire: Psytech International.

Burke, W.W. (2002). Organization change: *Theory and Practice*. Thousand Oaks, CA: Sage.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

Burnes, B. (2004). *Managing change*. (4th ed.). Harlow, Essex: Pearson Education.

Caldwell, R. (2003). Change leaders and change managers: Different or complementary? *Leadership and Organisational Development Journal, 25* (5), 285-293.

Canterucci, J. (2000). *Are you a change leader?* Retrieved October 2, 2007 from www.corpchange.com/archives/article/article_archives/a19_are_you_a_change_leader.

Carnell, C.A. (1997). Utilising audit to evaluate improvements in continuous veno-venous haemofiltration practices in intensive therapy unit. Nursing in critical care journal, 11 (4), 154 – 160.

Cattell, R.B. (1965). *The scientific analysis of personality.* Baltimore, Maryland: Penguin.

Cattell, R.B., Eber, H.W., & Tatsuoka, M.M. (1970). *Handbook for the sixteen personality factor questionnaire.* Champaign, IL: Institute for Personal Ability Testing.

Chapman, J.A. (2002). A framework for transformation change in organisations. *Leadership and Organisation Development Journal, 23* (1), 16-25.

Cheung, C., Jurman, S., Maguigad, A., & Slaughter, A. (2007). *Leaders as Change Agents.* Leadership APTA Class of 2007.

Chew, D., Gillian, S.L. (2005). *Corporate governance at the crossroads*. (1st ed.). Phoenix, AZ: University of Phoenix Custom.

Child, J. & Smith, C. (1987). The context and process of organisational transformation: Cadbury limited in its sector, *Journal of Management Studies*, *24* (6), 565-593.

Cobb, A. T. (2006). *Leading project teams*: *An introduction to the basics of project management and project team leadership.* London: Sage.

Coghlan, D. (1993). A person-centred approach to dealing with resistance to change. *Leadership and Organisational Development Journal*, *14* (4), 10 -14.

Cohen, L., Manion, L., & Morriso, K. (2001). *Research methods in education* (5th ed.). London: Routledge.

Conger, J.A., Spreitzer, G. & Lawler, E.E. (1999). *The leader's change handbook.* San Francisco: Jossey Bass.

Connor, D.R. (1993). *Managing at the speed of change.* New York: Villard Books.

Cummings, T.G. & Worley, C.G. (2001). *Organizational development and change.* (7th ed.). New York: South-Western Thomson Learning.

Cramer, D. (1997). *Basic statistics for social research.* London: Routledge.

Crichton, N.J. (1998). Statistical considerations in design and analysis. In *Research and development in clinical nursing practice.* London: Whurr.

Creswell, J.W. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.

Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16* (3), 297-334.

Cummings, T.G & Worley, C.G. (2001). *Organisational development and change.* (7th ed.). New York: South-Western Thomson Learning.

Darling, P. (1993). Getting results: The trainer's skills. *Management Development Review, 6 (5), 25-29.*

Davenport, T. (1993). *Process innovation: Reengineering work through I.T*. Boston: Harvard Business School.

Dawson, P. (2003). *Understanding organisational change: the contemporary experience of people at work*. London: Sage.

De Caluwé, L & Vermaak, H. (2002). *Prevailing perspectives on change*. Paper submitted to Management Consultancy Division, Academy of Management for the 2002 Conference in Denver, Colorado.

De Vos, A.S., Delport, C.S.L., Fouche, C.B., & Strydom, H. (2002). *Research at grass roots* (2nd ed.). Pretoria: Van Schaik.

Deci, E.L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology, 18*, 105-15.

Del Val, M.P & Fuentes, C.M. (2003). Resistance to change: A literature review and empirical study. *Management Decision*, *41* (2), 148-155.

Dench, S. (1997). Changing skills needs: What makes people employable? *Industrial and Commercial Training*, *29* (6), 190-193.

Denhardt, R.B. & Denhardt, J. V. (2006). *The dance of leadership: The art of leading in business, government and society*. New York: M.E. Sharpe.

Dent, E. & Goldberg, S. (1999). Challenging "resistance to change." *Journal of Applied Behavioral Science, 35* (1), 25-41.

Dent, M. & Barry, J. (2004). New public management and the professions in the UK: reconfiguring control. Que*stioning the New Public Management,* 7-20.

Diefenbach, T. (2005). The managerialistic ideology of organisational change management. *Journal of Organisational Change Management*, *20* (1), 126-144.

Doyle, M., Claydon, T., & Buchanan, D. (2000). Mixed results, lousy process: The management experience of organisational change. *British Journal of Management*, *11*, 59-80.

Doyle, M. (2001). Dispersing change agency in high velocity change organisations: Issues and implications. *Leadership and Organisational Development Journal, 22* (7), 321-329.

Drucker, P.F. (1954). *The practice of management.* New York: Harper & Row.

Dunlop, W.P., Corina, J. M., Vaslow, J.B., & Burke, M.J. (1996). Meta-analysis of experiments with matched groups or repeated measures designs. *Psychological Methods, 1,* 170-177.

Dunphy D. (1996). Organisational change in corporate setting. *Human Relations, 49* (5), 52 – 54.

Dunphy, D. & Stace, D. (1993). The strategic management of corporate change. *Human Relations*, *46* (8), 905-918.

Eby, L.T., Adams, D.M., Russel, J.E.A. & Gaby, S.H. (2000). Perceptions of organisational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations*, *53* (3), 419-428.

Egan, G. (1985). *Change agent skills in helping and human service settings*. New York: Wadsworth.

Evans, R. (1994). The human side of business process re-engineering. *Management Development Review, 7* (6), 10-12.

Folger, R. & Skarlicki, D. (1999). Unfairness and resistance to change: Hardship as mistreatment. *Journal of Organisational Change Management, 12* (1), 35-50.

Ford, J.D. & Ford, L.W. (1994). Logistics of identity, contradiction, and attraction of change. *Academy of Management Review*, *19* (4), 756-785.

Ford, A. (1999). *Modelling the environment.* Washington D.C: Island Press.

Friedlander, F. & Brown, I.D. (1974). Organisation development*. Annual Review of Psychology, 25*, 313-314.

Friedman, M. & Rosenman, R.H. (1974). *Type A behaviour and your heart.* New York: Knopf.

Freud, S. (1970). The unconscious. In W.A. Russell, *Milestones in motivation*, (p. 332-343). New York: Meredith Corporation.

Gerber, B. (1995). The bugaboo of team pay. *Training Journal, 32* (8), 25-35.

Gorsuch, R.L. (1997). Exploratory factor analysis: Its role in item-analysis. *Journal of Personality assessment*, *68* (3) : 532-560.

Gray, D.E. (2004). *Doing research in the real world*. London: Sage.

Guion, R.M. & Gottier, R.F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology*, *18*, 135-164.

Hailey, V.H. (2001). Breaking the mould? Innovation strategy for corporate renewal. *Human Resource Management*, *12* (7), 1126-1140.

Hackman, J.R. (2002). *Leading teams: Setting the stage for great performances*. Boston: Harvard Business School Press.

Hall, C.S & Lindzey, G. (1970). *Theories of personality* (2nd ed.). New York: John Wiley.

Harington, H.J. & Harrington, J.S. (1996). *High performance benchmarking.* New York: McCrawHill.

Hartley, J., Benington, J. & Binns, P. (1997). Researching the roles of internal-change agents in management of organisational change. *British Journal of Management, 8*, 61-71.

Hatcher, L., O'Rourke, N. & Stepanski, E.J. (2005). *A step-by-step approach to using SAS for univariate and multivariate statistics.* (2nd ed.). New York: SAS Institute.

Havelock, R.G., & Zotolow, S. (1995). *The change agent's guide* (2nd ed.). New Jersey: Educational Technology.

Hayes, J. (2002). *The theory and practice of change management.* Wiltshire: Palgrave.

Hiatt, J.M. (2006). *ADKAR*: *a model for change in business, government and our community.* Loveland, CO: Prosci Centre.

Hoffman, J.R. & Rogelberg, S.G. (1998). A guide to team incentive systems. *Team performance management, 4* (1), 23 -32.

Huber, G.P. & Glick, W.H. (1993). *Organisational change and redesign.* New York: Oxford University Press.

Hullman, K.E. (1995). Scaling the wall of resistance. *Training and Development Journal,* 15-18.

Hutton, D.W. (1994). *The change agents' handbook*. New York: American Society for Quality.

Isaac, S. & Michael, W. B. (1971). *Handbook in research and evaluation*. San Diego, CA: EDITS.

Johnson, S.T. (1993). Work teams: what's ahead in work design and rewards management? *Compensation and Benefits Review*, *29* (1), 48-51.

Jones, J., DeAnne, A. & Calderone, M. (2004). *10 principles of change management.* Retrieved September, 05, 2007 from http://www.strategy-business.com/resilience/rr00006.

Kanter, R.B. (1989). *When giants learn to dance*. London: Simon & Schuster.

Katzenbach, J. (1996). *Real change leaders*. London: Nicholas Brealey.

Katzenbach, J. (2008). *Effective change leaders*. Retrieved February 29, 2008 from www.mallenbaker.net/csr/CSRfiles/effective.html.

Kaufmann, U.W. & Tan. A. (2000). Making good change agent: Attitudes and Skills. Retrieved March 28, 2008 from http://europe.isixsigma.com/library/content/c040501a.asp.

Keep, E. & Mayhew, T.A. (1995). *Training policy for competitiveness: Time for a new perceptive*. London: Policy Studies Institute.

Kincaid, D.L. (1987). *Communication theory: Eastern and Western perspectives.* San Diego, CA: Academic Press.

K Jha, S. (2007). *Organizational behaviour: Personality and attitudes.* Retrieved February 29, 2008 from http://obreader.blogspot.com/2007/11/ob-handout-3.html.

Klein, K.J. & Sorra, J.S. (1996). The challenge of innovation implementation. *Academy of Management Review*, *21* (4), 22-42.

Kline, P. (2000). *A psychometrics primer.* London: Free Association Books.

Kogan, N. & Wallach, M.A. (1967). Group risk taking as a function of members' anxiety and defensiveness. *Journal of Personality*, 50-63.

Kotter, J.P. (1990). A force for change: *How leadership differs from management*. New York: Free Press.

Kotter, J.P. (1995). Why transformation efforts fail. *Harvard Business Review*, 73 (2) 59-67.

Kotter, J.P (1996). *Leading change*. Boston: Harvard Business School.

Kotter, J.P. & Schlesinger, L.A. (2008). Choosing strategies for change. *Harvard Business Review,* 130-138.

Kravchuk, O.Y. (2005). Nonparametric inference: Rack test of location optimal hyperbolic secant distribution. *Communications in Statistics*, *34*, 1617-1630.

Kuhn, T.S. (1996). The structures of scientific revolutions. 3rd Ed. Chicago: Chicago University Press.

Kyle, N. (1993). Staying with the flow of change. *Journal of Quality and Participation*, *16* (4), 34-42.

Lawler, E.E. & Cohen, S.G. (1992). Designing pay systems for teams. *ACA Journal, 1*, 6-19.

Laycock, M. (2002). Module 1: *Dealing with change.* Retrieved August 27, 2007 from www.oznet.ksu.edu/LEADS/FACT %20sheets/EP91.pdf.

Levinthal, D.A & March, J.G.(1993). The myopia of learning. *Strategy Management Journal, 14*, 95-112.

Lewin, K. (1951). *Field theory in social science.* New York: Harper & Row.

Lippit, R. & Lippit, G. (1975). Consulting process in action. *Training and Development Journal*, *29* (5), 48-54.

Lockyer, K. & Gordon, J. (1996). *Project management and project network techniques*. (6th ed.). London: Prentice Hall.

Luecke, R. (2003). *Managing change and transition.* Boston: Harvard Business Essentials/Harvard Business School Press.

Machiaveli, N. (1648). *The Prince: Statecraft and the welding of power*. Boston: Gim.

Margulies, N. & Raia, A. (1972). *Organizational development: Values, process and technology.* New York: McGraw-Hill.

Marshak, R.J. (1993). *A premier on decision making.* New York: Free Press.

Martin, M.M. (1998). Trust leadership. *Journal of Leadership Studies, 5* (13), 41-48.

Massey, L & Williams, S. (2006). Implementing change: The perspective of NHS change agents. *Leadership and Organisational Development Journal, 27* (8), 667-681.

Matthews, G., Deary, I.A. & Whiteman, M.C. (2003). *Personality traits* (2nd ed.). Cambridge: Cambridge University Press.

Maurer, R. (1996a). *Beyond the wall of resistance*. Austin, Tx: Bard Press.

Maurer, R. (1996b). Using resistance to build support for change. *The Journal for Quality and Participation, 19* (3) 55-66.

McCabe, J. (2004). The change agent. *Coaching, Executive Training.* Retrieved May 29, 2007 from www.jimcoach.com/newpages/ChangeAgent.htm

McCrae, R.R. & Costa, P.T. (1989). Reinterpreting the Myers-Briggs Type Indicator from the perspective of five factor model of personality. *Journal of Psychology,* 17-40.

McCrae, R.R. & Costa, P.T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509-516.

McDaniel, S. & Hemedinger, C. (2007). *SAS for dummies.* New York: Wiley.

McEwan, E.K. (2003). *10 traits of highly effective principals.* Thousand Oaks, CA: Corwin Press.

McNamara, C. (2007). *Basic context for organizational change.* Retrieved November 15, 2007 from http://www.managementhelp.org/mg mnt/orgchnge.htm.

Meyer, W.F., Moore, C. & Viljoen, H.G. (1989). *Personality theories from Freud to Frankl.* Johannesburg: Lexicon.

Michell, J. (1990). *An introduction to the logic of psychological measurement.* Hillsdale, New Jersey: Lawrence Erlbaum.

Micklethwait, J. & Wooldridge, A. (1996). The Witch Doctors. New York: Times Books.

Miles, R.H (1978). *Macro organisational behaviour*. Santa Monica, CA: Goodyear.

Milne, P. (2007). Motivation, incentives and organisational culture. *Kempston*, *11* (6), 28.

Mintzberg, H. & Westley, F. (1992). Cycles of organisational change. *Strategic Management, 13*, 39-59

Mischel, W. 1976. *Introduction of personality*. (2nd ed.). New York: Holt, Rhinehart & Winston.

Mitchell, J.G. & Young, S. (2001). High-skilled high performing VET. Melbourne: ANTA.

Moran, W.J. & Brightman, B.K. (2000). Leading organisational change. *Journal of Workplace Learning: Employee Counselling Today*, *12*, 66-74.

Morgan, G. (1986). *Images of organisation*. Beverley Hills, CA: Sage.

Morgan, N. (1996). 9 tips for change agents. *Fast Company,* (5), 124.
Mott, J. (2000). *Change agent.* Washington DC: William Rainey Harper College.

Mouton ,J. & Marais, H.C. (1994). *Basic concepts in the methodology of social science*. Pretoria: Human Sciences Research Council.

Nadler, D. (1998). *Champions of change. How CEO's and their companies are mastering the skills of radical change.* San Francisco: Jossey Bass.

Nahavandi, A. (2000). *The art and science of leadership* (2nd ed.). London: Prentice-Hall.

Naisbitt, J. & Aburdene, P. (1990). *Megatrends 2000.* London: Pan Books.

Neff, W.S. (1977). *Work and human behaviour.* Chicago: Aldine.

Neuman, W.L. (2002). *Social research methods: Qualitative and quantitative approaches*. (4th ed.) Boston: Allyn & Bacon.

Newman, K.L. (2000). Organisational transformation during institutional upheaval. *Academy of Management Journal, 25*, 602-620.

Nickel, J. E. (1990). Can your organization achieve better results by sharing gains with employees? *Employment Relations Today*, *17*, 173-184.

O'Brien, M.J. (2008). Five approaches to leading successful organisational change. *Healthcare Financial Management,* 138-140.

O'Connor, C.A. (1993). Resistance: The repercussions of change. *Leadership and Organisational Development Journal*, *14* (6), 30-36.

Oliver, J. & Turton, J. (1982). Is there a shortage of skilled labour? *British Journal of Industrial Relations, 20, 195 – 200.*

Oliver, J,M. & Mooradian, T.A. (2003). Personality traits and personal values: A conceptual and empirical integration. *Personality and Individual Differences, 35* (1), 109-125.

Orlikowski, W.J. (1996). Improvising organizational transformation overtime: a situated change perspective. *Information Systems Research, 7*(1), 63-92.

Palmer, B. (2004). Overcoming resistance to change. *Quality Progress, 37* (4), 35-40.

Panchapakesan, S., Ng, H.K.T., & Balakrishnan, N. (2006). Selecting the best population using a test for equality based on minimal Wilcoxon rank-sum precedence statistic. *Methodology Computing Applied Probability, 9*, 263-305.

Paton, R.A. & McCalman, J. (2000). *Change management: A guide to effective implementation* (2nd ed). London: Sage.

Perme, C. (1999). Agents of Change*. C.M. Perme & Associates*., *8* (1).

Performance Program Incorporated (2008). *Managing organisational change*. Retrieved April 7, 2009 from http://www.Performanceprograms.com/surveys/changeready.shtm.

Peters, T.J. (1978). Symbols patterns and settings. An optimistic case for getting things done. *Organizational Dynamics*, *7*, 3-23.

Pett, M.A. (1997). *Nonparametric statistics for health care research: Statistics for small samples and unusual distributions.* London: Sage.

Pettigrew, A. & Whipp, K. (1991). *Managing change for competitive success*. Oxford: Blackwell.

Piderit, S.K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management*, 783-794.

Plant, R. (1987). *Managing change and making it stick.* London: William Collins.

Popper, K.R & Eccles, J.C. (1977). *The self and its brain.* Berlin: Springer international.

Porras, J.I. & Silvers, R.C. (1991). Organisation development and transformation. *Annual Revised Psychology, 42*, 51–78.

Porras, J.I & Robertson P.J. (1992). Organizational development: Theory, practice, research. *Handbook of Organizational Psychology, 3*, 719 - 822.

Potts, R. & Lamarsh, J. (2004). *Managing change for success: Effecting change for optimum growth and maximum efficiency.* London: Duncan Baird.

Powell, M, K. (2002). Motivation: Organization change. In W.W. Burke, *Theory and practice.* Thousand Oaks, CA: Sage.

Powers, M. (2003). *Key role: The change agent.* Retrieved January 10, 2008 from *http://www.nasconsulting.biz/pdfs/TCS.pdf*

Psytech, 2002. *Occupational personality profile, the technical manual.* Retrieved December 2, 2005 from http://www.psytech.co.uk/downloads/manuals/oppman.pdf

Quinn, R.E. (2004). *Building the bridge at you walk on it*. New York: Jossey-Boss.

Quy Nguyen, H. (2001). Time, temporal capability and planned change. *Academy of Management Review,* 26, 602-620.

Randall, J. (2004). *Managing change and change managers.* London: Routledge.

Recklies, D. (2001). *What makes a good change agent?* Retrieved November 29, 2007 from http://www.themanager.org/Strategy/Change_agent.htm

Rice, J., Eggleton, C., Eggleton, C. H. & Rice, J.C. (1996). *The fieldbook of team interventions: Step-by-step guide to high performance teams*. Amherst, MA: Published by Human Resources Development Press.

Robbins, S.P. (2001). *Organizational Behaviour.* Upper Saddle River, New Jersey: Prentice Hall.

Robbins, S.P. (2005). *Organizational Behaviour.* (11th ed.). Upper Saddle River, New Jersey: Prentice Hall.

Robert, H.R & Mitchell, E.K. (1995). Organizational Development: The management of change*.* Tappi Journal, *78* (6), 255.

Rogers, C.R. (1973). *Freedom to learn for the 80's.* Columbus Ohio: Bell and Howell.

Rogers, E.M. (1987). *Diffusion of innovations*. (3rd ed.). New York: The Free Press.

Rogers, E. M. & Kincaid, D.L. (1987). *Communication networks: Toward a new paradigm for research.* New York: Free Press.

Rogers, E, M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press.

Rumelt, R.P. (1995). Inertia and transformation. In C.A. Montgomery (Ed.). *Resources based and evolutionary theories of the firm* (p. 101-132) . *Kluwer Academic*.

Saka, A. (2003). Internal change agents' view of the management of change problem. *Journal of Organisational Change Management*, *16* (5), 490 – 496.

Schalk, R., Campbell, J.W. & Freese, C. (1999). Change and employee behaviour*.* *Leadership and Organisational Development Journal*, *19*, 157-166.

Schein, E.H.. (1987). *Process Consultation: Its role in organisational development.* Massachustts, Reading, MA: Addison-Wesley.

Schein, E.H. (1996). Kurt Lewin's change theory in the field and in the classroom: Notes towards a model of managed learning. *Systems Practical.*, *9*, 27-47.

Schopenhauer, A. (1860). *The world as will and representation*. New York: Dover.

Schuler, A.J. (2002). *Change Management Communication. Planning change Management Communication.* Retrieved May 5, 2007 from www.schulersolutions.com/change_management_communication.html.

Schuler, A.J. (2003). *Overcoming resistance to change: Top ten reasons for change resistance.* Retrieved July 2, 2007 from www.schulersolutions.com/resistance_to_change.html.

Schultz, D.P. & Schultz, S.E. (1994). *Theories of personality.* Pacific Grove, California: Brooks/Cole.

Schwalbe, K. (2006). *Introduction to project management.* Boston: Thomson.

Scott, C.D. & Jaffe, D.T. (1988). Survive and thrive in times of change. *Training and Development Journal*, 25-7.

Seaberg, J.R. (1988). Utilizing sampling procedures. In Grinnell, R.M (Ed.), *Social work research and evaluation* (3rd ed.). Itasca, IL: Peacock.

Sekaran, U. (1992). *Research methods for business (*2nd ed.). New York: John Wiley.

Self, R.D. (2007). Organisational change: Overcoming resistance by creating readiness. *Development and learning in organizations*, *21*, 11-13.

Senge, P. M. (1990). The fifth Discipline: The art & practice of the learning organizations. New York: Doubleday.

Senge, P., Kleiner, A., Roberts, C., Roth, G., Ross, R. & Smith, B. (1999). *Dance of change: The challenges of sustaining momentum in learning organisations*. New York: Doubleday.

Shields, P. & Tajalli, H. (2006). Intermediate theory: The missing link in successful student scholarship. *Journal of Public Affairs Education 12* (3), 313-334.

Singleton, R., Straits, B.C., Straits, M.M., & McAllister, R.J. (1988). *Approaches to social research.* New York: Oxford University Press.

Smith, I. (2005a). Achieving readiness for organisational change. *Library Management*, *26* (7), 408-412.

Smith, I. (2005b). Managing the people side of organisational change. *Library Management, 26* (3), 152-155.

Spector, B. (2007). Implementing organizational change: *Theory and practice.* Upper Saddle River, New Jersey: Pearson.

Spiker, B.K. & Lesser. E. (1995). We have met the enemy, *Journal of Business Strategy*, *16*, 17-21.

St-Amour, D. (2001). Successful organisational change. *Canadian Manager*, *26* (2).

Stassen, T. (2006). *Change Management.* Retrieved August 10, 2007 from http://www.changewright.com/on%20cange.htm.

StatSoft. (2008). *Reliability and item analysis.* Oklahoma: Electronic textbook StatSoft.

Stratton, P. & Hayes, N. (1993). *Competence at work: Model for superior performance*. New York: Wiley.

Strebel, P. (1998). *The change pact*. San Francisco: Biddles.

Sullivan, M.F. & Guntzelman, J. (1991). The grieving process in cultural change. *The Health Care Supervisor, 10* (2), 28-33.

Tan, A. & Kaufmann, U.H. (2000). *Making good change agents*: *Attitudes and skills.* Retrieved February 29, 2008 from http://europe.isixsigma.com/library/content/c040501a.asp.

Taylor, F.W. (1911). *The principles of scientific management*, New York: Harper & Brothers.

Tearle, R. (2007). *The role of a change master. From change agent to change master.* Retrieved October 16, 2007 from http://www.changedesigns.co.za/The_role_of_a_change%20master.htm.

Ticky, N.M. & Devanna, M.A. (1990).*The transformational leader* (2nd ed.). New York: Wesley.

Trompenaars, F. & Wolliams, P. (2001). *Dillemma's of multi-cultural leaders: A new unified model of trans-cultural competence*. *Velocity*, *3* (1), 13-18.

Trochim, W. (1993, November). *The reliability of concept mapping*. Paper presented at the Annual Conference of the American Evaluation Association, Texas.

Trochim, W. (2002). *Non-probability sampling*. London: Routledge.

Trochim, W. (2006). *The research methods knowledge base*. New York: Atomic Dog Publishing

Trochim, W., Cook, J. & Setze, R. (1994). Using concept mapping to develop a conceptual framework of staff's views of a supported employment program for persons with severe mental illness. *Consulting and Clinical Psychology*, *62* (4), 766-775.

Tushman, M.L. & O'Reilly, C.A. (1996). The ambidextrous organisation: managing evolutionary and revolutionary change. *California Management Review*, *38*, 1–23.

Ulrich, D. (1997). Human resource champions: *The next agenda for adding value & delivering results*. Boston: Harvard Business School Press.

Ulrich, D. (2008). Are you a change agent? *Workforce Management*, *87* (10), 22.

Van de Ven, A.H & Poole, M.S. (1995). Explaining development and change in organizations. *Academy of Management review*, *20* (3), 510-540.

Van Tonder, C.L. (2004). *Organisational change: Theory and practice.* Hatfield: Van Schaik.

Van Yperen, N.W., Van den Berg, A.E., & Willering, M.C. (1999). Towards a better understanding of the link between participation in the decision-making and organisational citizenship behaviour: A multilevel analysis. *Journal of Organisational and Occupational Psychology*, 72, 377-392.

Vaughan, D. (1996). *The challenger launch decision.* Chicago: University Chicago Press.

Verma, V.K. (1996). *Human resource skills for project managers* (2nd ed.). New York: Project Management Institute.

Waddel, D. & Sohal, A.S. (1998). Resistance: a constructive tool for change management. *Management Decision*, *36* (8), 543-548.

Wageman, R. (1996). Interdependence and group effectiveness. *Administrative Science Quarterly*, *40*,145-80.

Waldersee, R & Griffiths, A. (1997). *The changing face of organisational change,* CCC *Paper No. 065,* Centre for Corporate Change, Australian Graduate School of Management, University of New South Wales, Sydney.

Wallace, R., Engel, D., & Mooney, J. (1997). *The learning school: A written guide to vision-based leadership*. Thousand Oaks, CA: Corwin Press.

Watson, J.B. (1913). Psychology as the behaviourist views it. *Psychological Review*, *20*, 158-177.

Weber, S.P. & Weber, J.E. (2001). Changes in employee perception during organisational change. *Leadership and Organisational Development Journal*, *22* (6), 291-300.

Weick, K.E. (1995). *Sense making in organisations.* Thousand Oaks, CA: Sage.

Weick, K.E. & Quinn, R.E. (1999). Organisational change and development. *Annual Revue Psychology*, *50*, 361-386.

Wertheimer, M.S.W. (2001). *The change agent's tool box. Core qualities of change agents.* Retrieved October 16, 2007 from www.nasmhpd.org/general_files/publications/ntac_pubs/toolbox/agent8.html.

Westra, E. & van de Vliert, E. (1989). *Mens en Onderneming*. *2,* 145-154.

Woodman, R.W. (1989). Organisational change and development: New arenas for inquiry and action. *Journal of Management, 15*, 205-228.

Worren, N.A.M., Ruddle, K., & Moore, K. (1999). From organisational development to change management: The emergence of a new profession. *The Journal of Applied Behavioural Science*, *35* (3), 273-286.

Young, T.L. (1996). *How to be a better project manager*. London: The Industrial Society.

Zaltman , G. & Duncan, R. (1977). *Strategies for planned change*, New York: Wiley.

Zander, A.F. (1950). Resistance to change: Its analysis and prevention*. Advanced Management*, *4* (5), 9-11.

Zimmerer, T.W. & Yasin, M.M. (1998). A leadership profile of American project managers. *Project Management Journal*, 31-38.

ADKAR CHANGE READINESS QUESTIONNAIRE

Name:	
Division:	
Date:	

This assessment is used to identify change readiness just prior to implementing a change intiative. It allows to pinpoint exactly where change resistances may occur and where interventions will need to run in parallel to the deployment of the P&SCM Transformation Programme.

Directions: Read each question carefully. You are being asked to rate yourself on a scale from 1-5 on your agreement to the statement. 1 = strongly disagree & 5 = strongly agree. Only place the number in the block next to each statement.

PLEASE PLACE YOUR ANSWERS IN THIS COLUMN

	ADKAR Assessment	
1	Rate your awareness of the need to change. Do you fully understand the business, customer or competitor issues that have created a need to change?	
2	Assess your overall desire to change. Consider the factors or consequences (good or bad) related to this change for yourself and assess your motivation to change.	
3	Rate your knowledge of the change and how to change. Do you have a clear understanding of skills and behaviours required in the new environment?	
4	Evaluate your ability to perform during and after the change. How proficient are you in terms of managing yourself and the new environment that the changes will bring about?	
5	Assess the reinforcement of change. Are there adequate mechanisms/development opportunities/processes, procedures to sustain the change?	

Please rate yourself on a scale of 1 - 5. 1 = Strongly disagree 5 = Strongly agree		
	AWARENESS	
1a	I understand the business reasons for the introduction of the P&SCM Tranformation Programme.	
1b	I understand the issues that are being addressed by the P&SCM Transformation Programme.	
1c	I understand the impact of the P&SCM Transformation.	
1d	I understand the goals and objectives of the P&SCM Transformation Programme.	
	DESIRE	
2a	I am excited to be part of this change.	
2b	There are great opportunities for me in the change.	
2c	I support the implementation of the P&SCM Transformation Programme.	
2d	I will benefit from the P&SCM Tranformation Programme.	
	KNOWLEDGE	
3a	I have the necessary skills to cope with the change.	
3b	I understand how my work relates to the change.	
3c	I need more clarity on the P&SCM Transformation Programme.	
	ABILITY	
4a	I can cope with the change.	
4b	I can positively contribute to the change.	
4c	I will be able to perform better due to the changes the P&SCM Transformation Programme will bring about.	
	REINFORCEMENT	
5a	I have the support to cope with the change.	
5b	My team members support the change.	
5c	My manager supports the change.	
5d	My uncertainties are addressed.	

5e	**I need training to perform better after change has been implemented.**	

Appendix B:

LEVEL OF COMMITMENT QUESTIONNAIRE

Dear participant

The purpose of the questionnaire is to determine what your commitment level is towards the proposed transformation programme. The information obtained from this questionnaire will assist the Change Management Team to develop suitable interventions to build commitment throughout the project life cycle. The results will not be used against any individual and you can complete this questionnaire anonymously.

Questionnaire completion instructions:

- Ensure you understand the vision / mission and objectives of the transformation project / programme before completion of this questionnaire.
- Read the key's describing each level of commitment as stated below.
- Indicate your answer by ticking the appropriate box.
- *"As I perceive the attitude of others on the team"* refers to those individuals in your current working team, function or discipline.
- *"As I perceive the attitude of others impacted"* refers to ALL employees to be impacted through the transformation programme / project.
- Please complete the questionnaire as honestly.
- The questionnaire will not take more than 20 minutes to complete.

Level of commitment – key descriptions:

1. **Apathy**: Neither for or against the vision / mission.
2. **Non-compliance:** Can't see the benefits of vision / mission and will not do what is expected.
3. **Grudging compliance:** Do not see the benefits of the vision / mission, but will do what is expected due to no choice in the matter.
4. **Formal compliance:** Sees the benefits of the vision / mission and will do what is expected but nothing more.
5. **Genuine compliance:** Sees the benefits of the vision / mission. Will do everything that is expected and more.
6. **Enrolment:** Will do whatever can be done within the "spirit of the law."
7. **Commitment:** Will make the change happen no matter how difficult it may be.

LEVEL OF COMMITMENT: VISION / MISSION STATEMENT:

Please complete the vision / mission statement below:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Vision / Mission:

LEVEL OF COMMITMENT: OBJECTIVE 1:

Please indicate an objective this transformation programme / project intents to achieve:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 1:

OBJECTIVE 2:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 2:

OBJECTIVE 3:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 3:

Appendix C:

CHANGE AGENT SKILLS, KNOWLEDGE & EXPERIENCE CHECKLIST

The purpose of this questionnaire is to determine what skills, knowledge and experience you as a change agent have in order for the change management specialist to determine what knowledge and skills needs you require and what experience you need to gain in to ensure that you are optimally equipped to act in the role of a change agent.

QUESTIONNAIRE COMPLETION INSTRUCTIONS:

- This questionnaire consists of 3 sections, please complete all sections.
- Please read each statement carefully and answer each question honestly.
- Section 1: Indicate your answer by ticking the box most appropriate to you.
- Section 2 & 3: Indicate your answer by either ticking the “Yes” or “No” option.

SECTION A: SKILLS

Indicate your answer by ticking the block most appropriate to you in terms of the following scales:

1. Always
2. Frequently
3. Unsure
4. Seldom
5. Never

1. Aware of my own values, needs, behaviour and impact on others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

2. Continuously evaluate my strengths and weaknesses.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

3. Always motivated to achieve.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

4. Enjoy knowing that others are dependent on me.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

5. Enjoy sharing new ideas with others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

6. Enjoy telling others stories.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

7. Act as a team builder to ensure collaboration between team members.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

8. I enjoy selling.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

9. People actively listen when I engage withy them.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

10. Most people action on what I have instructed.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

11. I understand my own interests as well as those of others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

12. I evaluate other alternatives when option 1 is not feasible.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

13. Others usually accept my ideas.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

14. When negotiating I always get my way.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

15. I use creative methods to expand possibilities to bring about an acceptable agreement with another party.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

16. I prefer to avoid conflict at all means.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

17. I see conflict as a way of resolving issues with another party.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

18. I prefer to face conflicting situations to resolve the related problem or concern.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

19. I find it easy to talk to strangers.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

20. I engage easily with someone I do not know because I am curious about that person.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

21. I usually have the intention to grow my relationship with strangers I just met.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

22. I find it easy to ask for advice from someone I just met, on possible solutions.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

23. I usually provide a wider context of a more detailed conversation to follow later on.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

24. I usually jump right into the detail.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

25. I usually reach a conclusion based on generalisation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

26. I take time to first understand the problem from different view points before analysing the situation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

27. When solving problems, I usually consider all consequences and results.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

28. I take time in developing creative and innovative ways of soling a problem.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

29. I find it difficult to pay attention to what someone says if I want to talk and add value or correct what has been said.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

30. I a one-on-one conversation I usually give the other person the opportunity to tell his/ her story first.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

31. I pay very close attention to body language as that tell's me a lot.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

32. I am usually the talker, find it difficult to listen.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

33. I always look at the holistic picture of a situation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

34. Think about problems and solutions in the long terms.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

35. I always try to recognise all behaviour around me.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

36. I take any rejection personally.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

37. I enjoy selling.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

38. I always persevere until I succeed if I believe in something.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

39. I usually find it easy to identify the right people with whom I want to share specific ideas or obtain their buy-in.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

SECTION B: KNOWLEDGE

	Knowledge descriptions	Yes	No
1	I have knowledge of the organisation.		
2	I have knowledge of the organisation's external environment.		
3	I fully understand the need for change.		
4	I have knowledge of change management principles.		
5	I have knowledge of change readiness & change readiness levels.		
6	I know my roles & responsibilities as a change agent.		
7	I have knowledge of various change management interventions.		
8	I understand the stated benefits of the change and the impact thereof for the organisation and individual.		

9	I have a comprehensive understanding of the specific area / function where change is taking place.		
10	I know the cycle / phases of change.		
11	I understand the value of a change agent.		
12	I have group dynamics knowledge.		

SECTION C: EXPERIENCE

	Experience descriptions	Yes	No
1	I am an expert in dealing with changing work conditions / procedures.		
2	I have exposure to implementing a change initiative.		
3	I have networking experience with those impacted by change.		
4	I have consulting / project environment related experience.		
5	I have experience in mobilising people behind a specific goal.		
6	I have experience in dealing with conflict and different people.		
7	I have some facilitation experience.		
8	I have experience in having to relay hard messages to others in a manner that instils confidence.		

_____

_____

Appendix D:

QUALITATIVE PERCEPTION QUESTIONNAIRE
- IDENTIFICATION OF CHANGE AGENT DIMENSIONS -

Dear Participant

You are kindly requested to participate in a research project due to your expertise in the field of Change Management and/or related consulting experience. This research project forms part of a Doctorate study conducted through the University of South Africa within the Department of Industrial and Organisational Psychology. The focus of this research is on the development and validation of a change agent identification framework.

Please read the background related to this research below and kindly complete the questionnaire. Your valuable contribution is highly appreciated.

RESEARCH BACKGROUND:

The skill of managing change has been described by numerous successful business men and women as one of the most important skills for managers and employees today. In large organisations, it seems to have become more difficult to manage change due to the large number of employees impacted by change and the limited number of knowledgeable change management specialists available to assist them throughout the transition process. If change management specialists are not visible enough, directly communicating and liaising with impacted employees, how could employees become change ready? Without continuous engagement with employees impacted by change, how could change management specialists keep their fingers on the pulse of possible issues and concerns arising, motivating employees to embrace change, rather than rejecting it?

There are many definitions of change agents; most definitions are vastly different from each other. For the purposes of this research the following definition from Cheung, Jurman, Maguigad and Slaughter (2007) seems to be appropriate: *Change agents can be found in all levels of an organisation, they can be leaders, managers or employees. A change agent is someone who sees a need for constructive change and who is willing to champion the cause and motivate people to see the benefits thereof.*

Currently there is no standardised framework/model available on how to identify "right" individuals to act as potential change agents in a large organisation. No validated dimensions and/or supportive elements have been established that constitutes a change agent identification framework. Limited research has been done on the concept "change agents" and therefore it is difficult for change management specialists to clearly understand what the different dimensions and/or supportive elements are that they should take into consideration to identify change agents. An in-depth literature study has been conducted and certain dimensions and elements have been identified that could possibly be considered to be included in such a framework. In order to determine whether these identified dimensions and/or supportive elements from the literature findings are appropriate, you are required to indicate (from your experience) important dimensions and/or supportive elements that a change agent should have as part of their profile.

In appreciation of your time and effort, an abstract of the proposed framework will be made available to you for future reference once the research has been completed.

Please complete this qualitative perception questionnaire, returning it no later than **August 8th, 2008.**

I thank you for your time.

Ms. Marzanne van der Linde
Email: Marzanne.vanderlinde@eskom.co.za
Phone: (011) 800 4510
082 532 6266

BIOGRAPHICAL INFORMATION:

Please supply the following information and note that this information will purely be used for research purposes and will not be disclosed for any other purposes.

Age:		
Gender:	Male	Female
Race:		
Number of years Change Management or related consulting experience:		
Highest qualification:		
Home language:		

I,…….give my informed content that this information may be used for the purposes of the research only.

_____ _____

Signature Date

QUESTIONNAIRE COMPLETION INSTRUCTIONS:

- This section consists of 6 open-ended questions. The reasons for including only open-ended questions are to explore and obtain as much information as possible, regarding your perception on the profile of a change agent.

- You are kindly requested to read each question carefully and provide answers in terms of your own perceptions and experience on characteristics an individual should portray to be identified as a possible change agent.

---

1. In your view, what are the critical **personality traits** an individual should possess to be identified as a possible change agent? (Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations.)

2. In your view, what are the critical **skills** an individual should possess to be identified as a possible change agent? (A skill is the learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy, or both.)

3. In your view, what **knowledge** should an individual have to be identified as a possible change agent? (Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.)

4. In your view, what **experience** should an individual have to be identified as a possible change agent? (The concept of experience generally refers to know-how or procedural knowledge of an event, instead of propositional knowledge.)

5. In your view, where on a **change curve** should an individual be in order to be identified as a possible change agent (assuming that the change curve consists of the following change-readiness scores)?

- **awareness** (aware of the project but not its impact)
- **understanding** (understanding the project and its impact
- **acceptance** (buy-in and active demonstration of support)
- **commitment** (ownership and significant involvement demonstrated)

6. Please mention important **dimensions** (from your experience) that a change agent should have as part of his or her profile (Dimensions referring to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent).

7. Further comments or suggestions.

Appendix E:

CHANGE AGENT IDENTIFICATION FRAMEWORK DEVELOPMENT

BIOGRAPHICAL INFORMATION

Please supply the following information by placing a tick in the appropriate box. Please note that this information will purely be used for research purposes and will not be disclosed for any other purposes.

Age	21 - 26	27 - 35	36 - 46	46 - 55	55 +

Gender	Male	Female

Race	Black	White	Caucasion	Coloured	Indian / Asian

Number of years change management experience	0 - 3	4 – 6	7 – 10	10 – 13	13 +

Highest qualification	Diploma / certificate	Bachelor's degree	Honours degree	Masters degree	Doctoral Degree

Home language	Afrikaans	English	African Please specify: _____	Other

5. Summary supportive elements: Change curve readiness level

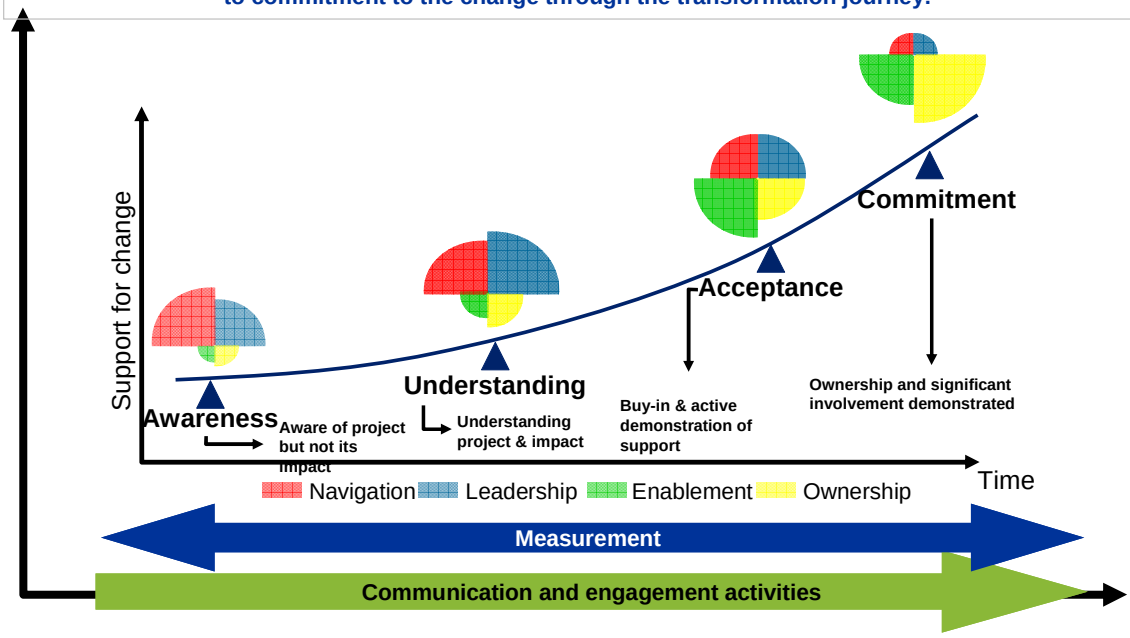
This section focuses on the level of change readiness by an individual in order to be identified as a potential change agent.

Change readiness levels:

- **Awareness** of the need to change but not the impact thereof;
- **Understanding** the need for change and the impact thereof;
- **Acceptance**: Buy-in & active demonstration of support to change;
- **Commitment**: Demonstrate ownership and significant involvement.

Progressing through the Change Curve

Specific communication interventions are required at each stage as stakeholders move from awareness to commitment to the change through the transformation journey:



Consider the following:

After awareness road shows have been completed, where an overview of the project, the necessity thereof, time lines, change impacts amongst others have been shared with the audience, change agents need to be selected. According to your perception, where on the change readiness curve do your believe should change agent be when selected?

** The proposed change readiness level indication below is as per qualitative perception questionnaires, completed by a sample of 15 external Change Management Consultants according to their perception.

	PROPOSED READINESS LEVEL	Readiness level as per survey responses	NOT ESSENTIAL	RANKING
1	Awareness	1/ 15		
2	Understanding	3 / 15		
3	Acceptance	5 / 15		
4	Commitment	6 / 15		

Looking at the definitions per readiness level as per the pictorial representation on page 1, at which level/s do you believe should change agents, be at selection? Pleas indicate the level/s and provide reasons for your answers.

6. Proposed dimensions verification

Definition: In this context, dimensions refer to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent.

A number of 5 different categories where included in an explorative – qualitative perception questionnaire, completed by a sample of 15 external Change Management Consultants. These dimensions / categories were identified from literature findings. These were:

- Personality traits
- Skills
- Knowledge
- Experience
- Change readiness level

The survey sample group were asked to indicate which categories / dimensions should ideally be part of a change agent identification framework.

Please read through the proposed dimensions and discuss which of those are essential and not essential to be included in the change agent identification framework and then rank those items in terms of importance (This is based on perception).

Ranking in terms of importance (1 - 8)

	PROPOSED DIMENSIONS	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Knowledge			
2	Ability			
3	Skills			
4	Level of committment			
5	Availability and willingness			
6	Personality traits			
7	Experience			
8	Change curve readiness			

Other proposed dimensions to be included in framework / Reasons for chosen ranking order:

THE DEVELOPMENT AND VALIDATION OF A CHANGE AGENT IDENTIFICATION FRAMEWORK

by

MARZANNE VAN DER LINDE-DE KLERK

Submitted in accordance with the requirements for the degree of

DOCTOR COMMERCII

In the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

PROMOTOR: PROFESSOR N. MARTINS
JOINT PROMOTOR: PROFESSOR M. DE BEER

NOVEMBER 2010

STUDENT NUMBER: 44917309

DECLARATION OF INTEREST

I declare that this thesis, **"The development and validation of a change agent identification framework"** is my own work and that all the sources I made use of or quoted have been acknowledged by means of complete references.

_____ _____

MARZANNE VAN DER LINDE-DE KLERK DATE

ACKNOWLEDGEMENTS

I would like express my appreciation to the following individuals and institutions:

- My Lord, Jesus Christ, for affording me this opportunity, carrying me each and every step of the way, and providing me with the courage, strength and insight to complete my thesis.
- My promoters, Professors Nico Martins and Marie de Beer, whose guidance, advice and support encouraged me to follow through and complete my thesis with relevant information to contribute to our field of work.
- Rina, for the statistical analysis which had to be done and redone many times, her patience and support were never-ending.
- My husband, Nico, for his understanding and patience during all the weekends I had to work; his belief in me and his your prayers made the world of difference to me.
- My dad, Hennie, for his assistance, advice, support, encouragement and unconditional love.
- My mom, Ria and Uncle Johann, whose encouragement, kind words and love will never be forgotten.
- My employer, for allowing me to conduct this research and supporting me to the end.
- Everyone else, too numerous to mention by name, who played a role.

THE DEVELOPMENT AND VALIDATION OF A CHANGE AGENT IDENTIFICATION FRAMEWORK

by

MARZANNE VAN DER LINDE-DE KLERK

DEGREE: DOCTOR OF COMMERCE (DComm)
SUBJECT: Industrial and Organisational Psychology

PROMOTER: Professor N. Martins
JOINT PROMOTER: Professor M. de Beer

SUMMARY

The main aim of the research project was to develop a change agent identification framework, to be used by organisational change management specialists to identify change agents more effectively in large organisations moving forward. To date, little research has been conducted regarding the role and identification of change agents in large organisations. In the context of the research project, the sample of change agents used, referred to employees affected by the change, spread across the organisation, assisting in communicating key messages and ensuring that their peers become change ready. A thorough 12-step empirical research process was followed, which included both a qualitative and quantitative approach. The qualitative process consisted of the development of a change agent identification framework, comprising of four dimensions, each with supportive information and/or items. The aim of the quantitative process was to empirically test the personality trait dimension of the framework with a sample group of 27 change agents and 135 employees influenced by a transformation process. This was to determine which change agent personality traits has a positive impact/effect on employee change readiness levels during transformation.

Through a rigorous analysis process, only the phlegmatic, persuasive and optimistic personality traits resulted in having some positive effect on employees during a transformation process.

In support of these findings, the literature study findings as well as the qualitative empirical research findings indicated that the persuasive and optimistic personality traits need to form part of a change agents' personality profile. The phlegmatic personality trait was not evident throughout all literature findings.

The literature and empirical results contributed towards a comprehensive understanding of the way in which individuals should be identified as change agents in large organisations. The developed framework should assist industrial and organisational psychologists in the future to identify individuals as change agents, more efficiently. Recommendations were made on the future expansion of a knowledge base for organisational change agents.

KEY TERMS:
Organisational change, change agents, change champions, change leaders, change management, framework, personality traits, skills, knowledge, change agent network, occupational personality profile

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

CHAPTER 1: OVERVIEW OF THE RESEARCH

1.1 BACKGROUND AND RATIONALE FOR THE RESEARCH

In 1513, the researcher and philosopher, Niccolo Machiavelli, made the following memorable statement: *"There is nothing more difficult to plan, nor more doubtful of success or more dangerous to manage than the creation of a new order of things"* (Rogers, 2003, p.1). What is of interest is the date on which the statement was made. As early as 1513, negativity, uncertainty and doubt went hand in hand with change; and today still, change introduces chaos, difficulty, uncertainty and doubtfulness. Change undeniably has a tremendous impact on people. Becoming accustomed to a new idea or way of doing something is always difficult, even when considering the benefits.

Nowadays, organisations are employing increasingly more individuals to manage change, helping employees to become accustomed to "the new order of things." No matter what the causes of or reasons for organisations engaging in transformational change, the impact on employees may be significant or disastrous to both the organisation and its employees. If employees do not accept the proposed changes in the organisation and realise the benefits, the organisation could suffer tremendously or even transform from being a market leader to fighting to remain in the market, without any competitive advantage (Rogers, 2003).

Organisations employ change management specialists to manage the impact of change (process and/or technology adjustments or changes) on the organisation. Change management specialists are concerned with the human resource and organisational elements of change. Typically, the objective of organisational change management is to maximise the collective benefits for all the people involved in change and minimise the risk of failure of implementing the change. This needs to be driven by organisational change management specialists (Rogers, 2003). The responsibilities of change management specialists in organisations, include assessing the overall organisation and the organisational units affected by the change, defining a change management strategy, identifying the impact of the change on the organisation, developing and implementing a communication strategy, describing and, if necessary, designing the targeted jobs and organisational structures, developing and implementing training and education programmes,

planning specific change management interventions, implementing those interventions and monitoring the process and impact throughout. Due to the sensitivities and complexities of a change management specialist's job, individuals in this position need to be equipped with specific competencies to drive change meaningfully in the organisation (Borysowich, 2006).

In reality, the more people are affected by the envisaged change, the more difficult it becomes for organisational change management specialists to manage the process of smooth transition and create a change ready environment for employees. Change management has become a vital activity in today's world of work. The skill of managing change has been described by numerous successful business people as one of the most important skills for managers and employees (Rogers, 2003). In large corporate organisations, nowadays it seems almost impossible to manage change as there are too few change management specialists and too many impacted employees. If change management specialists are not visible in all areas of the business, directly communicating and liaising with the impacted employees, how can the employees be prepared for change and motivated to embrace it instead of rejecting it? It goes without saying that change management specialists cannot be everywhere. If organisations could have individuals acting as so-called "change agents", throughout the organisation serving as the eyes, ears and the voice of the change management specialists, keeping their fingers on the pulse, issues, concerns and questions could be addressed more quickly and appropriate solutions implemented. It would be highly advantageous to appoint individuals in the organisation as agents of change in order to ensure a smooth transition process with which employees would be comfortable, thus ensuring optimism and commitment throughout (Recklies, 2001).

A number of definitions indicate the distinct difference between a change management specialist and a change agent. The following are some of the definitions: A change management specialist is someone responsible for managing the impact of the change on the organisation, and is concerned with the human resources and organisational aspects of change (Borysowich, 2006). A change agent is an individual who may promote change, influence and motivate others to accept the change and lead change (Tearle, 2007). According to Tearle (2007) a change agent is similar to a medical doctor, because he or she needs to diagnose the real issues emerging within his or her areas and then propose clear directed solutions. From diagnosis to the achievement of the desired end state, a change

agent fulfils the following roles: facilitator, designer, educator, marketer, observer and influencer. Change agents are also seen as catalysts that start the ball rolling. Rogers and Kincaid (1987) describe change agents as people with one foot in the old world and the other in the new world, helping employees cross the bridge to the new world and providing support throughout the journey. In a nutshell, employees who are passionate about change can represent the organisation as change agents, influencing others to accept any proposed changes.

In instances where change is properly communicated, the fears and anxieties people may experience about the change may be overcome in a specific way or it may even relieve some of the resistances employees might have**.** Employees who are passionate about change and who communicate regularly with their peers, can have a significant positive impact on the overall outcome of a transformation process. According to Wertheimer (2001), it takes a special kind of individual to act as an agent of change, because he or she needs to have certain personality traits, skills and knowledge.

The following question arises: "What are the personality traits, skills and knowledge that individuals should display in order to be successful change agents?" The literature on the topic does not seem to provide a clear answer. It is therefore necessary to determine the competencies individuals need to act as change agents, ensuring, that the right individuals are identified to drive change across a large organisation. A thorough literature study was conducted to gather as much information as possible on the above. After information had been collected and analysed, certain steps were followed in the research process in order to compile a framework with key dimensions and supportive elements to be used to identify change agents in large organisations in the future.

Many industrial and organisational psychologists specialise in the field of change management, and through experience and knowledge become change management experts in organisations, mostly fulfilling an advisory role on how to implement change in a way that is least disruptive for the organisation (Wertheimer, 2001). Through the development of a change agent identification framework, other industrial and organisational psychologists would be able to use this framework to correctly identify appropriate individuals to act as change agents, who could actively assist them to manage change more effectively and efficiently (Wertheimer, 2001). A comprehensive literature search could not provide a validated framework, either

locally or internationally. This research should therefore fill an important gap in the existing knowledge.

1.2 PROBLEM STATEMENT

No dimensions and/or supportive elements have been established in the past that constitutes a change agent identification framework. At this stage, the way in which change management specialists identify change agents may be valid but there is no formally structured model or framework in place that could guide them when searching for individuals to act as change agents.

To date, a limited amount of research has been conducted on the role of a change agent or regarding possible change agent identification methods (McNamara, 2007). The research problem can be identified as:

There are no dimensions and/or supportive elements available that constitute a validated change agent identification framework.

1.3 RESEARCH QUESTIONS

The general research question is as follows:
What are the dimensions and supportive elements that constitute a valid change agent identification framework?

1.3.1 Research questions relating to the literature review:

- **Research question 1:** What are change, organisational change and change management?
- **Research question 2:** Why is it necessary to identify change agents to manage change in large organisations?
- **Research question 3:** What are the roles and responsibilities of change agents in large organisations?
- **Research question 4:** What are the main dimensions, such as skills, knowledge and personality traits that constitute a framework identifying change agents?

- **Research question 5:** What methods/tools have been used in the past to identify change agents?

1.3.2 Research questions relating to the empirical study:

- **Research question 1:** Is the change-readiness questionnaire a reliable questionnaire?
- **Research question 2:** Is there a statistically significant difference in mean change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network?
- **Research question 3:** What dimensions and supportive elements are perceived as critical to include in a change agent identification framework from the analysis of the dimensions/perception survey and the concept mapping workshop worksheets completed by **internal and external** change management consultants?
- **Research question 4:** Which tests, surveys or methods are most appropriate to measure the verified dimensions and supportive elements?
- **Research question 5:** Are there significantly larger improvements in the change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not showing that specific trait?
- **Research question 6:** Which of the personality traits are key personality traits?
- **Research question 7:** Did employees supported by change agents possessing **all** key traits from the profile show significantly larger improvements in the change-readiness scores than employees supported by change agents not showing any of the key traits?

1.4 AIMS OF THE RESEARCH

1.4.1 General aim of the research

The general aim of the research was to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

1.4.2 Specific aims of the research

1.4.2.1 Specific aims relating to the literature review:

- **Research aim 1:** to understand the meaning of change, organisational change and change management
- **Research aim 2:** to understand why it is necessary to identify change agents to manage change in large organisations
- **Research aim 3:** to understand the roles and responsibilities of change agents in large organisations
- **Research aim 4:** to determine the main dimensions, such as skills, knowledge and personality traits, that could constitute a framework for identifying change agents
- **Research aim 5:** to understand the methods/tools that have been used to identify change agents in the past

1.4.2.2 Specific aims with regards to the empirical study:

- **Research aim 1:** to determine whether the change-readiness questionnaire can be considered a reliable questionnaire
- **Research aim 2:** to determine whether there is a statistically significant difference in change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network
- **Research aim 3:** to determine which dimensions and supportive elements are perceived as critical to include in a change agent identification framework from the analysis of the dimensions/perception survey and the concept mapping workshop worksheets completed by **internal and external** change management consultants

- **Research aim 4:** to determine which tests, surveys or methods would be most appropriate to measure the verified dimensions and supportive elements
- **Research aim 5:** to determine whether the improvement in change-readiness scores of the group supported by change agents possessing a specific trait from the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not show a specific trait from the ideal profile
- **Research aim 6:** to determine which of the personality traits are key personality traits
- **Research aim 7:** to determine whether there are significantly larger improvements in the change-readiness scores of employees supported by change agents possessing **all** key traits from the profile than employees supported by change agents not showing any of the key traits

1.5 THE PARADIGM PERSPECTIVE

1.5.1 Defining the paradigm perspective

According to Mouton and Marais (1994), a paradigm perspective refers to the intellectual climate and variety of metatheoretical values or beliefs and assumptions underlying the theories and models that form the definite context of this research. Their origin is mainly philosophical and is not meant to be tested.

1.5.2 The discipline and subdiscipline of this research

This research focuses primarily on the discipline of psychology because this study conducted in the field of human behaviour. Human behaviour was researched by means of thoroughly structured, descriptive and exploratory research. The sub-discipline focuses on the field of industrial and organisational psychology, and this research project is concerned with determining the appropriate dimensions and associated items necessary to create a framework in order to identify change agents in the organisational context.

1.5.3 Applicable psychological paradigms

The first evidence of this school of thought was found in the words of Watson (1913). He stated that in order for research to be truly scientific in the field of psychology it is necessary to observe behaviour in a structured and planned way (Stratton & Hayes, 1993). This research lies within the domain of the behaviourism and within the trait theory of personality. The behaviourism approach focuses on the perception or idea that certain behaviour is displayed by means of a series of different influences. A well-known theorist, Bandura (1977), indicated that behaviour is generally influenced by environmental factors which include an individual's modelling of others' behaviour. Even if individuals do not obtain any formal qualification, life skills and competencies learnt throughout life are extremely valuable and provide individuals with different coping mechanisms when faced with challenges along the way (Meyer, Moore & Viljoen, 1989). In order to develop a change agent identification framework, it was important to understand what behaviour needs to be displayed by individuals in order to consider them as change agents. As indicated by Meyer *et al*. (1989), life skills and learnt competencies play a significant role in developing certain coping mechanisms. In shifting the focus to change agents specifically, it was also important to determine how these individuals cope in changing situations, how change ready they should be and how certain behaviour displayed by them can be detected.

The trait theory of personality suggests that individual personalities are composed broad dispositions. It focuses on differences between individuals and emphasises that the combination and interaction of various traits forms a personality that is unique to each individual (McCrae & Costa, 1997). Within the context of this research the quantitative section focuses on the validation of specific change agent personality traits.

1.5.4 Applicable metatheoretical concepts

Metatheoretical concepts are regarded as assumptions focusing on certain theories, models and paradigms applicable to this research. These concepts are part of an intellectual climate, and the concepts are known as certain values or beliefs held by someone practising in that particular field. These beliefs or values are not meant to be tested (Mouton & Marais, 1994). The following are viewed as metatheoretical concepts:

1.5.4.1 The role of the Industrial and Organisational Psychologist

Industrial and organisational psychologists apply the principles of psychology to issues relating to the work situation of relatively well-adjusted adults in order to optimise individual, group and organisational wellbeing and effectiveness (Guion & Gottier, 1965). Many industrial and organisational psychologists specialise in the field of change management, focusing on the effectiveness of an individual, group or organisation as a whole during times of change. Since people respond to change in different ways, many psychological factors come into play during a transformation process and it is best to have a psychologist on board to manage the "people side" of a transformation process (Wertheimer, 2001). Industrial psychologists working as change management specialists have become increasingly popular in the last few years, helping employees cope with change and assisting the organisation to implement change in a way that is the least disruptive. Industrial psychology involves the scientific relationship between humans and the world of work, in the process of making a living, the psychological issues and effects of this relationship and its impact on the external world. Industrial and organisational psychology is also an application or extension of psychological principles applied to solving problems relating to human beings operating in the context of business and industry (Guion & Gottier, 1965).

1.5.4.2 Change and change management

Van de Ven and Poole (1995) defines change as one type of event, resulting in the empirical observation of difference in form, quality or state over time in an organisational context. In simpler terms, change occurs when something becomes different. To contextualise, the field of this research related to organisational change and the focus was on the development and validation of a framework to identify change agents to more effectively, assist large organisations to become change ready.

Change management is a set of behavioural science-based theories, values, strategies and techniques aimed at planned change of the organisational work setting in order to enhance individual development and improve organisational performance, by identifying organisational members' on-the-job behaviours (Porras & Robertson, 1992). Change management refers to a systematic approach that deals with change, at both individual and organisational level. Change management comprises of three different elements involving adapting to, controlling, and effecting change. A proactive approach in dealing with change is at the core of all three

elements. In an organisation, change management refers to implementing procedures and/or technologies to deal with changes in the competitive and demanding business environment. Change management focuses more on people than anything else, and entails guiding and nurturing human capital because the very success of any change initiative depends on the people affected by the change (Beekdal, Hansen, Todbjerg, & Mikkelsen, 2006).

1.5.5 Applicable concepts and constructs

The following concepts formed an integral part of this research:

1.5.5.1 Industrial and organisational psychology

Industrial and organisational psychology is mainly known as a diverse field incorporating other disciplines such as social psychology and personality psychology. In general, industrial psychologists focus on the three interdependent categories, namely work, worker and workplace. Specialist areas such as psychometrics, coaching, development, organisational development and change are included in these categories. Change agents can assist change management specialists in detecting issues and concerns more efficiently across the organisation by means of regular interaction with employees affected by change. The feedback received from change agents could assist change management specialists to analyse employee behaviour through applying the skills and knowledge of an industrial psychologist. Hence, through the development of a change agent identification framework, change management specialists will be able to use this framework to more effectively identify individuals to act as change agents, because they will be aware of the individual characteristics they should be on the look out for in the organisation (Wertheimer, 2001). As mentioned previously, to date, no South African or international framework has been established through previous research. Hence this research should help to fill a gap in existing knowledge.

1.5.5.2 Change agents

The saying, “The only constant thing about systems or even life is change”, has been heard many times. In every domain of life humans are confronted with change. The way individuals deal with change and manage it, is basically up to each individual. The following questions arise here: “Which individuals serve or act as potential change agents, what are the roles and responsibilities of these individuals? What does a change agent look like”? A change agent in the business context does not

refer to the manager, supervisor or even the change specialist, but to any individual who plays a significant part in designing, running, improving and communicating the proposed change (Egan, 1985). Change agents are individuals who can promote change and motivate others to accept it. They are individuals who have the characteristics to lead the change and who are comfortable with whom they are. Change agents are usually people who understand the impact of change on people's lives as well as the benefits thereof (Perme, 1999).

The role of change agents is generally seen as dealing with the softer issues, but sometimes also includes a number of tangible "hard" objectives. Change agents are not seen as objective third parties that are part of a team, but are part of a group and like any other member of the team take part in discussions about, and decision making on general issues. Change agents do, however, provide guidance to team members and are usually regarded as the people others listen to (Hutton, 1994).

1.5.5.3 Framework

In developing a change agent identification framework, the focus was on various concepts verified by subject matter experts. Shields and Tajalli (2006) describe a conceptual framework as one built from a number of concepts linked to a planned or existing system of methods, behaviour, functions, relationships, and objects. In computing terms a conceptual framework could be deemed to be a relational model. A conceptual framework is known as a type of intermediate theory that has the potential to connect to all aspects of inquiry such as problem definition, purpose, literature review, methodology, data collection and analysis. According to Shields and Tajalli (2006) frameworks are linked to particular research purposes or approaches such as exploration, description, gauging, decision making and explanation/prediction. When the research purpose or approach and framework are aligned, other aspects of empirical research such as the choice of the methodology to be used, *inter alia* surveys, interviews, the analysis of existing data, direct observation, focus groups and type of statistical technique, become obvious to the researcher.

1.6 METHODOLOGICAL ASSUMPTIONS / BELIEFS

Methodological convictions concern the nature of social science and scientific research. Methodological beliefs are no more than methodological preferences or assumptions about what is known as effective research (Mouton & Marais, 1994). The following are the methodological assumptions/beliefs affecting the nature and structure of this research:

1.6.1 The sociological dimension

The sociological dimension focuses largely on the literature and research results of researchers who have conducted similar research in the past. This research was analytical and experimental, and followed a structured descriptive and exploratory approach (Mouton & Marais, 1994). This approach will be explained in detail later on.

1.6.2 The ontological dimension

Ontology is known as the reality or domain of the study. When used in psychology, it refers to the study of humankind and all its diversities (Mouton & Marais, 1994). The objective of this research was to develop a framework of applicable behavioural elements to be used by future change management specialists to identify change agents more effectively

1.6.3 The teleological dimension

Mouton and Marais (1994) suggest that research should be to the point and the objectives clearly defined. The problem statement forms the foundation of the research and should be well thought through. In this study research problems were described and the goal was clear, namely: To establish a change agent identification framework by following a comprehensive qualitative and quantitative research process and methodology.

1.6.4 The epistemological dimension

This dimension is regarded as the most critical in social science, and is referred to as the ideal of science, also known as a search for the truth (Mouton & Marais, 1994). In order to approximate the truth, it is crucial for internal and external change

management specialists to objectively verify the dimensions and associated items of a proposed change agent identification framework. The epistemological dimension also focuses on factors influencing the internal and external validity of the research project. Internal and external validity should be managed to ensure that the research results are regarded as valid. Certain ethical principles are essential, taking internal and external validity implications into consideration. According to Isaac and Michael (1971), internal validity refers to how well the study was conducted and how confidently one can conclude that the change in the dependent variable was produced solely by the independent variable and not extraneous variables. Examples of extraneous variables that could have an impact on the internal validity of the study include history, maturation, testing and selection (Mouton & Marais, 1994). In this study a number of ethical principles were established to guide the researcher and help her to put contingency plans in place to prevent the extraneous variables from influencing the internal validity of the research project.

External validity refers to the extent to which the results of this research can be generalised to other groups, people or settings. The most common factors that could influence external validity include pretesting, multiple treatments or the setting in which the research takes place (Isaac & Michael, 1971). For this study in particular, one factor that could have significantly influenced the validity of the results was the setting, with change agents functioning in different business units/divisions and in different circumstances in the organisation as well as certain business decisions taken during the transformation process. All these factors were taken into consideration throughout the study and reported.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

According to De Vos, Delport, Fouche and Strydom (2002) a research design is a plan or blueprint of how one intends conducting the research. Research design therefore refers to the research questions, formulates a research problem as a point of departure and focuses on the logic of the research. The research design influences the research activities such as what data to collect and how. An exploratory and descriptive research design was followed, in this study including multiple research methods in order to comprehensively explore change agent

identification elements and ensure that a valid and reliable research process was followed.

The research design chosen for this research project is known as a comparison group pre/post-test design. The dependent variable (the change-readiness improvement scores of impacted employees) was measured at two different levels of the independent variable.

1) Employee change-readiness improvement scores were determined in cases where employees had been supported by change agents possessing a specific trait from the ideal profile.
2) Employee change-readiness improvement scores were determined in cases where employees were supported by change agents not possessing a specific trait from the ideal profile.

The ultimate goal of the empirical research phase was to determine whether there was significantly larger improvement in employee change-readiness scores in instances where change agents displayed specific personality traits versus those employees supported by change agents not displaying those specific personality traits as per the ideal profile of a change agent. Two groups of employees were compared by determining pre-test and post-test ADKAR change-readiness assessment scores for each of the change agent personality traits. All employee pre-test results served as an anchor, making it possible to improve the two employee groups in terms of their improvement scores. A detailed process description and the reasons for specific steps followed in the research process regarding the above will be provided in Chapter 4.

Figure 1.1: Research approach

1.7.2 Research approach

A combined qualitative and quantitative research approach was followed in the research project. This method is known as a “multi-phased approach”, as described by Creswell (1994). The research started with a quantitative process, followed by a qualitative process, and lastly, a quantitative process was included once again, testing or validating the qualitative process information. This approach is mainly used when the researcher proposes following a qualitative and quantitative research approach.

Firstly, a quantitative process was followed, consisting of the completion of the ADKAR change-readiness assessment by a sample group of employees in the procurement and supply chain function of a large organisation.

Secondly, a triangulation approach was followed for the qualitative research phase of the research project, and included:

1) thorough literature review
2) use of a survey questionnaire
3) a concept mapping process

According to Mouton and Marais (1994), triangulation refers to the use of multiple methods of data collection with the view to increasing the reliability of observations. Neuman (2002) indicates that there are several types of triangulation, the most common being triangulation of measure. This type of triangulation refers to multiple measures of the same phenomenon, by measuring something in more than one way. This allows the researcher to see various aspects of a certain phenomenon. The advantages of this approach convinced the researcher even more that this approach would be ideally for the study.

According to Neuman (2002), some of the advantages of this method are that:

1) it allows for more accurate results
2) it can help to uncover the deviant or off-quadrant dimension of a phenomenon
3) the use of multimethods can lead to the integration of theories

Thirdly, on completion of the qualitative research phase it was essential to test whether verified qualitative information was indeed valid, by testing the information obtained. All of these steps followed in the quantitative research phase will be explained in detail in chapter 4.

Steps in the process of the quantitative research phase are contextualised as follow:

- Initially, in 2007, individuals in the procurement & supply chain function of a large organisation completed a change-readiness questionnaire known as the ADKAR. This was done to identify individuals as change agents from the group affected by change. When the results of the questionnaire had been analysed, the individuals who had indicated a high level of desire to change were identified as change agents to assist the change management team to drive the change initiative in their respective areas of the business.
- Through the developed change agent identification framework emerging from the process followed in the qualitative research phase, test batteries, surveys and methods were selected to measure the dimensions in the developed framework.
- The group of change agents were asked to complete an Occupational Personality Profile (OPP) to determine which of them matched the profile of an ideal change agent in terms of personality traits as per the developed framework.
- After the OPP results had been analysed a distinction was made per personality trait and subsequently for all personality traits, between those individuals that matched the ideal profile of a change agent and those who did not.
- All the change agents were then requested to ask five of their peers in their working environment, whom they supported throughout the change initiative, to complete the ADKAR change-readiness questionnaire once again (post-test). This served as a post-measure to determine whether the improvement in the change-readiness scores of the group of employees supported by the change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group of employees supported by change agents who did not meet the ideal profile. The reasons for change agent selecting only five employees within their respective areas to complete the post-test ADKAR was that each change agent had easy access to at least five employees that had been influenced in their areas.

1.7.3 Qualitative research phase

1.7.3.1 Participants

The focus on the qualitative research was two sample groups:

1) One group consisted of change management specialists working as external consultants in the project management environment. A sample group of 30 was initially targeted, but only 15 questionnaires were returned.
2) The second group consisted of change management specialists in a large organisation mostly involved in large-scale, organisation-wide projects, as internal consultants of the business. These participants were asked to participate in the concept mapping exercise, and the sample comprised 15 change management specialists.

1.7.3.2 Measuring instruments

Since only limited research is available on the concept "change agents", the researcher had to rely upon qualitative and quantitative information obtained from the South African sample to ensure that all possible factors and dimensions were considered and covered in the process through the following:

- **Explorative qualitative perception questionnaire (appendix D).** This questionnaire was sent to 30 external change management consultants and 15 questionnaires were returned. These individuals were required to provide information on various dimensions which they deemed change agents should have as part of their profile. All the questions were therefore open-ended, in order not to limit the input obtained from the participants.

- **Concept mapping.** Concept mapping refers to the method with which people's ideas on a certain topic in graphical form can be clarified and described. By mapping concepts in pictorial form it it easier to understand the relationship between the different concepts. The technique is especially useful for the development of a conceptual framework (Trochim, 2002). Fifteen internal change management specialists participated to verify which elements should form part of a change agent identification framework and which should be eliminated by discussing those elements from the qualitative perception questionnaire in focus groups. There was no time limit placed on the duration of the session, and it ran for four hours.

1.7.4 Quantitative research phase

1.7.4.1 Participants

1) Initially, in 2007, 100 employees were identified as change agents through the completion of a change-readiness assessment, known as the ADKAR. Individuals displaying a high level of desire to change, as indicated on the ADKAR assessment's five-point Likert-type scale, were identified as change agents. For a number of reasons, as explained in chapter 4, this group of 100 change agents decreased to 27. The remaining 27 were requested to complete the OPP questionnaire because this questionnaire measured almost all the personality trait elements in the ideal profile developed through the qualitative research phase.
2) A sample group of 135 employees (five per active change agent), supported by the remaining 27 change agents, was requested to complete the ADKAR questionnaire a second time, in order to once again determine their change-readiness scores (post-test). The reasons for requesting only 135 employees to complete the ADKAR once again will be discussed in chapter 4. The information was necessary to determine whether the improvement in change-readiness scores of the group supported by change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not meet the ideal profile.

The research hypothesis, answered by the quantitative research phase, will be formulated in chapter 4.

1.7.4.2 Measuring instruments

- **Occupational Personality Profile (OPP).** The OPP is a personality test developed for use in industrial and organisational settings. It was introduced in South Africa in 1995. South African-based research findings on reliability coefficients are provided in the next section. Since 1995, the OPP has been widely adopted by various South African organisations. It measures nine different personality dimensions in addition to the distortion scale/supportive elements, and consists of 98 items.

- **ADKAR change-readiness assessment.** At the end of 2007, a number of change-readiness assessments were reviewed before it was decided to make use of the ADKAR assessment. The reasons for selecting the ADKAR assessment and background regarding this assessment will be highlighted in chapter 4. The ADKAR represents the following dimensions / categories to an employee's readiness to change: **A**wareness, **D**esire, **K**nowledge, **A**bility, **R**einforcement, all linked to the proposed change (Hiatt, 2006). These five dimensions are linked to the following:
    1) **Awareness of the need to change.** This relates to the level of understanding of the business, customer or competitor issues that have created a need to change.
    2) **Desire to change.** This concerns the level of understanding of the impact change will have on the individual as well as the his or her motivation and commitment to change.
    3) **Knowledge of the change and how to change.** This involves the level of understanding of skills and behaviours required in the new environment.
    4) **Ability to perform during and after the change.** This relates to the level of proficiency in terms of managing a new environment and all related factors that the changes will effect.
    5) **Reinforcement of change.** This entails the level of agreement/confidence in terms of adequate mechanisms, processes and/or procedures in place to sustain change (Hiatt, 2006).

1.8 RESEARCH VARIABLES

The following were identified as the variables applicable to this research project: This research project intended to determine whether **improvement in change-readiness scores (dependent variable)** of the group supported by **change agents possessing a specific trait from the ideal profile (independent variable)** was significantly larger than the improvement in the change-readiness scores of the group supported by change agents not possessing a specific trait from the ideal profile.

1.9 UNIT OF ANALYSIS

One of the most significant factors in any research project is the unit of analysis. It is a major entity on which the researcher's analysis in the research project is based. The following are examples of a unit of analysis (Trochim, 2002):

- individuals
- groups
- artefacts (books, photos or newspapers)
- geographical units (towns, census tracts or states)
- social interactions (dyadic relations, divorces or arrests)

The unit of analysis for this research project was as follows: Individuals in a group (internal and external change management specialists / consultants) as well as the sample of change agents and employees in the procurement and supply chain function of a large organisation undergoing major transformational change formed the most vital part of the research project.

1.10 DATA ANALYSIS

Comprehensive data analysis was performed to determine the following:

1) the number of appointed change agents who matched the ideal profile of a change agent in terms of personality traits
2) whether the improvement in change-readiness scores of the group supported by change agents meeting the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not meet the ideal profile
3) the level of statistical significance in terms of larger improvement of employee change-readiness scores for each of the seven personality traits change agents could display, in order to determine which of the seven personality traits could be identified as **key** personality traits
4) whether there was a significantly larger improvement in employee change-readiness scores when supported by the change agents possessing **all** key traits by comparing the ADKAR pre-and post-test results

The research analysis methods adopted are explained in detail in chapter 4.

1.11 ETHICAL RESEARCH PRINCIPLES

It was essential to include the need for ethics in research because human beings are usually the objects of studies in social sciences. For many researchers in the social sciences, the ethical issues are pervasive and complex, since data should never be obtained at the expense of individuals. Any person involved in research needs to be aware of and understand the general agreements relating to proper and inappropriate research (De Vos *et al.,* 2002). Ethical principles/guidelines serve as standards according to which each researcher should evaluate his or her own ethical conduct. Ethical principles should be internalised in the personality of the researcher to such an extent that ethical guided decisions become part of the way in which he or she conducts research. Some of the best-known ethical issues include harm to the respondents, informed consent, deception of the subjects, violation of privacy and the competency of the research amongst others (De Vos *et al.,* 2002). The research principles formulated and communicated for this research project will be indicated in detail in chapter 4.

1.12 RESEARCH METHOD

Section 1.8 outlined the approach followed during the research project and indicated what measuring instruments and sample sizes of participants were involved during each step. To summarise, the research phases consisted of the following:

- **Phase 1: literature conceptualisation/theoretical review**
  - This phase comprised three steps, namely the reporting on three theoretical aspects of the field of study. These steps will be outlined in chapter 4.

- **Phase 2: empirical research**
  - This phase comprised of three subphases depicted in figure 1.1, namely
    - The initial quantitative subphase involving two steps.
    - Followed by a qualitative subphase entailing three steps.
    - Another quantitative subphase, consisting of seven steps.
  - These subphases and their various steps will be explained in chapter 4.

- **Phase 3: conclusions, limitations and recommendations**
    - This phase consists of three steps, including the overall research conclusions, research limitations and possible recommendations.
    - These subphases and their various steps will be highlighted in chapter 4.

1.13 THESIS LAYOUT

The layout of the chapters in this thesis is as follows:

- **Chapter 1.** The background on the research, problem areas, research objectives, significance, hypotheses and the psychological paradigms was provided.
- **Chapter 2.** The meaning of change, organisational change and change management will be discussed.
- **Chapter 3.** The concept "change agent", personality traits, skills, knowledge, level of desire to change, etc., and the roles and responsibilities of change agents in large organisations will be explored. Also, past approaches/methods used to identify change agents and the amount of evidence available according to the literature and possible dimensions and associated elements included to identify change agents in the past will be explained.
- **Chapter 4.** A description of the methodologies used will be provided. This includes the research design, type of research, data collection method(s), and sample group and research analysis.
- **Chapter 5.** All the research results will be explained in the different subsections.
- **Chapter 6:** Conclusions will be drawn from the results and limitations noted in the research and recommendations made for future research.

1.14 CHAPTER CONCLUSION

This chapter provided insight into the background to the research that was conducted as well as the applicable research aims, questions, hypothesis, paradigms, methodology and chapter layout. The foundation of all chapters to follow was highlighted by contextualising the research approach and setting the scene accordingly. This was necessary to ensure that from the outset, the researcher would work towards making a contribution to the field of industrial and organisational psychology by conducting this research.

CHAPTER 2: UNDERSTANDING CHANGE, ORGANISATIONAL CHANGE AND CHANGE MANAGEMENT

2.1 INTRODUCTION

"Most people hate any change that doesn't jingle in their pockets."

-Japanese Proverb -

The modern era is characterised by change. This is not unusual in the history of humanity. However, what is different is that change is now managed by humans and people are now more prone to change than ever before (Diefenbach, 2005). Many people perceive change as an increase in their workload as job security and real earnings after inflation decrease. Today, it is all about financial success. For many organisations, financial considerations are often one of the reasons for change. Even in cases where employees have been negatively affected, many organisations still continue implementing major change interventions (Robbins, 2005). Many organisations have failed to implement change successfully because individuals in the business were not involved and properly or thoroughly consulted during major transformational change. The concept "managing change" was introduced many years ago in an effort to focus on the impact change has on people. According to Robbins (2005), this is also referred to as the softer side of change.

The above illustrates that even though change is managed today, many people have still been negatively impacted by doing so. It is therefore critical to ensure that change is managed appropriately. The aim of this research project is to provide a tool that organisations can use to manage change more effectively in the future.

Each person is an individual in his or her own right, because of certain values, behaviours, cultures and beliefs. One only has to consider humanity, *inter alia* humankind, civilisation, kindness, the human race amongst others - in short, the way in which people do certain things, each person's daily life consists of certain elements of routine in the execution of his/her work functions (Dent & Barry, 2004). Routine provides stability, and a sense of knowing what to expect in various situations (Robbins, 2005). Routine is also known as knowledge and knowledge can

be routinised. Without daily routine in their lives most people experience life as disorganised, hectic and chaotic (Van Tonder, 2004).

Sudden changes in routine can leave a person feeling uncomfortable and nervous at the same time. Change can turn an individual's life upside down, and is one of the reasons why today there is still so much stereotyping relating to change all throughout the world. Life is currently lived in an "age of discontinuity", with the only constant in life being change, taxes and death. Back in the 1950s, the past was a pretty effective indicator of how the future would be. Tomorrow was essentially an extension of yesterday and today. This is no longer the case, because change happens on a daily basis and is becoming increasingly faster (Van Tonder, 2004).

Change is something that forces people out of their comfort zones. It is sometimes unfair and inconsiderate and does not respect human beings. Change is almost like a marriage, for better or for worse and requires an adjustment period varying from one individual to the next. It is uncomfortable to change from one state, the status quo to the next or new way of completing tasks or doing things, because it influences the level of control people have over their lives (Dent & Barry, 2004). Change has a rippling effect on those who will not let go of the past. Even a roller coaster ride can be extreme fun if one knows when to bend to the side to create new balance. In many instances, change is not facilitated by the statement "just hang in there" but with the statement "you can make it." Change cannot be fixed by crying, worrying or mental tread milling. Change is accepted by those victorious individuals and not by people who allow themselves to become the "victims" of change - this is a personal choice (Robbins, 2005).

The aim of this chapter is to provide a clear understanding of what change and change management are and ultimately to answer the following research questions:

1) What is change?
2) What is organisational change?
3) Why is it necessary to manage change in large organisations?

2.2 UNDERSTANDING CHANGE

Change, in general, has always been part of the human condition. Change is happening all around us, especially in recent years. A few examples include increased global competition, technological advancement and declining resources. Some implications of worldwide change may evoke less favourable responses such as global warming, overpopulation, increased ineffectiveness of social institutions and even pollution (St-Amour, 2001). The only noticeable difference regarding change is the pace at which it occurs now, and it is expected to become even faster, affecting every part of life. In many instances, the day and age we live in is changing at such an enormous speed that people sometimes do not have time to adapt and adjust before the next change is upon them. Sometimes change is planned and people have sufficient time to prepare themselves in advance, but in other instances change is unexpected and people have to adjust right on the spot (Laycock, 2002).

Change per se is happening at a much faster pace than it used to in the 1980s and 1990s. Anyone who does not keep up with the pace, will ultimately be left behind and lose his/her competitive advantage in the business world. Those who keep abreast of the pace of change will constantly reap the benefits (van Tonder, 2004).

2.2.1 Defining change

There are many definitions of change is and most of which are interlinked.

Ford and Ford (1994) see change as a sequence of activities emanating from disturbances in the stable force field surrounding the organisation, object or situation. Van de Ven and Poole (1995, p. 511) define change by looking at its end result: “Change, one type of event, is an empirical observation of difference in form, quality or state over time in an organisational entity.” Change can be viewed from an individual perspective, because new human behaviour may be required. It can also be seen from a business perspective, because it may imply new business processes or systems. From a societal perspective it can be viewed in terms of changes in public policies or legislation (Worren, Ruddle & Moore, 1999).

This indicates that change occurs in all areas of life and that change should be understood in the context in which it occurs.

Powell (2002, p. 2) has the following to say about the shift in new technology: “It will be messy and it will be confusing, and we will get a lot of it wrong and we’ll have to start over, but that is the creative process that is the evolutionary process.” Planned change is usually linear, because it focuses on all the steps in sequential order right through to the final step. However, change is usually implemented in just the opposite way - it is messy, timelines are not always met, people do not co-operate and unexpected decisions are made because of unanticipated consequences. Implementing change is not always a smooth process. Even though this process is usually messy, it is crucial to have a plan in place in order to remain focused on the change goal and end state (Burke, 2002).

Van Tonder (2004) provides a generic view by indicating that change can be seen as a process, and change is evident in the difference of a certain state. This indicates that change cannot be implemented successfully overnight. It is a process that requires a lot of preplanning before entering the execution phase. According to Robbins (2005), change occurs when something becomes different and planned change involves change activities that are intentional and goal oriented. Planned change is ultimately concerned with changing individual behaviour in order to respond to the changes the environment generates.

No change definition is perfect or even beyond criticism, but each definition ultimately has the same idea, namely that transformation of some or other kind takes place. It is evident from the above that most definitions of change contain some of the following: Planned or unplanned, disturbance, difference in form, shift, opposite and messy.

2.3 UNDERSTANDING ORGANISATIONAL CHANGE

Organisational change has a profound impact on the individuals in the organisation. Today, most organisations have accepted that the only constant is change. Continuous change is often viewed as “white-water turbulence” that forces the leaders of an organisation to examine the vision, values and essence of what they stand for (Beckhard & Pitchard, 1992).

According to Burke (2002), after the mid-1900s more researchers started focusing their energy and research capabilities on organisational change, and there was a wealth of literature on organisational, societal and cultural change. Through studying the management of organisational change it was found that the focus of past literature findings were sometimes not aligned with the essence of organisational change. Many organisations fell into the trap of defining and understanding change as “organisational change versus individual change.” In so doing, many organisations failed to implement change successfully in the past because organisational and individual change should not have been weighed up against each other or seen as competing with each other (Burke, 2002). A lack of participation, commitment, communication and involvement on the part of employees on account of the above misfit had serious repercussions for organisations (Beer & Nohria, 2000). St-Amor (2001) supports the above by indicating that most changing organisations struggle immensely with people-related issues because of the misalignment of different functional realities relating to management moving to the desired state at their own individual pace without moving together as a leadership team. Misalignment between different personal responses to change may lead to confusion, lack of commitment and high levels of resistance to change across the organisation. Misalignment may have a negative impact on individuals and the organisations.

Every employee needs to face and deal with change in his or her own way. This also depends on the impact change has on each employee, as well as on his or her beliefs, values and norms which are influenced by it. Every organisation is affected by the context of individual-level change, since the rate of organisational change is determined by the rate at which individuals deal with, accept and support the change (Naisbitt & Aburdene, 1990). The interdependence between individual and organisational change is currently unknown because many managers are still unaware of the need to focus on individuals in the change process, and therefore organisations repeatedly fail (Beer & Nohria, 2000).

Managing organisational change requires a clear understanding of what organisational change is, hence the importance of defining the term “organisational change” properly.

2.3.1 Defining organisational change

Although change was defined in the previous section it is necessary to understand the meaning of organisational change because focus of this research is in the context of organisational change.

Organisational change is literally as old as organisations themselves. The first change recorded can be traced back to the Old Testament in the Christian Bible. During the biblical times, pyramidal organisations were formed where many changes took place. The first scientific research conducted on organisational change was back in the late 1800s and early 1900s. This research was done by Taylor (1911). In his book, *Scientific Management*, Taylor (1911) explained an organisation in terms of a machine, because he was studying a manufacturing organisation. He made use of many scientific terms and principles and labelled his research *"scientific management."* His scientific research approach included the following five principles: data gathering, worker selection and development, the integration of science, the trained worker and re-division of the work of business. Taylor (1911) proved numerous times that his research approach was significant. Many organisations that followed his approach when dealing with change failed because managers applied the approach inappropriately to gain quick successes. Taylor's approach then became more controversial; some organisations supported his approach strongly while others viewed it as insignificant. It is interesting to note that Taylor was viewed as the first real "change management theorist" in history. He believed strongly that adapting a rational, scientific approach would provide the best opportunity for change (Taylor, 1911).

Plant (1987) conducted extensive research on organisational change, employee commitment and leadership. He indicated that change is undoubtedly painful process for any organisation, no matter how small or large. As soon as change impacts on core values and significant established systems with which employees are comfortable, emotional and technical factors came into play. Porras and Robertson (1992, p. 723) provide the following comprehensive definition of organisational change: "Change is a set of behavioural science-based theories, values, strategies and techniques aimed at the planned change of the organisational work setting for the purpose of enhancing individual development and improving organisational performance through the alteration of organisational members' on-the-job behaviours." From this definition, it is clear that a shift takes place. This may refer to

current organisational behaviour shifting to the ideal organisational performance by improving certain capabilities and skills of employees in the organisation.

According to research conducted by Moran and Brightman (2000), the following observations were made: Firstly, change is nonlinear, and often seems confusing and endless. Secondly, change interlinks multiple improvements in organisations. Thirdly, change is a top-down and bottom-up process. In cases where change is top down, clear direction is provided, whereas the bottom-up approach caters for participation and generates support. Lastly, organisational change is a key personal dimension because the more significant organisational change is, the more crucial it becomes to create opportunities for employees to revise and adjust their own values and beliefs accordingly (Moran & Brightman, 2000).

Organisational change mainly occurs in the context of failure or adjustment of some or other kind. In organisations, change involves the difference in the way an organisation functions, who its members and leaders are, what form it takes and/or how it allocates its resources (Huber & Glick, 1993). According to St-Amour (2001), organisational change occurs mostly as a result of mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining. Laycock (2002) argues that organisational change would have never emerged or would not have been necessary if individuals had simply done their jobs properly in the first place. Organisational change is usually triggered by the failure of people not doing what is expected of them, which leads to the organisation having to adapt continuously (Laycock, 2002). The above can also be considered a performance management issue, which does not necessarily result in organisational change, depending on the need for change.

The above definitions show that the reasons for organisational change can be debated and the reasons for managing organisational change differ from one organisation to the next. The views of these researchers indicate that organisational change is confusing but allows for realignment of values and beliefs, promotes employee involvement and allows the organisation to improve itself in order to maintain a competitive advantage in the market.

Changes in an organisation ultimately mean a change in the way the organisation functions, who its members and leaders are, what form it takes and how it allocates its resources (Huber & Glick, 1993). It is also necessary to focus on the tempo of organisational changes - in other words, on the rhythm and pattern or work activity,

because this will indicate how much and how fast an organisation will have to adapt to changes in order to maintain a competitive advantage (Van de Ven & Poole, 1995). Examining different types of change will provide an understanding of the impact change may have on individuals, because this research study focuses on the "people aspect" of organisational change. Dunphy (1996) developed five properties of change that he believed can be found in any comprehensive theory of change.

These properties are as follows:

1) a basic metaphor of the nature of organisation
2) an analytical framework to understand organisational change processes
3) an ideal change model focusing on effective functioning organisations, that focuses on both direction for change and the values used to assess the successes of implemented change interventions
4) an intervention theory that specifies exactly when, where and how to move an organisation to the ideal end state
5) a definition of the role of a change agent

According to Kuhn (1996), it is essential to understand that even when these five properties are the same across two organisations, there will be distinct differences in the change process, because this will depend on various elements, such as culture, values, vision, number of employees and levels of resistance in the organisation concerned.

Dunphy's (1996) five properties can be linked to two types of organisational changes, namely episodic or continuous change. Porras and Silvers (1991) suggest that episodic or continuous change usually emerges in organisations. These two types of change will be discussed to provide the reader with a clear understanding of the difference between the two.

Change in the business world is accelerating at a considerable rate. In the 21st century, organisations are dealing with vertical integrations, mergers, new technologies, diagnosis-related groups, re-engineering, total quality management, and so on. Past organisational successes do not guarantee future performance any longer. In the face of the intense competition in the business world today, simply meeting past performance will not result in the level of improvement in order to maintain a competitive advantage (Harrington & Harrington, 1996). If organisations

are to survive the next decade, it is critical to rethink and re-evaluate all their structures, products, processes and markets.

In summary, the most applicable reasons for undergoing organisational change relating to this research project were provided by Huber and Glick (1993). They indicated that change generally occurs in the context of failure or adjustment of some sort or other, and that by changing the way in which the organisation functions, it influences who its leaders are, what form it takes and/or how it allocates its resources. The reason for transforming the procurement and supply chain function of the organisation involved in this research project was restructuring and therefore the reasons for change indicated by St-Amour (2001) also apply. According to St-Amour (2001) organisational change occurs mostly because of mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining.

2.3.2 Types of organisational change

2.3.2.1 Episodic change

The phrase "episodic change" is used to group together organisational changes that tend to be irregular, alternating, and planned together. The assumption is that episodic change occurs during periods of disagreement when organisations are moving away from their current state (Mintzberg & Westley, 1992).

In general, a misalignment between the true nature of the current status and the perceived working environment by employees can lead to change. Episodic change tends to be uncommon; slower because of its extremely wide scope; less complete because it is seldom fully implemented, more strategic in content, more deliberate and formal than emergent change; more disruptive because programmes are replaced rather than altered; and initiated at higher levels in the organisation (Mintzberg & Westley 1992). This form of change is labelled episodic, mainly because it tends to occur in distinct periods during which shifts are caused by external events such as technological changes or a change in key individuals in the organisation (Weick & Quinn, 1999). Episodic change has a generic description that is applicable across all organisations and their diversities. If organisational change generally occurs in the context of failure to adapt, then the ideal organisation is one that continuously adapts (Weick & Quinn, 1999).

By linking Dunphy's (1996) five properties of change to episodic change, a well-rounded understanding of change theory in any organisation can be provided. Firstly, the analytical framework, which focuses on the episodic change process is usually dramatic and driven externally and occurs in an organisation failing to adapt its deep structure to a changing environment (Ford & Ford, 1994). Secondly, basic metaphors for organising episodic change indicate that organisations are inertial, and change is infrequent, discontinuous and intentional (Tushman & O'Reilly, 1996). Thirdly, the ideal episodic organisation is capable of adapting continuously. An ideal model should be in place to guide the organisation and its values to adapt accordingly throughout. This is extremely challenging but it is imperative that the implemented change model is revised frequently to ensure that it provides the organisation with direction and assist human resources to adjust accordingly (Brown & Eisenhardt, 1997). Fourthly, intervention theory in episodic change is known as "Lewinian", which means that it is linear, progressive and goal seeking and requires external interventions (Brown & Eisenhardt, 1997).

Lewin's (1951) change model remains central to episodic change today still, because the fact that change passes through a contemplation stage, means that people change before any alterations can be observed through their behaviour (Schein, 1996). Lastly, the primary role of a change agent in episodic change is to ultimately create change. The change agent focuses on internal processes and seeks points of central leverage. These individuals speak differently about the change - they communicate alternatives, reinterpret revolutionary triggers and build coordination and commitment (Kotter, 1996).

To summarise, episodic change linked to Dunphy's (1996) five properties of change provides a clear picture of how infrequent discontinuous change impacts on different areas of an organisation and also proposes how an organisation should function when faced with episodic change. Weick and Quinn (1999) indicate that the above properties linked to episodic change should be considered suggestive instead of definitive because some organisations may always agree that episodic change has a different impact on them than on others.

2.3.2.2 Continuous change

Continuous change refers to organisational changes that are grouped together and tend to be growing and increasing (Orlikowski, 1996). A common assumption made by numerous researchers in the past is that change is emergent or growing The one most distinctive quality of continuous change is that small continuous adjustments, created at the same time across units or divisions, can cumulate and create significant change. This can also refer to the well-known systems theory that states that the whole is better than the sum of its parts. Small, yet significant, changes in the organisation over a period of time may escalate, creating enormous change at the end. This process seems to be infinite (Orlikowski, 1996).

Organisations that are compatible with regard to continuous change include those built on the ideas of improvisation, translation and learning. These types of organisations usually have a number of change agents or organisational development (OD) practitioners who continuously manage change in the organisation. These people are generally regarded as creative individuals driving the change processes. This usually also involves skills development to ensure the employees are equipped with the necessary skills to stay in touch with the latest technological advances (Levinthal & March, 1993). The distinctive quality of continuous change lies in the idea that small continuous adjustments, created simultaneously across units, can create substantial change.

The following conclusions were drawn in linking continuous change to Dunphy's (1996) five properties: Firstly, the metaphor for organising change is hidden in conceptualisations of continuous change and not the reciprocal metaphor associated with episodic change. The dynamics are different in the sense that in continuous change everything changes all the time (Ford & Ford, 1994). Change is therefore constant, evolving and cumulative (Weick & Quinn, 1999). Secondly, change is a pattern of endless modifications in work processes with regard to its analytical framework. It is driven by organisational instability. Changes across the organisation cumulate continuously (Vaughan, 1996). Thirdly, the ideal organisation is capable of continuous adaptation. As mentioned earlier, because this is extremely difficult change models and interventions should be reviewed continuously (Brown & Eisenhardt, 1997). Fourthly, with continuous change, intervention theory focuses on the redirection of change that is already under way. According to Lewin (1951), change equals confusion, without an end state. Lewin's (1951) change process follows the stages evident in continuous change, that is: freeze, possessing patterns

through maps and stories; rebalance - reinterpret, relabel and resequence patterns; unfreeze - improvise through learning in ways that are more mindful.

Episodic and continuous change indicated that change starts with the failure to adapt and that it never really starts because it never stops. Hence, in order to understand organisational change, one must first comprehend the organisation's short- falls, contents and interdependencies. The focus should probably fall more on "changing" instead of "change", since this would refer to the fact that change was never "not there" and that it is ongoing (Weick & Quinn, 1999).

Various change models focusing mainly on the process/ stages of change have been developed. These will be explored next in order to grasp and define certain processes and stages as well as the meaning thereof in the context of human behaviour.

2.3.3 Organisational change models

2.3.3.1 Defining organisational change models

When an organisation decides to make a strategic change, a planning process is usually the next step, ultimately resulting in the implementation of the proposed change. The proposed change may relate to changing the way the work is done or clarifying reporting relationships through restructuring. According to Bridges (2000), organisations do not usually apply the same level of planning to personal transitions, which refers to the time it takes for individuals to accept and deal with change. The organisation needs to move from the status quo to the desired change by means of a well-designed process in order to ensure that the transition is as smooth as possible for those influenced by the change.

Over the years, many organisational models, focusing on different steps in a transition process, have been developed by researchers in the field of change. These models included organisational culture models, communication models and organisational effectiveness models. Before introducing a few of the models on change it is imperative to understand what an organisational model is and why it is necessary to use one when implementing change. Burke (2002, p. 176) defines an organisational model as a "standard to emulate, to imitate, or with which to compare" or "representation to show the construction or appearance of something."

A model is usually designed to assist the organisation to categorise, enhance understanding, interpret data, provide a common language and guide the action for change. Change models or frameworks were developed as early as the 1950s, shortly after World War II. According to Ford (1999), a model can come in many shapes, sizes, and styles. A model is not the real world but merely a human construct to help people better understand real world systems. In general, all models have an information input, an information processor, and an output of expected results.

2.3.3.2 Types of change models

The psychologist, Kurt Lewin, published two essays on behavioural change. Lewin's (1951) classic view of change focused on the role and context of the current state and of the end state after change has occurred. Lewin then compared the role and context of both scenarios and built on the outcome. This approach was his so-called "field theory" and is a well-known change model. Influencing structures, behaviour and/or systems in organisations may take years or even decades. Organisations need to find their own internal change dynamics in order to maintain synchronisation and control which is suited to their own needs. Lewin's three-step model supports the need for organisations to maintain control in the process of change. His model of organisational change focuses on unfreezing, moving and refreezing and includes a dynamic psychological process (Lewin, 1951). He recognised change at both individual and group levels, mainly because of his strong belief that organisational change is a relative concept and that there are indeed various levels of change that need to be tackled in an organisation (Lewin, 1951). Lewin's research caused many individuals to look into the concepts "change management and organisation development (OD)" as their curiosity was aroused. Friedlander and Brown (1974) provided a framework for understanding organisational change. They referred to two basic approaches: people and technology. Some years later Plant (1987) provided a model grounded in an open system theory. This model focused specifically on how input from the external environment is transformed into output-organisational performance. In essence, Porras's model is a clear description of how an organisation functions and what key elements are evident in its operations.

Another famous model is the transition model of Bridges (1991). The transition model is widely accepted by individuals and organisations because it is easy to use by understanding the change and its impacts. The model illustrates that the transition starts with the letting-go process, followed by the neutral zone which is characterised by low stability, personal stress and conflict. The last step focuses on the new

beginning, by leaning towards the future. This model has been widely used by many organisations and is seen as valuable and significant (Bridges, 2000).

Two other well-known change models are the action research model and the contemporary action research model (Cummings & Worley, 2001). The action research model includes eight steps of a change process and is also known as a cyclical process in which initial research about organisations provides information to guide further action. The main objective of this model is to help specific organisations to implement planned change and develop general knowledge that can be applied in other settings (Burke, 2002). These steps include: identification of the problem, consultation between the client and the behavioural science expert, data gathering process and preliminary diagnosis, feedback to the specific client, a joint diagnosis of the problem, a joint action planning process, implementation of the desired state and data gathering after implementation to measure success. In essence this model places significant emphasis on data gathering and diagnosis prior to action planning or implementation, as well a comprehensive evaluation process after action has taken place (Cummings & Worley, 2001).

The contemporary action research model underlines the most current approaches to planned change. During the development of this model, the focus was on movement from smaller subunits in organisations to total systems. Applying this model creates social change and innovation mostly demonstrated in global social change projects (Cummings & Worley, 2001). Throughout the development of different change models, many theorists offered new insights into these concepts. In focusing on OD, theorists agreed that an organisation should be viewed as an open system. This means that an organisation exists in constant interaction with its external environment and between its own internal elements. Organisational effectiveness can only be achieved if there is a significant degree of congruence between the organisation and various elements in the open system (Spector, 2007).

In essence, change models assist organisations to implement change in a more organised manner, and in many instances to gain an understanding of external market influences. Most models focus on human behaviour in the organisation. Each organisation should choose a model appropriate to its circumstances, size, the number of employees affected and internal and external influences.

2.4 UNDERSTANDING CHANGE MANAGEMENT

Successful change demands more than only new processes, structures or technology - it also requires the engagement and participation of people. Change management in an organisational context provides a framework for managing the people side of change. Even though change management has come a long way in the last ten years, many may wonder whether it is really taken seriously (Hutton, 1994). Change management is a painful process for any organisation. When change impacts on the core values of an organisation it is important to consider both the emotional and technical dimensions involved. Some of the primary dimensions of change management is time, the content, the context and the actual process of change (Newman, 2000). Today, change management as a discipline has become part of the mainstream business.

Change does not just happen - it is driven by a reason, thoughts or ideas. Change can impact on an organisation from outside or inside. If an organisation is influenced by external factors that require it to change, it may relate to, *inter alia,* market change, political events or natural disasters. Internally, an organisation may, for example, be faced with budget costs, interdepartmental conflicts, new systems or processes (Potts & Lamarsh, 2004).

According to Stassen (2006), many managers argue that they are individuals themselves and they know exactly what the needs, issues and concerns of people are during transformation. This is the first mistake managers can make. People have their own needs, fears, concerns and problems and it is naïve to think that people can be managed in the same way during transformation – hence the need to have change management specialists on board to manage the people side of change (Stassen, 2006). Owing to the fact that change may aggravate many emotional and psychological issues, it is recommended that the expertise of an industrial psychologist be used to drive change management (Stassen, 2006). The concept and role of an industrial psychologist were discussed in Chapter 1.

In many instances industrial psychologists act as change management specialists in organisations. This is because they are regarded as the most suitable individuals for the task, for the simple reason that they understand that different people react differently to change, and everyone has fundamental needs that have to be met. In addition, change often involves loss, expectations that need to be managed

realistically and fears that have to be dealt with appropriately (Guion & Gottier, 1965). Change management specialists understand the fact that some individuals anticipate a better future but regret what will be left behind, and some want to turn around and go back to what they are used to. Positive and negative behaviour should therefore be managed in a way best suited to the organisation and its culture (Stassen, 2006).

According to Hutton (1994), many employees travel the journey and in an effort to focus on the same vision, sweating through rough times during a transformation process, each experiences it differently. Some people see change as an adventure, others as a death sentence, and others again simply as a task that will be over in no time, with no impact whatsoever.

Even though every person is on his or her own journey, employees affected by organisational transformation cannot succeed in reaching the common vision developed by the organisation if each individual does not contribute something towards the processes to achieve those common stated goals. Some employees contribute patience and moral support throughout, others have courage and faith and others again add humour or play a significant role by motivating the employees (Hutton, 1994). According to Schalk, Campbell and Freese (1998), employees can only contribute significantly when they feel supported by their supervisors during the change efforts. Employees are also likely to become less defensive and more willing to become involved when they are supported accordingly (Van Yperen, Van den Berg and Willering, 1999).

Each organisation follows its own processes and methods in managing change effectively and views the successful elements contributing to effective change management differently. The next section focuses on comprehensively defining change management in order to gain an in-depth understanding of the way organisations deal with change.

2.4.1 Defining change management

Porras and Robertson (1992, p. 723) provide the following definition of organisational change: “Change is a set of behavioural science-based theories, values, strategies and techniques aimed at the planned change of the organisational work setting for the purpose of enhancing individual development and improving organisational performance through the alteration of organisational members’ on-the-job

behaviours." According to Hailey (2001), the process of change may take many years in order for it to become a reality with each impacted individual. Hence change does not need to always be all inclusive and can be implemented on smaller scales over periods of time. Doyle, Claydon and Buchanan (2000) disagree about this form of change management because they believe that successful change does not require spreading the milestones in the planning phase of change but rather implementing the change all at once (the "big bang" approach). Quy Nguyen (2001) disagrees with both the above change management approaches by stating that each organisation needs to find its own internal change rhythm that allows for an alternative between rapid and moderately paced change without losing synchronisation or control in the process. Change management can be viewed as a process of continuously renewing the organisation's direction, structures and capabilities in order to satisfy the needs of its internal and external customers (Moran & Brightman, 2000). Mastering techniques on how to manage change are deemed to be important in today's day and age, because marketplaces are changing overnight and technological advancements occur daily. Change management may also refer to effecting changes in a planned and managed or systematic fashion. It involves the effective implementation of new methods and systems in an organisation, which is controlled by the organisation itself (Bolognese, 2002).

It is clear from the above that there are different viewpoints on change management. As indicated earlier, every organisation has different reasons for undergoing change. It would therefore be ideal for each organisation to analyse its own situation and decide which approach would be best to follow. Each organisation is unique and should apply a change model suitable to its environment and conditions.

According to Stassen (2006, p.1) "Change management is like building a dam wall – you can show good progress even when it is done poorly, and by the time your work is really put to test, it is too late to fix it…"

The term "managing change" has at least two meanings. Firstly, it refers to making changes in a planned and managed or systematic fashion. In this instance, the aim would be to more effectively implement new methods and systems in an organisation. The changes to be managed vest within the organisation and are also controlled by it. These internal changes are often triggered by events that occurred outside the organisation or the external environment. A second explanation of managing change refers to the response to changes over which the organisation

exercises little or no control initiated through external factors. Examples would include legislation, social and political turmoil, increased competition in the market and shifting economic trends (Bennis, Benne & Chin, 1969; Hiatt, 2006).

The first time a proposed change is introduced to a group of individuals, it may be experienced differently and cause different reactions towards the message. Some individuals may regard it as a great idea and accept it, while others may agree but be hesitant about the proposed changes. Then there would always be those who do not agree with the proposed changes and will argue that it is impossible and will never work. These are the different schools of initial reaction (Kotter, 1990). All change is stressful and while some employees find it less stressful, others may even develop major health problems because of change. Many organisations follow the general change cycle developed by Kotter (1990). The phases in this cycle are as follows:

1) Establish a sense of urgency.
2) Create a coalition.
3) Develop a clear vision.
4) Share the vision.
5) Empower people to clear obstacles.
6) Secure short-term successes.
7) Consolidate and keep moving.
8) Anchor the change.

Kotter (1990) emphasises the importance of the chronological order of these phases and the fact that momentum should be maintained when implementing change. These change phases are known as “ideal” phases in a change cycle, and by following these phases change will probably be successfully implemented. According to Kotter (1990) even if a perfect change process is followed there will always be elements of concern and stress among individuals. He emphasises that it is essential for people to work through the stages of change at their own pace, in order to lessen the stress and pressures of reaching the required end state (Kotter, 1990). Stress is not all bad - a moderate level of stress can be regarded as beneficial in any change process and is seen as normal and healthy. Firstly, any improvement in any organisation that involves change affects the individual involved in change - no one can ignore this fact. Secondly, changes that seem to be minor to top management are often viewed as major change by the individuals who are affected across the organisation. Hence, employees struggling with accepting the change may experience stress levels that could disrupt people’s expectations of them. Lastly,

people who are overly stressed or reach a stage where burnout is experienced cannot focus their full attention or energy on their work (Kotter, 1990).

Each person has a certain role to fulfil in the change process (Hutton, 1994). In managing change, certain pillars need to be formed prior to the process that will serve as the foundation for managing change. These pillars are change goals, leadership, the change and journey plan, guidance, equipment and tools on how to reach the desired end state (Hutton, 1994). According to Schalk et al. (1999), managing change always starts with the individual. The individual should ensure that he or she understands and believes in the vision before he or she can join the journey with their peers.

Each organisation should choose its own methodology when managing change, this methodology should be most applicable to its organisational culture and climate. The impact of the change, size of the organisation and current context are some of the factors to consider when developing a change management approach. Suitable interventions should be designed to manage resistance to change depending on the reasons for change. The sooner change resistances are detected, the sooner mechanisms can be put in place to manage it accordingly.

2.4.2 Resistance to and readiness for change

Before focusing on resistance to or readiness for change, it is necessary to understand the difference between the two concepts. Resistance and readiness are not opposites – instead, they represent complex states, influenced by various organisational and individual factors. When faced with proposed change, the nature of change is evaluated and its impact on the organisation and on individuals are evaluated. From those evaluations, the following behaviours usually emerge - adapt to the change or resist the change (Self, 2007). According to Self (2007), organisations should focus on creating readiness for change instead of attempting to overcome resistance to it. In this section, the focus will be on understanding the core difference between resistance to change and readiness for change and possible methods to use in creating readiness for change.

2.4.2.1 Resistance to change

Organisational change efforts almost always involves some form of employee resistance. Even though experienced managers are generally aware of this fact, many still fail to take the time to systemically assess who might resist the change initiative and for what reasons. People affected by organisational change usually experience some emotional turmoil. Even changes that appear to be positive involve loss and uncertainty (Kotter & Schlesinger, 2008). Many individuals resist change because it is disruptive - it awakens fears about the future and the unknown and is unpleasant.

Various earlier researchers defined the concept "employee resistance." Zander (1950, cited in Dent & Goldberg, 1999, p.34) defined resistance to change as: "Behaviour which is intended to protect an individual from the effects of real or imagined change." Folger and Skarlicki (1999, p. 36) believed that resistance to change is: "Employee behaviour that seeks to challenge, disrupt, or invert prevailing assumptions, discourses, and power relations." Piderit (2000, p. 784) believed that the definition of the term "resistance" should have a far broader scope. She indicated that a review of past empirical research reveals three different emphases in conceptualisations of resistance - as a cognitive state, as an emotional state and as behaviour. Many "resistance to change" definitions relate to some or other kind of disruption known to people. Change has become a key part of organisational dynamics; people resisting the change will ultimately be left behind in the corporate world (Bolognese, 2002).

A well-known international organisation, known as Prosci, specialising in change management, conducted research in 2003, where 288 organisations participated in rating their ability to change (Hiatt, 2006). Participants were requested to complete a questionnaire, where they had to select the answer most applicable to them on a scale from 1 to 5, with 1 being the most rigidly opposed to change and 5 being in favour of change. The findings were as follow: Only a fifth of the participants representing the 288 organisations rated their organisation as a 4 or 5, indicating a low level of adaptability to change. More than 40% of participants rated their organisation resistant to change, with a score of either 2 or 1. These results indicate that most individuals are resistant to change, simply because it is human nature, and people feel uncomfortable when taken out of their comfort zone or when exposed to the unknown (Hiatt, 2006).

Scott and Jaffe (1988) highlighted the following four stages of reaction towards change: initial denial, resistance, gradual exploration and commitment. These stages were confirmed by Kotter (1990), because most employees move from a stage of total resistance and denial to a stage of commitment, acceptance and integration. In general, organisations seem to struggle in assisting employees moving from the stage of resistance to the next stage. Darling (1993) indicated that resistance to change is a natural, normal response since change usually involves going from the unknown to the known. In order for management to successfully lead an organisation through change it is essential to balance individual and organisational needs because organisational change is driven by personal change (Spiker & Lesser, 1995). Today, most organisational change programmes are directed towards managing resistance to change, because it is deemed to be the most common problem management faces when implementing change (Waldersee & Griffiths, 1997). According to these authors, resistance is resisted instead of being purposefully managed in many organisations.

Managing resistance to change is therefore crucial to ensure that change is implemented successfully, because the affected employees promote the change and will ultimately determine the success rate of the implemented change.

Resistance to change can be viewed as action taken by individuals and groups when it is perceived that the change that occurs could be a threat to them. Resistance may assume many forms - active or passive, overt or covert, individual or organisational, aggressive or even timid. Change is seen as something different that is believed to be for the better, even if there is no proof that the benefits of the change will be significant. People always want to see proof before believing, hence the famous saying “seeing is believing” (Schuler, 2003).

The reasons why people resist organisational change include some of the following: firstly, individuals resist change when they do not understand the implications of the proposed change. This usually occurs because of a lack of trust between the people initialising change and the employees (Argyris, 1970).

Secondly, the individuals influenced by the change believe they will lose something of value as a result of the change, and in such instances people will focus on their own best interests and not those of the organisation (Miles, 1978).

Thirdly, one of the best-known reasons why people resist change is due to their fear that they will not be able to develop the new skills and behaviours that will be required of them (Miles, 1978).

Finally, when individuals assess the situation differently from managers and cannot see the real benefits of the change for the organisation, resistance may set in (Kotter & Schlesinger, 2008). Organisational change may also require people to change too much too quickly.

According to Drucker (1954), a major obstacle to organisational growth is managers' inability to change their attitudes and behaviour as rapidly as the organisation requires. Even when managers do understand the need for change, they are still sometimes emotionally unable to make the transition (Kotter & Schlesinger, 2008).

If an organisation can guarantee benefits beforehand, employees would be more accepting of the changes. Most people prefer to remain connected to those they know, those who have taught them and those with whom they are familiar. If certain influential colleagues resist change, the individuals working closely with them will probably also resist it, because most people have a need to fit in (Schuler, 2003). Since change inevitably threatens the status quo, many leaders in the organisation may also become resistant to it because it could imply that organisational structures have to change and this will impact on their value to the organisation. This then creates the potential for other employees to gain more power at the expense of the current leaders. Internal politics suggest that the drive for change usually comes from employees who are new to the organisation and others removed from the main power structure. Often when leaders were forced to introduce change, they tended to implement first-order change because radical change (second-order change) was too threatening. Power struggles in an organisation will largely determine the speed and the quantity of change (Robbins, 2005).

There are thus many reasons why people resist change, and these should be assessed in order to ensure resistance to change is managed accordingly. In so doing, methods should be customised to ensure the success of each organisation.

2.4.2.2 Organisational resistance to change

An organisation may resist change because it is change-fatigued – in other words change is or has been happening throughout the organisation and it is therefore exhausted by all the change initiatives. The organisation may also be in a position, either financially, culturally or technologically, of being unfit to manage or welcome any change initiatives at certain stages (Del Val & Fuentes, 2003). Organisational resistance to change can be seen as a phenomenon that affects the change process in that it delays the start of the process, hinders the implementation of the change and increases the costs throughout (Ansoff, 1990). Van de Ven and Poole (1995) argue that when organisations find themselves in these difficult positions mentioned above and do not welcome change initiatives, it is actually then that they should consider changing for the better. Organisational resistance to change can also be seen as any conduct that tries to keep the status quo - in other words, the organisations will do anything in their power to avoid change (Maurer, 1996a, 1996b). In general, resistance is not always deemed to be negative, because change is not always inherently beneficial for an organisation. Resistance can also point out to managers those dimensions that are not properly considered in a change process (Waddell & Sohal, 1998).

Research conducted by Rumelt (1995), indicated that organisational resistance to change can be divided into five groups. The first group refers to the perception of the organisation's need to change. In the formulation phase, this refers to distorted perception, interpretation and vague strategic priorities. The second group refers to low motivation for the change on account of, *inter alia,* the costs involved, past failures, and different organisational interests or priorities. The third group of organisational resistance focuses on a lack of creative responses. Diminishing creative responses may be caused by the fact that the change will effect complex environmental changes, resignations of key personnel or lead to an inadequate strategic organisational vision. The fourth group focuses on resistance in driving the implementation stage. The first form of resistance that usually occurs in this group relates to political or cultural deadlock to change because of a possible misalignment between change values and organisational values. The last group focuses on leadership inaction, caused by, *inter alia,* leaders being uncertain about or afraid to change embedded routines, collective action problems or cynicism (Rumelt, 1995).

All of these factors lead to organisations resisting change, and through organisational resistance to change, individuals in the organisation resist change (Klein & Sorra, 1996). The impact on individuals and the reasons for individual resistance to change are explored next.

2.4.2.3 Individual resistance to change

According to Hullman (1995), there are many reasons why individuals resist change. He focused his research on the individual's paradigm regarding change resistance and suggested the following reasons why employees may resist change:

- Individuals are satisfied with the status quo because their current needs are being met.
- Individuals see organisational change as the main threat in their lives.
- Individuals may understand the increase in benefits and decrease in future costs if change is implemented, but that cost outweighs the potential benefits to them.
- Individuals may be resistant on account of feeling that management are using the change process for their own personal benefit and not for the benefit of the organisation.
- Employees are pessimistic about change implementation being likely to succeed.

In many instances employee resistance is created as a result of management actions on the way they pursue change. Employees who are regarded as passionate, optimistic and in favour of proposed change should be encouraged to engage with people resistant to the change and explain the reasons why it is necessary to change the status quo to a more favourable one. If employees do not feel involved, they could easily become resistant. According to Spector (2007), in order to understand how resistance to change should be dealt with in different areas of the business, the voice of the employees should not be excluded from the change process as they are the ones who know their customers, co-workers, demands and challenges in the organisation, which management may not be involved with on a daily basis.

In a longitudinal study of 500 large organisations, it was found that employee resistance is the most frequently cited problem encountered by management when implementing change (Waldersee & Griffiths, 1997). More than half the organisations that participated in this survey indicated that they experience difficulties with employees' resistance to change. Successfully managing resistance

to change is usually one of the most challenging factors facing the change initiators in an organisational change process (O'Connor, 1993). One should bear in mind that organisational change is driven by personal change and that the success of organisational change depends on individual (Evans, 1994). According to Kyle (1993), changing individual resistance to change depends on two related factors. Firstly, the degree to which an individual has control over the change and his or her ability to start, modify and stop the change process are vital. Secondly, the degree of impact the change has on individuals will determine how resistant employees become. During organisational change, individuals usually create their own interpretations of what is going to happen, how they perceive themselves and what others are thinking or intending (Coghlan, 1993).

Through individuals' own interpretations and perceptions, feelings of anger, denial or loss and grief are usually experienced. These emotions emerge as individuals may realise that the way in which they have done their work in the past may change and therefore changes and losses in role identity may lead to anger, sadness and anxiety, amongst other things (Sullivan & Guntzelman, 1991). Resistance occurs when individuals fail to adapt emotionally and hence emotions can be regarded as one of the key intervening variables (Sekaran, 1992).

Hiatt (2006) indicated that in research undertaken by the company, Prosci, the five primary reasons for employee and manager resistance to change were caused by a lack of understanding of the vision of the organisation; fear of the unknown; negative previous experiences with change; new competencies to be learned; new technology to be introduced by the change and the fear of employees losing their jobs. Managers however, were mostly opposed to change if they feared losing power and control, work overload in the long run, lack of skills to manage and drive the change process and disagreement and scepticism about the new way of doing business (Hiatt, 2006).

All of the above factors play a critical role in people unprepared for change. Questions such as, how to manage resistance to change and what it takes for people to become ready for change will be discussed in the sections to follow.

2.4.2.4 Managing resistance to change

There are various ways in which people can be helped to cope with change. Some of these include providing them with information about the need for change, possible benefits for the organisation, clear information on the processes, tools and time lines. Employees should be allowed to plan their own journey (Recklies, 2001). According to Hutton (1994) people cope much better with change if they were involved in generating it. It is therefore crucial to involve people as much as possible from the outset to make them feel part of the decision-making processes. People can easily form a sense of ownership when they understand why changes are necessary. Once all employees agree upon the way forward in managing the change, they will automatically figure out for themselves how to realise the goals. When a person becomes concerned about something, it helps to talk to someone and express feelings and emotions (Recklies, 2001).

When employees receive support for their ideas, they may be less resistant to the change. Employees receiving rewards or recognition for their involvement are more likely to act voluntarily in support of the change, which will lead to overall organisational effectiveness as well (Mintzberg & Wesley, 1992). Research by Bocchino (1993) indicated that the creation of an atmosphere in which trustful communication and collaboration can take place is essential for achieving change goals. Trust in management may also reduce feelings of uncertainty and a lack of information about the change. Furthermore, employees who trust management may support managerial values and thus tend to react more positively to the proposed changes (Martin, 1998). Other studies suggested that organisational change efforts could be more successful if employees felt supported during the change efforts. According to Eby, Adams, Russel and Gaby (2000), a work environment conducive to innovation and change is usually receptive to organisational change efforts. In instances where employees have previously been involved in planning and implementing change, this could help to reduce resistance to change and encourage employee commitment to it (Eby *et al*., 2000). Employees' trust, support for improvement and perceptions of managing organisational resistance to change can help to facilitate all change efforts. Few studies have gathered empirical data on changing attitudes before and after organisational change. Positive employee attitudes make the task of managing resistance to change less complex, and change initiators can then directly focus on ensuring that employees are ready to change, instead of managing resistance all the way (Weber & Weber, 2001).

According to Kotter and Schlesinger (2008), many managers underestimate the variety of ways in which people may react to organisational change. These authors suggested the following ways in which managers could manage resistance to change:

- **Education and communication.** One of the most common ways to overcome resistance to change is to educate the individuals concerned about the change beforehand. Communication of ideas helps people to see the need for change. This process could involve one-on-one discussions, presentations to groups, memos, reports and newsletters.
- **Participation and involvement:** If change initiators involve the relevant individuals in the design and implementation process of the change initiative, resistance could be prevented.
- **Facilitation and support:** Another way in which managers can deal with resistance to change is by regularly being supportive and re-emphasising their support for their employees. Facilitation could include providing training for new skills or simply listening to employees by means of focus group sessions.
- **Negotiation and agreement:** Incentives could be offered to active individuals with the potential to become involved in the change process. A negotiated agreement could be established between the change initiator and this person or party in order to obtain his or her buy in and commitment to the process.
- **Manipulation and co-optation:** In some instance, managers may also resort to covert attempts to influence others. Manipulation in this context refers to the selective use of information and the conscious structuring of events. Co-option is one common form of manipulation and refers to providing an individual with a crucial role in the change process because this could lead to the resistant individuals feeling valued and involved.
- **Explicit and implicit coercion.** Finally, managers can deal with resistance coercively. In this instance, people are forced to accept the change by explicitly or implicitly threatening the individuals involved (with the loss of jobs or promotion possibilities) (Kotter & Schlesinger, 2008).

The above strategies, available to managers to manage resistance to change, might work in some organisations and cultural settings but would not be relevant or applicable to all organisations. It is therefore necessary to analyse the organisation, its employees and the culture before deciding on a strategy to manage resistance to change (Kotter & Schlesinger, 2008).

Any change process can be dangerous if no one is prepared to listen, because destructive behaviour is more likely under these circumstances. Co-workers can help to prepare employees for change and listen to their fears and concerns. As indicated in chapter 1, it is difficult for change management experts to be everywhere in order for employees to familiarise themselves with these individuals and have easy access to them throughout the transitions period. Co-workers, identified as change agents, could fulfil a significant role by assisting employees to overcome resistance to change more comfortably (Self, 2007).

Employees influenced by change easily blame the manager and change specialist if their questions are not answered on time and in a satisfactory manner or if they received minimal communication throughout the project cycle. Resistance to change cannot be managed if change management specialists do not continuously interact with the employees concerned in order to communicate the benefits, issues, risks, processes and project time lines, among other things, to the employees (Moran & Brightman, 2000). According to McCabe (2004), the best-known approach to managing resistance to change is no longer necessarily the most effective one. Traditionally, the manager, organisational development and / or change management specialist would develop certain strategies or methods and apply them to the larger organisation. If they worked, they were deemed to be great, but if they failed at least they would have tried. This was often the attitude of the managers. The responsibility of ultimately ensuring the successful execution of planned interventions and managing resistance to change lie with the change management specialist and respective managers (McCabe, 2004).

When managing change, it is necessary to understand that a change process can only be learnt a little at a time, like riding a bike - no person riding a bike experiences it in the same way as another person (Robbins, 2005). In managing change throughout the change process, some setbacks may be experienced and may lead to individuals reverting back to their old ways, which is typically the situation in the following examples (Robbins, 2005):

- when top management becomes preoccupied with other crucial issues and lose heart in the change process, not being involved anymore as much as they should be
- when some divisions immediately reject the change initiative, because it will not fit into their environment on account of certain processes, structures and technology

- when the appointment of a new leader may cause a setback because employees have to develop trust all over again since the new leader may have many other ideas and a different vision for the organisation

The question now arises: What should be done to recover from setbacks or slowdowns as resistance to change probably increases? According to Hutton (1994), there is no process that cannot be diagnosed by simply looking at the situation as if one were starting from scratch and then adjust or develop new strategies to manage resistance to change more effectively, even when setbacks do occur. According to McCabe (2004) some individuals will have to start the journey right from the start, in their own minds, at least. With any setback, it is necessary to go back to the basics, review the steps and adjust them if necessary in order to start managing the resistance to the change process all over again. Change management specialists should carefully record all the reasons for the setback in order to ensure that the correct and most suitable interventions are planned to recover from the setback (McCabe, 2004). The earlier setbacks are identified, the better, as the problem/s could snowball and become something extremely difficult to correct later on in the process. It is vital to search intensively for all the answers, and sometimes organisations may find they have diagnosed the problem incorrectly from the start and that the interventions planned are unsuitable (Robbins, 2005).

When reviewing the process, the question “why” should be put more than once by the change management specialist to an independent third party to help analyse setbacks. An outsider may spot certain elements that could be easily overlooked by the change management specialist involved in the change process from the outset (McCabe, 2004). During long term transformation, the organisation could celebrate the following accomplishments: top management are still involved and committed to the approach, the plan has been updated for improvement to be embedded in the overall plan for the organisation, significant behavioural changes have been affected and tangible gains have been made (Robbins, 2005).

As indicated earlier, managing resistance to change and creating employee readiness to change are inextricably interlinked. According to Self (2007), an organisation should focus its effort on creating readiness to change instead of managing resistance throughout. If the focus is placed on managing resistance to change, the change management specialist’s key role would be to manage negative behaviour instead of focusing on positive behaviour and interventions to allow

employees to become ready for change. Methods and techniques that can be used to ensure that employees become ready for change are explored next.

2.4.2.5 Creating employee readiness for change

There are many ways in which organisations can create readiness for change, but the key question would be: How does one create and manage readiness leading to the adoption of change that produces success and performance? Armenakis, Harris and Field (1999) indicated that there are five critical elements necessary to create readiness for change:

1) the need for change
2) demonstrating that it is indeed the right change
3) key people supporting the change
4) members have the confidence they can succeed
5) an answer to the question –"What's in it for me?"

It is people who make up organisations - they are the real force behind and vehicle for change in organisations. Individuals are the ones who will resist or embrace change. By creating readiness, dual benefits can be achieved in the sense that positive energy goes into creating preparedness for the changes, and in turn, there can be a significant reduction in the need for the management of resistance once organisational revival is under way (Self, 2007).

If organisational change it to succeed, employees should be prepared for it. Change-readiness is not automatic; nor can it be assumed. As indicated earlier, failure to assess organisational and individual change-readiness may result in managers spending a significant period of time dealing with resistance to change (Smith, 2005). According to Smith (2005), there are three steps for achieving organisational change-readiness:

- creating a sense of need and urgency to change
- communicating the change message and ensuring participation
- providing anchoring points and a base for achieving change

Lewin's (1951) theory, particularly his theory on "refreezing" organisational culture in the wake of change, has been overridden by the later thinking of Kotter (1995) of the core notion of breaking the status quo and encouraging people to perceive and embrace the need for change. Kotter (1995) similarly argued that the first step towards achieving successful organisational change is the creation of a sense of

urgency and a need for change. By actively revealing discrepancies between the current and desired behaviour, motivation and readiness for change can be created (Kotter, 1995). Involving staff in the process of achieving a shift to a change ready organisational culture through staff training, team building and, role modelling from the top of the organisation are powerful tools (Palmer, 2004).

Individual and organisational readiness and capacity for change need to be based on a sound foundation of mutual trust and respect. Communicating the proposed change to staff, involving them in decision making and considering of options are all important elements in establishing a foundation of trust (Smith, 2005).

Awareness building is viewed as another significant method to create employee readiness for change. To determine whether or not awareness building was successful, it needs to be measured. The only way to successfully measure awareness building is through interaction and feedback between those individuals affected by the change and the change management specialist or project team (Hutton, 1994). When communicating for the purposes of awareness building multiple types of media / channels should be used. Some of these are face-to-face meetings, group meetings, emails, newsletters, one-on-one communication, magazine articles, the intranet, presentations by executives, training and workshops, telephone conferencing, memos and letters, flyers, posters and banners. These various channels of communication should only be utilised after a communication strategy has been formulated and the messages clearly thought through (Robbins, 2005).

When communicating change, audience segmentation is necessary to ensure that awareness messages are designed specifically for each target group. Questions such as “What type of communication will be effective for each group, when is the best time to send these messages and which communication channels should be utilised?” should be asked prior to sending of engaging messages. According to Hiatt (2006), frequent communication is necessary because no organisation can over communicate and organisations shouldn’t assume that people understand the message. Feedback should be obtained from the audience by the change management specialists on whether the message was easily understood; if not, the message should be redesigned and resent to the audience in order to prevent confusion, increased uncertainties and anxiety (Hiatt, 2006).

Once awareness has been created, the next objective in managing change should be to create energy and engagement around the change in order to produce momentum and support at all levels of the organisation. According to Hiatt (2006), there are numerous ways to create the desire to change. The following are some of the tactics used to instil a desire for change:

- Line managers and supervisors should be equipped to be change leaders. These individuals should be able to conduct effective conversations with their peers on any details of the change, manage resistance and demonstrate commitment to the change through their behaviour. In cases where employees may have questions that line management or supervisors cannot answer, responsibility should be taken to obtain answers from the appropriate source and report back to the employee(s) with an appropriate answer. The change agent should follow up with relevant supervisors or the line manager to understand where in the process they are in obtaining answers as promised to the employee on the ground, in order to manage expectations effectively (Kotter, 1995).
- Senior management should participate actively and visibly throughout, in order to send a message to employees of commitment to and support of the project. In some instances, organisations should even go so far as removing resistant managers, proving to employees the organisation's commitment and that they are serious about the change and conveying the message that there is no place for resistance from managers. Executive sponsors should communicate with all employees and managers on a regular basis, clearly stating the vision of the organisation, specific goals and objectives and their personal commitment should be reinforced every time when communicating (Armenakis, 1999).
- Risks should be assessed and resistance anticipated. Change-readiness assessments are useful tools to determine the employee's readiness to change. The results obtained from the assessment will help to identify risks and this will enable change management specialists to develop suitable interventions to deal with these potential risks appropriately. Palmer (2004) differentiates between two different types of assessments. Firstly, a change assessment evaluates the nature of change from organisational perspectives as well as from different groups. The assessment helps' to develop an overall view of the size and scope of change. The assessment results should be compared with the future state of change in order to determine the gap in different areas in the organisation. Secondly, an organisational readiness

assessment is used to evaluate the overall readiness of an organisation to change. A combination of change and readiness assessments allows for the evaluation of the overall impact of change in an organisation. An analysis can then be performed to determine the challenges facing the specific organisation/group in order to develop suitable interventions for the employees to become change ready (Palmer, 2004).

- Incentive schemes can be aligned to support the desired behaviour. This will motivate and almost force employees to adapt in order to enjoy the incentive rewards with others. Even in cases where financial benefits are not directly aligned to a performance matrix, the behaviour of employees is strongly driven by how they are measured (Smith, 2005a).

Developing knowledge about new processes, systems, tools, and so on, is a primary activity in any change management process. Many project team members are not skilled in adult learning processes and not professional trainers or educators (Palmer, 2004). However, it is the responsibility of the project team to provide the required knowledge and skills for change to be successful, in order to sustain the change after project completion. There are various ways to develop knowledge - the method chosen will depend on the target audience, depth of knowledge to be transferred and the resources available to train employees (Hiatt, 2006). The following are some examples of how to develop knowledge, as indicated by Hiatt (2006):

- Training programmes are known as a primary channel for creating knowledge. The best way to train employees is to allow hands-on activities during the training programme and not only lecture time and reading, since the more frequently employees participate, the more knowledgeable they will become. Training programmes should be designed according to the knowledge gap identified.
- Job aids such as checklists and templates can enable employees to follow more complex procedures. Job aids can also refer to paper documentation or quick reference cards that can be periodically reviewed.
- One-on-one coaching is another method of developing knowledge. People learn in different ways, and one-on-one coaching allows the trainer to customise his or her training approach for the specific individual. After a few months or even years of knowledge transfer, employees may need some refresher points, and in instances where one-on-one coaching took place, it may be quite easy for the individual to schedule a meeting with his or her coach to up-skill his or her knowledge base quickly and effectively.

- Learning from peers is also a very popular technique because employees identify with and relate to the experiences of their fellow employees. Employees teach one another in their own environment, in which they are usually comfortable. Employees initially need to undergo training in order to transfer their knowledge to fellow employees back at the office.

According to O'Brien (2008), developing abilities relating to new processes and job roles will vary from individual to individual. Some employees may find the new processes quite easy and adapt accordingly while others may struggle to feel fully comfortable and understand the new way of doing things. Employees may become change ready if they are allowed and equipped to put their knowledge into practice at the right time in the change process. O'Brien (2008) states the following:

- Supervisors need to be involved on a day-to-day basis to assist employees to exercise their knowledge in the correct manner and support them in cases where they may be struggling.
- Employees should have access to subject matter experts in order to obtain information on processes, systems, tools, and so on should they need it.
- Hands-on experience should be included in training in order to allow employers to test their newfound knowledge.

Everybody's eyes are usually on the leadership structure in a change process. It is therefore imperative for the leadership team to understand the culture and behaviours the changes intend to introduce to enable everyone to agree upon the most appropriate method to monitor the changes (Jones, DeAnne & Calderone, 2004). Leadership should not only be seen at the top but should also be identified at every level in order to display appropriate behaviours among peers and motivate them to accept the change. This structure should remain in place throughout the change process. It is also an efficient way for organisations to identify their next generation leadership. When the leaders communicate to different levels in the organisation, it is critical to customise the messages in such a way that employees easily understand the messages. It is also important that the same message should be communicated at all levels, even though the approach or wording may differ (Jones *et al*., 2004). Employees will observe commitment, support and excitement of the change by leaders. If leaders speak with one voice, repeatedly deliver the same message to employees and model the desired behaviour, resistance to change will be significantly reduced (Self, 2007). Employees will understand the reasons for

change and trust their leaders to drive the change and support them as employees right to the end.

Creating employee readiness for organisational change ultimately relates to reinforcing change by any event in the change process that helps to strengthen, embrace and sustain change in the long run. This requires intensive involvement on the part of the project team, the managers involved, the leadership team and the change management specialists to ensure no issues or concerns are overlooked when managing change.

2.5 CRITIQUE ON THE RESEARCH AND DEVELOPMENT OF CHANGE IN THE LAST 20 YEARS

There is an ongoing debate about whether research conducted in the field of change management has made significant contributions to the field over in last 20 years. According to Woodman (1989) various business people specialising in change management are referred to as “gurus” only because the word “charlatan” is difficult to spell. It was also found that planned change tends to be described as a controlled, orderly process. This message is seriously misleading albeit comforting to many. It is viewed as a chaotic process because of many external factors having an impact on it (Mintzberg & Westley, 1992).

Researchers such as Porras and Robertsen (1992), argued that planned change activities, usually demonstrated in change models, should be guided by information about the organisational features to be changed, as well as the intended outcomes and mechanisms whereby the outcome is to be achieved. These two researchers felt strongly about the fact that the information necessary to successfully guide change is only partially available and that a great deal of research is still required to fill these gaps. The majority of change models specify a general set of steps or stages intended to be applicable to most change efforts. Change models have therefore been criticised for not being situation specific.

Hutton (1994) argued that the significance of change management no longer lies with the change experts using the most appropriate change model to lead the organisation through the change cycle. He indicated that to make a true difference in the management of change, organisations need to start appointing change agents, to

manage the “people side” of change more effectively. The point Hutton made is that it is futile to develop new processes if employees do not know how to or do not wish to use them. These processes should ideally be managed by individuals whom employees trust, confide in and have the confidence to share expectations with those they believe understand what they are going through. Hutton believes there is a gap in research that should be filled, by focusing on all the intricacies of change agents and their significant value in large organisations.

Van de Ven and Poole (1995) tried to impose some order on developing new and exciting frameworks of change after the above became evident. They really tried to prove to past researchers that there is much research and development still needed and that new and significant findings could be added to the “older” information on change. Even though a great deal of criticism has been mentioned, Van de Ven and Poole (1995) encouraged other researchers to take this criticism and turn it into something positive, by shaping their focus of future research in the field of planned change and change models. Micklethwait and Wooldridge (1996) shared the same sentiments as Woodman (1989) indicating that a number of theoretical propositions are merely repeated, with no additional data or real development in the latest literature. Much information and advice are given or even observations quoted with references, but few explanations are provided (Micklethwait & Wooldridge, 1996).

The relationship between planned change and organisational performance is not always well understood. Organisations have failed to implement change because of not really understanding the complexity of their current situation, the lack of sophisticated analysis and the timeous process of implementing change. Past results indicated that organisations focus too much on the proposed change model, which is usually not considered to be a customised model, specific to their environment (Cummings & Worley, 2001).

Despite the critique on research in this field, some significant contributions have been made. Researchers and theorists in the field have different viewpoints on many aspect of change and change management. Such views provide a platform for possible future research to be conducted in that significant value can be added to past research through exploration of these different views.

2.6 CHAPTER CONCLUSION

This chapter dealt with the following topics:

1) understanding change
2) organisational change
3) change management

The first section focused on defining change in the broader context. It was discovered that change is difficult, and in many instances resisted, but when properly planned it can be exciting, linear and evolutionary. It was noted that change could also have a rippling effect on those who refuse let go of the past. Many definitions were provided from a number of researchers in the field and it was found that in all instances, these definitions captured more or less the same message in that change happens when something has to become different in order to improve the current situation. The section on organisational change focused on an overview of organisational change, different types of organisational change employees may experience and the reasons for this as well as the introduction of different types of change models and their usage. The last section focused on change management. This included a number of sub focus areas, namely various definitions of change management, the reasons for resistance to change and how to ensure employees become change ready during transformation. A critique on the research conducted on change was also provided in order to emphasise possible gaps in the field. Researchers argue that the research conducted focused on the same type of research undertaken in previous years, without actually making any new significant contributions to the field.

Chapter 3 will look at the concept "change agent" in order to provide a clear understanding of this phrase in change management in the organisational context. Research conducted on change agents in the change management framework could possibly fill some of the gaps, as indicated by the research critique. It is therefore necessary to unpack the essence of organisational change agents and the reasons behind why it is known as one of the latest focus areas in change management today.

"Change alone is eternal, perceptual, and immortal."

- Schopenhauer (1860) -

CHAPTER 3: THE CHANGE AGENT

"Tell me and I'll forget, show me and I may remember, involve me and I'll understand."

- Chinese proverb -

3.1 INTRODUCTION

The role or function of a change agent is unknown to many and the value that change agents may add to large organisations undergoing change has not been explored to date. This chapter looks at the value of a change agent. This will be linked to the way change can be managed after the identification of change agents for the purpose of managing the people side of change. This chapter introduces the concept "change agent", explores the importance for organisations to have employees to serve as change agents and the benefits thereof. Some of the skills and personality traits of the ideal change agent will be highlighted. The knowledge and experience change agents should ideally have will be explored as well as the required change-readiness level of potential change agents.

The term "change agent network" will be researched. This will provide insight into the significance of a group of people selected to serve as change agents in the same organisation, division or team. Other terms such as change leaders, change masters and change champions will be examined in order to understand the difference between the roles of these individuals versus those of change agents. The roles and responsibilities of a change agent will be discussed to provide insight into the magnitude of a change agent's task. Ultimately, all the intricacies of change agents in large organisations will be explored.

Back in the early 1990s, Porras and Robertson (1992, p. 755) emphasised the pressing need for research to examine the role of change agents in the organisational context: "Better specifications both of the conditions for effective change and of the characteristics of effective change agents are necessary to develop a more comprehensive understanding of how these various factors affect each other during the course of a complex process of planned organisational change."

The need to understand the meaning of the role of a change agent is therefore critical before a change agent identification framework can be developed. A limited amount of research has been conducted on the concept "change agent", and a limited number of arguments and perspectives are thus provided. According to Hartley, Benington and Binns (1997), a limited amount of literature is available on the role of change agents in organisations. Again, the researcher in this study drew the same conclusion about the paucity of literature on this topic. Nevertheless, literature that she did find provides insight into the term "change agent" and answered the research questions formulated below. After defining term "change agent", the main aim of this chapter is to answer the following research questions:

- What are change agents and what personality traits, skills, knowledge, experience and level of desire to change do they require?
- What are the roles and responsibilities of change agents in large organisations?
- What methods/tools have been used in the past to identify change agents?

3.2 THE CHANGE AGENT

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things."

- Niccolo Machiaveli, *The prince* -

3.2.1 Change agent defined

Every time an individual decides to assume the responsibility to create or manage change for the better of an organisation, a survival guide should be provided on day one, because the journey will be one of extreme challenges, obstacles and excitement. Few courageous individuals usually volunteer to take on this role, because many are only too aware of the challenges awaiting them (Massey & Williams, 2006). According to Hutton (1994), the world will become a duller and even poorer place without individuals who volunteer to improve the state of an organisation and to serve as implementers of change.

Throughout this chapter, definitions of and the role of the change agent will be compared with those of so-called "change leaders", "change masters "and "change

champions." The purpose of this is to provide comprehensive information and the researchers' viewpoints in the field, on the different roles key individuals, other than change management specialists, play in the field of change management.

The focus of this research is on the field of transformational change. A transformational change leader is someone who is extremely motivated, has concise approaches and executes strategies that he or she has developed (Katzenbach, 1996). Transformational change leaders are also viewed as those individuals able to complete a compelling picture. Their conviction demonstrates their belief in their vision and a high level of confidence in themselves and their resources (Chew & Gillan, 2005).

Burns (1978) first introduced the concept of transformational leadership in his research on political leadership. This term is widely used today in organisational psychology. According to Burns (1978), transforming leadership occurs when one or more persons engage with others in such a way that other leaders and followers raise one another to higher levels of motivation and morality. Transformational leaders offer a purpose that transcends short-term objectives and focuses on higher order needs. This results in followers identifying with the needs of the leader. If followers share the same need for change as the transformation leader then the battle to change is halfway won (Katzenbach, 1996).

Definitions of change leadership in this context refer to the following: "leadership is about change, moving people in new directions, realising a new vision, or simply doing things different and better" (Denhardt & Denhardt, 2006, p. 8). According to Wallace, Engel and Mooney (1997), more successful change leaders are able to gain the positive engagement of people in organisations to meet changing circumstances. Ultimately, change leaders need to define the reality of others (Morgan, 1986, p. 176). In most organisational change processes, the role of the leader is crucial, because he or she symbolises the culture, and plays a pivotal role in the construction of new behaviours (Trompenaars & Woolliams, 2003). Leaders of change ultimately show how to make change, where to effect change, and why to make change. Moreover, leaders need to demonstrate their commitment to change, to enable others in the organisation to see how it should be done (Denhardt & Denhardt, 2006).

According to Tearle (2007), a change master fulfils a pivotal role in any transformation process. A change master may be a full-time organisational

development professional, a leader of a division or a middle manager charged with the responsibility of effecting change in his or her area. Depending on the type of change he or she is tasked with, a change master fulfils some of the following roles: developing clear change roles and acting as a facilitator of change, a project manager, an educator, a marketer, a systems integrator and monitor of the whole change process (Tearle, 2007).

Another key term in the field of transformational change is “change champion.” Change champions can be regarded as those individuals who support the transformation project, helping to communicate the messages in respective areas of an organisation. Champions can also translate the new way of working into specific goals and create meaning and context for employees (Nadler, 1998).

Change champions are viewed as those individuals who play a key role in driving change. Champions are not individuals appointed in a formal representation role, but should broadly reflect the make-up of the workforce at all levels of the organisation (Nadler, 1997). According to Tearle (2007), the difference between the roles of change champions and change agents is small. The difference lies in that change champions have a more informal role than the change agents.

In many instances the change role models are regarded as existing leaders. However, Havelock and Zotolow (1995) indicate that nowadays, change role models are also viewed as change agents or change champions. Havelock and Zotolow (1995) argue that, change agents, like leaders, deliberately try to effect change or innovation and engage with others to see the benefits through powerful communication methods. Alternately, those organisations that have change champions who provide powerful symbolic means of communication, in turn manage and shape change (Peters, 1978). Leaders, change agents and change champions have the capacity to influence, but the extent to which they are able to influence content, process or context differs from each other (Weick, 1995).

The term “change agent” will be explored in an effort to understand its meaning, as well as the roles and responsibilities of an individual, acting as a change agent in a large organisation.

The role of a change agent is relatively new to the business world and many questions have been raised in the recent past about the meaning and role of change agents in organisations (Burnes, 2004).

During the 1950s through to the 1990s a number of industrial organisations in Japan and the USA developed ideas around appointing people to drive change into a practical approach - these people were named change agents (Egan, 1985). Today the role of the change agent is known to most industries throughout the world. The concept "change agent", however, does have different meanings for different people and organisations. Some organisations naturally see change agents as top management, while others feel it refers to line management or employees or even a combination of the two (Hartley *et al.*, 1997).

For the purposes of this research project, the concept of change agent does not only refer to the manager, supervisor or even to the change specialist; but to any individual appointed to play a significant part in designing, running, improving and communicating proposed change.

Many definitions are explored in this chapter in order to determine how the business world views the role of a change agent as well as finding a suitable definition for this research. Burnes (2004, p. 669) defines change agents as "the people responsible for directing, organising and facilitating change in organisations." This can be a difficult task, especially in dealing with large bureaucratic organisations. Pettigrew and Whipp (1991) describe change agents as individuals who operate at various levels in an organisation, because this caters for both operational and strategic change capacity. According to Doyle (2001), even though change agents are appointed at different levels of the organisation to manage change, it is essential to have a change management team in place to support appointed change agents and help them in developing their abilities.

Saka (2003) refers to organisational change agents as managers who shape the conditions for change. He also emphasises that managers should be known as the organisation's "internal" change agents rather than consultants because such individuals have a view of the overall organisational goals and vision. A manager as a change agent is beneficial in large transformation drives because he or she can reconfigure an organisation's roles, responsibilities, structures, outputs, systems and resources. According to Ticky and Devanna (1990), a change agent can be anyone

affected by the change, to the extent that the individual's personal involvement in reframing contributes to the successful outcome of the change. For all levels of change in an organisation, the change agent is known as a helper who intervenes as a facilitator in the process (Schein, 1987).

If change agents do assume the role of a facilitator, it is vital to develop such skills in order to deal with any psychological challenges that may arise during each phase in the process (Bartunek, 1988). It is evident from the above that even though organisations have recently only become familiar with the meaning of the term "change agent", conversations and theories on change agents were conducted and proposed by researchers in the 1980s.

A change agent can also be an individual who may enforce change, motivate others to accept change and someone with the characteristics to lead change. Large organisations usually make use of change management specialists to drive change in the organisation, but these specialists struggle to interact directly with employees affected by the change on a regular basis, because of the size of the organisation and the large number of individuals affected. Some organisations argue that individuals in the business with little or no change management background cannot be considered for the role of a change agent, even though they are well connected and could potentially fulfil a significant role in the implementation of proposed change (Hartley *et al*., 1997). Earlier, Egan (1985) clearly stated that a person does not have to be a change specialist in order to be a change agent.

Rogers (1987) describes change agents as people with one foot in the old world and the other in the new world. Change agents assist people to cross the bridge to the new world, provide support throughout the journey and start the ball rolling. De Caluwé and Vermaak (2002) supported Roger (1987) by stating that one of the primary ways to manage change is through a change agent. These authors define a change agent as a person taking responsibility for consciously and professionally designing and affecting change. De Caluwé and Vermaak (2002) go on to say that change agents can be managers, consultants and employees in an organisation or even network partners, and that they come in many shapes and sizes. Westra and Van de Vliert (1989) emphasised that the role of the change agent is also strongly linked to what he or she believes is "good" for the organisation and what he or she trusts to work best. According to Ulrich (2008) change agents are human resource (HR) professionals. These may include change management specialists,

organisational development experts or organisational effectiveness consultants. Ulrich (2008) argued that even though it is mainly HR professionals that manage change in large organisations, they should not be the only change agents in an organisation. Individuals in other departments or functions should also be able to assist in managing change.

These viewpoints indicate that researchers in the field each defined the concept of organisational change agents in a different way. However, most agreed that the core functions of these individuals are to manage and drive change in the organisation.

Hutton (1994) cited examples of why it is necessary to select and appoint change agents. In his first example, Hutton (1994) provided a scenario of a large organisation to be moved to a new building. An announcement was made that all employees should move to a new building by a certain date. Other than that, no logistical arrangements were explained. No proper messages were communicated to employees to ease their fears and concerns and no guidance was provided. Employees were expected to allocate themselves appropriate office space, with departments remaining as they were currently, in the same area. Also each individual was responsible for moving his or her own furniture and connecting the telephone lines. The likelihood of an orderly move was almost zero. According to Hutton (1994), whether an office move or major organisational transformation is involved, the same principles should apply. To manage change systematically, appropriate processes and strategies should be developed and the psychological wellbeing of employees should be addressed to ensure a smooth transition in all areas. By appointing change agents to assist in measuring the readiness levels of the employees concerned, their wellbeing and resolving issues and concerns of employees on the ground, many obstacles can be removed early on. Imagine how useful change agents could have been in the above scenario (Smith, 2005). Some researchers indicate that it is unwise to attempt major change without designated change agents, especially in cases where large numbers of employees are affected by the change (Saka, 2001).

Schein (1988), believed that as early as the 1980s change agents played a pivotal role in business, by indicating the following:

- Managers are often not aware of specific problems employees on the floor experience and change agents can therefore assist in diagnosing the actual problems.
- In many cases, managers are not aware of the help needed from employees to assist in solving problems, and better execution of their tasks, and so on. Change agents can determine what kind of help is necessary and request the appropriate assistance from management.
- Most managers have a constructive intent to improve certain things, but they need help in identifying what they have to change to improve the situation. Change agents can provide answers to these questions.
- Most organisations can become much more effective once they know how to diagnose and manage their own strengths and weaknesses.
- Unless remedies are determined jointly with members of the organisation, who knows what can and cannot work, the remedies are likely to be unsuitable and resisted by the organisation.
- Managers cannot make decisions about the implementation of certain solutions by themselves. If they do, this may have negative consequences for the organisation because staff feel left out and not valued. This may result in poor staff retention.

According to Margulies and Raia (1972), in order for change agents to be successful at managing change, the following should be considered:

- Change agents should be comfortable dealing with other people and building relationships. To this end, change agents should have the ability to listen to others and show empathy, which means that they require numerous people-oriented skills.
- Change agents should be able to enact the change process – hence the need for both analytical and diagnostic skills. This will enable change agents to identify and solve problems by using the techniques available in order to facilitate the change process in their areas with confidence.
- Lastly, change agents needs to have background information on the types of people, type of work and business environment where change has to be managed to ensure that suitable interventions and approaches are developed for the people and their environment.

For change agents to be successful, they need to demonstrate a level of expertise in establishing credibility with those who are affected by the change, demonstrating skills in managing the change and possess the personality traits that reflect certain social skills. To place oneself in such a position, the potential change agent has to be able to recognise and reconcile what type of person he or she intends being. A change agent, like most managers, is a person who fulfils a role for a certain period of time - hence the need for the organisation to determine the change agent's specific roles and responsibilities (Hartley *et al*., 1997).

In a study by Perme (1999) in Texas, it was found that change agents are skilled individuals who are comfortable with who they are, with clarity about their values and an understanding of their reasons for supporting the change initiative. Change agents understand the impact change will have on people's lives as well as the benefits. Change agents should be able to play different roles at different times, because in most instances, identified change agents still have another job to do, apart from serving as a change agent. According to Hartley *et al*. (1997), change agents will have a greater chance of succeeding if they are permanent employees of the organisation because they will have the ability to withstand initial unfavourable reactions from peers.

In the past, many organisations have debated whether all leaders are change agents, and vice versa. According to the above quotation, the perception is that not all leaders are necessarily change agents. According to Cheung, Jurman, Maguigad and Slaughter (2007), change agents can be found at all levels of an organisation, they can be leaders, managers or employees. Cheung *et al*. (2007), hold that change agents are people who see a need for constructive change and are willing to champion the cause and motivate people to see the benefits involved. According to Doyle (2001), change agents are risk takers and leaders. Like leaders, they look outward and into the future and challenge the status quo. Like a manager, a successful change agent will also look inward to understand the organisation and its culture in order to achieve change. A change agent will involve everyone and is willing to engage diverse groups. Typically, when one talks of change agents, one thinks of great leaders who have initiated new directions for their organisations. There are many examples of good leaders who maintain the status quo, achieve positive, new or better things for the organisation, but who never go beyond their comfort levels which are known to them (Kotter, 1996).

Bill Millar, President of the American Public Transportation Association, indicated that a change agent usually takes little steps in order to achieve the end result - the pace is usually even slower the larger the organisation becomes. The most significant difference between a leader and a change agent lies in the way they approach the challenges they are faced with (Doyle, 2001).

Literature findings on the topic “change master” written by Kanter (1989) stressed the importance of strong corporate entrepreneurs and innovators in transforming organisations. These change masters were referred to as leaders, testing limits and creating new possibilities by directing the innovation process. Behling and McFillen (1996) conducted similar research on leaders as change agents. They indicated that leaders should be the organisations’ greatest and most profound change agents. Transformational leadership focuses on a vision that can inspire people to embrace change and leaders of the organisation should promote that vision continuously throughout the transformation period. According to Dunphy and Stace (1993), in instances where leaders are identified as change agents, self-identification as change agents of these leaders is vital for role clarification and commitment. These leaders should be outspoken, have courage, believe in people, be open and also have the ability to deal with complexity and uncertainty.

The importance of change agents’ involvement in the process of managing change has been highlighted in that change agents should be identified to ultimately help employees cope better with change. Owing to the lack of research in this field, limited information is available about the reasons why and how change agents should be identified to manage change, yet the benefits found were clear. According to Luecke (2003), by identifying change agents, organisations experience some of the following benefits:

Change agents:

- engage passive resisters by means of one-on-one communication in order to start participating actively
- start the ball rolling by engaging with the employees affected in order to get key messages across regarding the reasons for change
- motivate their colleagues to accept the change
- diagnose problems in order to assist change management specialists to develop suitable interventions

- build trust by continuously engaging with employees and aligning the objectives of the change initiative with the organisation's vision
- stabilise the adoption of innovation
- diagnose existing issues or problems
- analyse the barriers preventing the organisation from achieving the desired state
- keep their fingers on the pulse continuously, serving as the eyes and ears of change management specialists and project leaders
- encourage individuals to take risks
- actively support or champion changes throughout the organisation
- answer project/initiative questions and promote bottom-up communication
- transmit formalised information to and encouraging informal discussions with the target audience
- communicates project messages to the target audience

According to Hartley *et al*. (1997), the process of managing the people side during transition is much more comprehensive when change agents have been identified to manage change in the organisation. Since change agents have the ability to engage with employees on a frequent basis, employees should not be allowed to feel excluded or not consulted during the change process. Research has shown that the greater the number individuals who participate in a transformation process, the easier it will be for any organisation to win the hearts and minds of its employees to accept change and adapt behaviour to the advantage of the organisation and its employees (Tearle, 2007).

In research conducted by Caldwell (2003), it was found that to act as change leaders, it is necessary to understand different attributes of individuals. This researcher indicated that a mix of skills, knowledge, capabilities, competencies and personality characteristics needs to be understood and determined in considering the importance of change leaders and their role. The process followed by Caldwell (2003) to determine change leaders' attributes was as follows: An overall list of attributes was compiled from newspapers and books. An expert panel consisting of senior HR practitioners reviewed the list of attributes and then ranked them in terms of importance. The advantage of this process is that it allowed for attributes considered to be important by HR practitioners to be negotiated and agreed upon. The chosen attributes were congruent with some of the attributes identified in the literature. A

similar process was followed in this research project. This is explained in detail in the results chapter.

The above highlighted that researchers view change agents as leaders in the organisation, who initiate change. In the context of this research project, a change agent is not viewed as the initiator but rather the individual assisting in driving the change to ensure the other individuals concerned become change ready through the management of fears and concerns and effective change communication. **The definition chosen that applies to this research project was the change agent definition of Cheung *et al*. (2007, p. 9): "*Change agents can be found in all levels of an organisation. They can be leaders, managers or employees. A change agent is someone who supports the need for change, is committed to championing the cause and motivates staff in their respective areas to see the benefits thereof.*"**

The above definition was chosen to define change agents in the context of this research project because it was deemed to be the most suitable.

Although a limited number of definitions were found, different valuable viewpoints and arguments were analysed.

The literature findings below focus, *inter alia,* on certain personality traits, skills and knowledge, amongst others, which individuals should portray if they are to be considered change agents. The literature findings were considered significant because the information provided a platform to structure the first part of the empirical research, focusing on a triangular research method.

3.3 PERSONALITY TRAITS OF A CHANGE AGENT

3.3.1 Personality and personality traits

Before focusing on the personality traits of a change agent, it is essential to have a clear understanding of the meaning of personality, different theories of personality and personality traits.

3.3.1.1 Personality defined

Definitions of personality generally try to show a set of qualities that distinguishes one person from another. A variety of approaches and theories are reflected in different definitions of personality. Many contemporary psychologists agree that personality can only be adequately explained if personality traits and the situation or environment of the individual are considered (Bergh & Theron, 1999).

The following definitions of personality can be viewed as systemic, interactional and integrated.

Allport (1937, p. 48) defined personality as "the dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to his environment." This implies that personality is the sum total of ways in which an individual reacts and interacts with others and that there are many external influences that form a person's personality (Allport, 1937). Mischel (1976, p. 2) referred to personality as "the distinctive patterns of behaviour that characterise each individual's adaptation to the situations of his or her life." Schultz and Schultz (1994, p. 10) viewed personality as "the unique, relatively enduring internal and external aspects of a person's character that influence behaviour in different situations." Cattell (1965, p. 25) adopted a broad view of personality and viewed it as "that which people will do, think or say when placed in a specific or given situation."

The above definitions refer to personality that is determined by the environment or the situation an individual finds himself or herself in. From a work perspective, personality may be viewed differently because personality traits may have to fit into the demands of the workplace. Neff (1977) defined "work" personality as semi-autonomous from other aspects of personality, which includes work styles, behaviours, abilities and feelings that are necessary to fulfil a productive role as required in the work situation. Linked to the above definitions, which indicates that an individual's personality will be formed through the current environment or situation the individual finds himself or herself in, Robbins (2001) stated that the three main determinants of personality are as follows:

- **Heredity.** This refers to genetics such as physical stature, facial attractiveness, gender, temperament, muscle composition and even reflexes and biological rhythms. This determinant indicates that an individual's personality is a molecular structure of genes located in chromosomes. Researchers have found that genetics account for more than 50% of a

person's personality. However, personality is not fixed because many other factors influence and form a person's personality.

- **Environment.** This involves the culture in which individuals are raised, as well as early conditioning and norms among family and friends. The environments to which individuals are exposed play a significant role in shaping personalities. Heredity sets personality parameters but an individual's full potential will be determined by how well he or she adjusts to the demands and requirements of the immediate environment.
- **Situation.** This factor influences the effects of heredity and the environment on personality. Research has shown that a person's personality does change, depending on the situation. Personality patterns should therefore not be studied in isolation, but in the context of various situations. Some situations obviously have a greater influence on a person's personality than others.

From personality definitions, many personality theories were developed by many well-known researchers in the field. These theories will be explained next in order to understand what the different elements are that make up a person's personality.

3.3.1.2 Personality theories

To understand the meaning of the term "personality theories" it is imperative to understand exactly what the term "theory" refers to. According to Hall and Lindzey (1970), theory exists in opposition to fact and it is known as an unsubstantiated hypothesis or a speculation concerning reality which is not yet definitely known to be so. Only when theory is empirically confirmed does it become a fact. Personality theory refers to a set of assumptions relevant to human behaviour together with the necessary empirical definitions (Bergh & Theron, 1999). At the very least, personality theories represent the clusters of attitudes concerning human behaviour, which in many ways limit the different kinds of investigations to be considered. In many instances personality theories were developed to generate ideas, stimulate curiosity and to stir doubts.

Personality theories refer to a number of dimensions to explain personality and personality functioning. Many researchers, better known as personality theory experts, formulated interesting theories about personality as far back as the early 1900s (Bergh & Theron, 1999). The personality theories of Sigmund Freud, Carl Jung, Kurt Lewin, Gordon Allport, Raymond B. Cattell, B.F. Skinner and Carl Rogers are widely known throughout the world. Allport (1961) and Cattell (1965) used traits

as examples of structural concepts. These structural concepts refer to basic building blocks that constitute personality. Freud (1970) proposed dimensions in three mental structures, known as id, ego and superego. Rogers (1973), however, utilised the self-concept of behavioural responses as an integrative structural concept. These are but a few examples of the theories developed by some of the researchers named above. It is also evident from the above examples that many personality theories were developed in the 1970s and all of which were known as significant perspectives (Bergh & Theron, 1999).

3.3.1.3 Personality traits and type

Personality **traits** can be defined as: "Enduring characteristics that describe an individual's behaviour" (Oliver & Mooradian, 2003, p. 110). Research has shown that there are many different personality traits. In their study, Cattell, Eber and Tatsuoka (1970) identified 17953 personality traits. Sixteen different personality **traits** were selected after many years of intense research and these are referred to as the source or primary traits of personality. The psychometric instrument, the 16 personality factors assessment, was the first instrument to introduce these 16 traits to be measured (Cattel *et al*., 1970). Over time the everyday concept of personality traits developed into the formation of two basic assumptions: traits are stable over time and directly influence human behaviour (Robbins, 2001). Matthews, Deary and Whiteman (2003) indicated that there is a major gap between the everyday concepts of traits and a concept that is scientifically useful. The simplest technique for personality trait measurement is to ask a person to indicate how well certain traits relate to him or her. This is usually done by means of a standardised, valid and reliable self-report questionnaire.

However, personality **type** is identified by a personality indicator, and is merely based on a person's preference for certain stimuli (McCrae & Costa, 1989). The Myers-Briggs Type Indicator (MBTI) is a well-known framework of personality type. This test taps into four characteristics and classifies people into one of 16 personality types. Individuals can be classified into the following categories: introverted or extroverted, sensing or intuitive, thinking or feeling and perceiving or judging (McCrae & Costa, 1989).

The above discussion indicates that a distinction can be made between traits and type. Traits refer to specific characteristics describing an individual's behaviour, while type refers to a personality indicator based on a person's preferences for certain stimuli.

Robbins (2001), believed that research differentiated between two different personality types: Type A and Type B. Type A personality refers to a person who is aggressively involved in a chronic struggle to achieve more and more in less and less time. These individuals usually do almost everything in a hurry. They eat, walk, talk and move rapidly and can become impatient fairly quickly. They find it hard to cope with leisure time (Friedman & Rosenman, 1974). Type B personalities are rarely interested in trying to prove themselves and usually play for fun and can relax without any guilt. They seldom suffer from a sense of urgency and do not have the need to display or discuss their achievements or accomplishments unless the situation demands it (Kogan & Wallach, 1967).

Are Type A's usually more successful in organisations that Type B's? Even though it would be assumed that Type A's works harder, Type B individuals appear to make it to the top more easily, as proven by research conducted by Robbins (2001). This research also indicated that Type A individuals can be extraordinary salespeople whilst Type B individuals are often senior executives (Robbins, 2001).

Personality is still influenced by the environment and situation a person finds himself or herself in - hence individuals need to adjust and adapt their personalities as required by the situation (Robbins, 2001).

Before exploring the personality traits of a change agent, the traits of individuals playing a key role in the change process will be researched. This will provide insight in terms of whether there is a degree of correlation between the traits of individuals such as change masters, change leaders and change champions versus those of change agents.

According to Katzenbach (1996), change leaders should portray the following personality traits in order to accomplish results:

- creativity
- motivation
- a sense of caring
- sense of humour

According to Ackerman and Anderson (2001) the most primary traits of change leaders are:

- emotional intelligence
- optimism
- motivation
- social boldness
- enthusiasm
- being influential

As per the earlier definition of change leaders, these traits seem appropriate for individuals who lead the proposed change by looking at the needs of the organisation and its people.

Tearle (2007) provided information on the traits change masters should portray, namely:

- trust
- credibility
- self-confidence
- sense of caring
- a sense of humour
- inspirational
- innovation

McEwan (2003) conducted research on different traits for executing different roles in an organisation. According to this author, change masters should portray the following traits:

- motivation
- optimism
- confidence
- being futuristic
- trust
- transformationism

As indicated earlier, change masters fulfil all of the following roles: a developer of clear change roles, a facilitator of change, a project manager, an educator, a marketer, a systems integrator and a monitor of the whole change process. The traits

listed seem to be relevant to the kind of roles change masters have to fulfil (Tearle, 2007).

Lastly, traits of change champions are evident in the work of Nadler (1998). This author listed the following traits:

- being an extrovert
- envisioning
- energising
- empathising
- being supportive
- personal confidence
- being excited
- being enthusiastic

Nadler (1998) indicated that an individual cannot call himself or herself a change champion without possessing the above characteristics. As per the definition, these individuals are the main supporters of change and share their beliefs and excitement regarding the change with other employees in their respective areas of the business.

Literature findings on the personality traits of change agents are discussed below.

3.4 CHANGE AGENT: THE IDEAL PROFILE

For the purposes of this research the ideal profile refers to the ideal personality traits an individual should have to be identified as a change agent with the capability to drive and manage change in his or her own business area. Literature was collected and researched in order to determine the above. For the purposes of the empirical research conducted, it was critical to understand the ideal personality traits and skills of change agents to ensure that individuals are identified according to the correct requirements to act as change agents. Tabulated below are the literature findings on the key personality traits of change agents from various researchers in the field.

3.4.1 The ideal profile

The table below provides information on certain key personality traits change agents should possess:

TABLE 3.1: CHANGE AGENT PERSONALITY TRAITS

Personality traits	Source
The ability to deal with complex issues	Hutton (1994), Dunphy & Stace (1993)
Integrity	Hutton (1994)
Being respected	Hutton (1994)
Being a team player	Hutton (1994), Tearle (2007)
Patience	Mott (2000), Hutton (1994)
Persistence/persuasive	Hutton (1994), Tan & Kaufmann (2000), Dunphy & Stace (1993)
A sense of humour	Tearle (2007), Katzenbach (2008), Hutton (1994)
Honesty	Hutton (1994)
Trustworthiness	Perme (2003), Hutton (1994), Tearle (2007), K Jha (2007)
Reliability	Hutton (1994), Burnes (2004)
Being positive/optimistic	Tearle (2007), Katzenbach (2008), Hutton (1994), Tan & Kaufmann (2000)
Enthusiasm	Hutton (1994), K Jha (2007), Tan Kaufmann (2000)
Confident	Tearle (2007), Hutton (1994)
Risk-taking	Hutton (1994)
Having a political nose	Hutton (1994), Wertheimer (2001), Recklies (2001), Tan & Kaufmann (2000)
Assertiveness	Powers (2003)
Creativeness	Tearle (2007), Katzenbach (2008), K Jha (2007)
Caring	Tearle (2007), Katzenbach (2008), K Jha (2007)
Empathy	Arrata, Arnaud & Kumra (2007)

The above personality traits are indicative of what researchers in the field deemed appropriate personality traits and were compared with information obtained from change management experts in the organisational field and recorded in the research results chapter to follow.

By comparing the ideal traits of a change agent with those of the change leader, change master and change champion, it is evident that many of the ideal traits of a change agent are reflected in the roles of either the change master, change champion or change leader.

3.5 CHANGE AGENT SKILLS

The word “skills” is commonly used to describe the abilities one acquires through education and practical experiences. Research indicates that when an individual believes he or she has obtained the necessary skills to perform a job by applying a certain set of qualifications or experience, no further experience and knowledge are necessary for further personal development. In practice, the rapid pace of change no longer allows this. Nowadays, one needs to obtain increasingly more skills throughout life in order to develop oneself and to become an expert in a certain field of work (Keep & Mayhew, 1995).

Most people have a common understanding of what is meant by the word “skills”, but a precise definition appears somewhat problematic. The difficulty in defining skills steams from the lack of common terminology, connotation and the historical traditions behind the word. In many instances gender also plays a major role in the definition of the word because jobs dominated by women are classified as the “softer skills” and males are more prone to apply “harder skills” to perform their jobs (Dench, 1997). According to Keep and Mayhew (1995), skills refer to more than the existence of certain attributes in people. They can include communication, being capable to work with others, taking responsibility, making decisions, negotiation and problem-solving, amongst others. These types of skills are becoming crucially important across all occupations and companies or industries because of the changing organisational structures, organisation-wide transformation initiatives and a drive for quality, to mention but a few (Keep & Mayhew, 1995).

According to Oliver and Turton (1992), people either exhibit skills or not and they are not necessarily developed in all cases. However, Keep and Mayhew (1995) argue that skills can indeed be taught and developed and that different people can achieve varying levels of competence.

Before exploring the skills of a change agent, the skills of the change leader, change master and change champion were researched in order to determine which of the skills of the latter three correlate with the skills of a change agent.

Katzenbach (1996) developed a core list of the following skills change leaders should possess:

- balancing the scorecard: the ability to set up and meet tough earning goals and plans
- establishing a working vision: developing the vision should be developed at the top, guiding employees to work towards achieving the desired end state.
- instilling conviction in others: determining how employees can be motivated throughout the change process
- setting clear objectives: ensuring all job assignments, work plans and time lines are clear
- shaping and using action flows: developing vertical action flows in order to work with others, in the decision-making processes in order to deliver value
- building momentum: understanding and managing the physics of change, in order to ensure momentum is built at the right time and during the right phase

It is evident from the above that these skills are different from a list or description of skills in general. These skills are more action oriented in that change leaders perform certain tasks to ensure a smooth transformation process (Katzenbach, 1996)

According to Ackerman *et al.* (2001), change leaders should have the following skills:

- communicating
- counselling
- selling
- conflict handling
- facilitating

Ackerman *et al.* (2001) emphasise the importance of change leaders in mastering transformational change in terms of style, behaviour and strategy. These authors felt that the above skills should be mastered by change leaders and developed continuously throughout.

As indicated earlier, a change master is someone who fulfils a number of different roles and, to that end, this individual requires a number of skills (Tearle, 2007).

These include the following:

- facilitation skills
- the skill to diagnose real issues
- the skills to design change processes
- project management skills
- marketing skills
- systems integration and coordination skills
- coaching skills
- monitoring skills
- communication skills

Change champions are known as the principal supporters of the change initiative and are spread across an organisation. According to Nadler (1998), in order for individuals to be seen as change champions in an organisation, they require the following skills:

- alignment skills: the ability to align project objectives with those of the organisation
- the skills to manage the expectations of peers
- listening skills
- communication skills
- interpersonal skills
- networking skills

According to Randall (2004), no matter where in an organisation's change champions or change agents are based, these individual need a generic list of skills. Randall (2004) indicates that these skills are necessary in order to be the vehicle for success throughout all phases of the change programme. Some of these skills are as follows:

- sensing needs
- building awareness
- creating credibility
- legitimising viewpoints
- broadening support
- changing perceived risks
- structuring needed flexibilities

- putting forward trial concepts
- eliminating undesired options
- managing coalitions
- formalising agreed commitments

Ulrich (2008) places a lot of emphasis on the criticality of change champions having extraordinary communication skills. He indicates that a change champion can never over communicate, and therefore, together with sound communication skills, also has the ability to develop positive interpersonal relationships with peers.

Change initiatives are usually executed as a project and have a start and end date. Before the skills of project managers can be assessed, the term "project" has to be defined. According to Randall (2004), a project refers to "an undertaking that has a set of activities that are linked together over a period of time to achieve an established goal or goals." Change initiatives are managed by project teams and it is therefore relevant to include some preferred skills project managers should demonstrate. Zimmerer and Yasin (1998) conducted empirical research by asking 100 project managers to list the characteristics they believe are crucial for effective project managers. The study found that effective project managers provide leadership by example, are visionaries, technically competent, decisive and outstanding, good communicators and motivators. The study also indicated that positive leadership contributes the most to project success (Schwalbe, 2006).

In studying the above skills sets for the three different roles, it is interesting to note the different viewpoints of various authors on the skills needed to manage change effectively. These skills will be compared with those of a change agent in the next section.

An international consulting firm, Accenture developed a handbook indicating that organisational change agents should possess some of the skills indicated below in order to drive and manage change effectively:

- persuasive and negotiation skills
- trustworthiness (perceived as reliable, competent and helps to perform work)
- listening skills
- negotiation skills
- conceptual thinking and organisation skills (e.g. organises thoughts, detects the main points of a discussion, etc.)

- leadership skills
- credibility in the team
- interpersonal skills
- planning abilities
- capacity for autonomy
- observation, analysis, and judgment
- communication
- enthusiasm
- coaching and facilitation skills
- expertise related to the content of the change project (Accenture, 2007)

Following the same process as in the personality traits section of this chapter, a number of important change agent skills as indicated by various researchers in the field, were identified and are summarised in the table below.

TABLE 3.2: CHANGE AGENT SKILLS

Skills	Source
Interpersonal skills	Hutton (1994), Mott (2000), Tan & Kaufmann (2000), Wertheimer (2001)
Communication skills	Hutton (1994), Perme (1999), Wertheimer (2001), Arrata, Arnaud & Kumra (2007), Recklies (2001), Canterucci (2000), Tan & Kaufmann (2000)
Listening skills	Hutton (1994), Powers (2003), Canterucci (2000), Mott (2000), Tan & Kaufmann (2000)
Conflict-handling skills	Hutton (1994), Arrata, Arnaud & Kumra (2007)
Facilitation skills	Wertheimer (2001), Powers (2003), Tearle (2007)
Networking skills	Accenture (2007), Recklies (2001
Influencing skills	Accenture (2007), Recklies (2001)

To summarise, change agents should ideally have a number of specific skills and, as indicated by Keep and Mayhew (1995), individuals can in fact be trained to learn and develop certain skills. Individuals should therefore receive the proper education in order to develop their skills accordingly.

By comparing the skills in the above table with those of change leaders, change masters and change champions, the following were noted: change leaders, change masters and change champions all need communication and facilitation skills. Change champions, however, appear to possess most of the skills required by the change agent as per the literature findings as well. These are: interpersonal, communication, listening, facilitation and networking skills.

3.6 KNOWLEDGE OF A POTENTIAL CHANGE AGENT

One of the key reasons why change agents need to undergo training and development is to provide them with the appropriate information in order to prepare them promptly and effectively to become leading change agents (Keep & Mayhew, 1995). According to Hayes (2002), it is critical for change agents to obtain knowledge regarding concepts and theories relating to:

- different diagnostic models of change that focus on the identification of *what* needs to be changed
- process models of change indicating *how* change management should take place

The diagnostics models refer to how environmental changes affect the organisation, as well as those models focusing on the alignment of various internal processes of the organisation. Change agents need to understand the alternative processes to be followed in the management of different kinds of change in the organisation. One other critical area that should be included when training change agents is practical approaches on how to manage employee resistance to change because this is invariably the most common reaction that change agents can expect when managing change. Most importantly, change agents need to understand that no change model or process is applicable to every change situation because the impact of change will differ each time it is introduced (Hayes, 2002). There are many factors to be considered before deciding on the best approach. According to Mitchell and Young (2001), change is a creative process and interventions and approaches should be adjusted continuously during the transformation process. Different techniques in identifying, adjusting and implementing these approaches should be included when training newly selected change agents.

Ultimately, organisations can reap the benefits by training and developing change agents, because knowledgeable change agents can help to achieve the objectives of the overall change by performing the following functions (Mitchell & Young, 2001):

- assisting the organisation to review its structures, processes and culture to adjust to the needs and demands of both the employees and the market
- assisting the project team to obtain buy-in from critical stakeholders and employees on the floor for smooth strategic execution
- assisting the project team to communicate effectively by understanding the objectives and benefits of the change initiative and by knowing just how to transfer this knowledge to employees across the organisation

According to Tan and Kaufmann (2000), change agents should have a clear understanding of how the business and the market work, who the organisation's customers are, how many people the organisation employed, the mission and vision and the culture of the organisation. These researchers believe that an individual cannot become a change agent without a clear understanding of the above, mostly because change agents should adopt their approaches in dealing with employees in their areas, according to the nature of the business and its culture.

A basic understanding of change management should be acquired before a change agent can start to drive change. It can be dangerous to both the people affected by the change and for the change agents to make certain assumptions about the emotional state of employees or develop certain interventions themselves without understanding the different factors to be taken into consideration. In many instances the change agents will act as counsellors and should therefore have the knowledge of how to deal with sensitive issues (Morgan, 1996).

Tearle (2007) maintains that a successful change agent should be able to educate people in what to expect from the change process. To this end, change agents should be knowledgeable about on the following:

- the psychological phases people go through when experiencing change
- different approaches to help others deal with negative feelings
- how to deal with resistance to change
- how to make the change process fun and exciting
- methods to overcome barriers to change

Communication approaches and methods need to be explained to the change agents to allow them to make use of the most appropriate communication media in their areas to get the message across. Different communication mediums should be used for different audiences. For example, people working in the warehouse / stores of the business possibly do not have electronic mail access and key messages should therefore be communicated to them by other means – hence the importance of the change agent knowing his or her audience (Tearle, 2007).

All the literature findings on change agent knowledge are summarised in the table below.

TABLE 3.3: CHANGE AGENT KNOWLEDGE

Knowledge	Source
Diagnostic models of change	Keep and Mayhew (1995), Hayes (2002)
Process change models	Keep and Mayhew (1995), Hayes (2002), Mitchell and Young (2001).
Understanding of the organisation and its culture, customers, vision and mission	Mitchell and Young (2001), Tan and Kaufman (2000), Keep and Mayhew (1995),
Ways to manage resistance to change	Tearle (2007), Tan and Kaufman (2000),
Overcoming barriers to change	Tan and Kaufman (2000), Morgan (1996), Tearle (2007),
Suitable communication methods and approaches	Keep and Mayhew (1995), Hayes (2002), Mitchell and Young (2001), Tearle (2007), Tan and Kaufman (2000), Morgan (1996).

3.7 LEVELS OF DESIRE TO CHANGE

Research has indicated that people with a desire to change are those who wish to participate, support the change initiative and make the change happen (Hiatt, 2006). In the past, these individuals were identified as typical change agents. According to Hiatt (2006), the enablers that encourage individuals to have a desire to change are:

- discontent with the current state
- imminent negative consequences
- career advancement
- acquisition of power or position
- hope for the future

According to Schuler (2002), change agents are usually known either as extremists or influencers. The following are some of those enablers they deem important:

- They are always keen to try out new things and are up for a challenge.
- They have a huge influence over their peers.
- They drive change with everything in them.
- They find it easy to adapt to new situations.
- They are usually the ones with whom others wish to check to determine whether the change is worth going through or not.
- They enjoy keeping track of new things happening with an immediate effect on them and can therefore justify change happening.
- They seize every opportunity and are optimistic.

In general, there are different reasons why people want to change the current status quo. People with the desire to change are usually individuals who can motivate others to accept change and explain the benefits of the change to their peers through their enthusiasm and belief (Tan & Kaufmann, 2000).

The research information on change agents' personality traits, skills, knowledge and the level of desire to change clearly indicated that these four dimensions should be taken into consideration when identifying individuals to act as change agents.

These four dimensions were introduced to industrial psychologists/change management specialists to enable them to verify whether they agree or disagree with these dimensions and statements relating to each, when identifying change agents in the future. These results will be used as the foundation to develop a change agent identification framework, as described in chapter 4.

3.8 ROLES AND RESPONSIBILITIES OF A CHANGE AGENT

In most large organisations, it is considered important for a change agent to understand the strategic issues and processes in order to explain questions about the change to their peers and subordinates. Questions around strategic issues will arise more over time as employees become interested and develop the need to learn more. It is therefore essential for a change agent to learn about the organisation at strategic level. This involves understanding systems thinking, what strategies and

methodologies are available and to understand strategic planning (Paton & McCalman, 2000). A change agent is there to provide guidance and support for his or her peers and subordinates. Someone should also give management guidance, interrogate them on certain decisions made and make possible suggestions that people on the floor came up with. This could form part of the following: explaining why a formal process benchmarking may not be a good idea, asking questions about the practicalities of implementing the change and discussing timelines and resources (Doyle, 2001). In doing so, the change agent can obtain confirmation on certain questions/concerns and then feed this information back to the employees affected by the planned change in order to prevent any uncertainties from the very onset (Hutton, 1994).

3.8.1 Roles of a change agent and the key role players in managing change effectively

"We can't wait for the storm to blow over. We have to learn to work in the rain."

- Pete Silas, Chairman of Phillips Petroleum –

The role of the change agent is generally seen as dealing with the softer issues, but sometimes includes a few tangible "hard" objectives. A change agent is not viewed as an objective third party who forms part of a team but form part of a group and like any other member of the team, participates in discussions and decision making on general issues (Hutton, 1994). According to Child and Smith (1987), those individuals known as champions in an organisation should be empowered to act as change agents. The roles of these individuals would be to promote change in every aspect of the business, facilitating and directing the proposed changes. Massey and Williams (2006) support the above view by indicating that change agents should play the role of a clinical facilitator, supporting employees throughout the organisation to deal with and adapt to the proposed changes.

3.8.1.1 Roles of key role players in managing change effectively

Before focusing on the role of the change agent as such, a number of other change management and project management roles in the context of transformational change were explored. In examining change leadership, Conger, Spreitzer and Lawler (1999) indicated that it is commonly assumed that top leaders make a difference in how well an organisation transforms. Change leaders need to assume some of the following roles in order to ensure the organisation changes for the right

reasons without becoming change fatigued. Katzenbach (1996) supports the above by indicating that without strong leadership, the organisation will not be able to transform successfully. This author indicates that direction needs to be provided by those leaders who initiated the change. According to Conger *et al*. (1999), the main area in which change leadership matters most are task environments in which there is a great deal of uncertainty among employees, technology changes rapidly, project team composition consists of young members, few resources are available, organisational culture is weak, the organisation's top management is weak and their commitment to change only moderate.

Miles (1978) maintains that almost all change processes should benefit from strong transformational leadership, establishing a new vision, but this vision should be owned and driven by individuals in the organisation and communicated by change champions across it. According to Chapman (2002), the organisation's CEO (chief executive officer) should be known as the main change agent to drive the change initiative and obtain buy-in from everyone affected by the change. This leader should provide a vision and make it possible for the changes to be implemented successfully. Senior leadership in the organisation should facilitate the change and participate as much as possible in the change process. For the purposes of this research it was deemed important for the leadership team of the organisation to provide the vision, but change agents from different levels in the organisation had to drive the vision and facilitate the change process, with support from the change leader.

These different viewpoints indicate that leadership teams should initiate the changes and the vision and drive it together with their employees, using change agents to ensure that people become familiar with the new vision and proposed changes as developed by the organisational leadership team.

When considering management versus leadership, there are many different roles these different functions can assume during a transformation process. There are numerous debates in the literature on the difference between management and leadership (Randall, 2004). One popular distinction made in the 1980s was that of Bennis and Nanus (1985, p. 21) namely that "managers are people who do things right and leaders are people who do the right thing." Currently, the view is that leadership is an outcome of social construction requiring the involvement of others (Randall, 2004). This kind of leadership consolidates, confronts and changes

prevailing wisdom and attempts to frame and define the reality of others (Alvesson & Sveningsson, 2003). Change leadership therefore focuses on creating change, whereas management focuses on creating stability (Barker, 1997). Randall (2004) suggests that the leader is more responsible for the process of change where the ethics of individuals are integrated with the needs of the employees. This would suggest that the leader takes on the role of the moral arbitrator. Schwalbe (2006) indicates that a leader focuses on longer-term goals and the "big picture" objectives, while inspiring people to achieve these goals. A manager on the other hand often deals with day-to-day details of meeting specific goals.

Another role is that of the change master. The main roles of these individuals are to diagnose and develop clear change goals, facilitate the change process, design the change process, act as a project manager, act as an educator when informing others of the change, market the change in the organisation and serve as an inspiration agent (Tearle, 2007).

A project team is usually formed to manage the planning, implementation and monitoring of a change initiative and a project manager is usually appointed to ensure that the deliverables are met. According to Young (1996), some key roles of project managers in the context of transformational change are to ensure that:

- clear project tasks are formulated and defined
- all work is well coordinated and fairly distributed
- all team members have a clear understanding of their roles and responsibilities

Burnes (2004) states that the role of a project manager includes the following:

- interpersonal roles: acts as a figurehead, liaise with other organisations and acts as a leader
- information roles: monitoring the change by asking for feedback, acts as a spokesperson and disseminates information through the organisation
- decision-making roles: acts as an entrepreneur, constructs budget and allocate resources and acts as a negotiator

Ultimately, a project manager should act as a change leader, change master, change champion and change agent in order to "sell" the change, help employees to become change ready and monitor and implement the change initiatives accordingly (Nahavandi, 2000).

Connor (1993) developed a triangular model that focuses on the three most important roles in any change process. Firstly, the role of the ***sponsor*** was described. A sponsor is an individual with the appropriate authority to approve the change. A change goal is usually formulated by the sponsor and then people are assigned to drive the change and make it happen. Planned change cannot be possible without high-level sponsors. Secondly, the role of an ***advocate*** was introduced. An advocate is someone who sees a need for change and then convinces the sponsor(s) to approve it. This is known as the so-called "selling" role - to buy into the change. The advocate must be able to provide the sponsor/s with detailed information on all aspects of the proposed change, as it is crucial to obtain buy-in. Thirdly, the role of the ***change agent*** was described. After the mandate has been granted by the sponsor(s), change agents should be selected and given the responsibility to assist in driving and communicating change. In many instances in the past, change agents were referred to as officially appointed individuals in the management team of the organisation.

According to Davenport (1993), all project team members involved in the change process need to act as change agents, fulfilling different roles. The project manager needs to clarify who is responsible for which part of the change, since certain functions may require different change agents. Some of the roles could include:

- the advocate who proposes the change
- the sponsor who legitimises it
- the targets who undergo it
- the agents who implement it
- the process owner

The roles of these different change agents differ and some will need different skills sets from others. Individuals fulfilling these roles should be chosen with care to ensure competency and commitment (Randall, 2004).

For the purposes of this research project, change agents do not refer to all individuals involved in the project team but only to those employees, assisting in communicating key messages, providing implementation guidance, offering moral support to other employees and encouraging those around them through the transition.

Next the role of change agents was explored in order to determine their real value in large organisations.

3.8.1.2 Role of change agents in managing change effectively

Change agents are those individuals in organisations who provide guidance to its team members and who are usually viewed as people others listen to. The more these individuals stay in the loop regarding any information that could potentially impact on them as a result of the changes, the better they can disseminate the information to employees, in order to keep everyone informed and valued as part of the business (Massey & Williams, 2006). The closer a change agent is to new information released, the sooner he or she can communicate the impacts and proposed change to his or her peers.

Hutton (1994) conducted extensive research on the role of change agents, and to date his research is the only research found to be significantly comprehensive and applicable to the objectives of this research project. He defined the role of a change agent as follows: A change agent is someone who is selected to help employees cope with change that is usually driven by a certain initiative or project. The focus is therefore specific and the change agent usually knows what is expected from him / her. The number of change agents selected usually depends on the size of the organisation, the number of employees affected and the extent of the change. In many organisations, a group of change agents is referred to as a “change agent network” (Hutton, 1994). This concept will be introduced later in this chapter.

In his research Hutton (1994) emphasised the following six important roles a change agent has to play in order to drive change effectively and to ensure proper alignment between project goals and organisational goals:

1) Help individuals to change the way they think and perform their jobs.
2) Help to change the norms of the organisation. This may include accepted standards, customer service, adjusting best practices, and so on.
3) Help to change the processes and systems of the organisation.
4) Establish and maintain alignment between the vision of the entire organisation and the responsibilities of the change agents, also ensuring alignment of messages across the organisations in order to prevent confusion and resistance.
5) Provide leadership, support and guidance to fellow change agents.

6) Ensure regular communication with other change agents for the purpose of sharing knowledge and experience, venting frustrations and celebrating successes.

In order to achieve all of the above, it is necessary for change agents to schedule regular meetings with other change agents. Change agents cannot start fulfilling these roles without consensus by all parties involved, what exactly is expected of them, the timelines and their immediate tasks (Hutton, 1994).

Many years ago, Rogers (1987) conducted research on the role of change agents and indicated that change agents should fulfil the following critical roles:

- articulating the need for change
- building credibility in order to be viewed by others as trustworthy and competent
- viewing and diagnosing problems, issues and concerns of the perspective of their audience
- motivating people to change
- working through others in order to translate intent into suitable actions
- stabilising the adoption of innovation
- promoting self-renewing behaviour in others

According to Ulrich (2008), change agents play a critical role in building a firm's capacity to handle change. These individuals ensure that all initiatives are properly defined, developed and delivered by working closely with the appointed project team. Ulrich (2008) refers to change agents as HR professionals spread across the organisation, assisting a project team to ensure that the employees affected become change ready.

Ideally, a change agent should be able to find the balance between being a technical expert, having all the answers and a process facilitator and allowing the organisation to find its own answers by providing some guidance (Paton & McCalman, 2000). Employees who are regarded as change agents and also known to be affected by the change are more likely to question the value of the changes, hence through the answers obtained they can easily become experts by having all or most of the answers sought by their peers (Senge *et al*., 1999). This indicates that change agents should seek information from other experts in the field to be able to assist their peers efficiently in understanding the intricacies of the proposed changes. This

will increase communication and may lead to employees becoming change ready early in the transformation period.

According to Saka (2001), change agents are also viewed as those individuals who have a passion for the proposed change and individuals who influence others on a daily basis. Not all change agents will start off with extreme enthusiasm about the change but as time passes some become increasingly excited about the change, playing a vital role in that moment in time to convince employees to change and drive the change in more than one significant way. These individuals are known for helping their peers, supervisors and subordinates along this path.

According to Accenture (2007), other roles mentioned in the literature over and above the roles already mentioned are as follows:

- Change agents actively support or champion changes throughout the organisation, but especially with those groups affected by the transformation initiative.
- They answer project/initiative questions and promote bottom-up communication.
- They accelerate change by transmitting formalised information to and encouraging informal discussions with target audiences.
- They watch and assess the local situation, diagnose problems and alert the relevant persons.
- They pilot the change distribution process in their specific areas.
- They communicate project messages to target audiences.
- They exchange experience and knowledge with other change agents.

Lippit and Lippit (1975) argue that the behaviour of a change agent runs along the continuum of eight different roles, depending on whether the he or she is directive or non directive. These roles are mutually exclusive and vary in terms of the stage in which the project is. These researchers placed emphasis on the multiple roles change agents should play during transformation. No matter what role the change agent has at any given point in time, he or she needs to work in close conjunction with the project team. The role of the change agent ideally changes as the project proceeds from one phase to the next. In this instance, the change agent will firstly take on the role of identifying the problem he / she will be faced with and agree with the project team that the problem identified is indeed correct. Secondly, the relationship between the change agent and the people influenced by the change

should be established and developed. Thirdly, the change agent should assist the organisation to implement the change successfully whilst managing the fears and concerns of employees. Lastly, the change agent should help the organisation to position himself or herself in order to manage itself from there onwards. These two authors indicate that change agents should take on some of the following roles (Lippit & Lippit, 1975):

- They help the organisation to define the problem.
- They help the organisation to examine what causes the problem by interacting with the employees on the ground and obtaining proof from them.
- They assist the organisation to offer alternative solutions that would be best for its employees.
- They provide direction in the implementation of the solutions.
- They help the organisation to maintain the change by ensuring that employees are comfortable with the new way of work.

The role the change agent fulfils relies on the process of issue resolution and its stages. Change agents will therefore have to understand the different roles they should be able to fulfil at any given point in time. Only when change agents are comfortable with these roles and understand them, can they adapt and familiarise themselves with the applicable roles required in any given situation.

Hutton (1994) describes appropriate and inappropriate roles of a change agent. A clear distinction should be made to prevent change agents from spending time and wasting energy on the roles they are not supposed to play. Some appropriate roles would include: visionary, advocate, navigator, confidant, supporter and role model while inappropriate roles include: personal assistant, commander, spy, progress chaser, self-promoter, and the like.

Randall (2004) supports the roles of change agents as indicated by Hutton (1994). According to Randall (2004), the following are a number of key change agent roles: visionary and catalyst, analyst, case builder and risk assessor, team builder, implementer, action driver, reviewer, critic, navigator and auditor. The time allocated to the change agent's real job-related tasks and supporting function in driving the change should be carefully agreed upon by the change agent and his / her supervisor. With reference to this, Hutton (1994), developed a number of guiding principles for change agents on how they should manage change according to the appropriateness of their roles:

- Change agents should start with the needs and ambitions of individuals in order to gain their commitment to change from the start.
- They should make the change process a team effort and ensure that everyone is involved and takes part in decision making.
- Partnerships should be built with all key stakeholders throughout in order to obtain continuous commitment from them.
- They should strive for a few tangible early successes, and make use of recognition and publicity.
- They should provide as much information as possible to those individuals affected by the change, the information should be based on the needs for change, benefits and the effect the change will have on the organisation and its people.
- They should celebrate any progress made and ensure that the process is fun.

In summary, the main role of a change agent relating to this research project is to provide employees with support, helping them to understand and accept the change. This was done through regular communication feedback sessions with employees concerned.

Accenture (2007) stipulates that a change agent has various contact points during his or her involvement in the change initiative. Representations of these interactions are provided in the table below. These interactions usually happen concurrently and occur, in many instances, through the establishment of a change agent network, which is described later in this chapter.

TABLE 3.4: CHANGE AGENT CONTACT POINTS

With project team members	With other change agents	With peers	With direct supervisors
Provides requirements for communications and change activities.	Receives support.	Promotes the project.	Informs about change activities.
Tracks project communication.	Exchanges ideas.	Monitors change progress among peers.	Presents actions and has them validated.
Assists with distributing communication to impacted employees.	Presents solutions on the implementation of hints.	Receives information about possible issues.	Seeks advice.
Helps facilitate training and development.	Provides coaching.	Receives suggestions for project improvements from peers.	Informs about questions, issues and/or concerns raised by members of the business unit.
		Provides information and communicates project messages.	
		Acts as a leader in their environment and involves peers.	

To summarise, the proposed contact points as illustrated in the table above, numerous interactions on certain areas take place on a daily basis with various stakeholders. It is crucial for a change agent to establish favourable working relationships with all four of the above groups because the change agent being the central point of contact between his or her peers and supervisor and the project team. The change agent needs to report back on issues, concerns and comments received from his or her peers to the project team to help them develop suitable action plans, together with the change management specialist in order to resolve any issues/problems. The project team should report information on the project's progress, possible obstacles and any other relevant information to the change agent, who, in turn gives feedback to the people concerned in the respective areas. During

these interactions the change agent's supervisor has to be kept informed of all change agent activities taking place. It is crucial that this communication cycle should be kept alive because it could have serious repercussions if neglected, owing to change agents filling a tremendous communication gap in the change management process by directly engaging with employees on the floor.

A change agent is also known as an effective advocate, understanding and functioning in cooperation with many different systems. In order to promote the proposed changes, the change agent has to be knowledgeable about the reasons, processes and benefits of the project for the organisation and its employees (Wertheimer, 2001). This researcher also indicated that a change agent is bound to become unpopular with some employees at a certain point in time, especially if the change is highly resisted by them. Change agents therefore need to focus most communication on the "what's in it for me" factors in order to win over those resisting the change.

Even when guiding principles are followed by the best change agents in a large organisation, there are no guarantees that there will not be any setbacks or slowdowns. In order for employees to fully accept, understand and master the challenges change effects, it is necessary to communicate a correct and clear message to these employees concerned. It is essential for change agents to be comfortable with the changes to be implemented and the reasons for this in order to promote change successfully and minimise resistance throughout.

3.8.2 Responsibilities of a change agent

Even though there is not much literature available on the specific responsibilities of change agents, valuable information was found.

According to Nadler (1998) there are a number of day-to-day practices that change agents should follow to solidify their role. These are as follows:

- They should demonstrate personal involvement in the change process.
- They should communicate proper alignment between employee's current work and the new direction.
- They should model the new behaviours and ensure they are in line with the organisation's values and culture.

- They should communicate effectively throughout the change process.
- They should engage with the affected employees on a regular basis.

Nadler (1998) stressed the importance for change agents to work closely with the change leader in order to ensure that the right messages are communicated and the correct behaviour is demonstrated.

Accenture (2007) indicates that the following change agent responsibilities are critical, in order to support the successful delivery of any project/initiative:

- Champion changes on the ground:
    - Show strong commitment to project changes, both publicly and privately.
    - Make sure the actions in the workplace support the change agent's words.
    - Help to create enthusiasm for project changes.

- Address target audiences' questions and concerns:
    - Answer questions honestly.
    - Seek out additional information from other change agents or transformation project team contacts, as required.
    - Give feedback to the transformation project team on commonly asked questions.
    - Admit to not having all the answers, while reassuring the target audience that they will be contacted by the project team.

- Identify and escalate potential "hot spots":
    - Be alert - watch for potential "hot spots" or areas of possible concern.
    - Raise issues with the project team before they become problems.

- Roll out transformation communications, as required:
    - Help communicate project changes to co-workers once the project team has communicated key messages.
    - Prepare for any presentations by running through presentation material and anticipating audience questions.
    - Note any audience questions that cannot be answered and find out further information after the presentation.

- Encourage, coach, and support the individuals in the business area throughout the delivery of the transformation change initiatives:
    - Support the adoption of transformation changes.
    - Help the affected business area sustain “business as usual”, post implementation.
    - Encourage the impacted business area to integrate transformation changes into their daily work practices.
    - Show sustained support for transformation changes.

- Assist the project team to review progress towards achievement of change objectives:
    - Understand change objectives.
    - Monitor progress, as directed.
    - Process findings on a timely basis.
    - Feed results back to the project team.

- Seek out and squash rumours:
    - Listen.
    - Be proactive in searching for rumours.
    - Try to replace rumours with facts.
    - Notify the project team of widespread rumours.

Ulrich (1997), who refers to change agents as HR professionals in an organisation, developed the following four critical steps change agents should follow to ensure the success of the change initiative:

1) Identify the key success factors for building capacity for change.
2) Profile the extent to which the key success factors are being managed.
3) Identify the improvement activities for each success factor.
4) Manage the key factors for change as an iterative process and not as an event.

According to Recklies (2001), some of the responsibilities of change agents include: being able to evaluate facts from different points of view, identifying and involving opinion leaders in the process, motivating staff, communicating face to face with staff

and obtaining and studying information from the project team, in order to provide regular updates on the project progress to peers.

Ulrich (2007) holds that organisations are the ones creating initiatives and HR professionals should act as change agents, managing the people side of the proposed change. Following the above four steps could result in a higher proportion of change initiatives happening much faster and more successfully.

It has been mentioned many times that change agents should work closely with the project team to ensure a successful transformation process. The project team therefore also has some responsibilities in order to ensure they supply change agents with the right tools to manage change throughout the organisation (Young, 1996).

The responsibilities of project teams include the following (Schwalbe, 2006):

- Develop a project charter and hold an initial meeting with all relevant parties.
- Develop a scope statement to plan the work that needs to done.
- Develop a detailed schedule for all team members, stating when specific work will start and end.
- Engage with the key stakeholders and employees concerned throughout the change process.
- Provide training where necessary.
- Monitor the change process closely.
- Adjust the project charter where necessary.
- Report on the project outcomes .

In many instances, roles and responsibilities are divided amongst change agents in order to ensure that certain individuals are not overloaded with specific change agent tasks because these individuals still have their usual job functions to perform as well. The roles and responsibilities of change agents should be qualitative rather than quantitative. There should be continuous feedback between the change agent, change management specialist and the change agent's supervisor in order to ensure continuous alignment and support throughout the process (Chapman, 2002).

3.9 CHANGE AGENT NETWORK

According to Lockyer and Gordon (1996), a network of people is known as a group of people working towards a similar goal or a group that share similar views or beliefs in certain things. A network is also known as a team of people working together. A team is defined as "A number of people with complementary skills who are committed to a common purpose, a common set of performance goals, and a common approach for which they hold themselves accountable" (Cobb, 2006, p. 81). The concept "change agent network" provides insight into the significance of a group of people selected to serve as change agents in the same organisation, division or team. Hutton (1994), was the only researcher that highlighted this type of network, according to the literature found. He referred to a change agent network or CAN, as many organisations refer to it nowadays, as a structure of individuals throughout the different layers of an organisation, forming part of a certain group. He also emphasised that a change network is a communication channel to support change throughout different organisational layers.

According to Randall (2004), a change agent network can also be regarded as a marketing structure, relaying communication efforts from the project to the stakeholders in different organisational layers and feeding information back to the project about expectations. It also refers to a group of centre-led individuals belonging to the same group, focusing on the same objective during the transformation process, namely to drive change and minimise risks

The majority of obstacles in a transformational process involve organisational and people issues. The main objective of a change agent network is to facilitate and support the implementation of a change initiative in order to maximise the success and benefits of the changes. Individuals belonging to the CAN are closer to the "ground" and can therefore act as the link between the project team, implementing the change with employees on the ground (Hutton, 1994).

Accenture (2007) maintains that on the basis of research conducted in the past it is clear that a change agent network serves the following purposes:

- to provide information and guidance on how to implement a quality approach
- to offer moral support and encourage people around it
- to ensure recognition for hard work and milestones achieved during the process

- assist in fostering communication and cooperation between different divisions in the organisation

A change agent network should not only consist of the employees across the organisation selected as change agents but should also comprise the leaders of the change initiative. This includes the sponsor, advocate and divisional heads. Management are also seen as the drivers of change, and without their support and buy-in, selecting other change agents will be futile. Individuals forming part of this network function in different areas in the business, working with their own group of people in their respective areas. This network does not refer to a division or function within the business because people still work in their own areas, but cooperate in order to achieve a common purpose. The size of the network will depend on the size of the organisation, as well as on the number of employees influenced by the change (Accenture, 2007).

According to Katzenbach (1996), the project team in support of the change leader should form a network. This author believes that the project team should provide guidance to any other teams or individuals impacted by the change or involved in the project. It may be challenging for the project manager to put together a skilful project team to lead the change.

The project manager must ensure that the individuals in the team are able to work together and are committed to the process. It is therefore also essential for the organisation to appoint the right project manager to make sound decisions Young (1996). Often, when establishing a project team, the team is new and most members might not know one another (Schwalbe, 2006). Such a team might typically pass the following five stages of team development (Schwalbe, 2006):

1) forming: introducing team members
2) storming: team members having different opinions on how the team should operate
3) norming: team members testing one another which often results in evolving conflict
4) performing: shifting take place to the achievement of team goals as opposed to working on the team process
5) adjourning: breaking up the team on completion of the project

The typical roles and responsibilities of a project team were discussed earlier, and by examining the advantages of establishing a project team, focusing on the completion of certain tasks is often one of the most effective ways to help a team become productive and meeting the project objectives (Verma, 1996).

A change agent network, like a project team, can also be viewed as highly effective because of the fact that management do not see this network as a separate department but as part of them. The network can also reduce the amount of pressure on management in their area with regards to managing the people side in a transformation process (Hutton, 1994). A group of change agents can help to pass on crucial messages, and individuals in the network can provide tips and guidelines on how to minimise the risks and fears of the employees concerned (Randall, 2004).

In the same way as project team members, change agents can learn from one another by means of mutual support. If team members motivate one another, the change initiative would have a much bigger chance of succeeding. Project team members often adopt the attitude of the team leader, and one of the main motivational factors ensuring an effective team is for the leader to have a positive attitude (Verma, 1996). Change agents working as part of team should have the opportunity and suitable mechanisms, allowing them to regularly communicate with and motivate one another. These individuals should be aware of who the other selected change agents are to ensure proper communication (Randall, 2004). The network may be a team with enormous power, because they are individuals volunteering to help drive the change and they are prepared to put their hearts and souls into it and believe in it (Accenture, 2007).

Before an organisation decides to select individuals to form part of this network it is vital to obtain buy-in from the management team to establish such a network. Management should clearly understand the reasons behind it as well as the roles and responsibilities of individuals in the network and the methods used to select members (Hutton, 1994). One of the first questions to be asked is: How many change agents are needed? Carnell (1999) indicates that before a project team can make this decision, the different roles and responsibilities of change agents should be determined and documented. He suggests that input should be received from employees outside the project environment about their expectations of a change agent. In cases where different roles need to be fulfilled by different change agents,

suitable individuals should be selected, with the necessary skills to be able to fulfil those roles (Dawson, 2003.)

The group responsible for selecting the right number and type of individuals to act as change agents, should select employees who are constructive, have the best interests of the organisation at heart and have trust and confidence in their colleagues and supervisors (Randall, 2004). All employees should also be made aware of the upcoming network as well as the process to be followed in becoming a change agent. After selection, these individuals should be contacted to obtain their approval and consent, in cases where they were nominated by others to act as change agents. Individuals who volunteer to fulfil this role should clearly understand what it entails and what will be required from them (Accenture, 2007).

In the past, there was confusion because change agents selected from different divisions were not always sure to whom they should report on change agent activities. According to Randall (2004), the easiest way to resolve confusion is to obtain buy-in from selected change agents' line managers beforehand and request them to obtain feedback from selected change agents in their area on a monthly basis. This will also afford line managers the opportunity to determine whether the change agents are still on track and whether they are able to cope with their given tasks and with their original jobs, which they are paid to do.

It is crucial to sustain the network after establishment in order to accomplish the task at hand. Hutton (1994) provides the following suggestions for sustaining a change agent network:

- Schedule meetings or bi weekly touch points with change agents, according to their availability. It is important to work around their schedules because they have other responsibilities too.
- Recognise the need for moral support in the group, emphasise their problems and develop suitable interventions to resolve or minimise their problems as soon as possible.
- Change agents should share successes and recognise one another's achievements - this will keep them focused and motivated.
- Knowledge should be shared. Through the experiences of the change agents, they might develop possible solutions on behavioural problems in their area. The solutions may just be what another change agent was looking for and this shows that sharing knowledge is a powerful tool in this network.

- The network can also be used to scout for more talent. Some individuals may approach change agents and volunteer to be involved in the process and possibly also become a change agent. Change agents should therefore be on the lookout for other influential individuals with lots of energy and enthusiasm.
- Change agents should occasionally forget about their tasks, come together and celebrate their achievements to date.

As indicated earlier, before an organisation can start to manage change through a group of change agents it is essential to ensure that the right individuals are selected to fulfil these roles. In essence, the key role of a change agent network is to provide information and guidance on how to implement a quality approach, offer moral support and encourage those around them and assist in building communication and cooperation between different business units in an organisation.

3.10 CHANGE AGENT IDENTIFICATION

"If we want things to stay as they are, things will have to change."

- Giuseppe di Lampedusa (1957) -

According to Tan and Kaufmann (2000) it is critical for change agents to guide an organisation during times of change and it is therefore imperative for these individuals to become involved and to participate in the decision making processes.

As indicated, ideally, change agents should have certain personality traits and skills to be able to execute their responsibilities as change agents in the most effective way. The key question that now arises is how to identify individuals who have suitable personality traits and skills. The same factors should be taken into consideration when identifying individuals to form part of a project team. According to Lockyer and Gordon (1996), personal and technical skills should be considered when identifying individuals to form part of a project team – hence the need for the project manager it be involved in the selection process.

Lockyer and Gordon (1996) developed the following guidelines a project manager should consider when identifying individuals for the project team:

- Appoint individuals who will
    - behave innovatively
    - openly discuss ideas
    - communicate freely between functions
    - sell the ideas and work of the team
    - obtain cooperation from people outside the team
    - ensure work progresses at an acceptable level
    - assess their own and other people's work pragmatically
    - remain cohesive as a group

It is clear that potential project team members need to have certain characteristics, to ensure team cohesion and harmony. If individuals with suitable skills, knowledge and personality traits are selected, the success of the project in achieving its stated objectives will increase (Schwalbe, 2006).

According to Hutton (1994), when searching for individuals who could ideally act as change agents, certain factors should be taken into consideration: Personal skills and attributes, knowledge and experience of the business and knowledge and experience of quality. The following should form part of the selection process when searching for individuals with specific skills and personality traits. Search for individuals who

- identify with the aims of the change process, values and culture
- are able to deal with their complex issues of their peers and subordinates
- demonstrate integrity as well as the ability to earn the respect of others
- portray the urge to always help, involve others and collaborate with others - in other words be a team player
- display effective interpersonal and communication skills
- demonstrate patience, persistence and even an appropriate sense of humour

According to Tan and Kaufmann (2000), another factor to consider is the amount of knowledge and experience the individuals has of the business. Such individuals should understand the kinds of problems employees face and help them to resolve their problems. In doing so, it is important for a change agent to have a good understanding of the organisation's processes, procedures, systems, policies, and so on. He or she should understand the structure of the organisation, what the organisation stands for and the functions and roles of the organisation's executives.

A change agent, like a change leader, should be someone who has knowledge and experience of quality. This means that the he or she should be able to explain the current status of the organisation, and the importance of the quality of its products, services, global trends and best practices (Conger *et al*., 1999).

According to Katzenbach (1996), change agents should be individuals who have been part of the organisation for a while, because they require an in-depth understanding of all organisational-related processes, structures and policies. Even though the above focus areas need to be taken into consideration when selecting change agents, probably the most important quality, underpinning the above, lies in the individual's attitude.

It is evident from the above, that when selecting team members for a specific purpose, certain characteristics play a role in the identification processes.

3.10.1 Methods/approaches to follow in identifying change agents

Before exploring methods or approaches to follow in identifying change agents, some of the fundamentals of the composition of a project team were researched. These findings on the identification of project team members will be compared with methods and approaches found in change agent identification. When compiling a project team, project managers should consider a number of fundamentals (Cobb, 2006). Firstly, it is necessary to determine the size of the team that will be required. The project managers should review and analyse the nature of the project, and the duration and scope of the work so that they can determine the number of resources required. Secondly, the project managers should determine exactly what skills are necessary to achieve the stated project objectives, and cluster these accordingly. Thirdly, the level of individuals to be identified should be determined through team governance. The team governance approach will indicate whether the project will be manager led or self-managed. In cases where teams manage themselves throughout the process, more senior personnel will be required to lead their specific functions in the team. Fourthly, the project manager needs to determine whether these individuals need to be on board in a full-time or part-time capacity. Lastly, discussions should be held by the project manager with different functional heads in the specific area where the initiative will be implemented, in order for those functional heads to advise on which individuals with a specific skill set can be considered to join the project team or whether external recruitment will be necessary (Cobb, 2006).

Hackman (2002) also indicates that in order for a team to function effectively; the right candidates should be identified to fulfil the project roles. He also emphasised that the team members' identification process is one that should not be rushed, because this could ultimately impact on the end results. Members should be chosen carefully and judiciously.

As indicated above, it is necessary to understand that the approach followed in the identification of individuals for this role, could have a significant impact on the change initiative itself. Hutton (1994) provides some valuable information on the recruitment of these individuals. It is usually the task of change management experts and senior management to select the right individuals. Management should be a part of this process since they are aware of the capabilities, skills and personality traits of people in their area and can help to recommend specific individuals. However, change agents may also be required to identify other potential change agents to assist them in the process. Research shows that it is unusual to find individuals with the appropriate quality-related knowledge and skills to serve as change agents. How would these individuals have acquired this knowledge? If no suitable internal candidates can be found, external individuals can be recruited, but this is not always ideal. Ideally, someone from inside the organisation who is familiar with the organisation's people, structures and vision should rather be selected and developed to serve as a change agent (Luecke, 2003).

Some of the benefits of selecting individuals from within the organisation include the following: the characteristics and abilities of internal candidates are generally known, and the individual knows the organisation as well as the type of business, the process, people and the politics (Hutton, 1994). Often these individuals are already known and respected by others. The time it will take to recruit an outsider, allowing him or her enough time to familiarise himself or herself with the business and build relationships may be too time-consuming and this may then interfere with approved change initiative timelines. Also, new employees selected as change agents may become involved in the change process too late, when fears, uncertainties and anxieties are almost unmanageable (Randall, 2004).

Strebel (1998) provides significant information on how to attract the potential change agent's attention. A subtle approach can be used to attract change agents. In organisations where one can solicit the support of change agents publicly, one can

- approach individuals directly and sell the idea of becoming change agents to them
- ask managers to nominate and select change agents in their unit/division

In cases where it might be possible to select change agents and utilise them to act as change agents in the long term, it could be worthwhile for an organisation to invest in them by continuously training and developing them (Luecke, 2003).

Strebel (1998) distinguishes between two types of change agents: task-oriented and people-oriented change agents. Task-oriented change agents tend to be skilled at analysing formal economic dimensions, but have poor interpersonal relationship skills. These individuals are effective in driving processes and technology and highlighting the trends in the marketplace. People-oriented change agents however, focus on aligning the change initiative to the needs of their fellow employees. These individuals usually have excellent interpersonal skills and find it easy to communicate and drive change among their co-workers. This research project focuses on the people-oriented change agents, since these individuals need to work closely with others affected by change to ensure that they become change ready.

Luecke (2003) provides insightful information on the ways to identify change agents. Organisations should do the following:

- Determine who people listen to. Change agents often lead with the power of their ideas.
- Be alert to recognise people who think “otherwise.” Change agents are usually not satisfied with the current state of affairs and encourage any suggestion that brings about change.
- Focus attention on new employees, because they may enter the organisation with a different mind-set that brings different ideas and creativities to the table.
- Search for people with unusual training or experiences, because these people sometimes see the world through a different lens.

Arrata *et al*. (2007) hold that there are a number of distinct factors an organisation should take into consideration in order to identify credible change agents. They stress that when considering identifying change agents it is necessary to anticipate other staff members’ reactions when the change agents’ names are announced.

Selecting individuals who are known as high performers and are usually already well respected and well-known, would indicate that management take the programme seriously by placing these credible individuals into the roles of change agents. Arrate *et al.* (2007) argue that by forming a credible team of change agents, change will be driven and implemented more effectively. Recruiters should focus on identifying people with sound interpersonal skills - in other words people who find it easy to communicate with others in their area.

The procedure or tools used in the selection of change agents can be customised specifically for each division in the organisation, depending on where the change agent is located in the organisation, as well as considering the planned nature of work they will be asked to accomplish (Strebel, 1998).
According to Strebel (1998), the two most favourable and frequently used methods organisations use to select change agents are

- change-readiness questionnaires
- nominations by respective line managers

In cases where questionnaires are used, the organisation selects an appropriate questionnaire that will help to identify potential change agents according to their needs. The literature findings merely stipulated that many organisations request impacted employees involved to complete a certain change-readiness questionnaire in order to determine the level of readiness, and in so doing to identify those individuals with high change-readiness scores as potential change agents (Strebel, 1998).

In cases where questionnaires are not used, potential change agents are identified through nominations by direct managers or supervisors. These managers usually nominate individuals in their area who they believe have influential abilities, communicate well with others and have powerful relationships with their colleagues. No individual nominated to act as a change agent should ever be forced to act in this role. It should be voluntary, and the individual should have a clear understanding of what will be expected from him or her. Only in cases where an individual and his or her direct manager are satisfied with their roles and responsibilities, as well as the time the individual spend in this role, should a change agent be appointed and introduced (Strebel, 1998).

Wertheimer (2001) developed a number of criteria for finding individuals for change agent positions. He indicated that the identification process will differ, depending on the location in the system at which change agents will be placed and the nature of the work they will be asked to accomplish. However, the following are some generic characteristics the recruiter should consider when identifying suitable change agents:

- the level of experience in rendering a service to both internal and external stakeholders
- the level of experience in supervising or assisting others to solve multiple problems
- the communication skills of the individuals, which should include reading and writing skills
- the facilitation skills, which should be tested in practice by requesting the individual to facilitate a specific workgroup session

The recruiter should have a check-list handy to indicate which skills are visible or invisible, to enable him or her to draw up a short-list from the pool of candidates evaluated.

The recruiter should also consider a proven track record of trust in the community and capabilities developed by the potential change agent thus far. Strebel (1998) and Wertheimer (2001), like Hutton (1994), also indicate candidates with the right interpersonal skills and personality traits should be considered for this role, instead of focusing on the qualifications of a preferred change agent. Wertheimer (2001) argues that skills and traits that potential change agents possess are far more important than any qualification or specialised training.

To summarise: When identifying change agents it is important to consider the following: specific skills, personality traits, knowledge of the organisation and the level of trust and the relationships between the potential change agents and others in the organisation.

Every organisation should ask the above questions before deciding at which level change agents should be represented. Arguments regarding to two of the above questions are as follows (Hutton, 1994):

1) it may be extremely difficult for the functional heads to shift some responsibilities and take the time and effort to become an effective change agent

2) many employees feel more comfortable with change agents being their peers and not their supervisors

Since these arguments will differ from one organisation to the next, it is critical to ask these questions and not use a generic approach previously adopted by other organisations.

3.11 REWARDING CHANGE AGENTS

Even though minimal research has been conducted on change agent rewards and recognition, in-depth research has been undertaken on employee rewards and recognition. Since change agents are part of the employees in a large organisation, the literature findings in this regard were deemed appropriate. Some of the greatest challenges most organisations face today are efficient and effective employee rewards and recognition programmes (Milne, 2007). Many organisations are currently implementing reward and recognition programmes, believing that these will assist to effect the desired culture change. Vast amounts of money are being invested in these types of activities in many organisations across the world. The rationale for investing in employees is based on the assumption that financial incentives will encourages employee loyalty and teamwork and develop the desired culture (Milne, 2007).

A large body of literature exists on employee reward and recognition programmes and many of these studies focused on the effects of rewards on task interest and performance. A distinction can be made between two types of motivation, namely intrinsically and extrinsically motivated behaviour. The former focuses on a reward for the task itself, and the latter focuses on an activity that is rewarded by incentives not inherent in the task (Deci, 1971).

Understanding what motivates employees is one of the key challenges for managers today (Milne, 2007). According to Bruce and Pepitone (1999), it is imperative to know how to influence that, which others are motivated to do, with the overall aim of having employees identifying their own welfare with that of the organisation.

In general, the term “reward” refers to overall compensation, since many organisations use promotions and bonuses to reward employees, in the “financial”

sense of the word (Lawler & Cohen 1992). Kanter (1989) added another dimension to this discussion in the 1980s when she noted that many organisational rewards are differentiated on the basis of status and this is often the only way an individual can increase his or her chances of promotion.

Employee recognition is slightly different from employee rewards. Recognition is viewed as a nonfinancial reward given to employees selectively. Recognition can be as simple as giving someone feedback on outstanding performance, commitment and learning or giving an individual a certificate or thank you letter (Milne, 2007).

It is generally accepted that incentives such as rewards and recognition programmes are used to reinforce an organisation's values, promote outstanding performance and foster continuous learning by openly acknowledging role model behaviour and ongoing achievement. Both types are dependent on managers recognising the subordinates' achievements, whether as individuals or part of a team (Milne, 2007).

The literature review included information on project teams and change agent networks and it seemed appropriate to include some information on rewarding of teams. Since teams are becoming the primary work units, many organisations are attempting to adopt team-based reward and recognition programmes. Several factors have contributed to the growing popularity of team-based reward and recognition programmes. Some factors include a growing interdependence between tasks (Johnson, 1993). Changes in the way work is organised, the flattening of organisations and changing technology have created interdependencies between tasks that often make it difficult to separate the contributions and performance of individual workers (Nickel, 1990).

Research on performance appraisal indicates that performance can be more accurately assessed by measuring the success of larger units in the organisation instead of individual performances (Gerber, 1995). Group-level rewards have also been shown to influence the motivational levels of team members positively (Lawler, 1992).

Other studies conducted in the field have questioned the ability of team rewards to foster cooperation within teams. Wageman (1996), for example, found that the level of task independence among group members was positively related to cooperation, helping, job satisfaction and the quality of group processes, while the type of reward system - individual or group rewards, or both - exerted no independent effects on

these criteria. Team rewards may also lead to competition between teams and this may mean that teams move into a competitive, instead of a cooperative relationship with other teams with whom they have to interact (Lawler, 1992).

It is evident from the above that there is a need to design a team-based incentive programme to sustain team progress and reinforce the team structure (Hoffman, 1998). The work of Strebel (1998) was the only material that could be found on the remuneration of change agents. According to him, individuals are often hesitant to act as change agents because of a high workload in their day-to-day tasks. If individuals' performances are not measured and they are not remunerated for fulfilling a specific role, they might also become hesitant to voluntarily assume that role.

Strebel (1998) suggests that change agents should be compacted on their performance. A compact refers to a performance measurement indicator and an individual's key performance indicators. When it is performance bonus time, a rating should be allocated to employees' efforts as change agents. This initiative was introduced by an organisation named Eisai, a Japanese pharmaceutical company. The psychological attraction of a change agent's newly updated performance compact provided the opportunity to start up something new with more confidence, commitment and enthusiasm.

Once change agents have been identified, an organisation should help the individuals commit to the change initiative and process to be followed. According to Strebel (1998), the following should be considered when trying to establish commitment by the change agent:

- When no compact is in place, change agents may experience a dip in morale owing to the fear that their other job-related tasks will be negatively affected. This can be rectified by placing a performance compact in place in order to lessen other job priorities and adding change agent tasks into their performance compacts with which both parties are satisfied.
- Once a change agent understands his/her change priorities, and his or her manager should agree on the level of involvement in driving the change. This should also be included in the individual's performance compact.
- The individual has the right to signal commitment. Once this has been provided his or her supervisor has to commit to support the change agent and

encourage him or her to be involved in the change initiative for a certain period in time.

The above illustrates that even though it is essential to follow the correct procedure in identifying change agents. It is also critical to follow the correct process to obtain commitment from individuals identified, as well as a clear understanding of the organisational levels from which individuals should be selected.

The following conclusions can be drawn from the literature analysed in this chapter: There is a significant gap in literature on possible approaches, tools or techniques to be used to effectively identify change agents. This fact once again emphasises the gap this empirical research would fill. Most organisations seem to have utilised their own, customised approaches to identify change agents. Organisations compile their own criteria that individuals should comply with in order to become change agents. In most instances these criteria include years/level of experience, personality traits and interpersonal skills.

These focus areas are explored in the empirical phase of this research project in which a qualitative perception questionnaire was compiled, forming the foundation for the development of what seems to be one of the very first change agent identification frameworks. Future researchers could find the empirical research results useful and advantageous because of the change agent identification information, which is currently almost nonexistent in the literature in terms of a formal change agent identification framework.

3.12 CHAPTER CONCLUSION

This chapter dealt with the meaning of the term “change agent”. Various definitions were provided in order to understand the meaning of the concept from different viewpoints as well as information on the roles and responsibilities of these individuals in large organisations. The following is the most applicable definition found for the purposes of this research project: “*Change agents can be found in all levels of an organisation. They can be leaders, managers or employees. A change agent is someone who supports the need for change, is committed to championing the cause*

and motivates staff in their respective areas to see the benefits thereof" (Cheung *et al*., 2007, p. 9).

The key characteristics found in the literature were also discussed. These include certain personality traits, skills, knowledge and levels of desire to change a change agent should ideally possess. Most of the personality traits, skills and knowledge required for change agents were found in the work of researchers. This indicates that there is a significant level of agreement regarding the attributes of change agents. Tools and methods used in the past to identify change agents were mentioned. According to Strebel (1998), the two most favourable and frequently used methods used by organisations to select change agents are questionnaires or nominations by respective line managers. A gap in the existing literature was detected because of the limited amount of research regarding the identification of change agents.

The information provided in this chapter once again highlighted the fact that there is still much to be researched on the concept "change agents." The conclusion drawn is that there is definitely a need for change agents to become part of the process of managing change, especially in instances where transformation occurs in large organisations and where many employees are affected by the proposes changes.

"You may be the Pied Piper, but if there is too much distance between you and everyone else, they will never hear the music."

(Cheung et al., p.2. 2007)

This quotation aptly highlights the reason why a change agent can be viewed as the ideal link between the change management specialist and the employees in the organisation.

Chapter 4 will focus on the methodologies used in the empirical study to ensure that the scientific research processes are followed throughout in order to obtain valid and reliable research results.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

The comprehensive literature review in chapters 2 and 3 provided the theoretical context of the research. This chapter will focus on the research methodology for both the qualitative and quantitative research approach. Research methodology explains the process followed to perform an empirical study and described the population, sample, tools and techniques used within the study. The research design will be described, providing the foundation for the research process followed (De Vos *et al*., 2002).

As indicated, this research project adopted a multi-phased approach, which included the following qualitative and quantitative research approach characteristics (Creswell, 1998):

- Qualitative
    - The topic had to be widely explored.
    - There was a need to present a detailed view of the topic.
    - Sufficient time and resources were necessary to execute the research.
    - The research shaped continuously as the project progressed.
- Quantitative
    - A highly formalised and explicitly controlled approach was followed.
    - The researcher's role was that of an objective observer.
    - The research focused on specific questions and hypotheses.
    - Statistical methods were used to determine whether the improvement in the change-readiness scores of the group supported by change agents meeting the ideal profile were significantly larger than the improvement in change-readiness scores of the group supported by change agents who did not meet the ideal profile.

This multiple-phased research approach as well as the steps followed in the research process will be explained in this chapter. The reason for choosing a specific research design will be discussed for the sample sizes justified. The way in which data were collected and the measuring instruments utilised in doing so will also be indicated. Provision of this information indicates how the researcher carefully planned the

execution of the research project in an effort to improve the scientific quality and validity of the outcome (Mouton & Marais, 1994).

4.2 RESEARCH DESIGN

According to De Vos *et al*. (2002) research design refers to a plan or blueprint of how one intends conducting the research. The research design serves as a point of departure, and while focusing on the logic of the research, emphasises what the end product should be. In this instance a comprehensive three-step qualitative and nine-step quantitative research process were designed, which will be schematically illustrated and explained.

The research design is determined by the research question(s) which in turn influence the research activities, such as what data to collect and how. An exploratory and descriptive research design was chosen for the purposes of the research, incorporating multiple research methods in order to compile a change agent identification framework, whilst ensuring the validity and reliability of the research process.

The research design chosen for this research project is known as a comparison group pre- and post-test design. The dependent variable (the change-readiness scores of the employees concerned) was measured before the “treatment”, which is also referred to as the independent variable (support by change agents). This variable is then re-measured after the introduction of three different levels of the independent variable or “treatment”, as indicated in chapter 1. These “treatment” levels refer to no support from change agents, support from change agents meeting the ideal profile and support from change agents not meeting the ideal profile, in terms of personality traits.

The ultimate goal of the empirical research phase was to determine whether the improvement in change-readiness scores was significantly larger for the group supported by change agents possessing a specific personality trait from the ideal profile compared with the improvement in change-readiness scores of the group supported by change agents not possessing a specific personality trait from the ideal profile.

The two groups of employees were contrasted by comparing the improvement of employee change-readiness score, that is the difference, between pre-test and post-test ADKAR change-readiness assessment scores. Difference (improvement) scores involve subtracting the pre-test scores from the post-test scores. The pre- and post-test ADKAR change-readiness scores will be provided in chapter 5. The overall empirical research question (Are there significantly larger improvements in the change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not having that specific trait?) was answered by means of the comparison scores. All employee pre-test results served as an anchor, making it possible to compare the two employee groups. A detailed process description and the reasons for specific steps followed in the research process will be provided.

The sample groups were not obtained by random assignment but by purposive sampling. Purposive sampling falls under the category of probability sampling (Seaberg, 1988). The type "purposive sampling" in this category refers to researcher's judgement. The sample of change agents was purposefully chosen because they showed a high-level of change-readiness in the ADKAR change-readiness assessment results.

This research was conducted in a South African utility organisation consisting of approximately 32 000 employees across the country. The research was performed in the procurement and supply chain function of the organisation. During the period of the research this function experienced major transformational change. The objective of the transformational change was to change the way in which the organisation procures goods and services. All procurement and supply chain processes, as well as organisational structures, had to be reviewed and changed. Approximately 1002 employees were impacted by these changes. Not all of the 1 002 affected employees were assessed by the ADKAR change-readiness assessment, because only a certain number of roadshows were undertaken. The reasons for not visiting all the sites where the employees concerned were based were because of time constraints and overall business priorities, that is, the financial year-end and a cost-saving initiative throughout the organisation. In many instances the site managers themselves shared the objectives, benefits and processes of this project with their employees. In total, 350 of the 1 002 employees completed the ADKAR change-readiness assessment, and for these individuals, baseline ADKAR results were therefore available.

Since the 1 002 employees affected by the change were scattered throughout the country and a huge number of employees were involved, it was decided to establish a change agent network. The main purpose of this network was to appoint individuals to assist the change management team in supporting the affected employees throughout the transition period, and also ensuring that all project-related communication messages would filter through. This was the first time ever that the concept “change agent network” had been introduced to the organisation.

The organisation welcomed the establishment of such a network, and was eager to have this research done, to determine the ideal personality traits that employees should portray in order to act as change agents. 100 employees were identified as change agents based on their high levels of change-readiness (desire to change). Owing to a number of reasons, as explained in chapter 5, the 100 selected change agents reduced to 27 after a few months. Firstly, the remaining 27 change agents were later-on requested to complete an Occupational Personality Profile (OPP) questionnaire to determine which of them indeed display those personality traits that form part of the ideal profile of a change agents. Secondly, it had to be determined whether the change agents with the key personality traits from the ideal profile resulted in employees showing significantly larger improvements in change-readiness versus employees supported by change agents not possessing key traits. The ideal profile was compiled by means of a qualitative research phase, to be explained later. The sample group from which final change-readiness measures were obtained consisted of 135 impacted employees in the procurement and supply chain function who were supported by the change agents involved in the research and who were responsible for guiding them through the transformation change process. The method of selecting the 135 employees to complete the ADKAR will be explained later.

Initially, the literature on the roles and responsibilities of change agents were researched. Limited information was found on the identification of individuals as change agents, and the organisation therefore used its own discretion by selecting change agents through the use of the ADKAR change-readiness survey (Arrata *et al*., 2007). This survey will be explained comprehensively later.

During the quantitative phase of this research project, certain steps were followed in order to compare the improvement in change-readiness scores respectively of employees supported by change agents with a specific personality trait that forms

part of the ideal profile and those employees supported by change agents not meeting the ideal profile. Both the qualitative and quantitative steps followed in this research project are explained in sections 4.3 and 4.4.

4.3 RESEARCH APPROACH

As indicated in chapter 1, a combined qualitative and quantitative research approach was adopted in the research project. This method is known as a “multiple-phased approach”, as described by Creswell (1994).

On completion of the initial quantitative and qualitative research phase, it was essential to test whether the verified qualitative information was indeed valid, by empirically and quantitatively testing the elements in the developed theoretical framework. A detailed quantitative research approach was followed which included a multiple group pre- and post-test design approach, as indicated earlier.

4.3.1 Steps in the research process

The research process is presented schematically in figure 4.1, and captures the key focus areas of the research project and the process followed in obtaining the results as per the research objectives stated. Each of these steps will be explained in detail in sections 4.4 and 4.5.

Step 1: Quantitative process

Reliability coefficients were determined for the ADKAR change-readiness assessment. The ADKAR was completed by means of a convenience sample of 350 from a population of 1 002 employees in the specific division's procurement and supply chain function of a large organisation.

Step 2: Quantitative process

On completion of the ADKAR questionnaire, 100 change agents were chosen on the strength of their ADKAR results, indicating a high level (score of four or five on a five-point Likert-scale) of desire for change. This group was reduced to 27 change agents over a period of six months. Reasons for the decrease in the number of change agents and an analysis of the ADKAR results are provided. A t-test for independent samples was conducted to determine whether the means of the two groups differed significantly from each other in terms of overall change-readiness scores. Two groups were compared: 73 change agents who decided to leave the network and the 27 who remained as part of the change agent network.

Triangulation approach

Step 3: Qualitative process

3.1 Qualitative perception questionnaire (sample = 15 external change management specialists)

3.2 Concept mapping workshop (sample = 15 internal change management specialists)

3.3 Change agent identification framework and dimensions descriptions

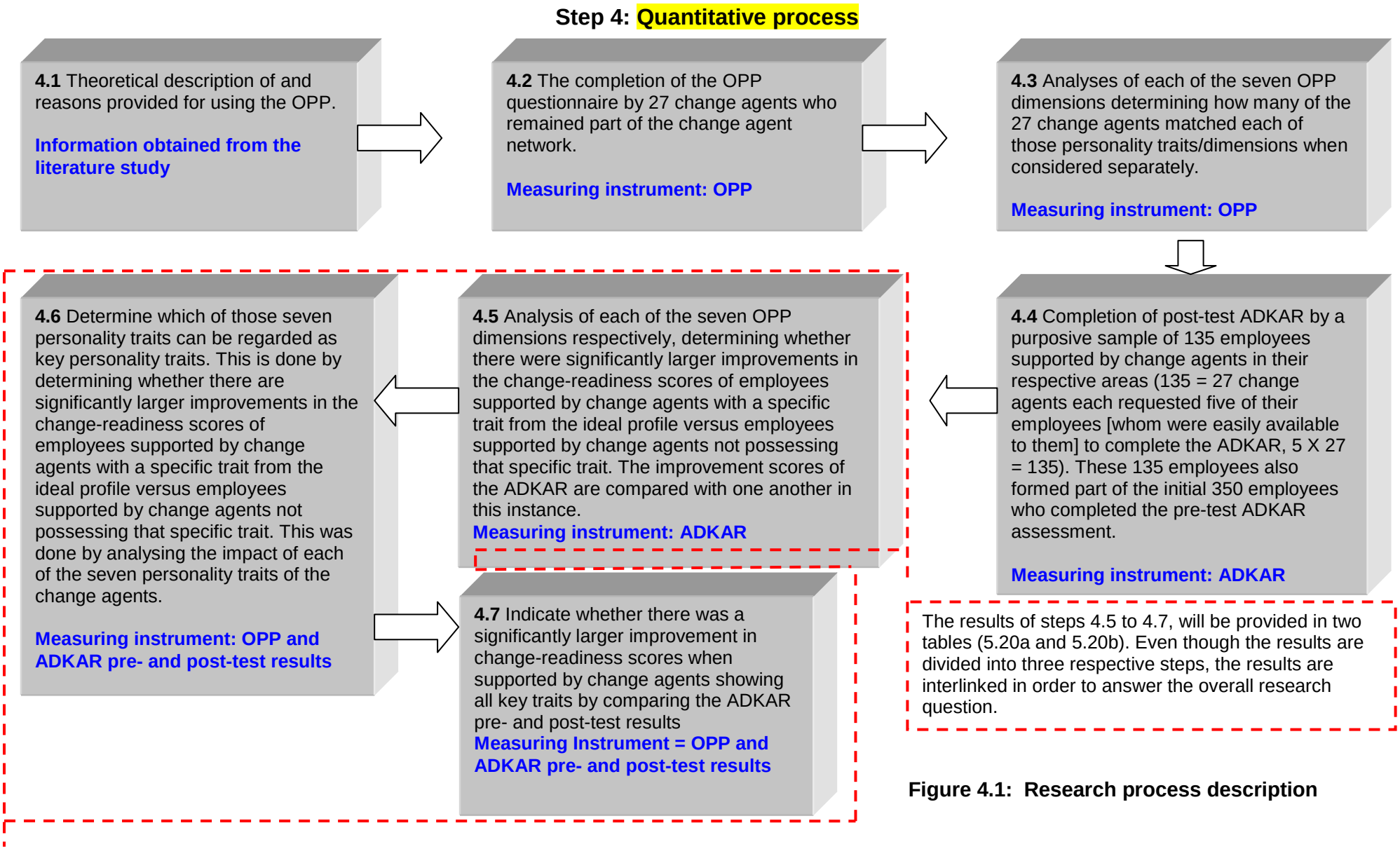


Figure 4.1: Research process description

4.4 RESEARCH PROCESS DESCRIPTION

Since the research process consisted of a number of qualitative and a number of quantitative steps, the research design, description of the measuring instruments, sample group description and the data collection method in each step are interlinked and are described as part of the same process in this section. This will allow for a more substantive and clearer picture of what needed to be achieved.

4.4.1 Step 1: quantitative process: completion of ADKAR and its reliability coefficients

4.4.1.1 Background

A number of roadshows were undertaken during the period mid-2007 to the beginning of 2008 within the procurement and supply chain function of the utility organisation. The objective of these roadshows was to ensure that the employees to be affected by transformation were fully aware of the objectives of the change, the benefits for them and the organisation and the way forward. A sample group of 350 from the total population of 1 002 procurement & supply chain function employees were engaged with during the roadshows undertaken - all employees were part of this functionality where a new operational model had to be implemented. The employees completed a change-readiness survey known as the ADKAR change-readiness questionnaire. This questionnaire was used to determine the change readiness levels of those affected by the change and to identify individuals to act as change agents. The reasons for the selection of this questionnaire are outlined in the following section. All 350 employees completed the ADKAR questionnaire. A detailed description of this questionnaire will be provided in section 4.4.1.2.

Employees who indicated a high level of desire to change were selected as change agents. This means that all employees who indicated a number 4 or 5 (Agree or strongly agree) on a Likert-type scale, next to the statements in the “desire” category of the ADKAR questionnaire, were identified as change agents. This was the first time the organisation had selected change agents, and it was not clear how to ideally identify individuals as potential change agents. Key stakeholders in the organisation then recommended that the employees who indicated a high desire to change, as per the ADKAR questionnaire results, should be identified as change agents. According

to the ADKAR principles, individuals with a high desire to change are eager to participate in the change and motivate others to accept and participate in the change process as well (Hiatt, 2006). This was the first time the ADKAR change-readiness questionnaire had been administered and served as the initial pre-test measure. The ADKAR served as the post-test measure as well, determining whether there was a significantly larger improvement in employee change-readiness scores when supported by change agents displaying a specific personality trait that forms part of the ideal profile versus employees supported by change agents not displaying that specific personality trait as per the ideal profile from the developed change agent identification framework. The ADKAR pre-test and post-test results had to be compared in order to determine whether or not there was a significantly larger improvement in change-readiness.

4.4.1.2 Reasons for selection of the ADKAR and instrument description

The organisation decided to make use of the ADKAR change-readiness assessment owing to the limited time it took to complete the questionnaire and its simplicity. Two other change-readiness assessments were reviewed before deciding to use the ADKAR. First, the change-readiness assessment of Maurer (1996) was reviewed. This assessment consisted of nine questions. However, because the items were not being grouped categorically, it would have been difficult to identify people with a passion for and desire to change. Secondly, a change-readiness assessment developed by Performance Programs Incorporated was reviewed (Performance Programs Incorporated, 2008). This assessment tool consisted of 41 standardised questions that are sub-divided into the following categories: employee involvement, preparation for change, attitudes towards change, reaching the goal and project activities (Maurer, 1996). This assessment was deemed appropriate and valuable but because it consisted of more than 40 items, it would take the participants longer than could be accommodated to complete.

The instrument chosen, namely the ADKAR, was developed by the Prosci Change Management Learning Centre. According to Hiatt (2006), every organisation uses different assessments, to measure an employee's readiness to change. The assessment consists of 18 questions and represents the following dimensions/categories of an employee's readiness to change: **A**wareness, **D**esire, **K**nowledge, **A**bility, **R**einforcement, all linked to the proposed change. These five dimensions relate to the following:

1) **Awareness of the need to change.** This relates to the level of understanding of the business, customer or competitor issues that have created a need to change.
2) **Desire to change:** This concerns the level of understanding of the impact change will have on the individual as well as his or her motivation and commitment to change.
3) **Knowledge of the change and how to change:** This involves the level of understanding of skills and behaviours required in the new environment.
4) **Ability to perform during and after the change:** This relates to the level of proficiency in terms of managing the new environment and all related factors that the changes will effect.
5) **Reinforcement of change:** This entails the level of agreement/confidence in terms of adequate mechanisms, processes and/or procedures in place to sustain change (Hiatt, 2006).

This model was first published by Prosci in 1998 after research at more than 300 companies undergoing major change. Even though this is a change-readiness assessment tool, it has been used in past research to identify change agents (Hiatt, 2006). As indicated, individuals who showed a high level of desire to change, on a five-point Likert-type scale were identified as change agents. An example of the ADKAR questionnaire used is included in appendix A.

The following table provides an example of the questions asked in the "desire" dimension of the questionnaire.

TABLE 4.1 : ADKAR QUESTIONNAIRE: DESIRE DIMENSION

	DESIRE
2a	**I am excited to be part of this change.**
2b	**There are great opportunities for me in the change.**
2c	**I support the implementation of the Procurement and Supply Chain Management (P&SCM) Transformation Programme.**
2d	**I will benefit from the P&SCM Transformation Programme.**

These questions were customised, indicating the specific project name in most of the statements in the questionnaire. Employees indicating a score of four or five next to each of the above statements were identified as change agents. As indicated earlier, the reason for looking only at the “desire” dimension scores for change agent selection was mainly influenced by the ADKAR principles, which state that individuals indicating a high desire to change are eager to participate in the change and motivate others to accept and participate in the change process as well (Hiatt, 2006). This was the role expected from selected the change agents.

4.4.1.3 Participants

Initially, a sample group of 350 from a population of 1 002 employees completed the ADKAR during transformation awareness roadshows. These employees were all part of the procurement and supply chain function in the organisation and consisted of white- and blue-collar workers.

4.4.1.4 Data collection description

Hard copies of the ADKAR questionnaire were provided to participants during the roadshows. Employees in that the specific division and function at a particular site were invited to attend a two-hour session. During this session, an overview of the project was provided and employees were afforded the opportunity to ask questions. After instructions on who should and how to complete the questionnaire were provided, participants had 20 minutes to complete the assessment.

4.4.1.5 Measuring instrument

The questionnaire consisted of 18 questions. The questions were grouped as follow:

- Questions 1 to 4: Measure awareness to change.
- Questions 5 to 8: Measure desire to change.
- Questions 9 to 11: Measure knowledge of the change.
- Questions 12 to 14: Measure ability to perform during and after change.
- Questions 15 to 18: Measure reinforcement of change.

The participants responded by writing down only the number of their response in terms of a Likert-type scale on the right-hand side of each statement.

The Likert-type scale was as follows:

- 1 – strongly disagree
- 2 – disagree
- 3 – unsure
- 4 – agree
- 5 - strongly agree

The following table is an example of the first section of the questionnaire, that is the awareness dimension:

TABLE 4.2 : ADKAR QUESTIONNAIRE: AWARENESS DIMENSION

	AWARENESS	PLEASE PLACE OUR ANSWER IN THIS COLUMN
1a	I understand the business reasons for the introduction of the P&SCM Transformation Program	
1b	I understand the issues that are being addressed by the P&SCM Transformation Program	
1c	I understand the impact of the P&SCM Transformation Program	
1d	I understand the goals and objectives of the P&SCM Transformation Program	

4.4.1.6 Scale reliability description

The data from the questionnaires were used to determine scale reliability. According to literature, reliability coefficients are usually determined in order to evaluate the reliability of scales already in use (Hatcher, O'Rourke & Stepanski, 2005). For the purpose of this research, the reliability coefficients determined were also used to evaluate the properties of the ADKAR change-readiness assessment.

A reliability coefficient can be defined as the percentage of variance in an observed variable that is accounted for by true scores on the underlying construct (Hatcher *et al*., 2005, p. 157). According to Cohen, Manion and Morriso (2001), reliability is known as the consistency of a set of measurements or measuring instruments. It is necessary to understand that reliability does not imply validity because these are two different concepts with different meanings, and they serve different purposes. Reliability focuses on measuring the consistency of items or scales, not measuring what was supposed to be measured, which is the purpose of

the validity measurement. Reliability therefore refers to an instrument consistently yielding similar results, over repeated tests of the same subject.

Reliability scores are indicated by an index of internal consistency known as the coefficient alpha or Cronbach alpha. The Cronbach alpha is referred to as a coefficient of reliability because it indicates the extent to which the individual items that constitute a test or subtest correlate with one another (Hatcher *et al*., 2005). It also measures how well a set of items measures a single construct. One should note that in instances where the data have a multi-dimensional structure, the Cronbach alpha will be relatively low.

Correlation refers to the relationship between two variables or sets of data. For the purposes of this research project, the correlation was determined between each item and the total score on the subscale of the AKDAR change-readiness assessment. High correlations indicate that the same construct is being measured by all items of the scale. The correlation coefficient is indicated by means of a statistical value ranging from -1.0 to +1.0, expressing the relationship in quantitative form. A correlation coefficient of +1.0 would indicate a perfect positive correlation between two factors and -1.0 a perfect negative relationship. These perfect negative and positive correlation coefficients are rarely found (Cohen *et al*., 2001).

The statistical computer program, SAS Proc Corr function was used to determine the reliability coefficients (Hatcher *et al.,* 2005). The alpha option in SAS Proc Corr is an effective tool for measuring Cronbach's alpha, which is a numerical coefficient of reliability. Alpha is therefore based on the reliability of a test relative to other tests with the same number of items, and measuring the same construct of interest (Hatcher *et al.,* 2005). The results in Chapter 5 focus on the following key area:

- The non-standardised alpha, known as the Cronbach alpha reliability coefficient, was provided. This coefficient indicates the scale reliability based on internal consistency (Hatcher *et al*., 2005).

4.4.2 Step 2: quantitative process: change agent selection and the decrease in the number of originally selected change agents

4.4.2.1 Background

Of the 1 002 employees affected by the change, 350 completed ADKAR change-readiness questionnaires were received, of which 100 employees indicated having a high desire to change. As indicated earlier, these employees indicated a score of 4 (agree) or 5 (strongly agree) on all the "desire to change" questions and they were thus identified as change agents. Employees indicating a score of below 4 for any of the "desire to change" questions were not selected as change agents. Roles and responsibilities were defined, and these 100 employees were informed of their selection. Participation was voluntary. Employees were generally interested in this new concept and all of the identified change agents agreed to fulfil this role.

During 2008, some employees resigned from the organisation, others were transferred to other divisions in the organisation, while others again felt that they did not have the capacity to fulfil this role because of other day-to-day responsibilities. The most common reason employees gave for exiting the network was limited capacity to perform the role of a change agent. By September 2008, 27 change agents had agreed to remain part of what was known as a change agent network, as explained in Chapter 3. An analysis was conducted to determine whether there was a statistically significant difference in the overall ADKAR change-readiness scores between employees who decided to exit the network and the 27 employees who remained part of the change agent network. This approach will be described later-on.

The 27 remaining change agents fulfilled the following responsibilities during the duration of the transformation project:

- They championed changes on the ground.
- They addressed the target audiences' questions and concerns.
- They identified and reported potential concerns or problems.
- They shared communication received from the change management team with the employees in their respective areas.
- They encouraged, coached and supported other individuals who were affected throughout the transformation process.

Throughout the transformation process, the 27 change agents attended four workshops, each held once a quarter, obtaining critical information to share with their co-workers.

The remaining 27 change agents were requested to participate in the quantitative phase of this research project.

4.4.2.2 Statistical analysis

A t-test was conducted, comparing the ADKAR change-readiness scores of the 27 change agents (experimental group) who participated in the empirical part of the research project to the 73 change agents who had decided to exit the change agent network.

A t-test ultimately determined the difference between two means of two comparison groups, by calculating a variability score and a p-value score (Trochim, 2006).

The t-test used is known as the t-test for independent sample groups. These two groups were regarded as independent because the two means were not based on the same people, and the AKDAR change-readiness questionnaire was completed only once by these groups. Employees were not purposively assigned to either one of these groups because the researcher did not have any control over who remained or who decided to exit the change agent network (Gray, 2004).

In order to determine whether there is a significant difference between the two sample groups, it is necessary to statistically evaluate the difference between their mean scores.

This test therefore calculates the differences between each set of pairs and then ranks the absolute values (PRISM values) of the differences from low to high, before adding the ranks of the differences. If the PRISM (P) value score is smaller than 0.05, it indicates a significant difference in change-readiness scores between these two groups at the 10% level (Bland, 1995).

To summarise, a p-value of less than 0.05 would therefore suggest that the null hypothesis is rejected, and one can conclude that the two groups are indeed significantly different (Dunlop, Corina, Vaslow & Burke, 1996).

4.4.3 Step 3.1: qualitative process: qualitative perception questionnaire

4.4.3.1 Background

The information obtained in a comprehensive literature study showed why it is important to identify change agents, their characteristics, personality traits and skills and the knowledge they should possess to be considered effective change agents. This information was used to compile a qualitative perception questionnaire. Existing methods to identify change agents were reviewed as well as identification suggestions identified by past researchers. From the literature, key focus areas were identified that could form part of a change agent identification framework. Each main focus area represented associative descriptive elements identified in the literature. As indicated earlier, little research is available on the concept "change agent", and the researcher therefore had to rely heavily on qualitative and quantitative information obtained from the South African sample of change management specialists who participated in this research project in order to ensure that all possible factors and dimensions would be considered and covered in the process. All the literature findings were set out in chapter 3.

After analysing the literature findings, a qualitative dimensions/perception questionnaire was developed (appendix D). This questionnaire was exploratory in nature because no existing standardized questionnaire was available, and therefore open-ended questions were used to determine the perceptions of experts in the field. These experts were individuals specialising in change management, as external consultants, based at the organisation where the research project was undertaken for a certain period of time.

4.4.3.2. Participants

The questionnaire was emailed to 30 external change management consultants, from a consultancy organisation, but who were working in the organisation where the research was conducted, for a certain period in time. The reasons for deciding to include these individuals in this research project were the fact that change management specialists are viewed as individuals who know the change management process, the required ideal change-readiness levels of employees affected by change and factors leading to resistance or readiness to change. Only 15 completed questionnaires were electronically returned to the researcher. These individuals were required to provide information on various dimensions which they believe change agents should have as part of their profile. All the questions were

therefore open ended, in order not to limit the input obtained from these participants. Participants were also required to provide biographical information. The purpose of this questionnaire was to determine what change management experts, through their experiences, perceive as important to include in a change agent identification framework. A number of suggestions, identified in the literature findings, regarding possible dimensions to form part of the framework, were made to the participants as a guideline.

4.4.4 Step 3.2: qualitative process: concept mapping workshop

4.4.4.1 Background and concept mapping description

As indicated in chapter 1, a second qualitative verification phase was included, to verify whether the information obtained from the participants in the completion of the qualitative perception questionnaire was relevant and applicable. Adding this step in the qualitative research phase increased the validity and reliability of the research process. For verification purposes, it was decided to use the technique known as concept mapping. This technique is especially useful for the development of a conceptual framework (Trochim, 2002). Trochim, Cook and Setze (1994) indicate that concept mapping involves a different emphasis altogether. There are no assumed correct answers, and at best it is usually assumed that there might be a typical arrangement of statements. A concept mapping process usually consists of involving a sample group of people from the same homogeneous culture group, or people with the same interests. By involving a homogeneous group, the concept mapping results are viewed as more reliable.

Concept mapping suggests that with pictorial representation and its participant-oriented features, it can be a powerful method to organise complex methods and ideas. This process requires participants to brainstorm a large set of statements relevant to the topic of interest, and then to individually sort these items into “piles” of similar statements and rate each statement according to the scale and then interpret the maps resulting from the data analyses (Trochim, 1993). Several methodologies and approaches are known, say, as idea mapping, mind maps, causal mapping or even cognitive mapping. In most instances, the above terms are used and designed for individuals in order to enhance creative thinking or problem-solving abilities. Concept mapping however, is mainly used in a structured group conceptualisation

process. Concept mapping consists of several notable characteristics such as the following (Trochim, 1993):

- It is designed to integrate input from multiple sources with a vast range of content, expertise or interest.
- It uses sophisticated and rigorous multivariate data analyses to construct the maps, used in the process.
- It creates a series of maps that visually show the complex thinking of the sample group.
- The maps consist of a framework or structure that can be used immediately to guide action planning.

The concept mapping process consists of the following major steps (Trochim *et al*., 1994):

- In the preparation step, the focus of the mapping process is identified, a sample group selected and the schedule and logistics determined.
- The generation of ideas is usually accomplished through some form of brainstorming in a focus group session.
- The ideas generated are captured and the group then sorts all the ideas generated and then rates them in terms of their importance.
- Participants should be actively involved in the interpretation of the resulting maps.
- During the utilisation phase, the maps and associated results are used to address the purposes of the focus group session.

The core data for a map are obtained from the unstructured process where each participant in the focus group session generates statements into piles of similar statements. Participants are free to use as few or as many piles as they deem necessary to arrange the statement set meaningfully in terms of similarity. These data are decidedly judgmental and qualitative in nature (Trochim, 2002).

4.4.4.2 Participants

Concept mapping workshop participants were the change management specialists within the organisation generally involved in large-scale projects, serving as internal consultants of the business. All 21 divisional change management specialists in the business were invited by means of an appointment via email. These participants were asked to participate in the content-mapping exercise. Fifteen accepted and attended the workshop.

The group of internal change specialists who attended the focus group/concept mapping workshop, were allowed to be creative, generate different ideas and sort and prioritise those ideas. A focus group session plays a vital role in discussing the appropriateness of each element with internal change management specialists with a number of years experience in the field (Trochim, 2002). The assumption was that the latter could possibly provide other suggestions on elements or dimensions to be included and/or excluded from the list and had to be taken into account by the researcher. Conducting a focus group session, decreases the possibility of exclusion of other important dimensions or elements (Trochim, 2002).

4.4.4.3 Concept mapping workshop process

The steps followed in the actual concept mapping session with the 15 internal change management specialist were as follows: the session started by introducing the research project and explaining why and how these individuals had been selected to participate in the exercise. The objectives of the session were also thoroughly explained and participants were afforded an opportunity to ask questions. Before the exercise started, the following process was followed during the session:

- The 15 participants were divided into smaller focus groups of four to six, seated at round tables. They were given 30 minutes to brainstorm all possible elements and dimensions that could be included in a change agent identification framework.
- Each group was provided with two documents/worksheets (appendix E). Each document represented a specific dimension and its supportive elements as per the qualitative perception questionnaire results. Each dimension and its supportive elements were divided as follows:
    - group 1: personality traits and skills documents
    - group 2: knowledge and experience documents
    - group 3: change curve readiness levels and dimensions verification documents
- Each group had to review its two documents and discuss which of them were essential and not essential to be included in a change agent identification framework and then rank those items in terms of importance (based on their perception).
- Each group had to select a scribe and a spokesperson.
- Each group had to give feedback to the larger group and obtain input from the larger group on its choice of dimensions/elements.

- The facilitator (researcher) captured all the information provided electronically, and on completion, displayed the total list of elements to the rest of the groups by means of visual equipment.
- The facilitator took the wider audience through the information provided by the smaller focus groups and requested them to prioritise all the elements by means of agreed appropriateness/importance and to eliminate inappropriate dimensions or elements on the flipcharts provided.
- The participants discussed the potential importance of each dimension and/or element and prioritised them accordingly, by discussing and ranking each dimension and/or element. The facilitator played an observatory role in order to place the number in sequence of importance next to each element/ dimension.
- After prioritising all the elements and dimensions in order of importance, the session was adjourned. No time limit was placed on the total duration of the session and it ran for four hours. The researcher then compared the results of the questionnaire and concept mapping exercise elements and dimensions with one another to determine which elements/dimensions correlated with one another, in order to finalise the framework scientifically.

4.4.5 Step 3.3: qualitative process: change agent identification framework and dimensions descriptions

The results of the concept mapping process were analysed and a change agent identification framework was then developed, which consisted of five dimensions and their supportive elements identified by the questionnaire and as agreed to at the concept mapping workshop. All the identified dimensions will be described in chapter 5.

For each of the five dimensions included in the framework, possible measuring instruments were researched. The purpose of this was to introduce possible instruments or methods in measuring each dimension when using the framework to identify change agents. Chapter 5 provides detailed information on how to measure each dimension as well as the reasons for selecting certain instruments or methods. Two of the proposed measuring instruments, namely Senge's commitment level model and the Occupational Personality Profile (OPP) are described in this chapter, because they form part of the theoretical measuring instrument descriptions.

According to Rice, Eggleton, Eggleton and Rice (1996), commitment cannot be measured without change agents having a comprehensive understanding of the vision, mission or objectives of the transformation programme. In these authors' research on high-performing teams, one of their focus areas was measuring commitment. A model developed by Senge (1990) on measuring commitment was included in Rice *et al's*.,(1996) textbook. Senge (1990) conducted extensive research on different levels of commitment and developed a model to assist learning organisations to measure commitment in terms of a certain mission/vision and objectives. Senge (1990) indicated that almost 90% of the time commitment is confused with the term "compliance". Today, it is common to hear management talking about obtaining "buy-in" from their employees into the vision / mission. The term "enrolment" also plays a key role in this context because the change agent will "enrol" to act as a change agent. Enrolment is known as free choice and a process. When it comes to real commitment towards a certain formulated vision or mission, there are still many contemporary organisations in which only a few people are enrolled and even fewer are committed. Senge (1990) therefore indicated that there are several different levels of compliance which lead to behaviour such as enrolment and commitment.

From the work done by Senge (1990), Rice *et al*., (1996) compiled a questionnaire measuring commitment, for organisations to use Senge's theory to help them determine the commitment levels among employees. The researcher could not find any other commitment level questionnaire, applicable to measure the commitment levels of change agents, and this questionnaire could easily be used in a project-related environment.

The format of this model requires each individual to indicate his or her own level of commitment. Each individual should then indicate his or her answer to the vision/mission of the project and for each of its objectives. Their level of commitment should be indicated on a seven-point Likert-type scale, and each individual should be asked for any comments relating to the anticipated level of commitment for each element. The level of commitment scales according to this questionnaire is as follows:

- 1 = apathy: neither for nor against the vision/mission
- 2 = non-compliance: cannot see the benefits of the vision/mission and will not do what is expected

- 3 = grudging compliance: do not see the benefits of the vision/mission, but will do what is expected because there is no choice in the matter.
- 4 = formal compliance: sees the benefits of the vision/mission and will do what is expected, but nothing more
- 5 = genuine compliance: sees the benefits of the vision/mission, and do everything that is expected of the individual and more
- 6 = enrolment: will do whatever can be done within the “spirit of the law”
- 7 = commitment: will make the change happen no matter how difficult it may be

An example of the commitment questionnaire used for team direction is provided below.

EXHIBIT 6.1

Measuring Commitment: Possible Attitudes Toward the Team's Direction

KEY

Commitment: Wants it. Will make it happen. Creates whatever "laws" (structures) are needed.

Enrollment: Wants it. Will do whatever can be done within the "spirit of the law."

Genuine Compliance: Sees the benefits of the vision. Will do everything expected and more. Follows the "letter of the law." "Good soldier."

Formal Compliance: On the whole, sees the benefits of the vision. Will do what's expected and no more. "Pretty good soldier."

Grudging Compliance: Does not see the benefits of the vision. But, also, does not want to lose job. Will do enough of what's expected because have to, but also will let it be known that he/she is not really on board.

Noncompliance: Does not see benefits of vision and will not do what's expected. "I won't do it; you can't make me."

Apathy: Neither for nor against the vision. No interest. No energy. "Is it five o'clock yet"?*

		COMMITMENT	ENROLLMENT	GENUINE COMPLIANCE	FORMAL COMPLIANCE	GRUDGING COMPLIANCE	NONCOMPLIANCE	APATHY
Vision	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Mission	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						

* Senge, Peter M., *The Fifth Discipline: The Art & Practice of the Learning Organization*, Doubleday Currency, New York, 1990.

Measuring Commitment

EXHIBIT 6.1 (concluded)

		COMMITMENT	ENROLLMENT	GENUINE COMPLIANCE	FORMAL COMPLIANCE	GRUDGING COMPLIANCE	NONCOMPLIANCE	APATHY
Objective 1	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 2	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 3	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 4	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						
Objective 5	*My attitude*	7	6	5	4	3	2	1
	As I perceive the attitude of others on the team	7	6	5	4	3	2	1
	As I perceive the attitude of others impacted	7	6	5	4	3	2	1
		Comments:						

99

Figure 4.2: Senge's model of commitment measuring possible attitudes towards the team's direction

Source: Rice *et al*. (1996, p.98-99)

The other dimensions described in chapter 5 do not require a measuring instrument and are therefore background/literature is provided on these dimensions in this chapter.

Following the qualitative research description, the major research hypothesis was to be answered by a seven-step quantitative research process as described in the next section.

The research hypotheses were as follows:

H0: Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

H1: Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

4.4.6 Step 4.1: quantitative process: description of and reasons provided for using the OPP

4.4.6.1 Background

After the development of the change agent identification framework, it was necessary to test the dimensions of the developed framework empirically. It was decided to validate the personality traits' dimension. The reason for deciding to assess this particular dimension was the fact that the organisation had indicated a need to focus on the personality traits. This need was highlighted by the internal change management specialists who participated in the concept mapping workshop.

4.4.6.2 Reasons for selecting the OPP

The OPP was selected since almost all of the dimensions from the developed framework were measurable by the OPP. Other personality assessments such as the MBTI, OPQ and the 15FQ+ were also considered, but the theoretical list of personality traits showed less of a match with those traits or types that these tests

measure. The OPP measured seven of the twelve personality traits identified in the developed framework.

The traits measured by the OPP are

- assertive
- flexible
- trusting
- phlegmatic
- gregarious
- persuasive
- optimistic

As indicated in the results in chapter 5, the five traits from the developed framework not measurable through the OPP were

- willing
- open-minded
- being a good listener
- sociable
- self-assured/self-aware

4.4.6.3 Description of the OPP

One of the major reasons for utilising psychometric tests in general is to make valid and grounded selection decisions, because information for selection cannot be easily obtained in other ways. Psychometric tests are often used to support or confirm findings from a selection interview. In order to gather information on a person's specific aptitudes and abilities and their personality, attitudes and values, it is usually preferable to use psychometric tests (Budd, 1991). Psychometric tests not only provide additional information about an applicant, but also add a degree of reliability and validity to the selection procedure that is impossible to achieve otherwise (Psytech, 2002).

The interest in psychometrics can be traced back to the Second World War (Kline, 1990). During the war there was an urgent need to select military personnel for air crew training. This need led to the development of a number of psychometric tests. The focus at that time was on the development of intelligence (IQ) tests, as opposed to personality tests. Even though psychological theory and trait theory, which underlie personality testing, was developed by Allport in the 1930s it was still some time before personality testing was used in an attempt to construct personality measures.

The development of personality tests (e.g. the 16PF, CPI, EPI, etc.) only came into play after the Second World War. During this period, a great deal of interest was shown in personality measurement, human behaviour and psychological characteristics. A link between personality and behaviour was discovered in Allport's work in the 1930s (Kline, 1990). In practice, the basic principles that underpin personality measurement are not as complex as it may first appear (Michell, 1990).

A personality test simply consists of a collection of questions, or "items", which assess an individual's characteristic way of thinking, feeling and acting in different situations. Personality tests take items that measure different aspects of the same personality characteristic and combine them to form subscales or dimensions. Personality questionnaires attempt to develop a broad picture of how the applicant usually acts in different settings and with different people (e.g. with friends, colleagues at work and at formal social engagements) (Michell, 1990)

The OPP is a personality test developed for use in industrial and organisational settings. It was introduced in South Africa in 1995. Initially, the adoption of this instrument was relatively slow. Only when an organisation, Psytech South Africa, was formed in 1998 and comparative reliabilities with other tests were computed, was the potential of the OPP for use in South Africa realised. Further data were collected by Psytech, and reliabilities and norm groups were compiled. Through this process, some of the items were revised to raise the internal consistency reliabilities and make the test questions better understood. South African-based research findings on reliability coefficients are provided in the next section. Since then, various South African organisations have adopted the OPP (Psytech, 2002).

The OPP measures nine different personality dimensions in addition to the distortion scale/supportive elements, and consists of 98 items. Each of the nine dimensions measured by the OPP is bipolar. This indicates how high or low scores on each supportive element in each dimension are. The personality characteristics measured by the OPP are selected for two reasons (Psytech, 2002):

- for their relevance to personnel assessment and selection decisions
- extensive research evidence demonstrating their validity

There was a need to balance the length of the test against the need for it to be valid and reliable. The OPP attempted to achieve an optimal balance between these two conflicting demands, to seek a short and reliable, but measurable, broad, meaningful

measure of personality constructs. To this end, a five-point response scale was chosen instead of the more common three-point scale (i.e. strongly agree to strongly disagree as opposed to true, uncertain, false). Five-point scales have the advantage of increasing item variance with the result that fewer items are needed to achieve the same level of reliability (Psytech, 2002).

4.4.6.4 Validity and reliability of the instrument

The OPP is regarded as a reliable measuring instrument. It consists of ten sub-scales, namely assertive, flexible, trusting, phlegmatic, gregarious, persuasive, contesting, pessimistic, pragmatic and distortive. The Cronbach alpha was computed for all subscales, with a sample group of 942. The results indicated reliability coefficients between 0.66 to 0.83 for these subscales (Psytech, 2002). For a scale to be viewed as reliable, the coefficient alpha estimates should always equal or exceed 0.70. A score lower than 0.70 indicates poor scale reliability (Cronbach, 1951). As a rule of thumb, Allen and Yen (2002) indicate that a reliability score of 0.70 or higher is deemed to be satisfactory. Two of the ten OPP subscales, namely gregarious and distortive indicated coefficients of 0.67 and 0.66 respectively. This indicates lower than required subscale reliability for these two subscales. The reliability coefficients of the other eight subscales were higher than 0.70, which indicates acceptable subscale reliability (Psytech, 2002).

The standardisation sample of the OPP was based on approximately 1 900 UK adults almost equally represented by males and females. The norm comparison is therefore an adequate representation of the general population. The GeneSys software programme was used to include a number of specialised norm groups. A total of seven constituent sample groups were used to form the total norm base of the OPP (Budd, 1991). South African-based research was also conducted numerous times with different sample groups. One research project included a group of 176 South African citizens employed by the mining sector. Reliability was computed for all subscales and the Cronbach alpha obtained was 0.59. In another research project a group of 93 consultants employed by some of South Africa's major consulting firms were requested to complete the OPP. The Cronbach alpha resulted in a coefficient score of 0.64 (Psytech, 2002). Even though the Cronbach alpha was smaller than 0.70, it was still the most favourable assessment to use since most of the dimensions measured by the OPP formed part of the ideal profile in terms of personality traits as per the theoretical developed change agent identification framework.

4.4.7 Step 4.2: Quantitative process: completion of the OPP questionnaire by change agents

4.4.7.1 Background

The 27 change agents were requested to attend a change agent workshop in September 2008. Before the start of the actual workshop, the change agents were requested to complete a hard copy of the OPP questionnaire and the completed questionnaires were handed to the researcher.

4.4.7.2 Data collection method

Booklets, answer sheets and pencils were handed to all the participants by the facilitator. She explained the objective of completing the questionnaire, namely that research was being conducted on the identification of change agents. As personality traits are part of the developed framework, it needed to be assessed. Everyone was comfortable with the objectives and also signed an informed consent form indicating that information would only be used for research purposes.

The instructions were read out and the participants were afforded the opportunity to ask questions. No time limit was allocated for completing the questionnaire. The participants had to complete 98 Likert-type scale response questions. They had to indicate their answer by ticking the block most appropriate to themselves. The scale allocation was as follows:

- 1: strongly agree
- 2: agree
- 3: between
- 4: disagree
- 5: strongly disagree

All the employees completed the questionnaire within 20 minutes.

4.4.8 Step 4.3 quantitative process: analysis of each of the 27 change agents' personality traits

4.4.8.1 Background

The first step after completion of the OPP was to determine how many of the 27 change agents matched the ideal profile by analysing all seven of the measured traits respectively.

The following serves as an example of the profile in graph format provided to each change agent as part of his or her OPP results report. The words highlighted in red indicate the ideal personality traits. Results are plotted on the nine-point scale. From the seven personality traits highlighted, the figure below indicates that this individual lean towards two of the seven personality traits, namely trusting and gregarious.

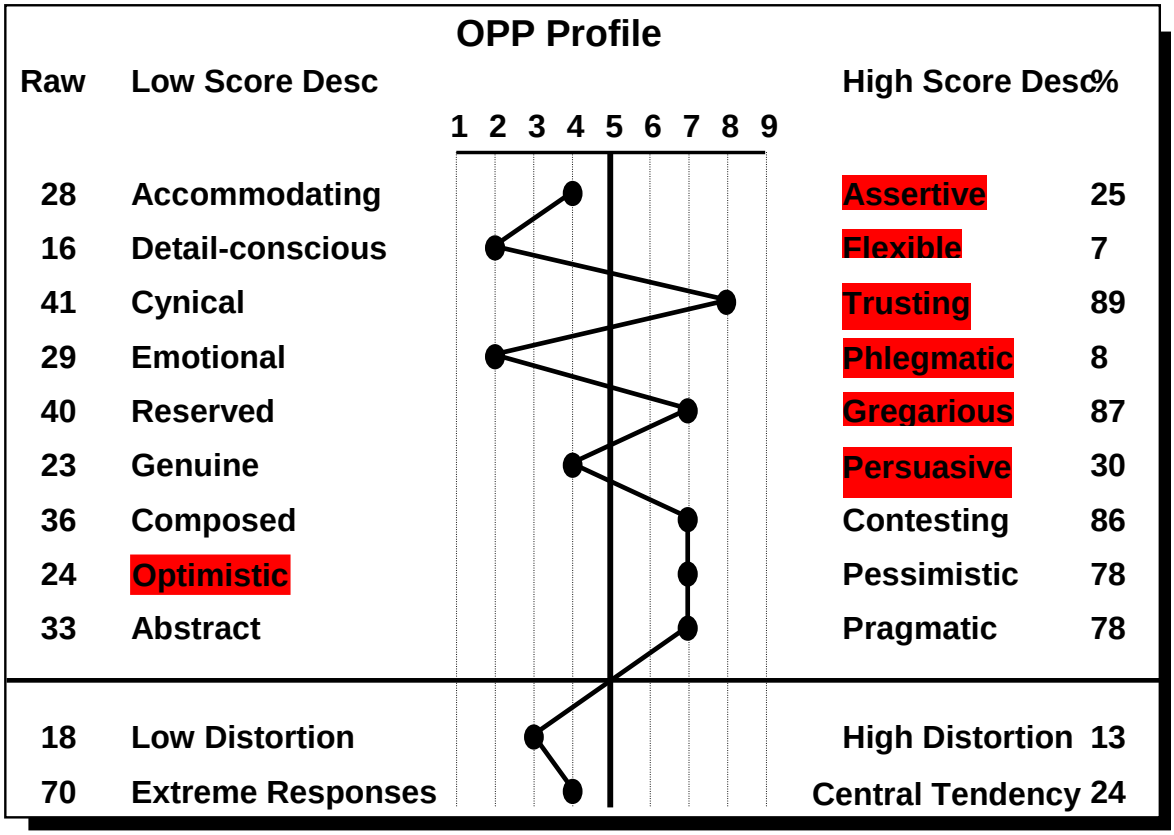


Figure 4.3: Occupational Personality Profile example

Source: Psytech (2002, p.2)

The following assumptions were made: One would consider an employee a change agents if they matched the ideal profile, in terms of personality traits, as per the OPP profile. (**All** personality traits marked in red indicated those elements that form part of the change agent identification framework.) The table below indicates these ideal profile match boundaries.

TABLE 4.3: IDEAL PROFILE MATCH BOUNDARIES

1. Assertive	>=8
2. Flexible	>=8
3. Trusting	>=8
4. Phlegmatic	>=8
5. Gregarious	>=8
6. Persuasive	>=8
7. Optimistic	<=2

The chances were viewed as slim that change agents would meet all seven personality traits as per the ideal profile indicated in the above table, and therefore cut-off points were adjusted accordingly. The following cut-off points were decided upon on the nine-point scale of the OPP: A range from 7 to 9 (on the right-hand side of the continuum) for the first six personality traits were linked to the ideal profile personality traits and a range of 1 to 3 for the seventh and last personality trait, namely optimism. After analysing this information, it was found that none of the selected change agents fell into **all** seven personality trait dimension ranges, even after cut-off points were adjusted to less stringent ones.

On the basis of the above, it was decided to analyse each personality trait separately and compare employee ADKAR improvement scores for each of the personality traits. The employees were divided into two groups, namely those supported by change agents who matched that specific trait and those supported by change agents not matching that specific trait.

It would have been extremely difficult to defend the approach because only two change agents fell into the ranges for all seven personality traits that form part of the ideal profile, after cut-off points were revised to less stringent ones. Furthermore, it should be kept in mind that the development of the ideal profile of the change agents up to this point in time was purely theoretical – based on the literature review and the qualitative process to determine important characteristics. It therefore made sense to adapt a broader perspective in the empirical investigation of the effect of the

identified traits / dimensions on the actual change-related behaviour / attitude of the individuals working with the particular change agent.

4.4.8.2 Statistical analysis method description

The statistical program used in the quantitative phase of the research project was the Statistical Analysis System (SAS) statistical package, Version SAS 9.1.3. The SAS 9.1.3.version was released in 2005 and includes an enlarged function library with new parameters on standard functions (McDaniel & Hemedinger, 2007).

Firstly, the frequency of scores of the change agent sample group that fell within particular categories was determined. This indicated how many of the change agents matched the ideal profile in terms of each dimension/personality trait measured. Once again, these results were provided per personality trait since only two change agents fell into the ranges for all seven personality traits that form part of the ideal profile, after cut-off points were revised to less stringent ones.

Secondly, the Friedman two-way analysis of variance test was used to compare the different averages of all the OPP dimensions with one another. The Friedman test is known as a nonparametric test that compares three or more paired groups. This test ranks the values in each matched set from low to high. Each dimension is ranked separately and the total of each group then ranked (Hatcher *et al*., 2005).The reasons why the different means (averages) of all dimensions were compared was to indicate what the sample group looked like in terms of personality traits – that is, which dimensions the group measured high on and which dimensions the group measured low on.

The standard deviation calculated, measures the spread of the data for the mean (average) value. It is useful in comparing sets of data which may have the same mean but a different range (Hatcher *et al*., 2005). Relatively low standard deviation scores imply that data were not that widely dispersed. In instances where the standard deviation scores are relatively low, data were compressed.

4.4.9 Step 4.4: quantitative process: the completion of the post-test ADKAR questionnaires by a sample of 135 employees supported by change agents in their respective areas

4.4.9.1 Background

In November 2008, shortly before the conclusion of the project, each of the 27 change agents who had completed the OPP, was requested to ask five (27 X 5 = 135) of the employees, easily available to them, in their respective areas, whom they supported throughout the change initiative, to complete the ADKAR questionnaire again (post-test). These 135 employees also formed part of the initial sample group of 350 employees from a population of 1 002 who had completed the pre-test ADKAR assessment during transformation awareness roadshows. The change agents were initially provided with a list of names, geographical locations and job titles of the 350 individuals who had completed the pre-test ADKAR assessment, at the first change agent workshop. This was necessary to ensure that the change agents selected five individuals to complete the ADKAR again, in their respective areas who formed part of the list of 350 employees who had initially completed it. The 1 002 employees all worked in the procurement and supply chain function of the organisation, spread over 15 geographical areas country wide.

The change agents indicated that they would ask five of the employees in their areas to complete the ADKAR questionnaire, because it was feasible to assume that five employees would be readily available on site, at one point in time, to complete the ADKAR questionnaire. All five selected employees from each area, who were readily available at the time, agreed to complete the questionnaire. A 100% completion rate was thus achieved. This served as a post-measure to determine whether there was a significantly larger improvement in the change-readiness scores of employees after they had been supported by change agents possessing a specific personality trait that formed part of the ideal profile. This indicated whether the specific personality trait in a change agent resulted in the significantly larger improvement in the employee change-readiness scores of employees supported by him/her.

4.4.9.2 Data collection method

The ADKAR change-readiness questionnaire was sent to change agents via electronic mail. The change agents printed hard copies of these questionnaires and handed them to the procurement and supply chain management employees in their area to complete. On completion, the questionnaires were returned to the researcher.

The statistical analysis process followed in analysing the post-ADKAR results are described in sections 4.4.10 and 4.4.11.

4.4.10 Step 4.5: quantitative process: analysis of each of the seven OPP dimensions.

Analysis of each of the seven OPP dimensions was conducted in order to determine whether there was a significantly larger improvement in the change-readiness scores of employees supported by change agents possessing that specific trait versus those supported by change agents not showing that specific trait by comparing employee pre-and post-test ADKAR results.

4.4.10.1 Background

Each of the seven OPP traits measured was analysed respectively for all 27 change agents. The employee ADKAR pre- and post-test results were then compared to determine whether there was a significantly larger improvement of change-readiness scores for each of the seven traits respectively. This information indicated whether the change agents possessing a specific trait when supporting others (those five employees were each requested to complete the ADKAR) through change did in fact help to improve the employee change-readiness scores.

4.4.10.2 Statistical analysis method description

To determine whether there was a significantly larger improvement in the employee change-readiness scores in cases where they were supported by the change agents meeting the ideal profile for each of the seven traits respectively, the following method was used: A nonparametric test, known as the Kruskal-Wallis test was used for this purpose. Nonparametric tests, instead of parametric tests are normally used when certain assumptions about underlying populations are questionable, say, when comparing two independent samples or when the sample groups are not that large. The tests involving ranked data are classified as nonparametric (Kravchuk, 2005). Nonparametric tests are also generally used for smaller sample groups, and because this research involved the use of ordinal-level data (Likert-type response scales), this was deemed to be a plausible alternative to the more stringent parametric tests (Pett, 1997).

According to Pett (1997), some of the best-known characteristics of non-parametric tests are as follows:

- The level of independence of randomly selected observations is important.
- Fewer assumptions are made about the population's distribution.
- The scale of measurement of the dependent variable is either categorical or ordinal.
- The primary focus is either on rank ordering or frequency of data.
- Hypotheses are often formulated on ranks, medians or frequencies of data.
- Sample size requirements are less stringent than for parametric tests.

The above characteristics were relevant to this research project. The sample group was small, the focus was on ordinal data, and the data were ranked.

The Kruskal-Wallis test is a well-known nonparametric test and is generally used to test the median difference in paired data. The test was designed to test the hypothesis on the location or median of a population distribution (Crichton, 1998). It often involves the use of matched pairs - in other words, before and after data. In many instances the assumption is that the population probability distribution is symmetric. The test is also applied in cases where observations of a sample of data are ranked (Panchapakesan, Ng & Balakrishnan, 2006).

This test first calculates the differences between each set of pairs and then ranks the absolute values (PRISM values) of the differences from low to high before adding the ranks of the differences. The Prism (P) value answers the following question: If the median difference is zero, what is the chance that the random sample would result in a median far from zero (Bland, 1995)? If the two columns of ranks are markedly different, the P-value will be tiny.

If the P-value score is smaller than 0.05 it indicates a significant improvement in the change-readiness scores of employees when supported by a change agent possessing a specific trait. The larger the score, the smaller the difference will be, in the improvement of the change-readiness scores as per the ADKAR pre- and post-test scores. A P-score larger than 0.05 would mean that the particular trait displayed by change agents who support employees experiencing transformational change, does not result in the significant improvement of those employees' readiness levels.

The difference between the pre- and post-test change-readiness scores was calculated at a 10% level of significance. As the results in chapter 5 will indicate, if the sample group size (N) was larger, this difference could have been calculated on a 5% level, which is a more effective measurement, because it indicates that the improvement in the change- readiness level is not at all coincidental. The 10% level indicates a 90% certainty that the difference between change-readiness scores is not coincidental, whereas a 5% level indicates a 95% level of certainty that differences between change-readiness scores are not coincidental (Pett, 1997).

4.4.11 Step 4.6: quantitative process: key personality traits identified

This step involved determining which of the seven personality traits could be regarded as **key** personality traits by analysing whether there were significantly larger improvements in employees' change-readiness for those employees supported by change agents possessing a specific trait from the ideal profile and those employees supported by change agents not showing a specific trait from the ideal profile for each of the relevant seven personality traits.

4.4.11.1 Background

Further analysis was done listing each of the identified seven OPP dimensions, by indicating whether there was a significantly larger improvement in employee readiness levels in cases where employees were supported by change agents possessing a specific personality trait from the ideal profile compared with employees supported by change agents not showing that specific trait. If it was found that the change-readiness scores did not show a significantly larger improvement for the group of employees supported by change agents possessing that particular personality trait compared with those supported by change agents not showing that particular personality trait then the trait could not deemed to be a **key** trait and vice versa.

This process of evaluation determined which of the seven personality traits measured, were in fact key change agent personality traits.

4.4.11.2 Integrated results table description

Integrated results tables (5.20a and 5.20b) will be included in chapter 5, to indicate the results of steps 4.5 – 4.7. The reasons for showing the results in these integrated tables were the fact that these results were interlinked. The methods used to calculate the results were explained in this chapter. The table will therefore achieve the following:

- step 4.5: reporting whether there is a significantly larger improvement in change-readiness scores of the employees supported by change agents possessing that specific personality trait compare to those supported by change agents not showing that specific trait
- step 4.6: indicating which of those seven personality traits can be regarded as **key** personality traits by analysing the improvement in employee change-readiness scores for each of the seven personality traits change agents could possess
- step 4.7: indicating whether there is a significantly larger improvement in employee change-readiness scores when supported by the change agents possessing **all key** traits by comparing the ADKAR pre- and post-test results

4.4.12 Step 4.7: quantitative process: significant larger improvement of employee change-readiness scores when supported by change agents with all the key traits

An overall analysis was conducted determining whether or not there was a significantly larger improvement in employee change-readiness scores in the ADKAR pre-and post-test in instances where the employees were supported by change agents possessing **ALL** those key traits. These results were reported from the findings in step 4.6 and will be indicated in two detailed results tables in chapter 5.

4.5 RESEARCH VARIABLES

The following were identified as the variables applicable to this research project: This research project intended to determine whether the **improvement in the change-readiness scores (dependent variable)** of the group supported by **change agents possessing a specific trait from the ideal profile (independent variable)** was

significantly larger than the improvement in change-readiness scores of the group supported by change agents not showing a specific trait from the ideal profile.

4.6 UNIT OF ANALYSIS

As per the definition in chapter 1, the unit of analysis in this research project was based on the measurement at individual level, but the analysis was done at group level because two groups were compared with each other each time.

4.7 ETHICAL RESEARCH PRINCIPLES

Definitions and the reasons for including ethical research principles as part of a research project were explained in chapter 1. For the purposes of this research project, the research participants were properly informed and the following ethical principles were stated and communicated:

- All the participants were involved on a voluntary basis - no one was forced to complete the qualitative perception questionnaire, participate in the concept-mapping exercise or complete the ADKAR assessment. All the participants signed an informed consent form which was distributed to them by means of email or at the workshop held. This formed part of the biographical information form.
- All the participants were assured that the research would not inflict any physical, psychological or emotional harm on them.
- The participants were informed about the purpose of the research before completing the questionnaires or participating in a focus group session.
- Selected individuals were assured that the information would only be used for the research purpose and no information would be used against them in any way in the future.
- Signed written consent was obtained from the organisation, allowing the research to be conducted, which involved the participation of a number of permanent employees in the organisation.

4.8 SUMMARY OF THE RESEARCH METHODS APPLIED

The research phases of this project were described in detail and the content of this chapter could be summarised as shown in the table below.

TABLE 4.4: DESCRIPTION OF THE RESEARCH METHODS

PHASE 1	**LITERATURE CONCEPTUALISATION/THEORETICAL REVIEW**
Step 1	Change, change management and organisational change were explained, as the context in which this research project was conducted because of organisational change.
Step 2	Firstly, the main reasons were advanced of identifying change agents in managing change in large organisations. The differences between change agents and change management specialists were described to ensure clarification of roles. Secondly, the personality traits, skills, knowledge, and level of desire to change of these individuals were reviewed, and information gained on the possible traits of change agents. Lastly, the change agent roles and responsibilities performed in large organisations served as key elements to consider when identifying individuals to act as change agents.
Step 3	The research results highlighted the methods or tools used in the past to identify change agents. No clear evidence was found on existing change agent identification methods or tools. This indicated a gap that the empirical research had to fill.
PHASE 2	**EMPIRICAL RESEARCH**
Step 1	**Quantitative phase, step 1.** ADKAR assessment item analysis was conducted to determine the reliability of this assessment. The results were indicated by means of Cronbach alpha coefficients.
Step 2	**Quantitative phase, step 2.** A t-test of independent samples analysis was conducted to evaluate the significant difference in the ADKAR change-readiness scores between the 27 change agents who remained part of the change agent network and the 73 change agents who decided to exit the network.

Step 3 **Qualitative phase, step 1.** An explorative, qualitative perception questionnaire was compiled and completed by 15 external change management specialists. This was done after the findings in literature had been reviewed to determine what information could possibly be used to include in a change agent's profile. These participants were asked to provide additional information on possible supportive elements and dimensions that could be part of a change agent's profile.

Step 4 **Qualitative phase, step 2.** A concept mapping workshop was conducted. The participants were asked to attend a focus group session. The sample of participants consisted of 15 internal change management specialists in a large organisation.

Step 5 **Qualitative phase, step 3.** All the information on the supportive elements and dimensions from the qualitative perception questionnaire with the verified items and dimensions that resulted from the concept mapping exercise were compared. The results were compared, indicating which elements and dimensions need to form part of the change agent identification framework. The overlapping dimensions and items were tabulated in a framework, named the "change agent identification framework."

Step 6 **Quantitative phase, step 3.** Reasons were advanced for the selection and use of the OPP.

Step 7 **Quantitative phase, step 4.** The OPP questionnaire was completed by 27 change agents.

Step 8 **Quantitative phase, step 5.** An analysis was conducted of each of the seven OPP dimensions determining how many of the 27 change agents matched each of those personality traits/dimensions.

Step 9 **Quantitative phase, step 6.** The post-test ADKAR was completed by a sample of 135 employees supported by change agents in their respective areas.

Step 10 **Quantitative phase, step 7.** An analysis was done for each of the seven OPP dimensions, determining whether there was a significantly larger improvement in the change-readiness scores of employees supported by the change agents possessing the specific personality trait compared to those supported by change agents not showing that specific trait.

Step 11 **Quantitative phase, step 8.** The researcher determined which of these seven OPP personality traits could be regarded as **key** personality traits by comparing the improvement in the employee change-readiness scores for each of the seven personality traits per group supported by change agents possessing a particular personality trait versus the group supported by those change agents not showing a particular personality trait of the ideal profile.

PHASE 3	CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS
Step 1	**Conclusion.** Conclusions will be drawn on the outcomes of the research project.
Step 2	**Research limitations.** Possible limitations detected throughout the research project will be discussed.
Step 3	**Recommendations.** Recommendations or suggestions will be made for future research.

4.9 CHAPTER CONCLUSION

A schematic process flow description was provided on the research approach followed to answer all the research questions stated in chapter 1. All three of the qualitative and all seven of the quantitative research steps were explained in detail. The results and findings derived from these steps in the research process will be reported on and discussed in chapter 5.

CHAPTER 5: RESEARCH RESULTS AND FINDINGS

5.1 INTRODUCTION

The empirical part of this study was conducted to provide data that could be used to satisfy the aim of this research project. All the qualitative and quantitative research results will be provided in this chapter. The results will be used to answer the research questions below, which were formulated in chapter 1.

The general aim of this research is to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

To increase the scientific quality of the research project, an empirical research phase was added to the theoretical phase of the research project. In order to answer all research questions, the following results are provided in this chapter:

- the ADKAR item analysis results
- the difference between the overall change-readiness scores of those individuals who decided to exit the change agent network and those who remained part of the change agent network
- the qualitative perception questionnaire results as well as biographical information (explorative)
- the concept mapping workshop results, and biographical information (verification)
- the comparative results between the information emanating from the questionnaires as well as from the workshop (explorative and verification)
- the change agent identification framework development
- the OPP questionnaire results, together with specific biographical information of the sample group
- an indication of the number of change agents possessing personality traits of a change agent as per the developed framework, by providing results that led to the answer by means of frequency tables

- the ADKAR questionnaire results, as completed by employees in respective areas of the business
- an indication of whether there were significantly larger improvements in change-readiness scores of employees supported by change agents possessing a specific trait from the ideal profile versus employees supported by change agents not showing that specific trait.
- the identification of key personality traits
- the indication of whether employees showed significantly larger improvement of change-readiness scores when supported by change agents possessing **all** key traits compared to those supported by change agents not showing all key traits

5.2 RESEARCH FINDINGS

All the research findings will be presented according to the steps followed in the research process, schematically presented in figure 4.1 in chapter 4.

5.2.1 Research findings step 1: completion of the ADKAR questionnaire and reliability coefficient results

As indicated in chapter 4, 350 employees completed the ADKAR change-readiness assessment during the awareness roadshows, in the procurement and supply chain function of the organisation. These employees comprised of white- and blue-collar workers. The purpose for completion of this questionnaire was to determine each employee's overall change-readiness scores at the initial stage of a transformation process, for all five of the ADKAR dimensions.

In order to determine the reliability of the ADKAR change-readiness assessment, the reliability coefficients of this questionnaire were statistically determined by means of the SAS Proc Corr function (Hatcher *et al*., 2005).

Table 5.1 indicates the reliability coefficients by means of the Cronbach alpha reliability coefficient values, detecting whether the same construct was in fact measured by all items of the scale. These values were calculated for each of the five ADKAR dimensions, as well as for the overall scale.

5.2.1.1 T*he ADKAR assessment reliability coefficient results*

In order for a scale to be viewed as reliable, the alpha coefficient estimates should equal or exceed 0.70. A score lower than 0.70 indicates poor scale reliability (Cronbach, 1951). According to Allen and Yen (2002), a reliability score of 0.70 or higher is deemed to be acceptable.

The table below indicates that four of the five ADKAR dimensions yielded acceptable alpha coefficient values, which means that the awareness, desire, ability and reinforcement dimensions' items yielded consistent results. The "knowledge" dimension's alpha coefficient value indicated that the items did not yield consistent results.

TABLE 5.1: ADKAR QUESTIONNAIRE ALHPA COEFFICIENT RESULTS

	Alpha
Awareness	0.907859
Desire	0.878058
Knowledge	0.470452
Ability	0.777230
Reinforcement	0.819423

Overall scale Cronbach Alpha: 0.77

The only item with low subscale reliability was the knowledge dimension, with a score of 0.47. By conducting an item analysis it would have been possible to detect which items in this subscale contributed to its low reliability coefficient. Since the purpose of this research project was not focused on analysing the ADKAR assessment and its psychometric properties, only overall scale reliability was computed. An item analysis was therefore also not conducted in an attempt to improve the reliability coefficient of the knowledge dimension.

It is evident that the reliability of the ADKAR questionnaire was acceptable for the current sample group.

5.2.2 Research findings step 2. Reasons for the decrease in number of change agents over the transformation period

As indicated in chapter 4, from the 350 completed ADKAR change-readiness questionnaires received, 100 employees indicated that they had a high desire to change. These were employees who indicated a score of 4 or 5 (agree or strongly agree) on all the questions in the "desire to change" dimension. These individuals were then identified as change agents. Roles and responsibilities were defined and these 100 employees were informed of their selection. Participation was voluntary. The employees were generally interested in this new concept and all of the identified change agents initially agreed to perform this role.

During 2008, some employees resigned from the organisation, some moved to other divisions in the organisation and others again felt that they did not have the capacity to fulfil this role because of other day-to-day responsibilities. The most common reason for employees exiting the network was because of limited capacity to perform the role of a change agent. By September 2008, only 27 change agents remained and agreed to still remain part of what was known as a change agent network, as explained in chapter 3. An analysis was conducted to determine whether there was a statistically significant difference in the overall change-readiness scores of the employees who decided to exit the network and the 27 employees who remained part of the change agent network.

In order to determine whether there was a significant difference in the overall change-readiness scores between those 73 change agents who decided to exit the network and the 27 change agents (experimental group) who remained part of the network, a t-test for independent groups was conducted, after testing for equality of variances to determine the appropriate formula. As mentioned in chapter 4, if the p-value is less than 0.05, it indicates a significant difference in the change-readiness scores between these two groups at the 5% level (Bland, 1995). A p-value of less than 0.05 would therefore suggest that the null hypothesis should be rejected and concludes that the two groups were in fact significantly different (Dunlop *et al*., 1996).

TABLE 5.2 T-TEST ANALYSIS RESULTS

Variable	Group	N	Mean	Std. Dev.	Variance	T-value	P-value
Awareness	**C**	73	4.4315	0.6085	Unequal	-4.37	
Awareness	**E**	27	4.8241	0.2843			<.0001
Desire	**C**	73	4.7055	0.3155	Unequal		
Desire	**E**	27	4.9537	0.099		-5.97	<.0001
Knowledge	**C**	73	4.4338	0.5711	Unequal		
Knowledge	**E**	27	4.7778	0.3922		-3.41	0.0011
Ability	**C**	73	4.4064	0.6168	Unequal		
Ability	**E**	27	4.8519	0.3247		-4.67	<.0001
Reinforce	**C**	73	4.1176	0.6939	Equal	-2.55	0.0122
Reinforce	**E**	27	4.4907	0.5023			

From the above, it was evident that for all the ADKAR dimensions, the 27 change agents who remained part of the change agent network obtained statistically significantly higher mean scores than the 73 individuals who decided to exit the network. It was therefore concluded that the change agents who decided to remain part of the network were more change ready than those who decided to exit the network.

In the development of a change agent identification framework, a comprehensive qualitative process was followed, in order to obtain critical information regarding the identification and selection of change agents. Sections 5.23 to 5.24 provide information on the outcomes of the process followed and the information obtained in formulating the framework.

5.2.3 Step 3.1: explorative qualitative perception questionnaire background

A qualitative open-ended questionnaire was developed and sent to a sample of external change managements consultants. The objective of the questionnaire was to obtain information from the sample on their perception of supportive elements from a number of dimensions relating to the identification of change agents. The questionnaire was sent to a sample of 30 external change management specialists

on 25 July, 2008 via electronic mail. The participants were requested to return the completed surveys by no later than 8 August, 2008. The number of completed questionnaires returned to the researcher on this date was 15.

Background information was provided in the questionnaire to familiarise the participants with the objectives of and background information on the research. The questionnaire consisted of six open-ended questions and space was provided below each question for answers. Each question focused on a different category or dimension of change agent attributes, that had been identified in the literature findings. These were

- change agent personality traits
- change agent skills
- knowledge change agents should ideally have
- experience required in order to act as a change agent
- change curve readiness level individuals should possess to be classified as a potential change agent
- change agent identification dimensions - these could relate to the ones given (personality traits, skills, knowledge, experience, etc.) or other proposed dimensions by the sample group

Even though information on certain personality traits, skills, knowledge and change curve readiness levels were provided as part of the literature study, it was necessary to obtain information from the sample group in order to ascertain what dimensions or elements they viewed as important to include in a change agent identification framework through their experience in the workplace. This increased the comprehensiveness of the literature research process by means of an empirical qualitative research process.

The participants were requested to provide biographical information as part of completion of the questionnaire. A table was included in the questionnaire and the participants had to tick the block most applicable to them.

5.2.3.1 Research findings step 3.1 : explorative qualitative perception questionnaire results

The following biographical information was obtained through the completion of a one-page biographical questionnaire sent to participants, together with the qualitative questionnaire via electronic mail:

TABLE 5.3: BIOGRAPHICAL INFORMATION OF THE EXTERNAL CHANGE MANAGEMENT CONSULTANTS SAMPLE GROUP (N = 15)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	2	13.3	2	13.3
27 – 35	8	53.3	10	66.6
36 - 46	5	33.4	15	100
46 - 55	0	0	15	100
> 55	0	0	15	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	4	26.6	4	26.6
Female	11	73.4	15	100
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Black	3	20	3	20
White	9	60	12	80
Caucasian (Indigenous populations of Europe, North Africa)	2	13.3	14	93.3
Coloured	1	6.7	15	100
Indian/Asian	0	0	15	100
Number of years' change management or related consulting experience	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
0 – 3	**6**	40	6	40
4 – 6	**3**	20	9	60
7 – 10	**3**	20	12	80
10 – 13	**2**	13.3	14	93.3
>13	**1**	6.7	15	100

TABLE 5.3: BIOGRAPHICAL INFORMATION OF THE EXTERNAL CHANGE MANAGEMENT CONSULTANTS SAMPLE GROUP (N = 15) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Bachelor's degree	**1**	6.7	1	6.7
Honours degree	**2**	13.3	2	20
MBA	**2**	13.3	5	33.3
Master's degree	**9**	60	14	93.3
Doctoral degree	**1**	6.7	15	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	**8**	53.3	8	53.3
English	**4**	26.6	12	79.9
Northern Sotho	**1**	6.7	14	86.6
Zulu	**1**	6.7	14	93.3
Other	**1**	6.7	15	100

According to the above, the sample consisted of 27% males and 73% females. 53% were between the ages of 27 and 35; 60% were from the white race group; 40% had three or less than three years' specialist working experience; 60% had a master's Degree; 53% were Afrikaans-speaking; and 27% were English.

The following section indicates the questions from the qualitative perception questionnaire as well as the responses/information provided by the external change management expert group for each question.

Question 1

*In your view, what are the critical **personality traits** an individual should possess to be identified as a possible change agent? (Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations.)*

The sample group provided similar responses to the question relating to change agent personality traits. The researcher short-listed all the personality traits mentioned by the sample group, by comparing similar traits provided by most from the sample group. The 36 personality traits in table 5.4 had to be verified at the concept mapping workshop held. As indicated in chapter 4, a concept mapping

workshop was also held in addition to the completion of a qualitative perception questionnaire.

TABLE 5.4 PROPOSED PERSONALITY TRAITS

PROPOSED PERSONALITY TRAITS			
1	Willingness	19	Adaptability
2	People person	20	Influential
3	Results oriented	21	Team oriented
4	Personal confidence	22	Personal efficacy
5	Open minded	23	Energetic
6	Emotional maturity	24	Inspirational
7	Extrovert	25	Objective
8	Leadership characteristics	26	Patience
9	Self-starter	27	Emotional intelligence
10	Optimistic	28	Perseverance
11	Good listener	29	Results oriented
12	Objective	30	Empathetic
13	Integrity	31	Charismatic
14	Sociable	32	Self-reflective
15	Assertive	33	Analytical
16	Enthusiastic	34	Approachability
17	Integrity and honesty	35	Motivating
18	Diplomatic	36	Flexible

** The above personality traits are in no particular ranking order.

Question 2

*In your view, what are the critical **skills** an individual should possess to be identified as a possible change agent? (A skill is the learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy, or both.)*

The researcher short-listed all the proposed “skills a change agent should portray”, by means of comparing similar skills indicated by most from the sample group. The 25 proposed skills in the table below were also verified at the concept mapping workshop.

TABLE 5.5: PROPOSED SKILLS

PROPOSED SKILLS			
1	Presentation skills	14	Intrapersonal skills
2	Attentive listening skills	15	Time management skills
3	Problem identification skills	16	Systemic thinking ability
4	Problem-solving skills	17	Strategic thinking ability
5	Verbal communication skills	18	“Selling” skills
6	Facilitation skills	19	Non-verbal communication skills
7	Analytical skills	20	Networking skills
8	Planning and organising skills	21	Project management skills
9	Influential skills	22	Stakeholder management skills
10	Negotiation skills	23	Persuasion skills
11	Interpersonal skills	24	Deductive reasoning skills
12	Leadership skills	25	Conflict-handling skills
13	Motivational skills		

** The proposed skills above are in no particular ranking order.

Question 3

*In your view, what **knowledge** should an individual have to be identified as a possible change agent? (Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.)*

The researcher short-listed all the proposed “knowledge” elements the expert sample group indicated a change agent should have by comparing similar skills indicated by most from the sample group. The following 29 proposed skills in the table below were also to be verified at the concept mapping workshop.

TABLE 5.6: PROPOSED KNOWLEDGE

PROPOSED KNOWLEDGE			
1	Change management principles	16	Organisational political circumstantial knowledge
2	Knowledge of the specific project	17	Change network structure and functioning knowledge
3	Knowledge of the organisation	18	Value of being a change agent
4	Knowledge of the organisation's external environment	19	Benefits of the change and the positive impact of the change on the organisation
5	Knowledge of the roles and responsibilities of the change agent	20	Knowledge of communication principles
6	Understanding of the need for change	21	Project management methodology
7	Knowledge of change-readiness and change-readiness scores	22	Knowledge of group dynamics
8	Knowledge of organisational development models	23	Knowledge of stress management
9	Understanding of systems theory	24	Knowledge of organisational development and renewal
10	Understanding of various change interventions available	25	Understanding of the organisation's culture
11	Knowledge of behavioural science	26	Mentoring and coaching
12	Understanding of the cycle/phases of change	27	Deep understanding of the specific area/function in which the change is taking place
13	Knowledge of the subject of industrial psychology	28	Knowledge of the power maps of people in the organisation
14	Understanding of general HR issues	29	Intimate project-related knowledge
15	Understanding of people dynamics		

** The above knowledge elements are in no particular ranking order.

Question 4

*In your view, what **experience** should an individual have to be identified as a possible change agent? (The concept of experience generally refers to know-how or procedural knowledge of an event, instead of propositional knowledge.)*

The researcher short-listed all the proposed "change agent experience elements" the expert sample group indicated a change agent should have, by comparing similar elements relating to experience provided by most of the sample group. The 18 proposed change agent experience elements in the table below were also verified at the concept mapping workshop.

TABLE 5.7: PROPOSED EXPERIENCE

PROPOSED EXPERIENCE			
1	Experience in either dealing with change agents or being a change agent themselves	10	Exposure to implementing a change initiative or even having been on the receiving end of a change
2	Experience in dealing with changing work conditions/procedures	11	Networking experience with those affected by change
3	Experience in communicating in small groups	12	Any prior Union or Forum experience
4	Facilitation experience – even if minimal	13	Exposure to planning activities in a structured manner (i.e. MS Excel, MS Project, Outlook, etc.)
5	Leadership role experience, be that in church, community or work	14	Experience in having to relay hard messages to others in a manner that still instils confidence
6	Prior workplace change experience (i.e. have been part of change in a work environment)	15	Consulting or project environment-related experience
7	Experience in dealing with conflict and difficult people	16	Experience of "typical setbacks" that occur during the change process
8	Experience in an ever-changing environment either in a leadership or employee role	17	Working with individuals in a changing environment
9	Related project management experience	18	Experience in mobilising people behind a specific goal

** The above experience elements are in no particular ranking order.

Question 5

*In your view, where on a **change curve** should an individual be in order to be identified as a possible change agent (assuming that the change curve consists of the following change-readiness scores)?*

- ***awareness*** *(aware of the project but not its impact)*
- ***understanding*** *(understanding the project and its impact*
- ***acceptance*** *(buy-in and active demonstration of support)*
- ***commitment*** *(ownership and significant involvement demonstrated)*

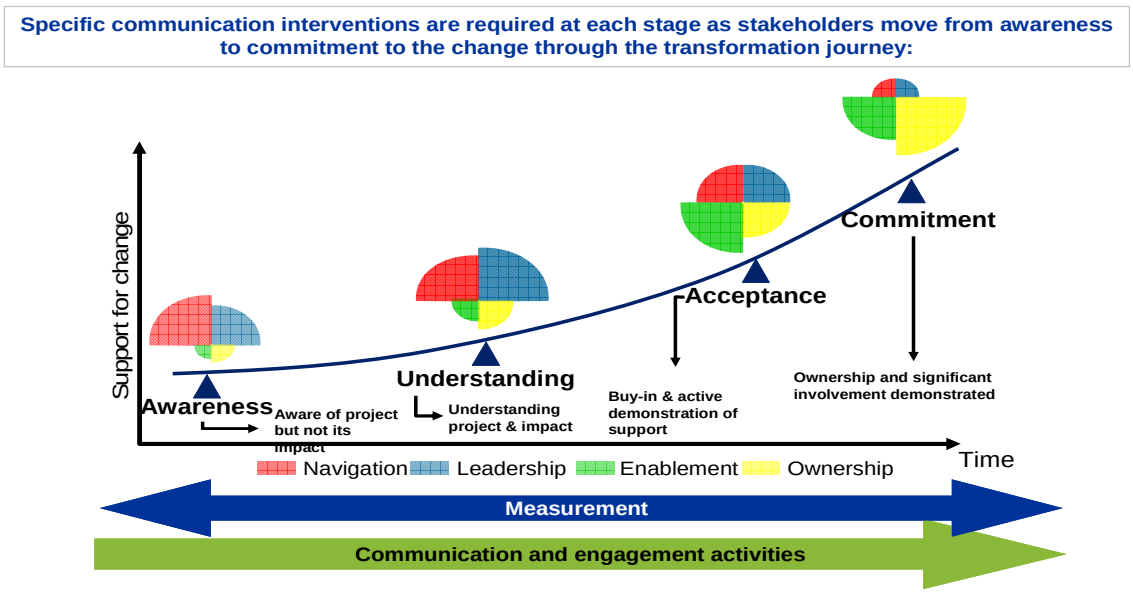


Figure 5.1: Change curve
Source: Accenture (2007, p.6)

The researcher showed figure 5.1 in the questionnaire, in order for the respondents to refer to it as part of the change-readiness scores question. The researcher analysed all the proposed change-readiness scores the sample group indicated a change agent should be at, by comparing similar elements relating to the change curve readiness level provided by most of the expert sample group. The following proposed change-readiness level recommendations were made:

TABLE 5.8: PROPOSED READINESS LEVEL

	PROPOSED READINESS LEVEL	Proposed readiness level survey responses
1	Awareness	1/ 15
2	Understanding	3 / 15
3	Acceptance	5 / 15
4	Commitment	6 / 15

Six of the 15 respondents indicated that a change agent should be at the "commitment" readiness level in order to drive change successfully in the respective areas of a business. Three of the 15 respondents indicated that a change agent should be at a level of understanding of what the change is about. Five of the respondents indicated that change agents should be at a level of acceptance of the

proposed change. Only one respondent felt that it is sufficient for a change agent only to remain in the awareness phase of the change curve, in order to drive change successfully. The above was verified at the concept mapping workshop.

Question 6

*Please mention important **dimensions** (from your experience) that a change agent should have as part of his or her profile (dimensions referring to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent).*

The researcher short-listed all the proposed dimensions the sample group suggested that a change agent identification framework should comprise. The following eight proposed dimensions were short-listed, to be verified at the concept mapping workshop:

TABLE 5.9: PROPOSED SHORT-LISTED DIMENSIONS

	PROPOSED DIMENSIONS
1	Knowledge
2	Ability
3	Skills
4	Level of commitment
5	Availability and willingness
6	Personality traits
7	Experience
8	Change curve readiness

All the above results were documented, to enable the concept mapping workshop participants (different sample group) to review the information provided from the first qualitative perception questionnaire sample group. The process followed and the outcome of the concept mapping workshop will be discussed next.

5.2.4 Step 3.2: concept-mapping workshop (verification step) background

A concept mapping workshop was held on 28 August 2008. Twenty-one internal (in the business where the research was conducted) change management specialists were invited by means of an appointment via electronic mail. Fifteen internal change management specialists accepted the appointment and attended the workshop. An informed consent form was sent to all the invitees by means of electronic mail and

distributed at the workshop held, affording everyone an opportunity to complete the form either electronically or on hard copy.

The workshop participants were requested to provide biographical information. A table was included in the questionnaire and participants had to tick the block most applicable to them.

The attendees were divided into three different focus groups of five individuals per group. Each group were provided with two documents. Each document represented a specific dimension and its supportive elements as per the qualitative perception questionnaire results. Each dimension and its supportive elements were subdivided as follows:
Group 1: personality traits and skills documents
Group 2: knowledge and experience documents
Group 3: change curve readiness levels and dimensions verification documents

The instructions were as follows:

- Each group received two documents and had to work through all the elements on each of the documents and discuss which of them are essential and which are not essential to be included in a change agent identification framework and then rank these items in terms of importance (based on their perception).
- Each group had to select a scribe and a spokesperson.
- Each group were requested to give feedback to the larger group and obtain input from the larger group on their choice of dimensions/elements.

Each group were allowed 30 minutes to work through their two documents, deciding which elements they perceived to be essential and nonessential. After doing this, each group had to rank all the essential items in terms of importance. A spokesperson from each group was selected to give feedback on the group's choice of dimensions/elements to be included in the framework. Many debates developed during the feedback session, and this helped the researcher to understand their thinking, motivation and reasoning for including or excluding certain elements from the framework.

5.2.4.1 Research findings step 3.2: concept-mapping workshop results

The following biographical information was obtained from a one-page biographical questionnaire, handed to participants at the start of the workshop:

TABLE 5.10: BIOGRAPHICAL INFORMATION OF INTERNAL CHANGE MANAGEMENT SPECIALISTS SAMPLE GROUP (N = 15)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	3	20	3	20
27 – 35	5	33.3	8	53.3
36 – 46	6	40	14	93.3
46 – 55	1	6.7	15	100
> 55	0	0	15	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	6	40	6	40
Female	9	60	15	100
Race	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
Black	8	53.3	8	53.3
White	6	40	14	93.3
Caucasian	0	0	14	93.3
Coloured	1	6.7	15	100
Indian/Asian	0	0	15	100
Number of years' change management or related consulting experience	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
0 – 3	6	40	6	40
4 – 6	4	26.7	10	66.7
7 – 10	1	6.7	11	73.4
10 – 13	2	13.3	13	86.7
>13	2	13.3	15	100

TABLE 5.10: BIOGRAPHICAL INFORMATION OF INTERNAL CHANGE MANAGEMENT SPECIALISTS SAMPLE GROUP (N = 15) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Bachelor's degree	1	6.7	1	6.7
Honours degree	3	20	4	26.7
MBA	1	6.7	5	33.4
Masters degree	10	66.6	15	100
Doctoral degree	0	0	15	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	4	26.7	4	26.7
English	3	20	7	46.7
African	8	53.3	15	100
Other	0	0	15	100

According to the above, the sample consisted of 40% males and 60% females. 40% were between the ages of 36 and 46; 54% were African; 40% had three or less than three years' of specialist working experience; 67% had a master's degree; 53% spoke an African language; and 27% were Afrikaans.

The results of the concept mapping workshop are provided in ranked order of importance in tables 5.11 to 5.16 below. A comparison was also made of the concept- mapping workshop results and literature review findings on each of the dimensions/elements. By comparing the results with the literature findings, it was possible to determine which dimensions/elements were deemed to be important by the specialist sample group and researchers in the field. These dimensions/elements, *inter alia*, were then used to form part of the change agent identification framework.

A total of 12 personality traits were verified during the concept mapping workshops. All 15 workshop participants concurred that these personality traits are important to enable an individual to act as a change agent.

TABLE 5.11: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: PERSONALITY TRAITS

	Concept mapping results	Literature findings
1	Willingness	Able to deal with complex issues
2	Integrity and honesty	Integrity
3	Assertive	Assertive
4	Flexible	Team player
5	Approachable	Patience
6	Perseverance	Sense of humour
7	Influential/Persuasive	Persistence/persuasive
8	Open minded	Honest
9	Good listener	Trustworthy
10	Emotional maturity – change to self awareness	Caring
11	Optimistic	Positive/optimistic
12	Sociable	Reliable
		Enthusiastic
		Confident
		Risk taking
		Political nose
		Respected
		Creative
		Empathy

When the concept mapping workshop findings were compared with the literature findings, the following personality traits overlapped with each other: assertiveness, honesty, persuasiveness, integrity and optimistic. This indicated that both researchers in the field and the internal change management specialists' sample group agreed that these are important personality traits for a change agent.

For the purpose of the development of the theoretical framework, the concept mapping workshop results were taken into consideration. The 12 traits verified at the workshop were thus included in the framework. A total of 12 change agent skills were verified during the concept mapping workshops. All 15 workshop participants agreed that these skills are important for an individual acting as a change agent.

TABLE 5.12: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: SKILLS

	Concept mapping results	Literature findings
1	Intrapersonal skills	Interpersonal skills
2	Influential skills	Influential skills
3	Selling skills	Listening skills
4	Deductive reasoning skills	Communication skills
5	Networking skills	Networking skills
6	Conflict-handling skills	Conflict-handling skills
7	Facilitation skills	Facilitation skills
8	Attentive listening skills	
9	Problem identification skills	
10	Problem-solving skills	
11	Negotiation skills	
12	Systematic thinking skills	

When the concept mapping workshop findings were compared with the literature findings on change agent skills, the following skills overlapped with each other: Interpersonal, conflict handling, facilitation, networking and influential. This indicates that researchers in the field and the internal change management specialists' sample group agreed that these are important skills for a change agent.

A total of 12 change agent knowledge elements were verified during the concept-mapping workshops. All 15 workshop participants agreed that these knowledge elements are important for an individual acting as a change agent.

The change agent knowledge elements the workshop participants agreed upon are highlighted below.

TABLE 5.13: CONCEPT-MAPPING RESULTS VERSUS LITERATURE FINDINGS: KNOWLEDGE

	Concept mapping results	Literature findings
1	Knowledge of the organisation	Knowledge of the organisation, its culture and customers.
2	Knowledge of the organisation's external environment	Process change models.
3	Understanding the need for change	The organisation's vision and mission
4	Change management principles	Diagnostic model of change (Including change principles)
5	Knowledge of change resistance theories	Resistance to change and ways to manage it
6	Knowledge of roles and responsibilities of a change agent	Overcoming barriers to change and suitable communication methods and approaches
7	Understanding of various change management interventions	
8	Benefits of the change and its impact on the organisation and individual	
9	Deep understanding of the specific area/function where change is taking place	
10	Understanding of the cycle/phases of change	
11	The value of a change agent	
12	Group dynamics knowledge	

When the concept mapping research findings were compared with the literature findings on change agent knowledge elements the following overlapped: knowledge of the organisation, knowledge of change models/change principles and change resistance theory. This indicated that researchers in the field as well as the internal change management specialists' sample group agreed that these are important knowledge elements for a change agent.

A total of eight "change agent required experience elements" were verified during the concept mapping workshops. All 15 workshop participants agreed that these required experience elements are important for an individual acting as a change agent. The required experience elements of change agents that the workshop participants agreed upon are set below.

TABLE 5.14: CONCEPT MAPPING RESULTS: EXPERIENCE

1	Expert in dealing with changing work conditions/procedures
2	Exposure to implementing a change initiative
3	Networking experience with those affected by change
4	Consulting/project environment-related experience
5	Experience in mobilising people behind a specific goal
6	Experience in dealing with conflict and different people
7	Experience in having to relay hard messages to others in a manner that instils confidence
8	Facilitation experience – even if minimal

The researcher could not find any literature on the required experience of a change agent that could be compared with the concept mapping workshop results.

The workshop participants concerned that commitment and acceptance readiness levels are equally important readiness levels for individuals to be identified as change agents. Awareness and understanding were rated the second most important.

TABLE 5.15 CONCEPT MAPPING RESULTS: CHANGE CURVE READINESS LEVELS

1	Commitment
1	Acceptance
2	Awareness
2	Understanding

The researcher could not find any literature on the required change curve readiness levels of a change agent that could be compared with the concept mapping workshop results.

After all three focus groups had provided feedback on personality traits, skills, knowledge, experience, change curve readiness levels and dimensions verification, all the workshop participants discussed and agreed that, in their opinion, the following dimensions should form part of the change agent identification framework:

- Level of commitment of individuals to act as a change agent and to assist in implementing the proposed changes. The participants indicated that if an individual is not committed to the proposed change initiative, he or she will not execute his or her change agent responsibilities. They agreed that this is a vital dimension to consider when identifying individuals as change agents.
- Willingness to act in this role. The participants indicated that participation in a change agent network should be voluntary - it should remain the choice of the

individual whether he or she would like to act in this role for a certain period of time. They agreed that this is a vital dimension to consider when identifying individuals as change agents.

- Availability to perform certain tasks. The participants indicated that it would not be feasible to identify change agents to perform certain tasks if their day-to-day responsibilities did not allow them to fulfil this role as well. A certain percentage of their time should be allocated to perform their change agent duties. An agreement should be reached between the change agent identified and his or her manager to act in this role, as per the agreed key performance indicators. All of them concurred that this is a vital dimension to consider when identifying individuals as change agents.
- Personality traits: The participants indicated that they believe a change agent should have certain characteristics to be able to serve as an effective change agent. As per the literature findings, the participants concurred that there are 12 personality traits that should be considered when identifying change agents. These traits were indicated on the left-hand side of table 5.20a and 5.20b. They agreed that this is a significant dimension to consider when identifying individuals as change agents.

The meaning and/or supportive elements of each of these dimensions were captured in the developed theoretical framework. The methods proposed to measure each of the above stated dimensions is also provided in this chapter. The table below illustrate the dimensions workshop participants viewed as essential and non essential to be included in the developed theoretical framework.

TABLE 5.16: CONCEPT MAPPING RESULTS: PROPOSED VERIFIED DIMENSIONS

1	Level of commitment
2	Willingness
3	Availability
4	Personality traits
5	Skills **(not essential)**
6	Knowledge **(not essential)**
7	Experience **(not essential)**
8	Change curve readiness level **(not essential)**

From the initial literature findings it would seem that the following proposed dimensions needed to be included in a change agent identification framework: personality traits, skills, knowledge, experience and change curve readiness levels. The workshop attendees argued that it is not seen as essential to include skills, knowledge, experience and change curve readiness level dimensions in the identification framework itself. The agreement between workshop attendees was to focus instead on skills, knowledge and experience only after individuals had been identified as change agents. Even though they proposed that these elements should not be included in the framework, the elements deemed to be necessary to ensure that the change agent identified obtain the relevant knowledge, helping them to develop themselves and drive change more effectively. It was also proposed that change agents should be exposed to different change and transformation scenarios in an organisation in order to gain the experience needed to become more effective drivers of change.

Change curve readiness levels were not regarded as important to include or even to focus on after change agents had been identified. The reasons were that change-readiness scores work in parallel with the timelines of a specific project and that the more information is shared throughout the project, the more ready employees should become ready for change. The workshop attendees also concurred that readiness levels for change should not be considered when identifying change agents - instead change agents should be provided with a reliable tool such as the ADKAR assessment to determine the change-readiness scores of their co-workers.

It was also agreed that it is necessary for change agents to undergo training soon after appointment in this role so that they can obtain the right knowledge and acquire the necessary skills before beginning their task as a change agent.

The workshop participants placed strong emphasis on the following: It is imperative for a change agent to be directly affected by the change initiative for which he or she is identified as a change agent, because the individual would then share the “pain” his/her co-workers are experiencing. If the change agent is personally affected by the change, it will help him or her to explain the “what’s in it for me” element, influencing peers to accept the change and to feed valuable information back to the change management team on possible issues and concerns identified in their area of work.

5.2.5 Step 3.3: change agent identification framework

All the verified information obtained from the concept mapping workshop was analysed and was then used to design the change agent identification framework. This was the very first framework developed to use as a guideline for identifying change agents in organisations - no other framework was found to have been developed either locally or internationally.

Figure 5.2 depicts the developed change agent identification framework, as per the verified concept mapping workshop outcomes.

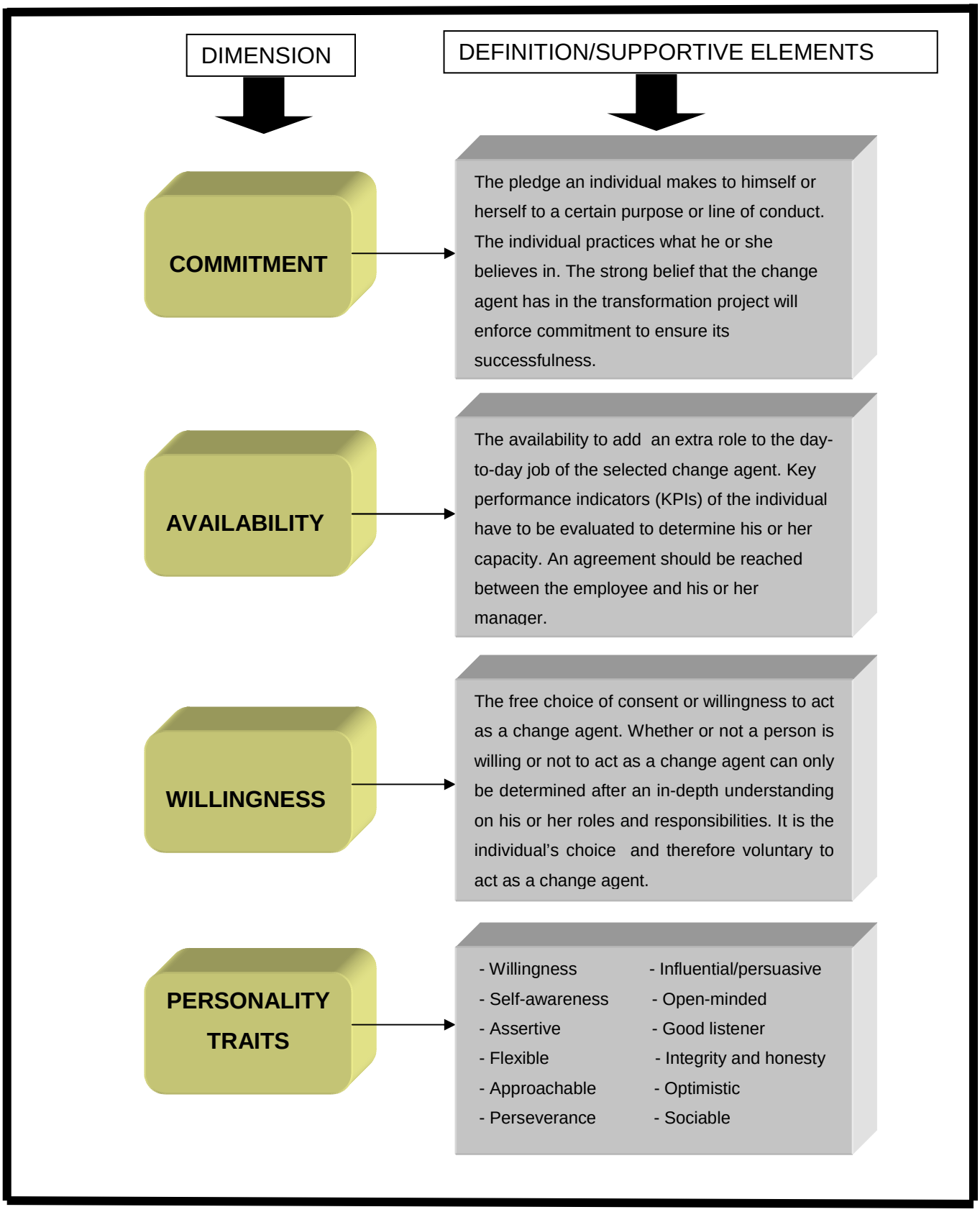


Figure 5.2: Change agent identification framework

5.2.6 Change agent identification framework dimensions and descriptions of supportive elements

This section highlights the various definitions and/or supportive elements for each of the theoretical change agent identification dimensions, as well as the method of measurement for each dimension.

5.2.6.1 Level of commitment

Level of commitment refers to the pledge an individual makes to himself or herself about a certain purpose or line of conduct. The individual practises what he or she believes in. The strong belief that the change agent has in the transformation project will enforce commitment to ensure its successfulness (Rice, et al., 1996).

- **Measured by Senge's measuring commitment level model.** The theoretical background of this questionnaire was explained in chapter 4 in order to illustrate that a commitment level questionnaire such as Senge's (1990) could be utilised by organisations in future to measure the commitment of potential change agents. It is suitable, as this questionnaire are mainly utilised in project type environments, where change agents could be identified, providing project support.

A similar level of commitment perception questionnaire was designed as part of the supportive documentation (ch. 6) of the designed framework. This questionnaire can be viewed in appendix B.

5.2.6.2 Availability

As discussed and agreed upon at the concept mapping workshop, availability refers to the availability to add an extra role to the day-to-day job responsibilities of the selected change agent. The key performance indicators (KPIs) of the individual have to be evaluated to determine his or her capacity. An agreement should be reached between the employee and his or her manager.

- **Measured by compact / key performance indicators.** An individual's key performance indicators should be reviewed in order to determine his or her capacity to act as a change agent. The manager and the respective employee/change agent identified should do this together.

5.2.6.3 Willingness

As discussed and agreed upon at the concept mapping workshop, willingness is the free choice of consent or will to act as a change agent.

- **Measured by voluntary participation.** Whether or not a person is willing to act as a change agent can only be determined after the selector has an in-depth understanding of the person's roles and responsibilities. It is up to the individual concerned whether he or she wishes to act as a change agent - it should be a voluntary act. No person should be forced or instructed to act as a change agent (Hutton, 1994).

  The willingness component forms part of these personality traits verified at the concept mapping workshop and was also measured as part of the personality traits measurement by means of the OPP.

5.2.6.4 Personality traits

Personality traits refer to a person's distinguishing qualities or characteristics, representing readiness to think or act in a particular fashion in response to a variety of different stimuli or situations (Oliver & Mooradian, 2003).

- **Measured by the OPP.** All the verified personality traits could be measured by the OPP psychometric instrument. This instrument is explained in detail in the section to follow.

As indicated in chapter 4, the OPP measures seven of the 12 personality traits identified in the developed framework. The OPP consists of nine different dimensions, each with opposing scales/poles. Each of the nine OPP dimension is supported by supportive elements. These elements as well as the nine different dimensions are provided below. Table 5.17 also highlights which of the verified personality traits from the developed framework were evident in each of the nine dimensions of the OPP. All these verified personality traits that form part of the developed change agent identification framework are highlighted in red.

TABLE 5.17 OPP DIMENSIONS

DIMENSION 1	
ACCOMMODATING	****ASSERTIVE**
Empathetic	Dominant
Accepting	****Challenging**
Sensitive to people's feelings	Unconcerned about feelings
Avoids confrontation	Confrontational
People-orientated	Task oriented
DIMENSION 2	
DETAIL CONSCIOUS	**FLEXIBLE**
Deliberating	Spontaneous
Controlled	Lacks of self-discipline and self-control
Rigid	****Flexible**
Enjoys attending to detail	Dislikes attending to detail
Conscientious	Disregards rules and obligations
DIMENSION 3	
CYNICAL	**TRUSTING**
Suspicious	Trusting
Inclined to question others' motives	Takes people at face value
Sceptical	****Has faith in others' honesty**
May disrupt other people	Sometimes a little credulous
DIMENSION 4	
EMOTIONAL	**** PHLEGMATIC**
Prone to worry	Self-assured
Moody	Emotional
Inclined to be anxious in social settings	Socially confident
Troubled by feelings of anxiety and self-doubt	Secure
Easily takes offence	Resilient

DIMENSION 5	
RESERVED	****GREGARIOUS**
Reserved	Outgoing and sociable
Cool and introspective	Lively and talkative
Prefers to work alone	Enjoys working with others
Enjoys own company	Has a high need for affiliation
Aloof and detached	Warm and appreciative

DIMENSION 6	
GENUINE	****PERSUASIVE**
Bases behaviour on own feelings and attitudes	Behaviour determined by demands of the situation
Forthright	Diplomatic
Honest and open	Manipulative and expedient
Genuine and sincere	Shrewd and calculating
May lack tact and diplomacy	Sensitive to “political” issues

DIMENSION 7	
COMPOSED	**CONTESTING**
Calm and composed	Ambitious and competitive
Able to delegate	May take on too much work
Keeps work separate from home life	Works long hours
Able to unwind and relax	Have difficulty relaxing
Tolerant	Impatient
Able to distance himself or herself	May be prone to stress-related work pressure

DIMENSION 8	
OPTIMISTIC	**PESSIMISTIC**
Achieving and striving	Resigned
Believe their own actions determine outcomes	Prone to feelings of helplessness
Positive approach to setbacks	Inclined to pessimism
****Optimistic**	Fatalistic
Believes he or she is in control of his or her own destiny	Have little faith in his or her ability to determine events

DIMENSION 9	
ABSTRACT	**PRAGMATIC**
Imaginative	Down to earth and concrete
Aesthetically sensitive	Not interested in artistic matters
Creative and artistic	Practical and realistic
Abstract and intellectual	Pragmatic
Have a theoretical orientation	More concerned with “how” than “why”

Note: ** Relevant dimensions and/or supportive elements.

Five of the verified supportive elements from the theoretical framework that are not measured by the OPP subscales are as follows: Willingness, open minded, being a good listener, self-awareness and perseverance. Seven of the twelve verified personality traits could be measurable by the OPP questionnaire, and the OPP was therefore selected as the appropriate assessment tool.

5.2.7 Research findings for steps 4.2 and 4.3: OPP results

As indicated in chapter 4, the sample group of 27 change agents were requested to complete the OPP questionnaire in order to determine how they compared with the ideal profile of a change agent in terms of each personality trait.

TABLE 5.18: BIOGRAPHICAL INFORMATION OF CHANGE AGENTS (N = 27)

Age	Frequency	Percent	Cumulative frequency	Cumulative percent
21 – 26	4	14.8	4	14.8
27 – 35	8	29.7	12	44.5
36 – 46	9	33.3	21	77.8
46 – 55	5	18.5	26	96.3
> 55	1	3.7	27	100
Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Male	11	40.7	11	40.7
Female	16	59.3	27	100
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Black	15	55.6	15	55.6
White	8	29.6	23	85.2
Caucasian	0	0	23	85.2
Coloured	3	11.1	26	96.3
Indian/Asian	1	3.7	27	100

TABLE 5.18: BIOGRAPHICAL INFORMATION OF CHANGE AGENTS (N = 27) CONTINUED

Highest qualification	Frequency	Percent	Cumulative frequency	Cumulative percent
Matric	**6**	22.2	6	22.2
Diploma	**7**	25.9	13	48.1
Degree	**8**	29.6	21	77.8
Honours degree	**3**	11.1	24	88.8
Master's degree/MBA	**3**	11.1	27	100
Home language	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percent**
Afrikaans	**8**	29.6	8	29.6
English	**7**	25.9	15	55.5
Northern Sotho	**2**	7.4	17	62.9
Zulu	**6**	22.2	23	85.1
Other	**4**	14.9	27	100

According to the above table, the sample consisted of 41% males and 59% females. 34% were between the ages of 36 and 46; 56% were African; 30% had a degree; 30% were Afrikaans speaking and 26% were English.

The occupational personality profile results were analysed to determine how many of the 27 change agents matched the change agent's ideal profile in terms of personality traits or how many change agents matched a personality trait that formed part of the ideal profile. The elements of the personality traits dimension in the framework that were measured by the OPP were:

- assertive
- flexible
- trusting
- phlegmatic
- gregarious
- persuasive
- optimistic

Note: The above traits are indicated with ** in table 5.17.

The chances were viewed as slim that change agents would meet all seven personality traits as per the ideal profile indicated in the above table, and therefore cut-off points were adjusted accordingly. The following cut-off points were decided upon on the nine-point scale of the OPP: A range from 7 to 9 (on the right-hand side of the continuum) for the first six personality traits were linked to the ideal profile personality traits and a range of 1 to 3 for the seventh and last personality trait, namely optimism. After analysing this information, it was found that none of the selected change agents fell into **all** seven personality trait dimension ranges, even after cut-off points were adjusted to less stringent ones.

On the strength of the above results, it was decided to consider each personality trait and compare the ADKAR improvement scores for each of the personality traits separately. The employees were divided into two groups, namely those supported by change agents who possessed that specific trait (fell within the indicated range on that specific personality trait) and those supported by change agents without that specific trait (fell outside the indicated range on that personality trait).

It would have been extremely difficult to defend the approach in terms of a change agent matching the ideal profile in totality, because not a single change agent fitted the **exact** ideal profile in terms of all seven personality traits as measured by the OPP with initial stringent cut-off points. Only two change agents fell within the ranges for all seven personality traits that form part of the ideal profile, after the cut-off points had been revised to less stringent ones.

5.2.7.1 Interpretation of frequency results

The frequency of scores of the sample group that fall within particular categories was determined. This indicated how many of the change agents matched the ideal profile in terms of each dimension/personality trait measured. These results were provided for each personality trait. The results indicated that not one of the 27 change agents matched the exact ideal profile for all seven of the personality traits.

The frequency of responses for each dimension of the OPP on both sides of the continuum was calculated. All the areas highlighted in yellow indicate the number of responses that matched the ideal profile for that particular dimension.

TABLE 5.19: OPP FREQUENCY RESULTS

Dimensions	Scale indicators	Frequency	Percent
Dimension 1: accommodating vs. assertive	**1-5**	13	48.15
	6-9	14	51.85
Dimension 2: detail conscious vs. Flexible	**1-5**	24	88.89
	6-9	3	11.11
Dimension 3: cynical vs. trusting	**1-5**	16	59.26
	6-9	11	40.74
Dimension 4: emotional vs. phlegmatic	**1-5**	16	59.26
	6-9	11	40.74
Dimension 5: reserved vs. gregarious	**1-5**	15	55.56
	6-9	12	44.44
Dimension 6 : genuine vs. persuasive	**1-5**	17	62.96
	6-9	10	37.04
Dimension 8: optimistic vs. pessimistic	**1-5**	7	25.93
	6-9	20	74.07

Note: Only the results of the seven personality traits from the ideal profile are provided and not all traits measured by the OPP.

The above indicates the following:

- **Dimension 1.** Thirteen of the 27 change agents inclined towards being accommodating, while 14 of them inclined towards the ideal profile of being assertive.
- **Dimension 2.** Twenty four of the 27 change agents inclined towards being detail-conscious, while 3 of them inclined towards the ideal profile of being flexible.
- **Dimension 3.** Sixteen of the 27 change agents inclined towards being cynical, while 11 of the 27 of them inclined towards the ideal profile of being trusting.
- **Dimension 4.** Sixteen of the 27 change agents inclined towards being emotional, while 11 of them inclined towards the ideal profile of being phlegmatic.
- **Dimension 5**. Fifteen of the 27 change agents inclined towards being reserved, while 12 of them inclined towards the ideal profile of being gregarious.

- **Dimension 6.** Seventeen of the 27 change agents inclined towards being genuine, while 10 of them inclined towards the ideal profile of being persuasive.
- **Dimension 8.** Seven of the 27 change agents inclined towards the ideal profile of being optimistic, while 20 of them inclined towards being pessimistic.

From the above results, it is clear that, in most instances, fewer than half of the 27 change agents inclined towards the ideal profile for each personality trait. The only instance in which more than half of the change agents inclined towards an ideal personality trait was for dimension 1. All the other dimension results indicated that more than half of the change agents inclined towards the other side of the continuum, that is not displaying a specific, ideal personality trait.

5.2.8 Step 4.4: completion of the post-test ADKAR by a sample of 135 employees supported by change agents in their respective areas

As indicated in chapter 4, the change agents were requested to ask five of their peers in their working area to complete the ADKAR questionnaire again (purposefully selected). The objective was to determine whether the employees supported by the change agents who had a specific personality trait that forms part of the ideal profile, showed a significantly larger improvement in change-readiness scores compared to those employees supported by change agents who did not have that particular personality trait - or whether the specific personality trait did not have any impact on the employee change-readiness scores. These selected employees had also completed the pre-test ADKAR questionnaire during earlier roadshows, because they were part of the 350 employees who had completed the ADKAR initially. On completion of the post-ADKAR questionnaire, the pre-test ADKAR questionnaires were collected from the archives in order to compare pre- and post-test ADKAR scores for these specific employees. A possible limitation, influencing the true ADKAR results, could have been due to the fact that employees subjectively decided that they wished to be perceived as accepting the change even though they actually resisted it.

No biographical information was obtained from these 135 (27 change agents X 5 employees per change agent) individuals who completed the post-ADKAR

assessment. These employees however were employed in the procurement and supply chain management function in the utility organisation.

The ADKAR change-readiness questionnaire was sent to change agents via electronic mail. The change agents printed hard copies of these questionnaires and handed them to procurement and supply chain management employees in their area to complete. On completion the questionnaires were sent back to the researcher for analysis.

5.2.9 Findings for steps 4.5, 4.6 and 4.7: combined research results – determining key personality traits

Steps 4.5, 4.6 and 4.7 were described respectively in chapter 4, where it was also indicated that all the results were analysed simultaneously and would be indicated in two integrated tables (tab. 5.20a and 5.20b). This section therefore focuses on the provision of the following results:

- **Step 4.5.** This entailed reporting whether there was a significantly larger improvement in the change-readiness scores of employees supported by the change agents possessing a specific personality trait compared to those supported by change agents not displaying that specific trait.
- **Step 4.6.** This involved reporting which of those seven personality traits could be viewed as **key** personality traits by comparing the improvement in employee change-readiness scores for each of the seven personality traits per group supported by change agents possessing a particular personality trait versus those change agents not showing a particular personality trait for the ideal profile.
- **Step 4.7.** This entailed indicating whether employees showed a significantly larger improvement in employee change-readiness scores when supported by change agents possessing **all** key traits compared to the group supported by change agents not showing all key traits.

The aim of this quantitative analysis is to answer each the following research hypotheses:

- **H0:** Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

- **H1:** Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

All the results are indicated in table 5.20a and 5.20b below. Owing to the vast number of results, it was necessary to provide the results in two separate tables. Below are descriptions of the different columns for both of the tables.

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Assertive	Awareness	65	1.15	3.63	65	1.03	3.36	70	1.05	3.41	70	0.98	3.09
Dd1	Desire	65	1.08	3.69	65	1.06	3.32	70	1.03	3.54	70	0.89	3.11
	Knowledge	65	0.73	4.01	65	0.96	3.28	70	0.66	3.82	70	0.87	3.07
	Ability	65	0.78	4.14	65	0.64	3.19	70	0.92	3.95	70	0.74	3.14
	Reinforcement	65	1.10	3.35	65	0.90	3.14	70	0.90	3.37	70	0.86	2.93
Flexible	Awareness	120	1.10	3.53	120	1.02	3.23	15	1.09	3.37	15	0.96	3.12
Dd2	Desire	120	1.04	3.64	120	1.00	3.23	15	1.14	3.40	15	0.78	3.10
	Knowledge	120	0.71	3.89	120	0.94	3.19	15	0.65	4.09	15	0.72	2.96
	Ability	120	0.86	4.04	120	0.71	3.17	15	0.77	4.07	15	0.56	3.18
	Reinforcement	120	0.96	3.43	120	0.91	3.05	15	1.08	2.78	15	0.62	2.87
Trusting	Awareness	80	1.18	3.40	80	1.00	3.28	55	0.96	3.69	55	1.02	3.13
Dd3	Desire	80	1.13	3.66	80	0.99	3.21	55	0.94	3.54	55	0.99	3.22
	Knowledge	80	0.70	3.92	80	0.90	3.19	55	0.71	3.90	55	0.93	3.13
	Ability	80	0.79	4.13	80	0.69	3.18	55	0.93	3.92	55	0.69	3.14
	Reinforcement	80	1.10	3.27	80	0.84	3.02	55	0.82	3.49	55	0.97	3.05

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS CONTINUED

TRAIT	**CHANGE READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Phlegmatic	Awareness	80	1.18	3.39	80	0.96	3.33	55	0.94	3.70	55	1.06	3.05
Dd4	Desire	80	1.09	3.55	80	0.93	3.23	55	1.00	3.71	55	1.04	3.19
	Knowledge	80	0.71	3.87	80	0.87	3.17	55	0.69	3.97	55	0.99	3.16
	Ability	80	0.82	4.04	80	0.69	3.18	55	0.91	4.04	55	0.68	3.15
	Reinforcement	80	1.07	3.19	80	0.82	3.01	55	0.82	3.60	55	0.98	3.06
Gregarious	Awareness	75	1.05	3.52	75	0.94	3.08	60	1.16	3.52	60	1.07	3.38
Dd5	Desire	75	1.05	3.61	75	0.89	3.11	60	1.06	3.62	60	1.07	3.37
	Knowledge	75	0.73	3.87	75	0.87	3.11	60	0.66	3.97	60	0.97	3.25
	Ability	75	0.79	4.03	75	0.68	3.13	60	0.93	4.06	60	0.71	3.21
	Reinforcement	75	0.97	3.34	75	0.75	2.98	60	1.04	3.37	60	1.03	3.10
Persuasive	Awareness	85	1.06	3.60	85	1.05	3.35	50	1.15	3.37	50	0.89	2.99
Dd6	Desire	85	1.03	3.68	85	1.04	3.34	50	1.10	3.50	50	0.81	2.99
	Knowledge	85	0.68	3.92	85	0.98	3.31	50	0.74	3.90	50	0.75	2.93
	Ability	85	0.80	4.02	85	0.73	3.29	50	0.94	4.08	50	0.55	2.96
	Reinforcement	85	0.99	3.39	85	0.92	3.20	50	1.03	3.30	50	0.73	2.73

TABLE 5.20a: ADKAR PRE- AND POST-TEST MEAN AND STANDARD DEVIATION SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONALITY TRAITS CONTINUED

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (pre-test)**			**D1 (1–5) Associated with change agents with personality trait (post-test)**			**D1 (6–9) Associated with change agents without personality traits (pre-test)**			**D1 (6–9) Associated with change agents without personality traits (post-test)**		
		N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean	N	Std dev.	Mean
Optimistic	Awareness	35	1.14	3.62	35	0.91	3.17	100	1.09	3.48	100	1.05	3.23
Dd8	Desire	35	1.01	3.51	35	0.90	3.22	100	1.07	3.65	100	1.01	3.20
	Knowledge	35	0.60	3.85	35	0.94	3.09	100	0.73	3.93	100	0.91	3.19
	Ability	35	0.99	3.94	35	0.62	3.08	100	0.80	4.08	100	0.71	3.19
	Reinforcement	35	0.86	3.56	35	0.87	2.86	100	1.03	3.29	100	0.90	3.09

Notes: As indicated earlier in the chapter, change agents were considered to be those **with** the elements of the ideal profile in terms of the first six traits (assertive, flexible, trusting, phlegmatic, gregarious and persuasive), if they scored between 6 and 9 on the OPP continuum scale and from 1 to 5 in terms of trait number 7 – trusting on the OPP stanine scale (scale from 1-9). D1 = the first personality trait, namely "assertiveness". The ADKAR pre-test and post-test results are provided per dimension for both groups, where employees were supported by change agents **with** or **without** the particular trait.

Table 5.20a:

- Column 1 (trait) refers to the seven relevant personality traits measured by the OPP questionnaire in terms of the change agent profile. These seven personality traits form part of the ideal profile of a change agent according to the theoretical framework developed.
- Column 2 (change readiness level) refers to all five change readiness dimensions of the overall ADKAR change readiness questionnaire. Each of the seven personality traits was assessed against all five change readiness scores, to determine whether there was a significant improvement in the employee change readiness scores in instances where employees were supported by change agents with or without a specific personality trait that forms part of the ideal profile of a change agent.
- Columns 3 and 4, D (1-5), refer to that group of employees supported by change agents with that specific personality trait that forms part of the ideal profile, while columns 5 and 6 refer to the group of employees supported by change agents without that specific personality trait.
    - The N columns represent the sample sizes of the employees who completed the pre- and post-ADKAR questionnaires, either supported by change agents possessing and not possessing the specific personality trait for each dimension. By examining the first personality trait in the above table, for example, which refers to assertiveness (Dd1), the sample sizes between the results of change agents with and without a specific personality trait differ. Frequency results table in section 5.2.7.1 showed that 14 change agents possessed the assertiveness personality trait. Since each of the change agents was tasked to obtain a second round of ADKAR results from five of the people he or she supported in his or her area, there would be five ADKAR post-test results available for each change agent. The same employees' pre-test ADKAR results are also reported. The remainder of the 13 change agents who did not possess that specific trait would each have obtained the ADKAR post-test results from five of the employees they worked with, resulting in a comparison of post-test and pre-test scores for 65 individuals (13 x 5 = 65) (see the above explanation). All of the other N values for all the remaining personality trait dimensions reflect the same approach. Before answering some of the empirical research questions posed below, it is necessary to

provide information on the way in which some of the results were calculated.

5.2.9.1 Interpretation of the results in table 5.20a

- By inspecting columns 3 and 4 (D1-5), it was evident that, contrary to expectations and to the original hypothesis, there was a decrease in the mean score values of the ADKAR post-test scores when compared to the pre-test scores in instances where employees were associated with change agents **with** specific personality traits from the ideal profile. This tendency was evident for all the personality traits dimensions.
- The same tendency was observed for columns 5 and 6 (D6-9), because there was also a decrease in ADKAR post-test mean scores values in comparison with the pre-test scores in instances where employees were associated with change agents **without** specific personality traits from the ideal profile.
- Owing to the above observation, a different approach was required to analyse the results. Since the ADKAR levels decreased for both groups, further investigation would be required in order to compare the decrease in the mean scores for each of the ADKAR levels and for all personality trait dimensions between the employees associated with change agents with and without specific personality traits.
- The hypothesis refers to an increase in employee change readiness scores when supported by change agents possessing specific traits compared with those employees supported by change agents not possessing those specific traits from the ideal profile. However, this was not reflected in the empirical results since table 5.20a indicates no improvement in any of the mean score values.

TABLE 5.20b: DIFFERENCES IN ADKAR PRE- AND POST-TEST SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONAILTY TRAITS

TRAIT	**CHANGE-READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (diffwith)**			**D1 (6–9) Associated with change agents without personality trait (diffwithout)**			**P-value (Kruskal-Wallis test)**	**Key trait: yes /no?**
		N	Std dev.	Mean diff with	N	Std dev.	Mean diff without		
Assertive	Awareness	65	1.51	-0.27	70	1.30	-0.32	0.9648	No
Dd1	Desire	65	1.63	-0.37	70	1.24	-0.42	0.6322	No
	Knowledge	65	1.24	-0.72	70	1.06	-0.75	0.7691	No
	Ability	65	0.93	-0.94	70	1.11	-0.81	0.6211	No
	Reinforcement	65	1.30	-0.20	70	1.22	-0.44	0.2327	No
Flexible	Awareness	120	1.40	-0.30	15	1.44	-0.25	0.7549	No
Dd2	Desire	120	1.45	-0.41	15	1.39	-0.30	0.8115	No
	Knowledge	120	1.14	-0.69	15	1.16	-1.13	0.1369	No
	Ability	120	1.04	-0.87	15	0.94	-0.88	0.9692	No
	Reinforcement	120	1.26	-0.38	15	1.20	0.08	0.2499	No
Trusting	Awareness	80	1.52	-0.12	55	1.17	-0.55	0.2282	No
Dd3	Desire	80	1.57	-0.45	55	1.23	-0.32	0.5919	No
	Knowledge	80	1.12	-0.72	55	1.19	-0.76	0.9893	No
	Ability	80	0.98	-0.94	55	1.09	-0.78	0.3517	No
	Reinforcement	80	1.33	-0.25	55	1.15	-0.44	0.4271	No
Phlegmatic	Awareness	80	1.45	-0.05	55	1.24	-0.65	**0.0517**	**Yes**
Dd4	Desire	80	1.50	-0.31	55	1.35	-0.52	0.4337	No
	Knowledge	80	1.11	-0.69	55	1.20	-0.80	0.7654	No
	Ability	80	1.03	-0.87	55	1.03	-0.89	0.8911	No
	Reinforcement	80	1.29	-0.18	55	1.18	-0.54	0.1024	No

TABLE 5.20b: DIFFERENCES IN ADKAR PRE- AND POST-TEST SCORES WHEN SUPPORTED BY CHANGE AGENTS WITH AND WITHOUT SPECIFIC PERSONAILTY TRAITS CONTINUED

TRAIT	**CHANGE READINESS LEVEL**	**D1 (1–5) Associated with change agents with personality trait (diffwith)**			**D1 (6–9) Associated with change agents without personality trait (diffwithout)**			**P-value (Kruskal -Wallis test)**	**Key trait: yes/no?**
		N	Std dev.	Mean diff with	N	Std dev.	Mean diff. without		
Gregarious	Awareness	75	1.36	-0.43	60	1.43	-0.13	0.2550	No
Dd5	Desire	75	1.54	-0.49	60	1.31	-0.28	0.2890	No
	Knowledge	75	1.13	-0.76	60	1.17	-0.71	0.6317	No
	Ability	75	0.97	-0.90	60	1.10	-0.85	0.7527	No
	Reinforcement	75	1.22	-0.37	60	1.31	-0.27	0.3797	No
Persuasive	Awareness	85	1.41	-0.25	50	1.38	-0.38	0.6187	No
Dd6	Desire	85	1.47	-0.33	50	1.39	-0.52	0.3783	No
	Knowledge	85	1.14	-0.60	50	1.13	-0.96	**0.0599**	**Yes**
	Ability	85	0.99	-0.73	50	1.05	-1.12	**0.0158**	**Yes**
	Reinforcement	85	1.23	-0.19	50	1.28	-0.56	**0.0569**	**Yes**
Optimistic	Awareness	35	1.19	-0.45	100	1.47	-0.25	0.5147	No
Dd8	Desire	35	1.32	-0.27	100	1.48	-0.44	0.4735	No
	Knowledge	35	1.10	-0.75	100	1.17	-0.73	0.9438	No
	Ability	35	1.13	-0.86	100	0.99	-0.88	0.8523	No
	Reinforcement	35	1.13	-0.20	100	1.28	-0.69	**0.0525**	**Yes**

Notes: The p-values in bold: significant at the 10% level in the employee concerned.

Table 5.20b

- Columns 1 and 2 represent the same information as columns 1 and 2 in table 5.20a.
- Columns 3 and 4, D (1-5) and D (6-9) refer to the differences in the ADKAR pre-and post-test mean scores. The pre-ADKAR scores were subtracted from the post-ADKAR scores for each of the individual employees in the groups respectively supported by change agents **with** and **without** a specific personality trait. The Kruskal-Wallis test was then used to compare the two

sets of difference scores for each of the personality dimensions involved. The significant p-values, at the 10% level, are highlighted in bold.

- One should bear in mind that since the ADKAR scores DECREASED in all cases for BOTH groups, the present comparison involves negative (difference) scores – labelled “diff with” and “diff without” in the table. Hence in layperson’s terms, if it can be shown that the group supported by change agents who **possessed** the particular personality characteristic showed a STATISTICALLY SIGNIFICANT **SMALLER** difference score (DECREASE in change readiness) than those supported by changes agents who **did not possess** that particular personality characteristic, then one could infer that characteristic in question is important in the profile of a successful change agent. Column 5 refers to the p-value score. In instances where the p-value was lower than 0.10, it demonstrates a significant difference in the “DIFFERENCE SCORES” for the group supported by change agents **possessing** a specific personality trait compared employees supported by change agents **not possessing** that specific trait. The magnitude of the mean difference scores for these traits (mean diff with and mean diff without) will indicate which of the two is larger, and indicate the statistical significance of the difference between the “mean diff with” and “mean diff without” scores.

5.2.9.2 Interpretation of the results in the table 5.20b

Owing to the fact that there was a decrease in all the mean scores throughout between the pre- and post-test ADKAR scores in instances where employees were associated with change agents with and without specific personality traits, it was necessary to review each of the mean scores respectively, in the above table, in order to determine the level of the decrease between each of the mean value scores. Should the mean value scores decrease significantly less in instances where employees were supported by change agents with specific personality traits, then a positive contribution is made by these change agents. This is determined by subtracting the “diff with” mean scores from the “diff without” mean scores.. An analysis of these results yielded the following information:

- **Assertiveness (Dd1).** No statistically significant differences between the mean scores were found in this dimension. The explanation below shows how the scores were interpreted.
    - The difference in mean value scores (-0.27 and -0.32) indicates 0.05 less of a decrease in the **awareness** change readiness score in instances where employees were supported by change agents with

this specific personality trait. The p-value of 0.9648 indicates that the mean difference scores for the two groups did not differ significantly. Hence this is not considered a key dimension in the profile of a ”successful” change agent.

The same approach, as indicated in the above discussion, was followed for all the ADKAR dimensions and personality traits. The results below highlight which of the personality traits did and did not positively affect the ADKAR change readiness levels.

- **Flexible (Dd2).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Trusting (Dd3).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Phlegmatic (Dd4).** One statistically significant difference between the mean difference scores was found for awareness in this dimension.
    - The difference in mean difference value scores (-0.05 and -0.65) indicates a statistically significant smaller decrease in the **awareness** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.
- **Gregarious (Dd5).** No statistically significant differences between the mean difference scores were found in this dimension.
- **Persuasive (Dd6).** Three statistically significant differences between the mean difference scores were found, namely for knowledge, ability and reinforcement, in this dimension.
    - The difference in the mean value scores (-0.60 and -0.96) indicates a statistically significant smaller decrease in the **knowledge** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.
    - The difference in the mean value scores (-0.73 and -1.12) indicates a statistically significant smaller decrease in the **ability** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.01 highlights this significant difference.
    - The difference in the mean value scores (-0.19 and -0.56) indicates a statistically significant smaller decrease in the **reinforcement** change

readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.

- **Optimistic (Dd8).** One statistically significant difference between the mean difference scores was found, namely for reinforcement, in this dimension.
    - The difference in the mean value scores (-0.69 and -0.20) indicates a statistically significant smaller decrease in the **reinforcement** change readiness score in instances where employees were supported by change agents with this specific personality trait. A p-value score of 0.05 highlights this significant difference.

Although only a few of the dimensions were indicated as making a positive contribution to the ”success” of change agents, these results can be used in support of the compilation of a change agent selection profile.

For those columns in which the p-values were highlighted in **bold,** there was a statistically significant smaller decrease in the mean values between the pre-and post-test results for the group who received support from change agents with specific personality traits compared with the decrease in the mean values between the pre- and post-test results for the group who received support from change agent without those specific traits.

To summarise with reference to the original hypothesis, there was no statistically significant larger improvement in the ADKAR post-test change readiness scores whatsoever because of the decrease of all the mean values in both instances (i.e. where employees were supported by a change agent **with** and **without** specific personality traits forming part of the ideal profile respectively). On the basis of the empirical results and the fact that all change readiness scores showed a decrease, all difference scores (post-test ADKAR minus pre-test ADKAR) were negative. However, there was some evidence of the positive **effect** of some personality traits manifested by change agents on change readiness scores with reference to those instances in which there was a statistically significantly smaller decrease in change readiness scores for change agents who possessed a particular trait.

On the strength of the information in the above tables, the researcher was able to answer the following three research questions:

Question 1. Are there significantly larger improvements in the change readiness scores of employees supported by change agents possessing a specific trait from the profile, versus those supported by change agents not possessing that specific trait?
Answer. There was no significantly larger improvement in **any** of the change readiness scores of employees supported by change agents possessing a specific trait from the profile, versus those supported by change agents not possessing that specific trait.

The tabled results indicate that there no significant improvements at all for employee change readiness levels – neither for those supported by change agents with a specific trait nor for those supported by change agents without a specific trait. However, there was a statistically significant (at the 10% level) smaller decrease in the mean values for the following personality traits and readiness levels:

- Phlegmatic personality traits manifested by the change agent resulted in a statistically significant smaller decrease in the awareness levels of employees.
- Persuasive personality traits manifested by change agents resulted in a statistically significant smaller decrease in the knowledge, ability and reinforcement readiness levels of employees.
- Optimistic personality traits manifested by change agents resulted in a statistically significant smaller decrease in the employees' reinforcement levels.

In support of these findings, the literature study findings and the qualitative empirical research findings indicated that the persuasive and optimistic personality traits need to form part of a change agent's personality profile. The phlegmatic personality trait was not evident in any of the findings.

Question 2. Which of those seven personality traits can be regarded as key personality traits by analysing the level of the significantly larger improvement in employee change readiness scores for each of the seven personality traits change agents could possess?

Answer. Because there was no significantly larger improvement in any of the change readiness scores in instances where employees received support from change agents with specific personality traits from the ideal profile, none of the personality traits from the ideal profile can be viewed as key traits. From the previous discussion

with a changed focus on the interpretation of negative difference scores, it was indicated that only the phlegmatic, persuasive and optimistic personality traits showed statistically significantly smaller decreases in the employee change readiness post-test scores. The statistically significant smaller decrease was only evident in the following traits and change readiness levels.

- **Phlegmatic personality traits**. There was a statistically significant smaller decrease between the pre- and post-test awareness levels only, and not in any other of the four readiness levels.
- **Persuasive personality trait**. There was a statistically significant smaller decrease between the pre- and post-test knowledge, ability and reinforcement levels when supported by change agents with this personality trait.
- **Optimistic personality trait**. There was a statistically significant smaller decrease between the pre- and post-test reinforcement levels only, and not in any other of the four readiness levels..

It can be concluded that the phlegmatic, persuasive and optimistic change agent personality traits do have some sort of positive effect on employees during transformation.

Question 3. On the basis of a comparison of the ADKAR pre- and post-test results, did employees show a statistically significantly larger improvement in change readiness scores when supported by change agents possessing all the key traits?

Answer. On the basis of a comparison of the ADKAR pre- and post-test results, there was no statistically significant larger improvement in any of the change readiness scores when supported by change agents possessing specific traits. The above question could not be answered because none of the change agents had all the key traits.

An in-depth process was followed in the development of a change agent identification framework. Even though the ADKAR is deemed a reliable questionnaire, in this research study it did not indicate changes in all change readiness scores through the appointment of change agents with specific personality traits as per the ideal profile.

To summarise, the following conclusions were drawn from all of the above results as indicated in chapter 5:

- The ADKAR change readiness questionnaire is reliable because the scale coefficient alpha was 0.77.
- For all the variables, the group 27 change agents who remained part of the change agent network obtained statistically significant higher scores than the 73 individuals who decided to exit the network.
- The frequency table results indicate that more than half of the 27 change agents were optimistic and assertive.
- The results indicated that there were no significantly larger improvements in the employee post-test change readiness scores when supported by change agents displaying specific traits from the ideal profile. However, when considering the negative difference scores found, there were some traits that led to statistically significant smaller decreases in scores – which provides positive support for identifying that trait as important in the profile of change agents.
- None of the personality traits resulted in a significantly larger improvement of all change readiness scores as per the significant difference score, as indicated by the p-value. The only three personality traits that did result in a statistically significantly smaller decrease of some of the AKDAR change readiness scores were the phlegmatic, persuasive and optimistic traits. Only these change agent personality traits can be deemed to have some sort of positive effect on employees during transformation.

5.3 CHAPTER CONCLUSION

The research project achieved its primary objective of developing a change agent identification framework. A vigorous qualitative research process was followed in establishing the theoretical framework. It can therefore be regarded as a beneficial framework to be used by industrial and organisational psychologists, specialising in change management in organisations undergoing change.

The personality traits dimension of the framework was tested and even though it did not yield significant results with regards to any significantly larger improvement regarding employee-change-readiness scores, empirical evidence in support of the

objectives were provided in throughout tables 5.1 to 5.20. The results indicate the comprehensive qualitative and quantitative approach followed in an effort to determine the impact of change agent personality traits on the change-readiness levels of employees.

The next chapter focuses on the research conclusions, their meaning and impact, possible future considerations and the ultimate success of the research project. The research project limitations faced are also explained and key recommendations made for future research in the field.

CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter focuses on phase 3 of the research process as indicated in chapter 1. Firstly, the conclusions in this research project are supported by the findings in the literature review and the results of the empirical research. Secondly, the research limitations and the impact thereof on the research results will be discussed. Lastly, recommendations will be made for future researchers in the field of industrial and organisational psychology, encouraging them to conduct further research in the field and to extend the theoretical knowledge base of the concept "change agent."

A comprehensive literature and empirical research process was followed, in order to achieve the following overall research objective: ***Determine the dimensions and supportive elements that constitute a valid change agent identification framework.***

This research aim served as the guiding principle for all the steps followed throughout the research process. These steps were schematically presented and explained in Chapter 4 (Figure 4.1).

Sub objectives were formulated in support of the primary objective in order to facilitate the overall research process. Five sub objectives/research questions were formulated for the literature study and seven sub-objectives/research questions for the empirical study.

Conclusions will be drawn from the literature review and empirical study in accordance with the research aims as elucidated in chapter 1.

6.2 CONCLUSIONS

All the literature study research findings in terms of the research aims formulated were indicated in chapters 2 and 3 and all empirical research findings in chapter 5.

6.2.1 Research questions relating to the literature study:

6.2.1.1 ***Research aim 1:*** *to understand the meaning of change, organisational change and change management.*

a. Conclusions regarding the meaning of change

A number of definitions were found on the concept of change, as indicated in chapter 2. Ford and Ford (1994) viewed change as sequence of activities that emerge from a number of disturbances. Change can also be viewed from an individual, business or societal perspective (Worren, Ruddle & Moore, 1999). Individual change may require adapting to new behaviour, whereas business change may require new business processes or systems. Societal change could imply changes in public policies or legislation (Burke, 2002).

Since this research project focused on planned, as opposed to unplanned change, definitions were sought for in this research project. Many researchers view the concept planned as linear, as it focuses on all the steps in sequential order right through to the final step. Other researchers argued that change cannot always be viewed as linear, because it is usually implemented in the exact opposite way. It is messy, timelines are not always adhered to, people do not cooperate and unexpected decisions are made because of unanticipated consequences.

Most of the definitions found on change, reflected the same idea, namely that transformation of some or other kind occurs. It is evident from the above that most definitions of change involve some of the following: planned or unplanned, disturbance, difference in form, shift, opposite and messy.

b. Conclusions regarding the meaning of organisational change

A vast amount of literature was found on the term “organisational change”. Some of the viewpoints on and definitions of organisational change, according to the literature findings are provided below.

Most definitions imply that a shift occurs, which could refer to current organisational behaviour shifting to ideal organisational performance by improving certain capabilities and skills of the employees in an organisation. According to Porras and Robertson (1992), the purpose of planned organisational change is often a result of enhancing individual development and improving organisational performance by altering organisational members' on-the-job behaviours.

It was noted that organisational change mostly occurs in the context of some or other failure or adjustment. With reference to organisations, change involves the difference in how an organisation functions, who its members and leaders are, what form it takes and/or how it allocates its resources. St-Amour (2001) advanced more specific reasons for organisational change, because they contend that it could refer to, *inter alia,* mergers, acquisitions, outsourcing, downsizing, restructuring or streamlining. Laycock (2002) argued that organisational change would not be necessary if individuals have simply done their jobs correctly in the first place. The above could also be deemed a performance management issue, which does not necessarily result in organisational change, depending on the need for change. For the purpose of this research project this viewpoint was not deemed to be applicable to the reasons for change.

In essence organisational change is usually planned and the need for change usually emerges as a result of poor organisational or individual performance, failure in systems, process, technology or overall organisational functioning. Organisational change therefore entails improvement and changing the status quo to a new desired, well-defined end-state.

c. Conclusion regarding the meaning of change management

The literature findings on change management referred to the process whereby an organisation aligns its people, processes and structures with its vision and business strategy, maximising its ability to achieve success through involved and committed people. It was noted that the process of change can take many years to become a reality for each individual affected by it. Hence change does not always have to be all-inclusive and may be implemented on smaller scales over periods of time.

Change management is also viewed as a process of continuously renewing the organisation's direction, structures and capabilities in order to satisfy the needs of its internal and external customers. It involves the effective implementation of new

methods and systems in a growing organisation, which is controlled by the organisation itself.

To summarise: All the literature findings on the above three key terms were explored and documented and these primary research aims were therefore achieved in chapter 2.

6.2.1.2 ***Research aim 2:*** *to understand why it is necessary to identify change agents to manage change in large organisations.*

Before identifying the importance of the change agent's role on the basis of the literature consulted, term "change agent" was defined.

Many definitions were examined in chapter 3 in order to determine how the business world views the role of a change agent and to find a definition applicable to this research project. According to Burnes (2004), change agents can be viewed as the individuals responsible for directing, organising and facilitating change in organisations. This was classified as a potentially difficult task, especially in large bureaucratic organisations. Saka (2003) argued that change agents are individuals directly affected by change, and through their involvement in the change process, they shape the way in which the end state should be achieved. It was evident from all the definitions researched that a change agent is someone who helps to drive, communicate and market change throughout the organisation or functional area in which employees are affected.

Saka (2003) argued that change agents should only be selected from the leadership team's senior managers. Ticky and Devanna (1990) felt that change agents should be spread across the entire organisation and represent all levels in the organisation that are affected by the change, in order to significantly relate to the issues and concerns of employees, and thus to support them properly.

Doyle (2001) agreed that change agents should either be supported by the change management team, thus helping them to communicate change messages effectively and supporting employees in their areas of work. These viewpoints indicate that researchers in the field tend to define the concept "organisational change agents" in different ways. However, most researchers concur that the core functions of these individuals are to manage and drive change in the organisation.

The definition of a change agent adopted for this research project was that a change agent does not only refer to the manager, supervisor or even a change specialist, but to any individual who is appointed to play a significant part in designing, running, improving and communicating any proposed change.

The importance of the role of change agents in organisations can be summarised as follow: to manage change systematically, appropriate processes and strategies should be developed, and the psychological wellbeing of employees should be addressed to ensure a smooth transition in all aspects of the proposed change. By appointing change agents to assist in measuring the readiness levels of the employees concerned and their wellbeing and to resolve any issues and concerns of employees on the ground, many obstacles can be removed early on in the process. According to Saka (2001), it would be unwise to attempt major change without designated change agents, especially in cases where large numbers of employees are affected by the change.

Owing to the fact that few organisations appointed change agents to manage change in the past, meaningful research still needs to be conducted on the significance of their role in large organisations.

For the purpose of this research, all possible literature findings on the above matters were explored and documented – hence, the primary research aim was achieved in chapter 3.

6.2.1.3 ***Research aim 3:*** *to understand the roles and responsibilities of change agents in large organisations.*

Most of the research studied provided information on the roles and responsibilities of change agents. In chapter 3, the roles of change agents were described and the findings on responsibilities highlighted. The following literature on the **role** of a change agent was documented: Most researchers agree that change agents are those individuals in organisations who provide guidance to their team members, and are usually viewed as the people others listen to. The more these individuals stay in the loop regarding any information that could potentially impact them as a result of the changes, the better they can disseminate the information to employees in an effort to keep everyone informed and valued as part of the business. The closer a change agent is to new information released, the sooner he or she can communicate

the impacts and proposed change to his or her peers. A change agent is also viewed as someone who is selected to help employees cope with change that is usually driven by a certain initiative or project. The focus is therefore specific, and the change agent usually knows what is expected of him or her. The number of change agents selected usually depends on the size of the organisation, the number of employees affected by, and the extent of the change. Hutton (1994) and information derived from Accenture (2007) provided valuable information on the roles of change agents. These key roles applicable to this research project are summarised in the table below.

TABLE 6.1: CHANGE AGENT ROLES

Change agent roles (Hutton, 1994)	Change agent roles (Accenture, 2007)
To help individuals change the way they think and perform their jobs	Actively supports or champions changes throughout the organisation, but especially with those groups affected by the transformation initiative
To change the norms of the organisation, including accepted standards, customer service, adjusting best practices, etc	Answers project/initiative questions and promotes bottom-up communication
To help change the processes and systems of the organisation	Accelerates change by transmitting formalised information to and encouraging informal discussions with target audiences
To establish and maintain alignment between the vision and the entire organisation and responsibilities of change agents, also ensuring alignment of messages across the organisation in an effort to prevent confusion and resistance	Watches and assesses the local situation, diagnoses problems and alerts the relevant persons
To provide leadership, support and guidance to fellow change agents	Pilots the change distribution process in their specific areas
To ensure regular communication with other change agents for the purpose of sharing knowledge and experience, venting frustrations and celebrating successes	Communicates project messages to target audiences
	Exchanges experiences and knowledge with other change agents

In essence, the role of change agents includes but is not limited to the support they provide to employees and other change agents, communication efforts, ensuring alignment, diagnosing problems and answering employees' questions on the change.

Little information was found on change agent responsibilities, because most researchers focused their research on the role of change agents. In conclusion, the findings on the responsibilities are summarised in the table below.

TABLE 6.2: CHANGE AGENT RESPONSIBILITIES

Change agent responsibilities (Ulrich, 1997)	Change agent responsibilities (Nadler, 1998)	Change agent responsibilities (Accenture, 2007)
Identify the key success factors for building capacity for change.	Demonstrate personal involvement in the change process.	Champion changes on the ground.
Profile the extent to which the key success factors are being managed.	Communicate proper alignment between employee's current work and the new direction.	Address the target audiences' questions and concerns.
Identify the improvement activities for each success factor.	Model the new behaviours and ensure it is in line with the organisation's values and culture.	Identify and escalate potential "hot spots."
Manage the key factors for change as an iterative process and not as an event.	Communicate effectively throughout the change process.	Roll out transformation communications as required.
	Engage with the employees affected on a regular basis.	Encourage, coach and support the individuals in the business area throughout the delivery of the transformation change initiatives. Assist the project team to review progress towards achievement of change objectives. Seek out and quash rumours.

Note: The reason for only summarising some of the change agent responsibilities, as highlighted in chapter 4, is that only those responsibilities **relevant to this research project** were summarised. In this project, the responsibilities of change agents included those summarised in the above table.

From the above it is clear that a change agent has a number of responsibilities in the process of managing change, which mainly include but are not limited to communicating and liaising with the correct audience and minimising overall resistance.

To summarise, all the literature findings on the change agent's roles and responsibilities were explored and documented, thus achieving the primary research aim formulated in chapter 3.

6.2.1.4 ***Research aim 4:*** *to determine the main dimensions, such as skills, knowledge and personality traits, that could constitute a framework for identifying change agents.*

From the findings in the literature, it is evident that most researchers in the field indicate that skills, knowledge, personality traits and level of desire to change are key change agent identification dimensions. Each of these dimensions comprises a number of supportive elements. All literature findings on change agent skills, knowledge and personality traits were indicated in chapter 3.

Tables 3.1, 3.2 and 3.3 illustrated these findings.

Research has indicated that people with a desire to change are those who wish to participate, support the change initiative and make the change happen. In the past, these individuals were identified as typical change agents.

By comparing the ideal traits of a change agent with those of the change leader, change master and change champion, it was evident that many of the ideal traits of a change agent are reflected in the roles of either the change master, change champion or change leader.

It was also found that change leaders, change masters and change champions all need communication and facilitation skills. Change champions, however, appear to

possess most of the skills required by the change agent as per the literature findings as well. These are: interpersonal, communication, listening, facilitation and networking skills.

As the change agents' personality traits formed a critical part of this research, it was necessary to clearly analyse the overlap between literature findings and empirical findings. The overlapping personality traits were: assertiveness, honesty, persuasiveness, integrity and optimism.

By analysing this in accordance to the conversations held with subject matter experts during the concept mapping workshop, it seemed critical for individuals to communicate their viewpoints and to take a clear stance when communicating with their audience. Change messages are sometime difficult to communicate and therefore the importance of honesty is critical in order to manage employee expectations accordingly, and to ensure individuals impacted by the changes receives the correct information upfront, assisting them to become change-ready.

As indicated in chapter 3, change agents need to have the ability to convince people to accept the changes introduced to them. Hence, it seems important for individuals acting in this role to convince their audience that the changes are beneficial, in order to minimize resistances that may occur.

Stemming from these conversation, it also seemed that if messages are shared with integrity and honesty, employees will accept changes quicker and view it as an opportunity rather than a threat. Messages therefore needs to be communicated in a manner that demonstrates the positive nature of the change and its favourable impact on those that will be required to adapt or change the way in which they perform their tasks.

Even though a number of skills, knowledge and personality traits were examined and tabulated in chapter 3, there is not much literature on these terms.

For the purpose of this research and because of the limited amount of research conducted to date on the role of change agents in large organisations, the researcher did manage to find valuable information. Hence, the research aim was achieved in chapter 3.

6.2.1.5 ***Research aim 5:*** *to understand the methods/tools that have been used to identify change agents in the past.*

Little information was found on change agent identification tools and methods. This was therefore also identified as a focus area for future research.

The purpose of this research was to investigate and recommend ways in which change agents should be identified, because of the limited amount of literature available on the identification approach/method, as highlighted in chapter 1.

However, the literature indicated that the most widely used change agent identification methods used today include but are not limited to: nominations from employees or line managers or completion of a typical employee engagement-type questionnaire (Hutton, 1994).

From all literature examined, it was clear that a limited number of change agent identification tools have been used or identified in the past.

For the purpose of this research and owing to the limited amount of research conducted to date on the identification of change agents in large organisations, the researcher did manage to trace useful information. Hence, the research aim was achieved in chapter 3.

6.2.2 Research questions relating to the empirical study:

6.2.2.1 ***Research aim 1:*** *to determine whether the change-readiness questionnaire can be considered a reliable questionnaire.*

The research results showed that the reliability of the ADKAR questionnaire was acceptable for the sample group used. As indicated in chapter 5, the only item with low subscale reliability is the knowledge dimension. Conducting an item analysis would have indicated which items in this subscale contributed to its low reliability coefficient. Since the purpose of this research project was not to analyse the ADKAR assessment and its psychometric properties, only overall scale reliability was computed. The overall scale reliability indicated a Cronbach alpha coefficient of 0.77.

Due to the acceptability of the ADKAR questionnaire, it was viewed as appropriate to utilise this questionnaire in determining the change-readiness levels of the sample group used.

Table 5.1 illustrated these findings.

According to these empirical findings, this research aim was achieved in chapter 5.

6.2.2.2 ***Research aim 2:*** *to determine whether there is a statistically significant difference in change-readiness scores between the individuals who decided to exit the change agent network and those individuals who remained part of the change agent network*

The research findings indicated that for all the ADKAR dimensions, the 27 change agents who remained part of the change agent network obtained statistically significantly higher scores than the 73 individuals who decided to exit the network. This was demonstrated by the mean scores, which were statistically significantly higher in all instances. It was therefore concluded that the change agents whom decided to remain part of the network, were more change ready than those who decided to exit it. These results provided insight regarding the true reliability of this questionnaire as it confirmed the willingness of individuals to remain part of the network, which was evident in their active participation afterwards, as reported.

Table 5.2 illustrated these findings.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.3 ***Research aim 3:*** *to determine which dimensions and supportive elements are perceived critical in a change agent identification framework from the analysis of the dimensions/perception survey (appendix D) and the concept mapping workshop worksheets (appendix E) completed by* ***internal and external*** *change management consultants.*

From the questionnaires completed by the external change management consultants (outside the organisations where the research was conducted) it was evident that, according to their perception, eight proposed dimensions need to be included in a

change agent identification framework, namely knowledge, ability, skills, level of commitment, availability and willingness, personality traits, experience and change curve readiness levels.

Table 5.9 illustrated these proposed short-listed dimensions.

From the analysis of the above-mentioned eight dimensions, external change management consultants proposed a total of 40 personality traits, 26 specific skills necessary for change agents to fulfil their roles, 29 topics on the knowledge change agents should ideally have and 18 elements of experience. Most agreed that change agents should ideally be at the commitment level on the change-readiness curve. The above were viewed as supportive elements in each of the proposed dimensions.

Tables 5.4 to 5.8 illustrated these supportive elements.

At the concept-mapping workshop held, most of the internal change management consultants agreed that skills, knowledge, experience and change curve readiness levels are regarded as necessary for inclusion in a change agent identification framework. It was argued that change agents could be trained to acquire the necessary skills and knowledge after they had been identified.

The dimensions/perception survey is viewable in appendix D and the concept mapping workshop worksheets in appendix E.

The workshop participants agreed that only level of commitment, willingness, availability and personality traits dimensions should be considered in identifying individuals as change agents. The reasons for this were described in Chapter 5.
Table 5.16 illustrated these proposed verified dimensions.

The participants indicated that 12 personality traits (supportive elements) should form part of the overall personality trait dimension of the framework. These 12 were identified through the review and elimination of the proposed list of 40 personality traits from the qualitative perception questionnaire completed by the external change management consultants.

Table 5.11 illustrated these personality traits.

Even though skills, knowledge, experience and change curve readiness levels were not verified as change agent identification dimensions, but as dimensions to consider in developing / training change agents during the post-identification phase, the participants agreed upon a number of supportive elements for each of the dimensions.

Tables 5.12, 5.13, 5.14 and 5.15 illustrated these supportive elements for the skills, knowledge, experience and change curve readiness level dimensions.

The input from the above-mentioned sample groups was a critical step in the research project, in order to utilise their feedback as the first step in creating a platform of criteria in identifying change agents. The debates during the workshop illustrated the participants' knowledge and strong viewpoints regarding the topic.

According to these empirical findings, this research aim was achieved in chapter 5.

6.2.2.4 ***Research aim 4:*** *to determine which tests, surveys or methods would be most appropriate to measure the verified dimensions and supportive elements*

As indicated, the verified dimensions forming part of the framework were level of commitment, willingness, availability and personality traits. Descriptions of each method or tool used to measure each dimension are provided below.

- **Level of commitment.** Senge's measuring commitment level model was identified to measure the commitment of individuals who could be identified as possible change agents. On the basis of Senge's (1990) work, Rice *et al*. (1996) compiled a questionnaire measuring commitment, to enable organisations to use Senge's theory to help them to determine commitment levels among employees. No other commitment level questionnaire was found that was applicable to measuring commitment levels of change agents, because this questionnaire can easily be used in a project-related environment. This questionnaire could be used in future to determine the commitment levels of employees who could act as change agents. An example of this questionnaire is attached as appendix B.
- **Availability.** Compact/key performance indicators were identified in the literature findings to determine an individual's capacity to act as a change

agent and measure his or her performance through the deliverables of certain tasks in the role of a change agent.

- **Willingness.** The willingness to voluntarily act as a change agent can only be determined after the selector has provided an in-depth understanding on the roles and responsibilities of change agents. It is the individual's choice whether he or she wishes to act as a change agent, and it is therefore voluntary. No person should be forced or told to act as a change agent. The willingness element can therefore be captured in terms of an individual who volunteers to fulfil this role.
- **Personality traits.** All the verified personality traits were measured by the OPP psychometric instrument. This measuring instrument seemed most appropriate because it entails most of the verified personality traits as per the concept mapping workshop results.

According to the above findings, this research aim was achieved in chapter 5.

6.2.2.5 ***Research aim 5:*** *to determine whether the improvement in change-readiness scores of the group supported by change agents possessing a specific trait from the ideal profile was significantly larger than the improvement in the change-readiness scores of the group supported by change agents who did not show a specific trait from the ideal profile*

The tabled results (5.20a and 5.20b) indicate that there are no significant improvements at all for employee change-readiness levels – neither for those supported by change agents possessing nor for those supported by change agents not possessing a specific trait. However, there was a statistically significant (at the 10% level) smaller decrease in mean values for the following personality traits and readiness levels:

- Phlegmatic personality traits displayed by the change agent resulted in a statistically significant smaller decrease of awareness levels of employees.
- Persuasive personality traits displayed by change agents resulted in a statistically significant smaller decrease in knowledge, ability and reinforcement readiness levels of employees.
- Optimistic personality traits displayed by change agents resulted in a statistically significant smaller decrease in reinforcement levels of employees.

In support of these findings, the literature study findings (chapter 3) as well as the qualitative empirical research findings (chapter 5) indicated that the persuasive and optimistic personality traits need to form part of a change agents' personality profile. The phlegmatic personality trait, as an essential change agent personality traits, was not evident throughout all literature findings.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.6 ***Research aim 6:*** *to determine which of the personality traits are key personality traits*

In the previous answer, it was indicated that only the phlegmatic, persuasive and optimistic personality traits showed a statistically significant smaller decrease in mean values. These personality traits are thus not viewed as key traits , because of no significant improvement in change readiness scores. It was therefore concluded that the phlegmatic, persuasive and optimistic change agent personality traits have some positive effect on employees during a transformation process.

According to the empirical findings, this research aim was achieved in chapter 5.

6.2.2.7 ***Research aim 7:*** *to* determine whether there are significantly larger improvements in the change-readiness scores of employees supported by change agents possessing **all** key traits from the profile than employees supported by change agents not showing any of the key traits

There was no statistically significant larger improvement in any of the change-readiness scores when supported by change agents possessing specific traits by comparing ADKAR pre- and post-test results. None of the change agents displayed **all** key traits and in essence no key traits were found, so the above question could not be answered.

The reason for including this research question during the inception of the research project was based on the perception that a few of the selected change agents, that remained willing and commitment to the process, would display most or all key traits.

The opposite demonstrated that even though individuals might show a high level of desire to change, it does not have any linkage to displaying the “right” personality traits as identified in this context.

According to the empirical findings, this research aim was achieved in chapter 5.

The interpretive conclusion from the factual results reported in chapter 5 therefore refers: The results of the research aims demonstrated the systematic process followed in order to comprehensively understand the value-add of change agents in large organisations. Most importantly, it was found that change agents who remained part of the change agent network were more change ready opposed to those who decided to exit the network at one point, as per the ADKAR change readiness questionnaire. Even though there were only two change agents that fell into some of the less stringent ranges of the personality trait continuums, none of these change agents or others demonstrated all of the key traits. Due to the phlegmatic, persuasive and optimistic personality traits demonstrating p-value scores that were significant at the 10% level, it could have been concluded that these personality traits were key traits, but due to no significant improvement in change readiness scores, it was concluded that these change agent personality traits only have some positive effect on employees during a transformation process but are not seen as key traits.

By gathering and analysing literature as well as empirical research findings, it was evident that there are still valuable research to be conducted in future regarding key personality traits of change agents. This research ~~project~~ however, provided a platform for future researchers, as these findings are the first in creating a theoretical body of knowledge regarding the identification of change agents.

6.3 GENERAL RESEARCH AIM

The overall research methodology was designed to work towards achieving the general aim of this research project. As indicated in chapter 1, the general aim of the research was to determine the dimensions and supportive elements that constitute a valid change agent identification framework.

The 12-step research process followed provided the researcher with the necessary approach and information to develop the change agent identification framework, depicted in figure 5.2. The personality traits dimension of the framework was then empirically tested and supportive information provided for the remaining three dimensions in the framework.

According to the empirical findings, the general aim of this research project was achieved, the dimensions and supportive elements determined and a valid change agent identification framework developed.

The conceptual conclusion therefore refers: There was no evidence of a change agent identification framework in the existing body of knowledge in either previous empirical research or literature, encapsulating change agent identification methodologies. No process has been followed, to date, in determining characteristics of change agents in large organisation by means of a qualitative and/or quantitative process. The process followed as well as the results obtained, are the first in establishing this specific body of knowledge in the field of industrial and organisational psychology.

6.4 RESEARCH HYPOTHESES

Change agents, who possess specific personality traits from the ideal profile, have no effect on the ADKAR change-readiness improvement scores of employees.

The reason for rejecting H0 was that a change agent possessing certain personality traits that forms part of the ideal profile does have some effect in the significantly smaller decrease of change-readiness scores compared to change agents not

displaying any traits that form part of the ideal profile of employees in terms of the following:

- Phlegmatic personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement of awareness levels of employees versus to employees supported by change agent not possessing this personality trait.
- Persuasive personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement in knowledge, ability and reinforcement readiness levels of employees compared to employees supported by change agent not possessing this personality trait.
- Optimistic personality traits displayed by the change agent resulted in the significantly smaller decrease and not the improvement in reinforcement levels of employees compared to employees supported by change agent not possessing this personality trait.

Employees receiving support from change agents possessing a specific trait from the ideal profile showed significantly larger improvement of ADKAR change-readiness scores compared to the improvement of the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

H1 was rejected as only some personality traits displayed by change agents resulted in the significantly smaller decrease and not in the improvement of certain change-readiness scores of employees. Employees receiving support from change agents possessing a specific trait from the ideal profile **did not** show a significantly larger improvement in any of the ADKAR change-readiness scores compared to the ADKAR change-readiness scores of those employees supported by change agents who do not show the specific trait.

6.5 RESEARCH LIMITATIONS

The following research limitations were evident in the research.

- 73 change agents decided to exit the change agent network during the transformation process, and only 27 change agents remained. The researcher did not have any control over their decision to exit the network, because it was influenced by various extraneous factors. A larger sample group would have been more valuable.
- In particular, limited amount of literature was found regarding the term "change agent." Little information was available on the roles and responsibilities of change agents and the methods or tools used in the past to identify change agents.
- No biographical information, e.g. age, gender, race, level of education, was taken into account in determining the selection criteria of change agents. This information could have contributed to even more stringent selection criteria.
- The difference in change-readiness scores were only calculated at a 10% level of significance, which only demonstrated a 90% certainty that the difference between change-readiness scores were not coincidental. A bigger sample group would have allowed for a 5% level which would have demonstrated a 95% level of certainty that differences between change-readiness scores were not coincidental.
- The following epistemological factors that may have influenced the empirical results were identified throughout the research process:
    - changing the overall transformation project mandate by the organisation after six months into the project initiation phase
    - the resignation of a number of senior project sponsors
    - a lack of support from direct managers for employees affected by the change
    - prolonged project timelines
    - more critical departmental priorities other than the project
    - inconsistent departmental communication
    - increased negative organisational publicity
    - change agents functioning in different business units/divisions and in different circumstances in the organisation

These factors did not necessarily influence the empirical results but were noted as part of the observations made that could have had an impact on the overall research results.

6.6 POST CHANGE AGENT IDENTIFICATION CONSIDERATIONS

As indicated earlier, at the concept mapping workshop, the participants discussed and agreed that there were three dimensions of their verified supportive elements that did not need to form part of the change agent identification framework, but instead should have served as supportive documentation after the change agent identification phase.

These were:

Figure 6.1: Post change agent identification considerations

Even though these dimensions were not included in the change agent identification framework, they could help the change management specialist to determine the identified change agents' level of skills, knowledge and experience in order to design training material or identify appropriate training courses for change agents, developed accordingly. The descriptions of each dimension and its verified supportive elements:

6.6.1 Skills

According to the literature findings, skills are referred to as a learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy or both (Keep & Mayhew, 1995). Skills that could be developed during the post identification phase include:

- intrapersonal skills
- influencing skills
- selling skills
- deductive reasoning skills
- networking skills

- conflict-handling skills
- facilitation skills
- attentive listening skills
- problem identification and solving skills
- Negotiation skills
- Systemic thinking

Note: All of the skills listed above were verified at the concept mapping workshop.

6.6.2 Knowledge

According to the literature findings, knowledge refers to the confident understanding of a subject with the ability to use it for a specific purpose (Hayes, 2002). Some theoretical knowledge that change agents could obtain afterwards, during the post-identification phase are as follows:

- knowledge of the organisation
- knowledge of the organisation's external environment
- an understanding of the need for change
- change management principles
- knowledge of change readiness and change-readiness scores
- knowledge of the roles and responsibilities of a change agent
- an understanding of various change management interventions
- the benefits of the change and its impact on the organisation and individual
- a thorough understanding of the specific area/function being affected by change
- an understanding of the cycle/phases of change
- knowledge of the value of a change agent
- knowledge of the group dynamics

Note: All of the knowledge elements listed above were verified at the concept mapping workshop.

6.6.3 Experience

Experience refers to knowledge of or the skill of some event gained through involvement in or exposure to the particular event (Popper & Eccles, 1977). The following are experiences that change agents could undergo during the post-identification phase:

- becoming an expert in dealing with changing work conditions/procedures
- exposure to implementing a change initiative
- networking experience with those affected by the change
- consulting/project environment-related experience
- experience in mobilising people behind a specific goal
- experience in dealing with conflict and different people
- experience in having to relay hard messages to others in a manner that instils confidence
- facilitation experience – even if minimal

Note: All of the experiences listed above were verified at the concept mapping workshop.

A change agent skills, knowledge and experience checklist was developed, based on some of the research findings in the literature, the qualitative perception questionnaire and the concept mapping workshop. This is solely a perception questionnaire and has not been validated, but it could be used by organisational change management practitioners as a tool to determine the identified change agents' level of skills, knowledge and experience. Identified change agents could complete the perception checklist, and on the basis of this change management practitioners could either develop or identify appropriate training courses the change agents could be exposed to. This perception questionnaire is attached as appendix D.

6.7 RECOMMENDATIONS

This study identified the need for further research and the expansion of the theoretical knowledge base on the term change agent and change agent identification. A brief description of possible areas for further studies and theoretical knowledge base expansions in the field are provided in the statements below:

- Future research could be conducted on change agent networks and change agent identification tools, in order to develop the knowledge base for this topic in the business world.
- A change agent identification tool could be developed in the form of a questionnaire, used by organisations to identify individuals as change agents.

- Similar research could be conducted that would include a larger sample group of change agents in a large organisation.
- Researchers could study the intricacies of change agents in their organisations and share this information with other specialists in other organisations. This would help to grow the concept of “change agents.”
- Organisations could appoint individuals as change agents and determine the real value of these “properly identified” individuals and their contribution to overall project success by measuring their impact on employee change-readiness levels.
- It is recommended that all four dimensions in the framework should be tested at the start of a next change agent identification process.
- The personality traits dimension, although tested in the quantitative part of this research process, did not yield significant results when tested against the ADKAR change-readiness assessment. If this set of personality traits could be tested against another change-readiness questionnaire, it could yield different results.
- Similar research could be conducted internationally because it will contribute significantly to global change agent research.
- In future, once change management practitioners have determined the necessary skills, knowledge and experience levels, change agents could be developed and equipped more appropriately, in order to manage change in their respective areas of the business.
- It is recommended that the organisation, in which this research was conducted should use the developed change agent identification framework to guide future change management consultants in identifying change agents.

6.8 CLOSURE

The word “closure” may be inappropriate here, because these research findings are only the “tip of the iceberg” for so many things still to be unearthed. The term change agent is developing all the time and there is still much more to be discovered through research in order to fully grasp all the intricacies of this role in a project-related environment. Hopefully this study has contributed to the body of knowledge pertaining to the field of change management in industrial and organisational psychology.

This research project should be regarded as a stepping stone in conducting more insightful, significant and meaningful research to feed the “hungry minds” in the business world of today.

“There is nothing wrong with change, if it is in the right direction.”

Winston Churchill

REFERENCE LIST

Accenture. (2007). *The change agent handbook*. Johannesburg: Accenture.

Ackerman , L. & Anderson, D. (2001). The change leader's roadmap. *How to navigate your organization's transformation.* San Francisco: Jossey-Bass/Pfeiffer.

Allen, M.J. & Yen, W.M. (2002). *Introduction to measurement theory*. Long Grove: Waveland Press.

Allport, G.W. (1937). Preface In K. Lewin (Ed), *Resolving social conflicts: Selected papers on group dynamics.* London: Souvenir Press.

Allport, G.W. (1961). *Pattern and growth in psychology*. Boston: Allyn & Bacon.

Alvesson, M. & Sveningsson, S. (2003). Good visions, bad micro-management and ugly ambiguity: Contradictions of non-leadership in a knowledge-intensive organisation. *Organisational studies, 24* (6), 961-988.

Ansoff, I.H. (1990). *Implanting strategic management.* London: Prentice-Hall International.

Argyris, C. (1970). *Intervention theory and method : A behaviour science view*. Reading, MA: Addison-Wesley.

Armenakis, A.A., Harris, S.G., & Feild, H.S. (1999). Making change permanent: model for institutionalising change interventions. In W. Passmore & R. Woodman. (Eds.). *Research in organisational change and development*, *12*, 289-319.

Arrata, P., Arnaud, D., Kumra, G. (2007). *Building an effective change agent team. Retrieved* January 09, 2008 from http://web.ebscohost.com/ehost/detail.

Bandura, A. (1977). *Social-learning theory.* Englewood Cliffs, New Jersey: Prentice-Hall.

Barker, R.A. (1997). How can we train leaders if we do not know what leadership is? *Journal of Human Relations*, *50* (4), 343-362.

Bartunek, J.M. (1988). The dynamics of personal and organisational reframing. In R.E. Quinn & K.S. Camerson. (Eds.) *Paradox and transformation: Toward a theory of change in organisational and management*. Cambridge: Ballinger, 137-162.

Beckhard, R. & Pitchard, W. (1992). *Changing the essence: The art of creating and leading fundamental change in organisations.* San Francisco: Jossey-Bass.

Beekdal, T., Hansen, K.L., Todbjerg, L., & Mikkelsen, H. (2006). *Change management handbook*. Retrieved July 09, 2007 from http://beekdal.com/downloads/ChangeManagement-EN.pdf.

Beer, M. & Nohria, N. (2000, May-June). Cracking the code of change*. Harvard Business Review*, 133 – 141.

Behling, O. & McFillen, J. (1996). Syncretical model of charismatic leadership. *Group and organisational management,* 12 (2), 163-191.

Bennis, W.G., Benne, K.D. & Chin. R. (1969). *The planning of change* (2nd ed.). NY: Holt, Rinehart and Winston.

Bennis, W.G. & Nanus, B. (1985). *Leaders: The strategies for taking charge.* New York: Harper & Row.

Bergh, Z.C. & Theron, A.L. (1999). *Psychology in the work context.* New York: Oxford University Press.

Bland, J.M. (1995). *An introduction to medical statistics*. (2nd ed.). Oxford: Oxford University Press.

Bless, C. & Kathuria, R. (1993). *Fundamentals of social statistics.* An African perspective. Cape Town: Juta.

Bocchino, R. (1993). Are you planning the future or fixing the past? *Journal of Staff Development, 14* (1), 48-52.

Bolognese, A.F. (2002). *Employee resistance to organisational change.* Retrieved June 26, 2007 from www.newfoundations.com/OrgTheory/Bolognese721.html.

Borysowich, C. (2006). *Hiring roles: The Change Management Specialist*. Massachusetts: EAI Community.

Bovey, W.H. & Hede, A. (2001). Resistance to organisational change: the role of cognitive and affective processes. *Leadership and Organisation Development Journal*, *22*(8), 372-382.

Bridges, W. (1991). *Managing transitions*. Reading, Massachusetts: Addison-Wesley.

Bridges, W. (2000). *The character of organisations.* Palo Alto, California: Davies-Black.

Brown, S.L. & Eisenhardt, K.M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organisations. *Admin Science Quarterly*, *42*, 1–34.

Bruce, A. & Pepitone, J.S. (1999). *Motivating Employees.* New York: McGraw Hill.

Budd, R. (1991). *The OPP technical manual.* Bedfordshire: Psytech International.

Burke, W.W. (2002). Organization change: *Theory and Practice*. Thousand Oaks, CA: Sage.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

Burnes, B. (2004). *Managing change*. (4th ed.). Harlow, Essex: Pearson Education.

Caldwell, R. (2003). Change leaders and change managers: Different or complementary? *Leadership and Organisational Development Journal, 25* (5), 285-293.

Canterucci, J. (2000). *Are you a change leader?* Retrieved October 2, 2007 from www.corpchange.com/archives/article/article_archives/a19_are_you_a_change_leader.

Carnell, C.A. (1997). Utilising audit to evaluate improvements in continuous veno-venous haemofiltration practices in intensive therapy unit. Nursing in critical care journal, 11 (4), 154 – 160.

Cattell, R.B. (1965). *The scientific analysis of personality.* Baltimore, Maryland: Penguin.

Cattell, R.B., Eber, H.W., & Tatsuoka, M.M. (1970). *Handbook for the sixteen personality factor questionnaire.* Champaign, IL: Institute for Personal Ability Testing.

Chapman, J.A. (2002). A framework for transformation change in organisations. *Leadership and Organisation Development Journal, 23* (1), 16-25.

Cheung, C., Jurman, S., Maguigad, A., & Slaughter, A. (2007). *Leaders as Change Agents.* Leadership APTA Class of 2007.

Chew, D., Gillian, S.L. (2005). *Corporate governance at the crossroads*. (1st ed.). Phoenix, AZ: University of Phoenix Custom.

Child, J. & Smith, C. (1987). The context and process of organisational transformation: Cadbury limited in its sector, *Journal of Management Studies*, *24* (6), 565-593.

Cobb, A. T. (2006). *Leading project teams*: *An introduction to the basics of project management and project team leadership.* London: Sage.

Coghlan, D. (1993). A person-centred approach to dealing with resistance to change. *Leadership and Organisational Development Journal*, *14* (4), 10 -14.

Cohen, L., Manion, L., & Morriso, K. (2001). *Research methods in education* (5th ed.). London: Routledge.

Conger, J.A., Spreitzer, G. & Lawler, E.E. (1999). *The leader's change handbook.* San Francisco: Jossey Bass.

Connor, D.R. (1993). *Managing at the speed of change.* New York: Villard Books.

Cummings, T.G. & Worley, C.G. (2001). *Organizational development and change.* (7th ed.). New York: South-Western Thomson Learning.

Cramer, D. (1997). *Basic statistics for social research.* London: Routledge.

Crichton, N.J. (1998). Statistical considerations in design and analysis. In *Research and development in clinical nursing practice.* London: Whurr.

Creswell, J.W. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.

Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16* (3), 297-334.

Cummings, T.G & Worley, C.G. (2001). *Organisational development and change.* (7th ed.). New York: South-Western Thomson Learning.

Darling, P. (1993). Getting results: The trainer's skills. *Management Development Review, 6 (5), 25-29.*

Davenport, T. (1993). *Process innovation: Reengineering work through I.T*. Boston: Harvard Business School.

Dawson, P. (2003). *Understanding organisational change: the contemporary experience of people at work*. London: Sage.

De Caluwé, L & Vermaak, H. (2002). *Prevailing perspectives on change*. Paper submitted to Management Consultancy Division, Academy of Management for the 2002 Conference in Denver, Colorado.

De Vos, A.S., Delport, C.S.L., Fouche, C.B., & Strydom, H. (2002). *Research at grass roots* (2nd ed.). Pretoria: Van Schaik.

Deci, E.L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology, 18*, 105-15.

Del Val, M.P & Fuentes, C.M. (2003). Resistance to change: A literature review and empirical study. *Management Decision*, *41* (2), 148-155.

Dench, S. (1997). Changing skills needs: What makes people employable? *Industrial and Commercial Training*, *29* (6), 190-193.

Denhardt, R.B. & Denhardt, J. V. (2006). *The dance of leadership: The art of leading in business, government and society*. New York: M.E. Sharpe.

Dent, E. & Goldberg, S. (1999). Challenging "resistance to change." *Journal of Applied Behavioral Science, 35* (1), 25-41.

Dent, M. & Barry, J. (2004). New public management and the professions in the UK: reconfiguring control. Que*stioning the New Public Management,* 7-20.

Diefenbach, T. (2005). The managerialistic ideology of organisational change management. *Journal of Organisational Change Management*, *20* (1), 126-144.

Doyle, M., Claydon, T., & Buchanan, D. (2000). Mixed results, lousy process: The management experience of organisational change. *British Journal of Management*, *11*, 59-80.

Doyle, M. (2001). Dispersing change agency in high velocity change organisations: Issues and implications. *Leadership and Organisational Development Journal, 22* (7), 321-329.

Drucker, P.F. (1954). *The practice of management.* New York: Harper & Row.

Dunlop, W.P., Corina, J. M., Vaslow, J.B., & Burke, M.J. (1996). Meta-analysis of experiments with matched groups or repeated measures designs. *Psychological Methods, 1,* 170-177.

Dunphy D. (1996). Organisational change in corporate setting. *Human Relations, 49* (5), 52 – 54.

Dunphy, D. & Stace, D. (1993). The strategic management of corporate change. *Human Relations*, *46* (8), 905-918.

Eby, L.T., Adams, D.M., Russel, J.E.A. & Gaby, S.H. (2000). Perceptions of organisational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations*, *53* (3), 419-428.

Egan, G. (1985). *Change agent skills in helping and human service settings*. New York: Wadsworth.

Evans, R. (1994). The human side of business process re-engineering. *Management Development Review, 7* (6), 10-12.

Folger, R. & Skarlicki, D. (1999). Unfairness and resistance to change: Hardship as mistreatment. *Journal of Organisational Change Management, 12* (1), 35-50.

Ford, J.D. & Ford, L.W. (1994). Logistics of identity, contradiction, and attraction of change. *Academy of Management Review*, *19* (4), 756-785.

Ford, A. (1999). *Modelling the environment.* Washington D.C: Island Press.

Friedlander, F. & Brown, I.D. (1974). Organisation development*. Annual Review of Psychology, 25*, 313-314.

Friedman, M. & Rosenman, R.H. (1974). *Type A behaviour and your heart.* New York: Knopf.

Freud, S. (1970). The unconscious. In W.A. Russell, *Milestones in motivation*, (p. 332-343). New York: Meredith Corporation.

Gerber, B. (1995). The bugaboo of team pay. *Training Journal, 32* (8), 25-35.

Gorsuch, R.L. (1997). Exploratory factor analysis: Its role in item-analysis. *Journal of Personality assessment*, *68* (3) : 532-560.

Gray, D.E. (2004). *Doing research in the real world*. London: Sage.

Guion, R.M. & Gottier, R.F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology*, *18*, 135-164.

Hailey, V.H. (2001). Breaking the mould? Innovation strategy for corporate renewal. *Human Resource Management*, *12* (7), 1126-1140.

Hackman, J.R. (2002). *Leading teams: Setting the stage for great performances*. Boston: Harvard Business School Press.

Hall, C.S & Lindzey, G. (1970). *Theories of personality* (2nd ed.). New York: John Wiley.

Harington, H.J. & Harrington, J.S. (1996). *High performance benchmarking.* New York: McCrawHill.

Hartley, J., Benington, J. & Binns, P. (1997). Researching the roles of internal-change agents in management of organisational change. *British Journal of Management, 8*, 61-71.

Hatcher, L., O'Rourke, N. & Stepanski, E.J. (2005). *A step-by-step approach to using SAS for univariate and multivariate statistics.* (2nd ed.). New York: SAS Institute.

Havelock, R.G., & Zotolow, S. (1995). *The change agent's guide* (2nd ed.). New Jersey: Educational Technology.

Hayes, J. (2002). *The theory and practice of change management.* Wiltshire: Palgrave.

Hiatt, J.M. (2006). *ADKAR*: *a model for change in business, government and our community.* Loveland, CO: Prosci Centre.

Hoffman, J.R. & Rogelberg, S.G. (1998). A guide to team incentive systems. *Team performance management, 4* (1), 23 -32.

Huber, G.P. & Glick, W.H. (1993). *Organisational change and redesign.* New York: Oxford University Press.

Hullman, K.E. (1995). Scaling the wall of resistance. *Training and Development Journal,* 15-18.

Hutton, D.W. (1994). *The change agents' handbook*. New York: American Society for Quality.

Isaac, S. & Michael, W. B. (1971). *Handbook in research and evaluation*. San Diego, CA: EDITS.

Johnson, S.T. (1993). Work teams: what's ahead in work design and rewards management? *Compensation and Benefits Review*, *29* (1), 48-51.

Jones, J., DeAnne, A. & Calderone, M. (2004). *10 principles of change management.* Retrieved September, 05, 2007 from http://www.strategy-business.com/resilience/rr00006.

Kanter, R.B. (1989). *When giants learn to dance*. London: Simon & Schuster.

Katzenbach, J. (1996). *Real change leaders*. London: Nicholas Brealey.

Katzenbach, J. (2008). *Effective change leaders*. Retrieved February 29, 2008 from www.mallenbaker.net/csr/CSRfiles/effective.html.

Kaufmann, U.W. & Tan. A. (2000). Making good change agent: Attitudes and Skills. Retrieved March 28, 2008 from http://europe.isixsigma.com/library/content/c040501a.asp.

Keep, E. & Mayhew, T.A. (1995). *Training policy for competitiveness: Time for a new perceptive*. London: Policy Studies Institute.

Kincaid, D.L. (1987). *Communication theory: Eastern and Western perspectives.* San Diego, CA: Academic Press.

K Jha, S. (2007). *Organizational behaviour: Personality and attitudes.* Retrieved February 29, 2008 from http://obreader.blogspot.com/2007/11/ob-handout-3.html.

Klein, K.J. & Sorra, J.S. (1996). The challenge of innovation implementation. *Academy of Management Review*, *21* (4), 22-42.

Kline, P. (2000). *A psychometrics primer.* London: Free Association Books.

Kogan, N. & Wallach, M.A. (1967). Group risk taking as a function of members' anxiety and defensiveness. *Journal of Personality*, 50-63.

Kotter, J.P. (1990). A force for change: *How leadership differs from management*. New York: Free Press.

Kotter, J.P. (1995). Why transformation efforts fail. *Harvard Business Review*, 73 (2) 59-67.

Kotter, J.P (1996). *Leading change*. Boston: Harvard Business School.

Kotter, J.P. & Schlesinger, L.A. (2008). Choosing strategies for change. *Harvard Business Review,* 130-138.

Kravchuk, O.Y. (2005). Nonparametric inference: Rack test of location optimal hyperbolic secant distribution. *Communications in Statistics*, *34*, 1617-1630.

Kuhn, T.S. (1996). The structures of scientific revolutions. 3rd Ed. Chicago: Chicago University Press.

Kyle, N. (1993). Staying with the flow of change. *Journal of Quality and Participation*, *16* (4), 34-42.

Lawler, E.E. & Cohen, S.G. (1992). Designing pay systems for teams. *ACA Journal, 1*, 6-19.

Laycock, M. (2002). Module 1: *Dealing with change.* Retrieved August 27, 2007 from www.oznet.ksu.edu/LEADS/FACT %20sheets/EP91.pdf.

Levinthal, D.A & March, J.G.(1993). The myopia of learning. *Strategy Management Journal, 14*, 95-112.

Lewin, K. (1951). *Field theory in social science.* New York: Harper & Row.

Lippit, R. & Lippit, G. (1975). Consulting process in action. *Training and Development Journal*, *29* (5), 48-54.

Lockyer, K. & Gordon, J. (1996). *Project management and project network techniques*. (6th ed.). London: Prentice Hall.

Luecke, R. (2003). *Managing change and transition.* Boston: Harvard Business Essentials/Harvard Business School Press.

Machiaveli, N. (1648). *The Prince: Statecraft and the welding of power*. Boston: Gim.

Margulies, N. & Raia, A. (1972). *Organizational development: Values, process and technology.* New York: McGraw-Hill.

Marshak, R.J. (1993). *A premier on decision making.* New York: Free Press.

Martin, M.M. (1998). Trust leadership. *Journal of Leadership Studies, 5* (13), 41-48.

Massey, L & Williams, S. (2006). Implementing change: The perspective of NHS change agents. *Leadership and Organisational Development Journal, 27* (8), 667-681.

Matthews, G., Deary, I.A. & Whiteman, M.C. (2003). *Personality traits* (2nd ed.). Cambridge: Cambridge University Press.

Maurer, R. (1996a). *Beyond the wall of resistance*. Austin, Tx: Bard Press.

Maurer, R. (1996b). Using resistance to build support for change. *The Journal for Quality and Participation, 19* (3) 55-66.

McCabe, J. (2004). The change agent. *Coaching, Executive Training.* Retrieved May 29, 2007 from www.jimcoach.com/newpages/ChangeAgent.htm

McCrae, R.R. & Costa, P.T. (1989). Reinterpreting the Myers-Briggs Type Indicator from the perspective of five factor model of personality. *Journal of Psychology,* 17-40.

McCrae, R.R. & Costa, P.T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509-516.

McDaniel, S. & Hemedinger, C. (2007). *SAS for dummies.* New York: Wiley.

McEwan, E.K. (2003). *10 traits of highly effective principals.* Thousand Oaks, CA: Corwin Press.

McNamara, C. (2007). *Basic context for organizational change.* Retrieved November 15, 2007 from http://www.managementhelp.org/mg mnt/orgchnge.htm.

Meyer, W.F., Moore, C. & Viljoen, H.G. (1989). *Personality theories from Freud to Frankl.* Johannesburg: Lexicon.

Michell, J. (1990). *An introduction to the logic of psychological measurement.* Hillsdale, New Jersey: Lawrence Erlbaum.

Micklethwait, J. & Wooldridge, A. (1996). The Witch Doctors. New York: Times Books.

Miles, R.H (1978). *Macro organisational behaviour*. Santa Monica, CA: Goodyear.

Milne, P. (2007). Motivation, incentives and organisational culture. *Kempston*, *11* (6), 28.

Mintzberg, H. & Westley, F. (1992). Cycles of organisational change. *Strategic Management, 13*, 39-59

Mischel, W. 1976. *Introduction of personality*. (2nd ed.). New York: Holt, Rhinehart & Winston.

Mitchell, J.G. & Young, S. (2001). High-skilled high performing VET. Melbourne: ANTA.

Moran, W.J. & Brightman, B.K. (2000). Leading organisational change. *Journal of Workplace Learning: Employee Counselling Today*, *12*, 66-74.

Morgan, G. (1986). *Images of organisation*. Beverley Hills, CA: Sage.

Morgan, N. (1996). 9 tips for change agents. *Fast Company,* (5), 124.
Mott, J. (2000). *Change agent.* Washington DC: William Rainey Harper College.

Mouton ,J. & Marais, H.C. (1994). *Basic concepts in the methodology of social science*. Pretoria: Human Sciences Research Council.

Nadler, D. (1998). *Champions of change. How CEO's and their companies are mastering the skills of radical change.* San Francisco: Jossey Bass.

Nahavandi, A. (2000). *The art and science of leadership* (2nd ed.). London: Prentice-Hall.

Naisbitt, J. & Aburdene, P. (1990). *Megatrends 2000.* London: Pan Books.

Neff, W.S. (1977). *Work and human behaviour.* Chicago: Aldine.

Neuman, W.L. (2002). *Social research methods: Qualitative and quantitative approaches*. (4th ed.) Boston: Allyn & Bacon.

Newman, K.L. (2000). Organisational transformation during institutional upheaval. *Academy of Management Journal, 25*, 602-620.

Nickel, J. E. (1990). Can your organization achieve better results by sharing gains with employees? *Employment Relations Today*, *17*, 173-184.

O'Brien, M.J. (2008). Five approaches to leading successful organisational change. *Healthcare Financial Management,* 138-140.

O'Connor, C.A. (1993). Resistance: The repercussions of change. *Leadership and Organisational Development Journal*, *14* (6), 30-36.

Oliver, J. & Turton, J. (1982). Is there a shortage of skilled labour? *British Journal of Industrial Relations, 20, 195 – 200.*

Oliver, J,M. & Mooradian, T.A. (2003). Personality traits and personal values: A conceptual and empirical integration. *Personality and Individual Differences, 35* (1), 109-125.

Orlikowski, W.J. (1996). Improvising organizational transformation overtime: a situated change perspective. *Information Systems Research, 7*(1), 63-92.

Palmer, B. (2004). Overcoming resistance to change. *Quality Progress, 37* (4), 35-40.

Panchapakesan, S., Ng, H.K.T., & Balakrishnan, N. (2006). Selecting the best population using a test for equality based on minimal Wilcoxon rank-sum precedence statistic. *Methodology Computing Applied Probability, 9*, 263-305.

Paton, R.A. & McCalman, J. (2000). *Change management: A guide to effective implementation* (2nd ed). London: Sage.

Perme, C. (1999). Agents of Change*. C.M. Perme & Associates*., *8* (1).

Performance Program Incorporated (2008). *Managing organisational change*. Retrieved April 7, 2009 from http://www.Performanceprograms.com/surveys/changeready.shtm.

Peters, T.J. (1978). Symbols patterns and settings. An optimistic case for getting things done. *Organizational Dynamics*, *7*, 3-23.

Pett, M.A. (1997). *Nonparametric statistics for health care research: Statistics for small samples and unusual distributions.* London: Sage.

Pettigrew, A. & Whipp, K. (1991). *Managing change for competitive success*. Oxford: Blackwell.

Piderit, S.K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management*, 783-794.

Plant, R. (1987). *Managing change and making it stick.* London: William Collins.

Popper, K.R & Eccles, J.C. (1977). *The self and its brain.* Berlin: Springer international.

Porras, J.I. & Silvers, R.C. (1991). Organisation development and transformation. *Annual Revised Psychology, 42*, 51–78.

Porras, J.I & Robertson P.J. (1992). Organizational development: Theory, practice, research. *Handbook of Organizational Psychology, 3*, 719 - 822.

Potts, R. & Lamarsh, J. (2004). *Managing change for success: Effecting change for optimum growth and maximum efficiency.* London: Duncan Baird.

Powell, M, K. (2002). Motivation: Organization change. In W.W. Burke, *Theory and practice.* Thousand Oaks, CA: Sage.

Powers, M. (2003). *Key role: The change agent.* Retrieved January 10, 2008 from *http://www.nasconsulting.biz/pdfs/TCS.pdf*

Psytech, 2002. *Occupational personality profile, the technical manual.* Retrieved December 2, 2005 from http://www.psytech.co.uk/downloads/manuals/oppman.pdf

Quinn, R.E. (2004). *Building the bridge at you walk on it*. New York: Jossey-Boss.

Quy Nguyen, H. (2001). Time, temporal capability and planned change. *Academy of Management Review,* 26, 602-620.

Randall, J. (2004). *Managing change and change managers.* London: Routledge.

Recklies, D. (2001). *What makes a good change agent?* Retrieved November 29, 2007 from http://www.themanager.org/Strategy/Change_agent.htm

Rice, J., Eggleton, C., Eggleton, C. H. & Rice, J.C. (1996). *The fieldbook of team interventions: Step-by-step guide to high performance teams*. Amherst, MA: Published by Human Resources Development Press.

Robbins, S.P. (2001). *Organizational Behaviour.* Upper Saddle River, New Jersey: Prentice Hall.

Robbins, S.P. (2005). *Organizational Behaviour.* (11th ed.). Upper Saddle River, New Jersey: Prentice Hall.

Robert, H.R & Mitchell, E.K. (1995). Organizational Development: The management of change*.* Tappi Journal, *78* (6), 255.

Rogers, C.R. (1973). *Freedom to learn for the 80's.* Columbus Ohio: Bell and Howell.

Rogers, E.M. (1987). *Diffusion of innovations*. (3rd ed.). New York: The Free Press.

Rogers, E. M. & Kincaid, D.L. (1987). *Communication networks: Toward a new paradigm for research.* New York: Free Press.

Rogers, E, M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press.

Rumelt, R.P. (1995). Inertia and transformation. In C.A. Montgomery (Ed.). *Resources based and evolutionary theories of the firm* (p. 101-132) . *Kluwer Academic*.

Saka, A. (2003). Internal change agents' view of the management of change problem. *Journal of Organisational Change Management*, *16* (5), 490 – 496.

Schalk, R., Campbell, J.W. & Freese, C. (1999). Change and employee behaviour*.* *Leadership and Organisational Development Journal*, *19*, 157-166.

Schein, E.H.. (1987). *Process Consultation: Its role in organisational development.* Massachustts, Reading, MA: Addison-Wesley.

Schein, E.H. (1996). Kurt Lewin's change theory in the field and in the classroom: Notes towards a model of managed learning. *Systems Practical.*, *9*, 27-47.

Schopenhauer, A. (1860). *The world as will and representation*. New York: Dover.

Schuler, A.J. (2002). *Change Management Communication. Planning change Management Communication.* Retrieved May 5, 2007 from www.schulersolutions.com/change_management_communication.html.

Schuler, A.J. (2003). *Overcoming resistance to change: Top ten reasons for change resistance.* Retrieved July 2, 2007 from www.schulersolutions.com/resistance_to_change.html.

Schultz, D.P. & Schultz, S.E. (1994). *Theories of personality.* Pacific Grove, California: Brooks/Cole.

Schwalbe, K. (2006). *Introduction to project management.* Boston: Thomson.

Scott, C.D. & Jaffe, D.T. (1988). Survive and thrive in times of change. *Training and Development Journal*, 25-7.

Seaberg, J.R. (1988). Utilizing sampling procedures. In Grinnell, R.M (Ed.), *Social work research and evaluation* (3rd ed.). Itasca, IL: Peacock.

Sekaran, U. (1992). *Research methods for business (*2nd ed.). New York: John Wiley.

Self, R.D. (2007). Organisational change: Overcoming resistance by creating readiness. *Development and learning in organizations*, *21*, 11-13.

Senge, P. M. (1990). The fifth Discipline: The art & practice of the learning organizations. New York: Doubleday.

Senge, P., Kleiner, A., Roberts, C., Roth, G., Ross, R. & Smith, B. (1999). *Dance of change: The challenges of sustaining momentum in learning organisations*. New York: Doubleday.

Shields, P. & Tajalli, H. (2006). Intermediate theory: The missing link in successful student scholarship. *Journal of Public Affairs Education 12* (3), 313-334.

Singleton, R., Straits, B.C., Straits, M.M., & McAllister, R.J. (1988). *Approaches to social research.* New York: Oxford University Press.

Smith, I. (2005a). Achieving readiness for organisational change. *Library Management*, *26* (7), 408-412.

Smith, I. (2005b). Managing the people side of organisational change. *Library Management, 26* (3), 152-155.

Spector, B. (2007). Implementing organizational change: *Theory and practice.* Upper Saddle River, New Jersey: Pearson.

Spiker, B.K. & Lesser. E. (1995). We have met the enemy, *Journal of Business Strategy*, *16*, 17-21.

St-Amour, D. (2001). Successful organisational change. *Canadian Manager*, *26* (2).

Stassen, T. (2006). *Change Management.* Retrieved August 10, 2007 from http://www.changewright.com/on%20cange.htm.

StatSoft. (2008). *Reliability and item analysis.* Oklahoma: Electronic textbook StatSoft.

Stratton, P. & Hayes, N. (1993). *Competence at work: Model for superior performance*. New York: Wiley.

Strebel, P. (1998). *The change pact*. San Francisco: Biddles.

Sullivan, M.F. & Guntzelman, J. (1991). The grieving process in cultural change. *The Health Care Supervisor, 10* (2), 28-33.

Tan, A. & Kaufmann, U.H. (2000). *Making good change agents*: *Attitudes and skills.* Retrieved February 29, 2008 from http://europe.isixsigma.com/library/content/c040501a.asp.

Taylor, F.W. (1911). *The principles of scientific management*, New York: Harper & Brothers.

Tearle, R. (2007). *The role of a change master. From change agent to change master.* Retrieved October 16, 2007 from http://www.changedesigns.co.za/The_role_of_a_change%20master.htm.

Ticky, N.M. & Devanna, M.A. (1990).*The transformational leader* (2nd ed.). New York: Wesley.

Trompenaars, F. & Wolliams, P. (2001). *Dillemma's of multi-cultural leaders: A new unified model of trans-cultural competence*. *Velocity*, *3* (1), 13-18.

Trochim, W. (1993, November). *The reliability of concept mapping*. Paper presented at the Annual Conference of the American Evaluation Association, Texas.

Trochim, W. (2002). *Non-probability sampling*. London: Routledge.

Trochim, W. (2006). *The research methods knowledge base*. New York: Atomic Dog Publishing

Trochim, W., Cook, J. & Setze, R. (1994). Using concept mapping to develop a conceptual framework of staff's views of a supported employment program for persons with severe mental illness. *Consulting and Clinical Psychology*, *62* (4), 766-775.

Tushman, M.L. & O'Reilly, C.A. (1996). The ambidextrous organisation: managing evolutionary and revolutionary change. *California Management Review*, *38*, 1–23.

Ulrich, D. (1997). Human resource champions: *The next agenda for adding value & delivering results*. Boston: Harvard Business School Press.

Ulrich, D. (2008). Are you a change agent? *Workforce Management*, *87* (10), 22.

Van de Ven, A.H & Poole, M.S. (1995). Explaining development and change in organizations. *Academy of Management review*, *20* (3), 510-540.

Van Tonder, C.L. (2004). *Organisational change: Theory and practice.* Hatfield: Van Schaik.

Van Yperen, N.W., Van den Berg, A.E., & Willering, M.C. (1999). Towards a better understanding of the link between participation in the decision-making and organisational citizenship behaviour: A multilevel analysis. *Journal of Organisational and Occupational Psychology*, 72, 377-392.

Vaughan, D. (1996). *The challenger launch decision.* Chicago: University Chicago Press.

Verma, V.K. (1996). *Human resource skills for project managers* (2nd ed.). New York: Project Management Institute.

Waddel, D. & Sohal, A.S. (1998). Resistance: a constructive tool for change management. *Management Decision*, *36* (8), 543-548.

Wageman, R. (1996). Interdependence and group effectiveness. *Administrative Science Quarterly*, *40*,145-80.

Waldersee, R & Griffiths, A. (1997). *The changing face of organisational change,* CCC *Paper No. 065,* Centre for Corporate Change, Australian Graduate School of Management, University of New South Wales, Sydney.

Wallace, R., Engel, D., & Mooney, J. (1997). *The learning school: A written guide to vision-based leadership*. Thousand Oaks, CA: Corwin Press.

Watson, J.B. (1913). Psychology as the behaviourist views it. *Psychological Review*, *20*, 158-177.

Weber, S.P. & Weber, J.E. (2001). Changes in employee perception during organisational change. *Leadership and Organisational Development Journal*, *22* (6), 291-300.

Weick, K.E. (1995). *Sense making in organisations.* Thousand Oaks, CA: Sage.

Weick, K.E. & Quinn, R.E. (1999). Organisational change and development. *Annual Revue Psychology*, *50*, 361-386.

Wertheimer, M.S.W. (2001). *The change agent's tool box. Core qualities of change agents.* Retrieved October 16, 2007 from www.nasmhpd.org/general_files/publications/ntac_pubs/toolbox/agent8.html.

Westra, E. & van de Vliert, E. (1989). *Mens en Onderneming*. *2,* 145-154.

Woodman, R.W. (1989). Organisational change and development: New arenas for inquiry and action. *Journal of Management, 15*, 205-228.

Worren, N.A.M., Ruddle, K., & Moore, K. (1999). From organisational development to change management: The emergence of a new profession. *The Journal of Applied Behavioural Science*, *35* (3), 273-286.

Young, T.L. (1996). *How to be a better project manager*. London: The Industrial Society.

Zaltman , G. & Duncan, R. (1977). *Strategies for planned change*, New York: Wiley.

Zander, A.F. (1950). Resistance to change: Its analysis and prevention*. Advanced Management*, *4* (5), 9-11.

Zimmerer, T.W. & Yasin, M.M. (1998). A leadership profile of American project managers. *Project Management Journal*, 31-38.

ADKAR CHANGE READINESS QUESTIONNAIRE

Name:	
Division:	
Date:	

This assessment is used to identify change readiness just prior to implementing a change intiative. It allows to pinpoint exactly where change resistances may occur and where interventions will need to run in parallel to the deployment of the P&SCM Transformation Programme.

Directions: Read each question carefully. You are being asked to rate yourself on a scale from 1-5 on your agreement to the statement. 1 = strongly disagree & 5 = strongly agree. Only place the number in the block next to each statement.

PLEASE PLACE YOUR ANSWERS IN THIS COLUMN

	ADKAR Assessment	
1	Rate your awareness of the need to change. Do you fully understand the business, customer or competitor issues that have created a need to change?	
2	Assess your overall desire to change. Consider the factors or consequences (good or bad) related to this change for yourself and assess your motivation to change.	
3	Rate your knowledge of the change and how to change. Do you have a clear understanding of skills and behaviours required in the new environment?	
4	Evaluate your ability to perform during and after the change. How proficient are you in terms of managing yourself and the new environment that the changes will bring about?	
5	Assess the reinforcement of change. Are there adequate mechanisms/development opportunities/processes, procedures to sustain the change?	

Please rate yourself on a scale of 1 - 5. 1 = Strongly disagree 5 = Strongly agree		
	AWARENESS	
1a	I understand the business reasons for the introduction of the P&SCM Tranformation Programme.	
1b	I understand the issues that are being addressed by the P&SCM Transformation Programme.	
1c	I understand the impact of the P&SCM Transformation.	
1d	I understand the goals and objectives of the P&SCM Transformation Programme.	
	DESIRE	
2a	I am excited to be part of this change.	
2b	There are great opportunities for me in the change.	
2c	I support the implementation of the P&SCM Transformation Programme.	
2d	I will benefit from the P&SCM Tranformation Programme.	
	KNOWLEDGE	
3a	I have the necessary skills to cope with the change.	
3b	I understand how my work relates to the change.	
3c	I need more clarity on the P&SCM Transformation Programme.	
	ABILITY	
4a	I can cope with the change.	
4b	I can positively contribute to the change.	
4c	I will be able to perform better due to the changes the P&SCM Transformation Programme will bring about.	
	REINFORCEMENT	
5a	I have the support to cope with the change.	
5b	My team members support the change.	
5c	My manager supports the change.	
5d	My uncertainties are addressed.	

5e	**I need training to perform better after change has been implemented.**	

Appendix B:

LEVEL OF COMMITMENT QUESTIONNAIRE

Dear participant

The purpose of the questionnaire is to determine what your commitment level is towards the proposed transformation programme. The information obtained from this questionnaire will assist the Change Management Team to develop suitable interventions to build commitment throughout the project life cycle. The results will not be used against any individual and you can complete this questionnaire anonymously.

Questionnaire completion instructions:

- Ensure you understand the vision / mission and objectives of the transformation project / programme before completion of this questionnaire.
- Read the key's describing each level of commitment as stated below.
- Indicate your answer by ticking the appropriate box.
- *"As I perceive the attitude of others on the team"* refers to those individuals in your current working team, function or discipline.
- *"As I perceive the attitude of others impacted"* refers to ALL employees to be impacted through the transformation programme / project.
- Please complete the questionnaire as honestly.
- The questionnaire will not take more than 20 minutes to complete.

Level of commitment – key descriptions:

1. **Apathy**: Neither for or against the vision / mission.
2. **Non-compliance:** Can't see the benefits of vision / mission and will not do what is expected.
3. **Grudging compliance:** Do not see the benefits of the vision / mission, but will do what is expected due to no choice in the matter.
4. **Formal compliance:** Sees the benefits of the vision / mission and will do what is expected but nothing more.
5. **Genuine compliance:** Sees the benefits of the vision / mission. Will do everything that is expected and more.
6. **Enrolment:** Will do whatever can be done within the "spirit of the law."
7. **Commitment:** Will make the change happen no matter how difficult it may be.

LEVEL OF COMMITMENT: VISION / MISSION STATEMENT:

Please complete the vision / mission statement below:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Vision / Mission:

LEVEL OF COMMITMENT: OBJECTIVE 1:

Please indicate an objective this transformation programme / project intents to achieve:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 1:

OBJECTIVE 2:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 2:

OBJECTIVE 3:

	Commitment	Enrolment	Genuine Compliance	Formal Compliance	Grudging Compliance	Non-compliance	Apathy
My attitude.	7	6	5	4	3	2	1
As I perceive the attitude of others on the team.	7	6	5	4	3	2	1
As I perceive the attitude of others impacted.	7	6	5	4	3	2	1

Comments: Objective 3:

Appendix C:

CHANGE AGENT SKILLS, KNOWLEDGE & EXPERIENCE CHECKLIST

The purpose of this questionnaire is to determine what skills, knowledge and experience you as a change agent have in order for the change management specialist to determine what knowledge and skills needs you require and what experience you need to gain in to ensure that you are optimally equipped to act in the role of a change agent.

QUESTIONNAIRE COMPLETION INSTRUCTIONS:

- This questionnaire consists of 3 sections, please complete all sections.
- Please read each statement carefully and answer each question honestly.
- Section 1: Indicate your answer by ticking the box most appropriate to you.
- Section 2 & 3: Indicate your answer by either ticking the “Yes” or “No” option.

SECTION A: SKILLS

Indicate your answer by ticking the block most appropriate to you in terms of the following scales:

1. Always
2. Frequently
3. Unsure
4. Seldom
5. Never

1. Aware of my own values, needs, behaviour and impact on others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

2. Continuously evaluate my strengths and weaknesses.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

3. Always motivated to achieve.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

4. Enjoy knowing that others are dependent on me.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

5. Enjoy sharing new ideas with others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

6. Enjoy telling others stories.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

7. Act as a team builder to ensure collaboration between team members.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

8. I enjoy selling.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

9. People actively listen when I engage withy them.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

10. Most people action on what I have instructed.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

11. I understand my own interests as well as those of others.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

12. I evaluate other alternatives when option 1 is not feasible.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

13. Others usually accept my ideas.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

14. When negotiating I always get my way.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

15. I use creative methods to expand possibilities to bring about an acceptable agreement with another party.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

16. I prefer to avoid conflict at all means.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

17. I see conflict as a way of resolving issues with another party.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

18. I prefer to face conflicting situations to resolve the related problem or concern.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

19. I find it easy to talk to strangers.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

20. I engage easily with someone I do not know because I am curious about that person.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

21. I usually have the intention to grow my relationship with strangers I just met.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

22. I find it easy to ask for advice from someone I just met, on possible solutions.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

23. I usually provide a wider context of a more detailed conversation to follow later on.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

24. I usually jump right into the detail.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

25. I usually reach a conclusion based on generalisation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

26. I take time to first understand the problem from different view points before analysing the situation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

27. When solving problems, I usually consider all consequences and results.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

28. I take time in developing creative and innovative ways of soling a problem.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

29. I find it difficult to pay attention to what someone says if I want to talk and add value or correct what has been said.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

30. I a one-on-one conversation I usually give the other person the opportunity to tell his/ her story first.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

31. I pay very close attention to body language as that tell's me a lot.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

32. I am usually the talker, find it difficult to listen.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

33. I always look at the holistic picture of a situation.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

34. Think about problems and solutions in the long terms.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

35. I always try to recognise all behaviour around me.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

36. I take any rejection personally.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

37. I enjoy selling.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

38. I always persevere until I succeed if I believe in something.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

39. I usually find it easy to identify the right people with whom I want to share specific ideas or obtain their buy-in.

1	2	3	4	5
Always	Frequently	Unsure	Seldom	Never

SECTION B: KNOWLEDGE

	Knowledge descriptions	Yes	No
1	I have knowledge of the organisation.		
2	I have knowledge of the organisation's external environment.		
3	I fully understand the need for change.		
4	I have knowledge of change management principles.		
5	I have knowledge of change readiness & change readiness levels.		
6	I know my roles & responsibilities as a change agent.		
7	I have knowledge of various change management interventions.		
8	I understand the stated benefits of the change and the impact thereof for the organisation and individual.		

9	I have a comprehensive understanding of the specific area / function where change is taking place.		
10	I know the cycle / phases of change.		
11	I understand the value of a change agent.		
12	I have group dynamics knowledge.		

SECTION C: EXPERIENCE

	Experience descriptions	Yes	No
1	I am an expert in dealing with changing work conditions / procedures.		
2	I have exposure to implementing a change initiative.		
3	I have networking experience with those impacted by change.		
4	I have consulting / project environment related experience.		
5	I have experience in mobilising people behind a specific goal.		
6	I have experience in dealing with conflict and different people.		
7	I have some facilitation experience.		
8	I have experience in having to relay hard messages to others in a manner that instils confidence.		

_____

_____

Appendix D:

QUALITATIVE PERCEPTION QUESTIONNAIRE
- IDENTIFICATION OF CHANGE AGENT DIMENSIONS -

Dear Participant

You are kindly requested to participate in a research project due to your expertise in the field of Change Management and/or related consulting experience. This research project forms part of a Doctorate study conducted through the University of South Africa within the Department of Industrial and Organisational Psychology. The focus of this research is on the development and validation of a change agent identification framework.

Please read the background related to this research below and kindly complete the questionnaire. Your valuable contribution is highly appreciated.

RESEARCH BACKGROUND:

The skill of managing change has been described by numerous successful business men and women as one of the most important skills for managers and employees today. In large organisations, it seems to have become more difficult to manage change due to the large number of employees impacted by change and the limited number of knowledgeable change management specialists available to assist them throughout the transition process. If change management specialists are not visible enough, directly communicating and liaising with impacted employees, how could employees become change ready? Without continuous engagement with employees impacted by change, how could change management specialists keep their fingers on the pulse of possible issues and concerns arising, motivating employees to embrace change, rather than rejecting it?

There are many definitions of change agents; most definitions are vastly different from each other. For the purposes of this research the following definition from Cheung, Jurman, Maguigad and Slaughter (2007) seems to be appropriate: *Change agents can be found in all levels of an organisation, they can be leaders, managers or employees. A change agent is someone who sees a need for constructive change and who is willing to champion the cause and motivate people to see the benefits thereof.*

Currently there is no standardised framework/model available on how to identify "right" individuals to act as potential change agents in a large organisation. No validated dimensions and/or supportive elements have been established that constitutes a change agent identification framework. Limited research has been done on the concept "change agents" and therefore it is difficult for change management specialists to clearly understand what the different dimensions and/or supportive elements are that they should take into consideration to identify change agents. An in-depth literature study has been conducted and certain dimensions and elements have been identified that could possibly be considered to be included in such a framework. In order to determine whether these identified dimensions and/or supportive elements from the literature findings are appropriate, you are required to indicate (from your experience) important dimensions and/or supportive elements that a change agent should have as part of their profile.

In appreciation of your time and effort, an abstract of the proposed framework will be made available to you for future reference once the research has been completed.

Please complete this qualitative perception questionnaire, returning it no later than **August 8th, 2008.**

I thank you for your time.

Ms. Marzanne van der Linde
Email: Marzanne.vanderlinde@eskom.co.za
Phone: (011) 800 4510
082 532 6266

BIOGRAPHICAL INFORMATION:

Please supply the following information and note that this information will purely be used for research purposes and will not be disclosed for any other purposes.

Age:		
Gender:	Male	Female
Race:		
Number of years Change Management or related consulting experience:		
Highest qualification:		
Home language:		

I,…….give my informed content that this information may be used for the purposes of the research only.

_____ _____

Signature Date

QUESTIONNAIRE COMPLETION INSTRUCTIONS:

- This section consists of 6 open-ended questions. The reasons for including only open-ended questions are to explore and obtain as much information as possible, regarding your perception on the profile of a change agent.

- You are kindly requested to read each question carefully and provide answers in terms of your own perceptions and experience on characteristics an individual should portray to be identified as a possible change agent.

---

1. In your view, what are the critical **personality traits** an individual should possess to be identified as a possible change agent? (Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations.)

2. In your view, what are the critical **skills** an individual should possess to be identified as a possible change agent? (A skill is the learnt capacity or talent to achieve pre-determined results, often with the minimum outlay of time, energy, or both.)

3. In your view, what **knowledge** should an individual have to be identified as a possible change agent? (Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.)

4. In your view, what **experience** should an individual have to be identified as a possible change agent? (The concept of experience generally refers to know-how or procedural knowledge of an event, instead of propositional knowledge.)

5. In your view, where on a **change curve** should an individual be in order to be identified as a possible change agent (assuming that the change curve consists of the following change-readiness scores)?

- **awareness** (aware of the project but not its impact)
- **understanding** (understanding the project and its impact
- **acceptance** (buy-in and active demonstration of support)
- **commitment** (ownership and significant involvement demonstrated)

6. Please mention important **dimensions** (from your experience) that a change agent should have as part of his or her profile (Dimensions referring to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent).

7. Further comments or suggestions.

Appendix E:

CHANGE AGENT IDENTIFICATION FRAMEWORK DEVELOPMENT

BIOGRAPHICAL INFORMATION

Please supply the following information by placing a tick in the appropriate box. Please note that this information will purely be used for research purposes and will not be disclosed for any other purposes.

Age	21 - 26	27 - 35	36 - 46	46 - 55	55 +

Gender	Male	Female

Race	Black	White	Caucasion	Coloured	Indian / Asian

Number of years change management experience	0 - 3	4 – 6	7 – 10	10 – 13	13 +

Highest qualification	Diploma / certificate	Bachelor's degree	Honours degree	Masters degree	Doctoral Degree

Home language	Afrikaans	English	African Please specify: _____	Other

5. Summary supportive elements: Change curve readiness level

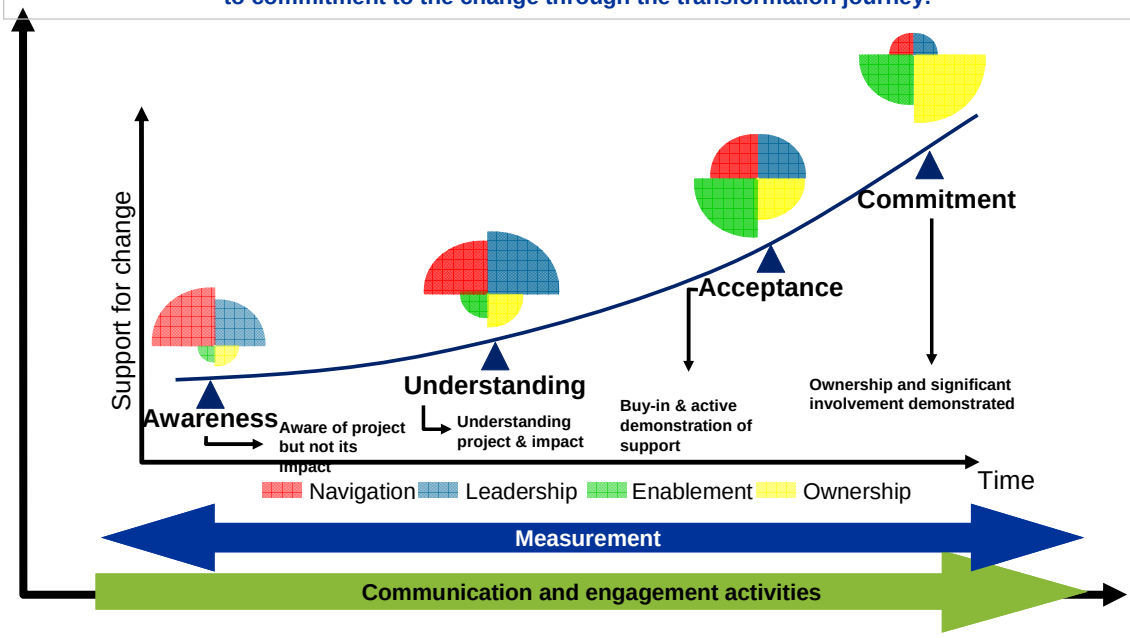
This section focuses on the level of change readiness by an individual in order to be identified as a potential change agent.

Change readiness levels:

- **Awareness** of the need to change but not the impact thereof;
- **Understanding** the need for change and the impact thereof;
- **Acceptance**: Buy-in & active demonstration of support to change;
- **Commitment**: Demonstrate ownership and significant involvement.

Progressing through the Change Curve

Specific communication interventions are required at each stage as stakeholders move from awareness to commitment to the change through the transformation journey:



Consider the following:

After awareness road shows have been completed, where an overview of the project, the necessity thereof, time lines, change impacts amongst others have been shared with the audience, change agents need to be selected. According to your perception, where on the change readiness curve do your believe should change agent be when selected?

** The proposed change readiness level indication below is as per qualitative perception questionnaires, completed by a sample of 15 external Change Management Consultants according to their perception.

	PROPOSED READINESS LEVEL	Readiness level as per survey responses	NOT ESSENTIAL	RANKING
1	Awareness	1/ 15		
2	Understanding	3 / 15		
3	Acceptance	5 / 15		
4	Commitment	6 / 15		

Looking at the definitions per readiness level as per the pictorial representation on page 1, at which level/s do you believe should change agents, be at selection? Pleas indicate the level/s and provide reasons for your answers.

6. Proposed dimensions verification

Definition: In this context, dimensions refer to those categories of information considered important to assess and determine whether an individual could serve as an effective change agent.

A number of 5 different categories where included in an explorative – qualitative perception questionnaire, completed by a sample of 15 external Change Management Consultants. These dimensions / categories were identified from literature findings. These were:

- Personality traits
- Skills
- Knowledge
- Experience
- Change readiness level

The survey sample group were asked to indicate which categories / dimensions should ideally be part of a change agent identification framework.

Please read through the proposed dimensions and discuss which of those are essential and not essential to be included in the change agent identification framework and then rank those items in terms of importance (This is based on perception).

Ranking in terms of importance (1 - 8)

	PROPOSED DIMENSIONS	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Knowledge			
2	Ability			
3	Skills			
4	Level of committment			
5	Availability and willingness			
6	Personality traits			
7	Experience			
8	Change curve readiness			

Other proposed dimensions to be included in framework / Reasons for chosen ranking order:

4. Summary supportive elements: Experience

Definition: The concept of experience generally refers to know-how or procedural knowledge of an event, rather than propositional knowledge.

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED EXPERIENCE	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Experience in either dealing with change agents or being a change agent themselves			
2	Experience in dealing with changing work conditions/procedures			
3	Experience in communicating in small groups			
4	Facilitation experience – even if minimal			
5	Leadership role experience, be that in church, community or work			
6	Prior workplace change experience, i.e. have been part of change in a work environment			
7	Experience in dealing with conflict and difficult people.			
8	Experience in an ever changing environment whether in a leadership or employee role.			
9	Related project management experience			

10	Exposure to implementing a change initiative or even having been on the receiving end of a change			
11	Networking experience with those impacted by change			
12	Any prior Union or Forum experience			
13	Exposure to planning activities in a structured manner, i.e. MS Excel, MS Project, Outlook etc			
14	Experience in having to relay hard messages to others in a manner that still instils confidence			
15	Consulting or project environment related experience			
16	Experience of “typical setbacks” that occurs during the change process			
17	Working with individuals in a changing environment.			
18	Experience in mobilising people behind a specific goal			

Further comments / Reasons for chosen ranking order:

3. Summary supportive elements: Knowledge

Definition: Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED KNOWLEDGE	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Change management principles			
2	Knowledge of the specific project			
3	Knowledge of the organisation			
4	Knowledge of the organisation's external environment			
5	Knowledge of the roles and responsibilities of the change agent			
6	Understanding of the need for change			
7	Knowledge of change readiness and change readiness levels			
8	Knowledge of organisational development models			
9	Understanding of systems theory			
10	Understanding of various change interventions available			
11	Knowledge of behavioural science			

12	Understanding of the cycle / phases of change			
13	Knowledge of the subject Industrial Psychology			
14	Understanding of general Human Resources issues			
15	Understnsding of people dynamics			
16	Intimate project-related knowledge			
17	Organisational political circumstantial knowledge			
18	Change network structure and functioning knowledge			
19	Value of being a Change Agent			
20	Benefits of the change and the positive impact of the change on the organisation			
21	Communication principles knowledge			
22	Project management methodolody			
23	Group dynamics knowledge			
24	Stress management knowledge			
25	Knowledge of organisational development and renewal			
26	Understanding of the organisation's culture			
27	Mentoring and coaching			
28	Deep understanding of the specific area/function where the change is taking place			
29	Knowledge of the power maps of people in the organisation			

Further comments / Reasons for chosen ranking order:

1. Summary supportive elements: Personality Traits

Definition: Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED TRAITS	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Willingness			
2	People person			
3	Results orientated			
4	Personal confidence			
5	Open Minded			
6	Emotional maturity			
7	Extrovert			
8	Leadership characteristics			
9	Self starter			
10	Optimistic			
11	Good listener			
12	Objective			
13	Creative			
14	Willingness			
15	Assertive			
16	Enthausiastic			
17	Integrity and honesty			
18	Diplomatic			
19	Fexible			
20	Approachability			
21	Adaptability			
22	Influencial			

23	Team orientated			
24	Personal efficacy			
25	Energetic			
26	Inspirational			
27	Objective			
28	Patience			
29	Emotional intelligent			
30	Perserverance			
31	Results orientated			
32	Empathetic			
33	Charismatic			
34	Self-reflective			
35	Analytical			
36	Ingegraty			
37	Sociable			
38	Motivating			
39	Influencial / persuasive			
40	Inspiring			

Further comments / Reasons for chosen ranking order:

2. Summary supportive elements: Skills

Definition: A skill is the learned capacity or talent to carry out pre-determined results often with the minimum outlay of time, energy, or both

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED SKILLS	**ESSENTIAL**	**NOT ESSENTIAL**	**RANKING**
1	Presentation skills			
2	Attentive listening skills			
3	Problem identification skills			
4	Problem solving skills			
5	Verbal communication skills			
6	Facilitation skills			
7	Analytical skills			
8	Planning & organising skills			
9	Influencial skills			
10	Negotiation skills			
11	Interpersonal skills			
12	Leadership skills			
13	Motivational skills			
14	Intrapersonal skills			
15	Time management skills			
16	Systemic thinking ability			
17	Strategic thinking ability			
18	‘Selling’ skills			
19	Analytical skills			
20	Non-verbal communication skills			
21	Networking skills			
22	Project management skills			
23	Stakeholder management skills			

24	Persuasion skills			
25	Deductive reasoning			
26	Conflict handing skills			

Further comments / Reasons for chosen ranking order:

4. Summary supportive elements: Experience

Definition: The concept of experience generally refers to know-how or procedural knowledge of an event, rather than propositional knowledge.

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED EXPERIENCE	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Experience in either dealing with change agents or being a change agent themselves			
2	Experience in dealing with changing work conditions/procedures			
3	Experience in communicating in small groups			
4	Facilitation experience – even if minimal			
5	Leadership role experience, be that in church, community or work			
6	Prior workplace change experience, i.e. have been part of change in a work environment			
7	Experience in dealing with conflict and difficult people.			
8	Experience in an ever changing environment whether in a leadership or employee role.			
9	Related project management experience			

10	Exposure to implementing a change initiative or even having been on the receiving end of a change			
11	Networking experience with those impacted by change			
12	Any prior Union or Forum experience			
13	Exposure to planning activities in a structured manner, i.e. MS Excel, MS Project, Outlook etc			
14	Experience in having to relay hard messages to others in a manner that still instils confidence			
15	Consulting or project environment related experience			
16	Experience of “typical setbacks” that occurs during the change process			
17	Working with individuals in a changing environment.			
18	Experience in mobilising people behind a specific goal			

Further comments / Reasons for chosen ranking order:

3. Summary supportive elements: Knowledge

Definition: Knowledge is the confident understanding of a subject with the ability to use it for a specific purpose.

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED KNOWLEDGE	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Change management principles			
2	Knowledge of the specific project			
3	Knowledge of the organisation			
4	Knowledge of the organisation's external environment			
5	Knowledge of the roles and responsibilities of the change agent			
6	Understanding of the need for change			
7	Knowledge of change readiness and change readiness levels			
8	Knowledge of organisational development models			
9	Understanding of systems theory			
10	Understanding of various change interventions available			
11	Knowledge of behavioural science			

12	Understanding of the cycle / phases of change			
13	Knowledge of the subject Industrial Psychology			
14	Understanding of general Human Resources issues			
15	Understnsding of people dynamics			
16	Intimate project-related knowledge			
17	Organisational political circumstantial knowledge			
18	Change network structure and functioning knowledge			
19	Value of being a Change Agent			
20	Benefits of the change and the positive impact of the change on the organisation			
21	Communication principles knowledge			
22	Project management methodolody			
23	Group dynamics knowledge			
24	Stress management knowledge			
25	Knowledge of organisational development and renewal			
26	Understanding of the organisation's culture			
27	Mentoring and coaching			
28	Deep understanding of the specific area/function where the change is taking place			
29	Knowledge of the power maps of people in the organisation			

Further comments / Reasons for chosen ranking order:

1. Summary supportive elements: Personality Traits

Definition: Personality traits are distinguishing qualities or characteristics of a person, representing readiness to think or act in a similar fashion in response to a variety of different stimuli or situations

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED TRAITS	ESSENTIAL	NOT ESSENTIAL	RANKING
1	Willingness			
2	People person			
3	Results orientated			
4	Personal confidence			
5	Open Minded			
6	Emotional maturity			
7	Extrovert			
8	Leadership characteristics			
9	Self starter			
10	Optimistic			
11	Good listener			
12	Objective			
13	Creative			
14	Willingness			
15	Assertive			
16	Enthausiastic			
17	Integrity and honesty			
18	Diplomatic			
19	Fexible			
20	Approachability			
21	Adaptability			
22	Influencial			

23	Team orientated			
24	Personal efficacy			
25	Energetic			
26	Inspirational			
27	Objective			
28	Patience			
29	Emotional intelligent			
30	Perserverance			
31	Results orientated			
32	Empathetic			
33	Charismatic			
34	Self-reflective			
35	Analytical			
36	Ingegraty			
37	Sociable			
38	Motivating			
39	Influencial / persuasive			
40	Inspiring			

Further comments / Reasons for chosen ranking order:

2. Summary supportive elements: Skills

Definition: A skill is the learned capacity or talent to carry out pre-determined results often with the minimum outlay of time, energy, or both

Please read through the proposed list of supportive elements below and discuss which of those are essential and not essential to be included in the change agent identification framework. Choose the **12** most critical / essential elements to be included in the framework and rank them in terms of importance from 1 - 12 (This is based on perception).

** All proposed elements as per qualitative perception questionnaires, completed by a sample of 15 external Change Management consultants.

Ranking in terms of importance (1 - 12)

	PROPOSED SKILLS	**ESSENTIAL**	**NOT ESSENTIAL**	**RANKING**
1	Presentation skills			
2	Attentive listening skills			
3	Problem identification skills			
4	Problem solving skills			
5	Verbal communication skills			
6	Facilitation skills			
7	Analytical skills			
8	Planning & organising skills			
9	Influencial skills			
10	Negotiation skills			
11	Interpersonal skills			
12	Leadership skills			
13	Motivational skills			
14	Intrapersonal skills			
15	Time management skills			
16	Systemic thinking ability			
17	Strategic thinking ability			
18	‘Selling’ skills			
19	Analytical skills			
20	Non-verbal communication skills			
21	Networking skills			
22	Project management skills			
23	Stakeholder management skills			

24	Persuasion skills			
25	Deductive reasoning			
26	Conflict handing skills			

Further comments / Reasons for chosen ranking order:
