THE DEVELOPMENT OF A COMPETENCY MODEL FOR AUDITORS WORKING IN A PROFESSIONAL SERVICES ENVIRONMENT

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SUMMARY

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The aim of this research was to develop a competency model for auditors by identifying those characteristics and behaviours that predict success as an auditor. The Work Profiling System (WPS), the Repertory Grid Technique (RGT) and the Critical Incident Technique (CIT) were the tools and techniques used to achieve this aim. This research was conducted in two groups: trainee accountants (year 1–3) and chartered accountants (year 4–5+).

The results of the research, which was conducted within one of the Big 5 auditing firms, indicated that the competencies required of a trainee accountant are largely consistent with those of registered chartered accountants, working in the same environment. The most noticeable difference was the change in focus from cognitive or technical skills during the early years to a focus on managerial competencies in later years.

The competencies identified in this research compare well with reported models in literature.

KEY TERMS

Chartered accountants; Competencies; Auditors; Competency models; Job analysis; Repertory Grid Technique (RGT); Critical Incident Technique (CIT); Work Profiling System (WPS); Success.

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ABBREVIATIONS EXPLAINED

AMA	:	American Management Association
BEI	:	Behavioural Event Interviewing
CA	:	Chartered Accountant
CTA	:	Certificate in the Theory of Accounting
CIT	:	Critical Incident Technique
EEA	:	Employment Equity Act
FJA	:	Functional Job Analysis
HR	:	Human Resource
HRM	:	Human Resource Management
IMC	:	Inventory of Management Competencies
JAQ	:	Job Analysis Questionnaire
JCAM	:	Job Competency Assessment Method
LRA	:	Labour Relations Act
MCI	:	Management Charter Initiative
NVQ	:	National Vocational Qualifications
PAAB	:	Public Accountants' and Auditors' Board
PAQ	:	Position Analysis Questionnaire
PCT	:	Personal Construct Theory
RGT	:	Repertory Grid Technique
SA	:	South Africa
SAICA	:	South African Institute of Chartered Accountants
QE	:	Qualifying Examination
UK	:	United Kingdom
US	:	United States

WPS : Work Profiling System

CHAPTER 1 SCIENTIFIC OVERVIEW OF THE RESEARCH

This research is intended to identify the competencies required of auditors working within a professional services environment. In this chapter the framework of the research will be discussed. This includes the background to and motivation for the research, the problem statement, the research aims, the paradigm perspective guiding the research, the research design and the research method. The chapter will conclude with a listing of the chapters remaining in the dissertation.

1.1 BACKGROUND TO AND MOTIVATION FOR THE RESEARCH

The burgeoning literature and programme of conferences is evidence of the interest in the competency movement over recent years. Competencies involve the study of success and it is this that makes the concept relevant to organisations.

The 1990s were a period of tremendous change for many organisations. The pace and nature of the demands being placed on organisations (ie globalisation of markets, the technological boom, financial deregulation and the increased availability of information) has resulted in a very competitive and intense market place (Trotter, 1996).

While effective restructuring and improved business processes have assisted some organisations in dealing with the above-mentioned changes, and have kept some organisations ahead of their competitors, it is increasingly recognised that the effective management of people has been a key factor in maintaining this competitive advantage (Saville and Holdsworth Limited [SHL], 1999a). Effective people management includes (but is not limited to) the attraction and retention of competent people. If people are as strategic to the organisation as one is led to believe, then these people decisions need to be optimised. A limiting factor in optimising the people decisions has been the inability to identify predictive factors which correlate highly with the criteria of job effectiveness and superior on-the-job performance. According to Sawyer (as cited in Dinius & McIntyre, 1979), traditional predictors such as academic achievements, interviews and standardised tests,

although correlating significantly with vocational success, leave major portions of predictor-criterion variance unexplained. Scores on knowledge tests have failed to predict work performance because they measure rote learning rather than the application of knowledge in the work environment (eg the ability to choose which one of five items is an effective argument is very different from the ability to stand up in a conflict situation and argue persuasively). Knowledge will at best predict what someone can do, not what they will do (Spencer & Spencer, 1993).

The importance of optimising people decisions should not be underestimated. McKinsey consultants (as cited in Hodgeson & Cranier, 1993) argue that competitiveness is no longer solely about markets and niches, but rather about people. They firmly believe that an organisation's greatest opportunity for competitive advantage is in its people and that great importance should be placed on the optimising of decisions relating to these resources. Hendry and Pettigrew (1990:21) support this perspective and "view the people of the organisation as a strategic resource for achieving competitive advantage". Cannon (1995:136) concurs with this thinking and says, "outstanding people more than physical assets, financial resources or brands, will help companies outperform their competitors". Handy (1989) says human intellectual capital is the most valuable resource available to organisations today. Organisations that are equipped to identify, develop, reward and retain highly competent individuals have a real opportunity to differentiate themselves from their competitors. It is becoming evident that people are increasingly becoming an organisation's key differentiator (Hodgeson & Cranier, 1993).

Today, however, many of the people decisions in organisations are still made on a relatively superficial basis, especially when compared with decisions about capital investments (Hooghiemstra, 1990). In managing the challenge of managing the people, organisations need to ask the following questions, "Who are the best performers? The whiz kids? What are the qualities that these people display that enable them to be successful, despite the inherent organisational limitations (eg decision making practices)?". Models to assist with making people decisions should be developed and tested with the same thoroughness as any other organisational model (Boyatzis, 1982; Hooghiemstra, 1990).

In times of change and uncertainty, formulae for success and effectiveness are more attractive than ever before (Hodgeson & Cranier, 1993). Industrial psychologists have for many years been working on matching the right people to the right jobs, based on an implicit assumption that virtually all jobs have a unique profile of ability, skill and knowledge requirements and for each person there is one best fit (Wise, McHenry & Campbell, 1990). The complexity of matching people to jobs has necessitated the development of enhanced assessment processes (SHL, 1991). In South Africa (SA), legislation in the form of the Labour Relations Act (LRA), the Employment Equity Act (EEA) and the National Qualifications Framework have placed assessment processes in the spotlight (Saunders, 2000).

The LRA of 1995 insists that in all human resource (HR) interventions, discrimination is based on competence only (ie the ability to do the work) (Saunders, 2000). The context therefore in which organisations are being forced to assess people is extremely sensitive and fraught with challenges, and can make the selection of people an extremely difficult task. This can potentially be problematic for people in organisations who have to make competency-based decisions regarding selection, performance, promotions, training, etcetera. The National Skills Development Act (Saunders, 2000) and the EEA, both require identification and assessment of job competence. The dilemma facing organisations is how to identify and assess those skills and abilities (ie competencies) that will predict success in a particular job role.

Valid and reliable assessment of performance is a significant factor in making SA more globally competitive (Saunders, 2000). The World Competitiveness Report has placed SA last with regard to people skills for two years running (Saunders, 2000). These findings indicate that skills levels need to increase dramatically if the country is to compete in the international market (Weightman, 1994). Standards of superior performance therefore need to be identified and included in the assessment processes. Assessments therefore have a crucial role to play in both the development of people and in the long-term growth and productivity of the country as a whole (Saunders, 2000).

The focus on assessment processes has highlighted the need for more integrated HR processes. Where processes are designed and implemented in isolation, a lot of time and effort is duplicated. A well-designed competency framework enables one to take an integrated approach to managing people in the workplace (SHL, 1999a). Decisions that are based on isolated or independent systems are often sub-optimal and in many instances are not aligned with the strategic needs of the business. The job competency method has advanced the task of getting the right person into the right job. This is because the method focuses on what people do that results in superior performance. Because all the dimensions are described in terms of behaviours, they can be measured against performance (SHL, 1999a; Spencer & Spencer, 1993). Competencies need to be developed and applied in a manner that complements the performance and direction of the business (Cannon, 1995).

A competency model such as the one to be developed in this research would greatly enhance the quality of the people decisions taken in organisations. It provides an integrated framework that links the people to the business, through various HR processes (SHL, 1999a).

Accurate information about the behavioural traits of successful auditors is not yet available and without this it is difficult or nearly impossible to be sure that one is attracting, developing and retaining the right candidates. Given that the large majority of candidates do not remain within the profession (Abdolmohammadi & Shanteau, 1992), and of those who do remain, only a few are admitted to the partnership (a sign which is synonymous with success), it would appear that current recruitment and retention strategies have their shortcomings. Identification of those criteria that would predict success as an auditor would assist in selecting candidates who have the greatest potential to excel in the profession.

The results of this research will provide an understanding of the underlying characteristics (ie competencies) required of high-performing auditors in the professional services environment. It will therefore benefit stakeholders both within and outside of the organisation.

The key beneficiary of this research will be the individual who, when accurately matched to the job of an auditor, will enjoy a more satisfying and rewarding career. If work is as important to people as the evidence indicates (Isaacson, 1985), then helping individuals to make better vocational choices will enhance their lives and those of their families. Identification of those competencies most prevalent in top-performing auditors will not necessarily guarantee the future performance of the individual, but it should act as a reasonable predictor of future performance (Isaacson, 1985).

From an organisational perspective, benefits will be realised through improved recruitment and selection decisions. Identification of those criteria that underlie success would assist in selecting candidates who have the greatest potential to succeed in the profession. In addition, the LRA requires that organisations provide empirical evidence to validate selection decisions (Saunders, 2000). This research will provide relevant validation data for the selection of candidates into the profession.

A competency model will also provide an appropriate basis against which to evaluate the current performance levels of staff and to determine appropriate learning interventions. This would result in improved performance and more integrated training and development plans, and would also contribute to more effective succession planning for the organisation.

Industrial psychologists, vocational guidance practitioners and academia will benefit in that the research will identify the knowledge, skills and abilities associated with superior performance within a specific occupation that can later be validated on those entering or currently working in the profession.

Benefits will therefore be achieved at an individual, an organisational, and a research level.

1.2 PROBLEM STATEMENT

Extensive research has been conducted in the area of management competencies, to the extent that there is mention of "competency clutter" or "competency minefields" (Cannon, 1995:131). However, there is limited evidence of those behavioural characteristics that are related to superior performance as an auditor. Without this information it is impossible to know if those people entering the profession have the greatest chance of excelling in the profession. Research is therefore required to identify the competencies that underlie superior performance as an auditor.

1.2.1 The Accounting Profession

Following is an overview of the accounting profession.

1.2.1.1 Professional Registration as a Chartered Accountant

In order to practise under the title of a Chartered Accountant of South Africa (CA[SA]) in SA, one is required to have passed a three-year Bachelor of Commerce degree (or equivalent) majoring in accounting. Thereafter students are required to complete a one-year Certificate in the Theory of Accountancy (CTA) (or equivalent). In addition, students are required to serve a three-year training contract. Students can enter into a training contract with an Approved Training Organisation or a Registered Training Office at any stage from commencement of studying until after writing and successfully passing the CTA. Having completed the CTA, students have an opportunity of writing Part 1 of the Qualifying Examination (QE). The objective of Part 1 is to establish whether candidates are able to apply the concepts and principles underpinning the defined field of study to the problems arising within the relevant practical domain (Public Accountants' and Auditors' Board [PAAB], 1995). After a minimum of 18 months' practical experience and a pass in Part 1 of the QE, students have the opportunity to write Part 2 of the QE. The objective of Part 2 is to establish whether candidates have an adequate knowledge of the material incorporated in the defined field of study and whether or not they have the ability to apply their knowledge in a professional

manner to the types of situations they are likely to encounter in public practice. Having successfully completed Part 1 and Part 2 of the QE and the requisite training period, students are entitled to join the South African Institute of Chartered Accountants (SAICA) and call themselves a CA(SA) (PAAB, 1995).

For the purposes of this research, the term "auditor" will be deemed to mean "trainee accountant" for those who are currently completing their period of clerkship, and "chartered accountant" for those who have already completed their "articles" and are registered with SAICA. The terms *accountant* and *auditor* will also be used interchangeably.

Having reviewed the requirements for registration, the next section will look at the recruitment of candidates into the profession.

1.2.1.2 Current Recruitment Practices

Recruiting graduates to the accounting profession has always been a difficult and costly task (Schofield, 1979). Competition for the best graduates has always been intense and is increasing since the opportunity to complete one's traineeship at more institutions (ie commerce, industry and public service) has become available. Demand for the best skills has reached a level where potential candidates are assessed and "wooed" from very early in their academic careers.

Effective hiring requires the identification of job qualifications determined from a suitable job analysis procedure (Wotruba & Castleberry, 1993). A thorough job analysis procedure would identify both the tasks required in the job and the person specifications required for the job. In the accounting profession, educational qualifications, as defined by SAICA (2000), determine the minimum entry criteria into the profession. The tasks and activities to be performed by trainee and registered chartered accountants (CAs) are prescribed (SAICA, 2000). However, no person specifications are prescribed.

No literature could be found on the PsycINFO database (1990–current) recommending or detailing commonly practised recruitment and selection

procedures for the accounting profession. The recruitment and selection of candidates into the profession appears therefore to be conducted at an organisational level, with no one standard process being followed.

The organisation where this research was undertaken annually recruits a large number of trainee accountants. The candidates are from various universities, have completed their bachelors degree and in most instances, also the CTA qualification. The recruitment of these people is a lengthy and structured activity incorporating campus interviews, office interviews (by both line managers and human resource practitioners), vacation work and client work. In the end, despite the best intentions, the final appointment decision is often largely based on academic results and an instinctive feeling of "who will fit in best". Hooghiemstra (1990) reports that similar processes apply in other organisations and criteria such as social/interpersonal skills, appearance, self-confidence and communication skills are used as selection criteria.

A new trend emerging in professional services firms is the recruitment of experienced hires (ie those people who have qualified as CAs and have completed their articles at other firms or institutions) into the Firm. The need to be able to predict superior performance at this level therefore becomes even more pertinent, as the job is more complex and the tasks are less tangible. At this experienced hire level, the candidates are of a similarly high IQ level and have similar credentials (ie they are all registered CAs). What distinquishes people at this level are the underlying characteristics (such as motivation, interpersonal skills, etc) that make some people more effective than others as auditors.

SAICA (2000) has identified three categories of skills that they believe are required of CAs. These are intellectual skills, interpersonal skills and communication skills. Each of the skill clusters will be explained in more detail in chapter 3.

Auditing is a very challenging and prestigious profession, with only a few of those entering the profession ever reaching the top (Abdolmohammadi & Shanteau, 1992). The preceding chapter has highlighted the need to be able to identify those

attributes and behavioural characteristics that are predictive of superior performance as an auditor.

This research will be limited to answering the following questions:

(a) Can job analysis and its relevance to the auditing profession be conceptualised?
(b) Can competencies and their relevance to the auditing profession be conceptualised?
(c) Can a competency model be developed for trainee accountants?
(d) Can a competency model be developed for CAs?

The problem statement for this research is therefore "What are the competencies required of auditors working in a professional services environment?".

1.3 AIMS OF THE RESEARCH

Having limited the research to answering the above stated problem, the following general and specific aims of the research are formulated:

1.3.1 General Aim

The general aim of this research is to develop a competency model for auditors working in a professional services environment.

1.3.2 Specific Aims

The specific aims are:

Theoretical
(a) To conceptualise job analysis and its relevance to the auditing profession
(b) To conceptualise competencies and their relevance to the auditing profession

Empirical (a) To develop a competency model for trainee accountants working in a professional services environment

(b) To develop a competency model for CAs working in a professional services environment

1.4 RESEARCH MODEL

For the purposes of this research, the Mouton and Marais (1990) model will be used (see figure 1.1). Mouton and Marais (1990:7) define research in the social sciences as "a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it".

In this definition the following aspects of research are emphasised: sociological, ontological, teleological, epistemological and methodological.

- *The sociological dimension:* Research is a collaborative activity (Mouton & Marais, 1990). Business and the industrial psychology research community will both contribute to this research. During this research the mechanisms of social control, the issues of research ethics and the influencing ideologies and interests of industrial psychology will be adhered to. At a project level this research is an individual, self-initiated project that will be conducted as part of an academic qualification.

- *The ontological dimension*: According to Mouton and Marais (1990), research in the social sciences is always directed at an aspect of social reality. In this research, the behaviourist paradigm will guide the literature study and the functionalist paradigm will guide the empirical study. At a project level this research will focus on identifying the competencies that are required for superior performance as an auditor.

- *The teleological dimension:* Research is goal-driven; its main aim being the understanding of phenomena (Mouton & Marais, 1990). In this research, both general and specific aims will be determined. At a project level this research can be regarded as practical to the extent that it will attempt to provide

information, diagnose and solve problems. The development of a competency model that identifies competencies which are predictive of superior performance as an auditor will solve the specified problem.

- *The epistemological dimension:* The aim of research is to provide a valid and reliable understanding of reality (Mouton & Marais, 1990). The reliability and validity of this research will be discussed in chapter 4.

- *The methodological dimension:* Research is objective by virtue of its being critical, planned, structured, unbiased, systematic and executed in a manner that will maximise the validity of the research findings (Mouton & Marais, 1990). At a project level, this research is quantitative and non-experimental in nature.

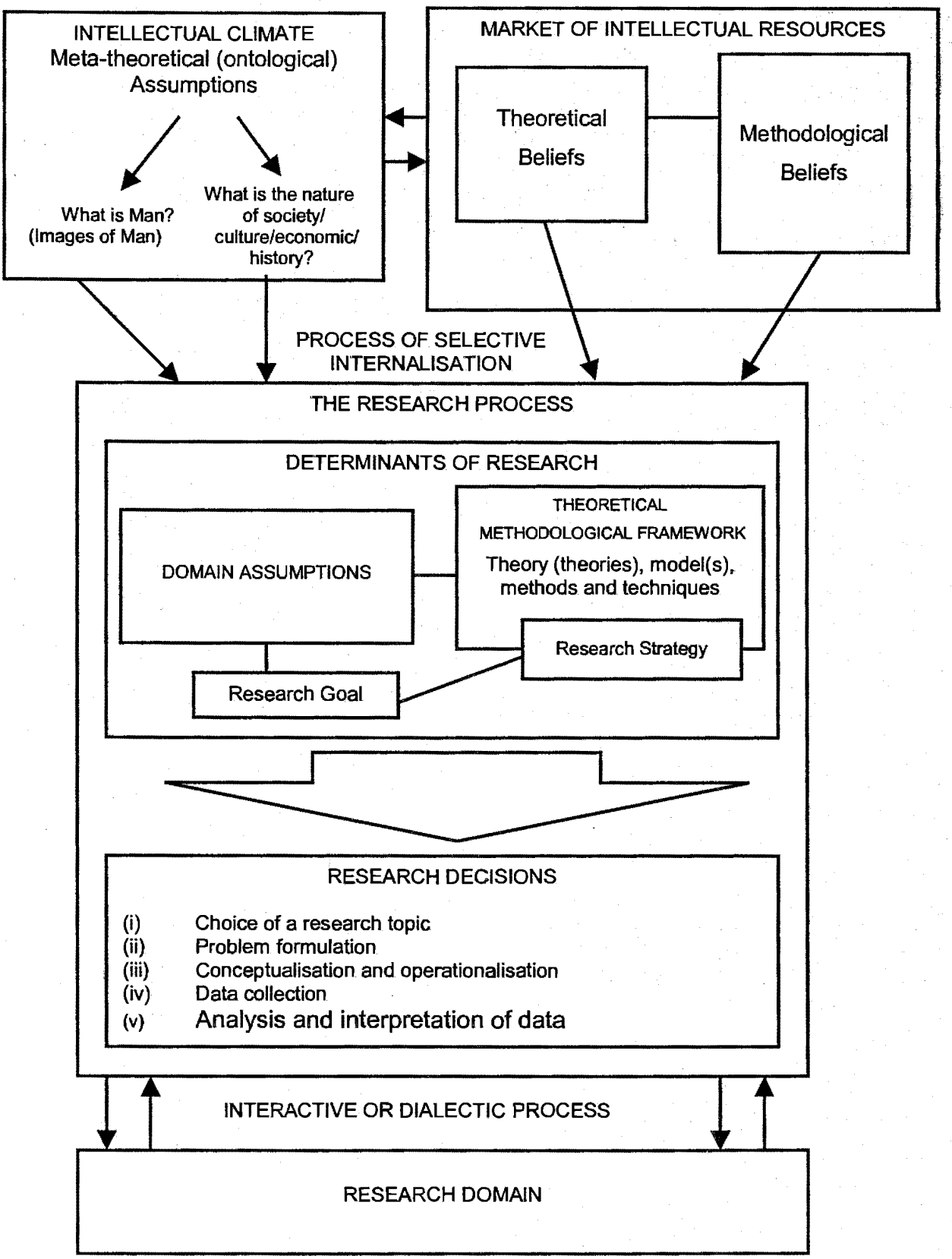

Figure 1.1 Research Model (Mouton & Marais, 1990)

Following is a description of the paradigm perspectives used in the research.

1.5 PARADIGM PERSPECTIVE OF THE RESEARCH

The paradigm perspective refers to the intellectual climate or variety of meta-theoretical values or beliefs and assumptions underlying the theories and models that form the definitive context of this research" (Mouton & Marais, 1990). The term *paradigm* is used in this research in its philosophical or metatheoretical sense to denote an implicit or explicit view of reality (Morgan, 1980).

1.5.1 Disciplinary Perspective

From a disciplinary perspective, this research focuses on psychology and industrial/organisational psychology as its main field of application. More specifically this research will focus on personnel psychology. This research is particularly relevant to the above disciplines and sub-disciplines because the study of competencies relates to jobs and job performance in the workplace.

1.5.1.1 Industrial/Organisational Psychology

Industrial psychology is defined in *The Penguin Dictionary of Psychology* (Reber, 1985:352) as:

> an umbrella term covering organisational, military, economic and personnel psychology and including such areas as tests and measurements, the study of organisations and organisational behaviour, personnel practices, human engineering, human factors, the effects of work, fatigue, pay and efficiency, consumer surveys, market research, etcetera.

In this research the behaviours and characteristics that differentiate effective and less effective performance as an auditor will be studied.

1.5.1.2 Personnel Psychology

Personnel psychology is defined by Reber (1985:537) as

> that aspect of industrial/organisational psychology concerned with (a) the selecting, supervising and evaluating of personnel, and (b) a variety of job related factors such as morale, personal satisfaction, management-worker relations, counselling, etcetera.

In this research the job of an auditor will be critically analysed in order to identify (1) the tasks and activities that comprise the job and (2) the attributes that are most relevant to performing the specified tasks and activities at a superior level.

1.5.2 Relevant Paradigm

In this research, the literature survey will be investigated from a behaviourist perspective and the empirical study will be presented from a functionalistic perspective. Thematically the literature survey will firstly be on job analysis and secondly on competencies.

1.5.2.1 Behaviourist Paradigm

According to Carson and Butcher (1992), the behaviourist perspective is centred around the role of learning in human behaviour. The basic assumptions of this paradigm are classical and operant conditioning, reinforcement and generalisation. These are described in more detail below.

- *Classical and operant conditioning:* Prior to learning a specific stimulus will elicit a specific response through classical conditioning. The same response may be elicited by a wide range of other conditioned stimuli. In operant conditioning the response typically precedes the desired stimulus. Over time, operant learning becomes a mechanism for discriminating between what will prove rewarding (ie achieving a desired goal) or what will prove unrewarding.

- *Reinforcement:* This is the strengthening of a new response by manipulating its association with a particular stimulus.

- *Generalisation:* When a response is conditioned to one stimulus or a set of stimulus conditions, it can become associated with other stimuli in proportion to the degree of similarity between the original and the new stimuli. Discrimination occurs when the individual learns to distinguish between similar stimuli and to respond differently to them.

According to Flanagan (1954), in the bookkeeping profession (which is a sub-field of accounting), success and failure are typically defined in terms of persistent behavioural patterns. Occasional mistakes in the balancing of an account are expected, but repeated errors are considered serious. Using the above perspective, individuals would be expected to learn specific responses to certain stimuli (eg how to perform specific repeatable tasks or how to react in certain situations).

1.5.2.2 Functionalist Paradigm

The assumptions of the functionalist paradigm are outlined by Morgan (1980:608) as follows:

- Society has a concrete, real existence and a systemic character oriented to produce an ordered and regulated state of affairs.
- It focuses upon understanding the role of human beings in society.
- Behaviour is seen as being contextually bound in a real world of concrete and tangible social relationships.
- It is regulative and pragmatic in its basic orientation.
- It is concerned with understanding society in a way that generates useful empirical knowledge.

The empirical study will focus on the identification of competencies and the formulation of a competency model for auditors working in a professional services environment.

1.5.3 Metatheoretical Statements

An important aspect of any research is the metatheoretical assumptions underlying the paradigms and models used in the research (Mouton & Marais, 1990). Given that this research is aimed at analysing jobs and the attributes that are required in order to perform the job effectively, it is important that the term *analysis* is defined, as this is a process or activity that forms an integral part of this research.

Analysis is defined by Reber (1985:32) as "the process of separating a 'thing' into its component parts or elementary qualities". It is a process designed to reveal fundamental components or root causes. It is associated with the connotation of reductionism.

1.5.4 Conceptual Descriptions

The conceptual descriptions that are relevant to this research will be defined next.

1.5.4.1 Jobs

Jobs are typically defined in terms of their specific accountabilities, tasks, duties and position in the structure (Pritchard & Murlis, 1992). For the purposes of this research, the definition of Ivancevich and Glueck (1985:104) will apply. They define a job as "a group of positions that are similar in their duties". Using this as a framework, *job* in this research will mean the job of an trainee accountant and the job of a CA.

1.5.4.2 Competencies

Competencies are those characteristics that people bring to situations and what they do that results in successful outcomes (Trotter, 1996). For the purposes of this research, competency will be defined as "a knowledge, skill, ability or characteristic associated with high performance on a job" (Mirabile, 1997:75).

1.5.5 Behavioural Models

Models not only serve a function of classification, but also suggest relationships between data (Mouton & Marais, 1990). Because of the nature and aims of this research, a behaviour-oriented approach to job analysis has been adopted. This approach has been selected as it describes work in terms of behaviours (SHL, 1994). The Job Competency Assessment Method (JCAM) has been adopted as the methodology for identifying competencies. The JCAM has been selected as it is a methodology that focuses on the differences between excellent and average performance (Dubois, 1993).

1.5.6 Central Hypothesis

The central hypothesis of this research can be formulated as follows:

The development of a competency model for auditors could enhance future human resource practices, specifically in terms of recruitment, training, performance management and career counselling.

Having considered the various aspects of the paradigm perspective, the research design will now be considered in detail.

1.6 RESEARCH DESIGN

According to Mouton and Marais (1990:33), "the aim of a research design is to plan and structure a given research project in such a manner that the eventual validity of the research findings is maximised".

Research design is a blue print of the research project and is synonymous with rational decision making during the research process. It is the responsibility of the researcher to ascertain those variables which may affect the validity of the results and to take every possible precaution to ensure that these factors are either minimised or eliminated (Mouton & Marais, 1990). The research design in this

study is designed to ensure that the job analysis tools and techniques chosen are capable of identifying the competencies required of high-performing auditors.

1.6.1 Research Variables

According to Kerlinger (1986:27), a variable is "a property that takes on different values. A variable is something that varies". The variables that will be investigated in this research are job and competencies. In terms of this research, both variables are defined as attribute variables because neither variable is being manipulated, but rather only analysed.

1.6.2 Type of Research

This research can be described as quantitative, non-experimental and descriptive in nature. It is a systematic, empirical enquiry where the variables are analysed and not manipulated (Kerlinger, 1986).

1.6.3 Unit of Analysis

The unit of analysis in this research is firstly the job, and secondly, a group of job incumbents who are perceived as performing at a superior level.

1.6.4 Validity

In any research it is important to consider both the internal and external validity of the research. Validity is most commonly defined or described as "Are we measuring what we think we are measuring?" (Kerlinger, 1986:417). It therefore should be ensured that it is the competencies of the sample population that are being measured.

1.6.4.1 Internal Validity

The validity of this research will be dependent on the validity of the tools and techniques used. The tools and techniques to be used in this research will be the

Work Profiling System (WPS) developed by SHL (1991), the Repertory Grid Technique (RGT) developed by Kelly (1955), and the Critical Incident Technique (CIT) developed by Flanagan (1954). Given that the instruments and techniques are widely used and accepted, it can be assumed that the data obtained will be valid. The validity of each tool and technique will be discussed in more detail in chapter 4.

In this research the internal validity will be ensured by:

- Choosing appropriate job analysis tools and techniques
- Administering the job analysis tools in a standardised manner
- Conceptualising and presenting the information in a structured manner (Mouton & Marais, 1990)

1.6.4.2 External Validity

In this research the external validity will be ensured by selecting a sample that is representative of the defined population (Mouton & Marais, 1990). The defined population in this research will be limited to the audit division of one firm. A component of the universe of candidates will therefore have been excluded.

1.7 RESEARCH METHOD

The research will be conducted in two phases, namely a literature review and an empirical study. The research can be described as descriptive, as it is the researcher's intention to describe both the most relevant research as well as the results of the study as accurately as possible (Mouton & Marais, 1990). The models will be presented in an integrated way and will serve as background to the variables being studied.

Given the recent emergence of competencies and competency models in business, literature may be reported in this research which uses different job analysis and competency modelling tools and techniques to those being used in

this research, and which does not necessarily pertain specifically to the accounting profession.

Phase 1: Literature Review

The literature review comprises the following steps:

Step 1: The literature on job analysis and its relevance to the auditing profession will be conceptualised.
Step 2: The literature on competencies and their relevance to the auditing profession will be conceptualised.

The literature review will focus on the following factors: procedure, data analysis and description, population and sample, and reliability and validity (Mouton & Marais, 1990).

Phase 2: Empirical Study

The empirical study involves the collection, analysis and interpretation of information in order to develop a competency model for trainee accountants and CAs working in a professional services environment. The empirical study will comprise the following steps:

Step 1: Determination and description of the sample
Step 2: Selection of the job analysis tools and techniques
Step 3: Collection of the information
Step 4: Processing and analysis of the information
Step 5: Reporting and interpretation of the results
Step 6: Conclusions of the research
Step 7: Limitations of the research
Step 8: Formulation of recommendations

1.8 CHAPTER DIVISION

The chapters will be presented in the following manner:

Chapter 2: Job Analysis

Chapter 3: Competencies

Chapter 4: Empirical Study

Chapter 5: Results

Chapter 6: Conclusions, Limitations and Recommendations

1.9 CHAPTER SUMMARY

This chapter discussed the background to and motivation for the research, the problem statement, the research aims, the paradigm perspective, the research design and the research method, and concluded with a listing of the chapters remaining in the dissertation. The next chapter will look at job analysis.

CHAPTER 2 JOB ANALYSIS

Chapter 2 is the beginning of the literature review. The aim of this chapter is to conceptualise job analysis and its relevance to the auditing profession.

Job analysis will be discussed with reference to the following factors: definitions, development, methodologies and approaches, planning a job analysis project, application of job analysis information, reliability and validity of job analysis information and shortcomings associated with the process. The relevance of job analysis within the auditing profession and the future of job analysis will also be reviewed. The chapter will conclude with a chapter summary.

2.1 CONCEPTUALISATION OF JOB ANALYSIS

Job analysis has been one of the most useful tools for systematically gathering job related information (Landis, Fogli & Goldberg, 1998). In the sections that follow, relevant aspects of job analysis literature are presented as a foundation upon which its relevance to the auditing profession can be considered. It will also serve as a contextual framework for the development of competencies.

2.1.1 Definitions

Job analysis is no more than a systematic process for collecting and analysing job-related information (SHL, 1994). It is, however, defined in many different ways. For the purposes of this research the following definition will apply. Job analysis is "any systematic procedure by which one describes the way a job is performed, the tasks that constitute a job, and/or the skills and abilities necessary to perform a job" (Friedman & Harvey, 1986:779). According to Ash (1988:3), job analysis can be defined as "the collection and analysis of any type of job-related information by any method for any purpose". It should be a purposeful, ongoing activity, performed by professionals in order to uncover, synthesize and disseminate information about jobs that can be used in making decisions relating to aspects of human resource management (HRM). Shaof, Genaidy and Shell (1998) believe that the term *job analysis* is outdated. They believe a more appropriate term for

the process is *work system analysis* given the interaction between factors such as the work environment, the job tasks, resources, the work objective and various factors relating to stress. According to Shaof et al (1998), job analysis starts with a model of the work activity and assesses all of the factors mentioned above.

A job is defined as "... a group of positions that are similar in their duties" (Ivancevich & Glueck, 1985:98) and analysis is described by Reber (1985:32) as "the process of separating a 'thing' into its component parts or elementary qualities". It is a process designed to reveal fundamental components or root causes. It is associated with the connotation of reductionism (see section 1.5.3).

According to Ash (1988), jobs are the pins that connect people to organisations; they are the building blocks of organisations and the primary unit of work groups. Analysing jobs within organisations is a common activity. The importance and usefulness of accurate job analysis information is apparent, although underestimated by many, despite the consequences and impact on both the individual and the organisation (McCormick, 1985).

The language of job analysis continues to cause considerable confusion with respect to the meaning of the various terms used in the process. Irrespective of the method used to gather the information, it remains descriptive information conveyed by means of language. In addition to the subjective elements introduced into the process by analysts (Fine & Getkate, 1995), the definition of terms is not used consistently. The following comment made by Kershner almost five decades ago (as cited in McCormick, 1976:654) is still relevant today: "As is patently evident, job analysis has been a sort of hand maiden serving in various ways a variety of needs and all the while floundering in a morass of semantic confusion". Therefore, before discussing the development of job analysis, and the various methods that may be used in job analysis, it is important to define the terms associated with the concept.

- *Task*: "... an action or related group of actions designed to produce a definite outcome or result" (Beach, 1985:97).

- *Position:* "... a collection of tasks and responsibilities ... assigned to one person" (Beach, 1985:97).

- *Occupation:* "... a grouping of jobs with broadly similar content, ... (Milkovich & Glueck, 1985:104).

Job analysis techniques may be applied to occupations, jobs, positions and tasks (Fine & Getkate, 1995).

- *Job Description*: "... a written statement of what the job holder actually does, how he or she does it, and under what conditions the job is performed" (Dessler, 1984:91).

- *Job Specification:* "... the minimum skills, knowledge and abilities required to perform the job" (Milkovich & Glueck, 1985:104).

From the above it is evident that the language used in the process of job analysis is of critical importance to the quality of the final product developed.

2.1.2 Development of Job Analysis

Systematic forms of job analysis have been around since early in the 20th century, however the concept has been described from as early as the fifth century BC (Gael, 1983). At this early stage, Socrates identified the need for differential type information. More specifically, Socrates identified the need to recognise (a) individual differences in aptitude for work, (b) the unique requirements of different occupations, and (c) the importance of people doing what they are most "naturally" suited to do (Primoff & Fine, 1988). Little is documented on the development of job analysis until the 18th century when the process was influenced by the scientific management movement, and most specifically by the work of Taylor and Munsterberg. Work analyses undertaken by industrial engineers at the time focused on elemental motions and the time taken to perform them. The focus at this stage was on the tasks performed and not on the job as a whole.

By World War I the importance of job analysis was clearly recognised (Primoff & Fine, 1988). It was also understood that measurement needed to be included in the process and that technology should be used to give more precise results During the period between World War 1 and World War 2, and for a while thereafter, the popularity of job analysis waned. The 1960s saw a resurgence of interest in the topic, especially in the military arena (Primoff & Fine, 1988). Whilst improving efficiencies and conducting job evaluations were the initial reasons for conducting job analysis (McCormick, 1985), its uses today are more varied. These will be described in more detail later in the chapter.

Since the 1960s, job analysis methods have cycled through stages of loose and unsystematic studies, replete with examples of confusion about the topic, the terms involved and application of the information obtained, to a stage where the job analysis methods developed and employed are more holistic in their focus and scientific in their methods of collection. The newer methods emphasise the systematic collection and analysis of information, with some including aspects of worker characteristics, such as knowledge, skills and abilities (Gael, 1983).

Despite the necessity for accurate and thorough job information (most HRM activities are dependant on this information), relatively little attention has been devoted to this activity (ie job analysis) within organisations until recently. Factors driving this change in focus and attention include employment legislation (Fine & Getkate, 1995; McCormick, 1985) and changing organisational structures (Pearn & Kandola, 1993).

2.1.2.1 Employment Legislation

Changing employment legislation has been a primary factor driving the increasing emphasis being placed on the job analysis process. In 1978 the Uniform Guidelines on Employee Selection Procedures were adopted in the US (McCormick, 1985; Pearn & Kandola, 1993; Shaof et al, 1998). These guidelines required that job specifications be supported with information obtained through job analysis methods. Although the type of job analysis method was not specified, it indicated that the analyses should include descriptions of job behaviours and

where appropriate and possible, measures of their criticality and importance (McCormick, 1985; Pearn & Kandola, 1993; SHL, 1994). In the UK there is no legislation which requires employers to treat all employees fairly at work (Pearn & Kandola, 1993). An employer may, however, be asked to justify an HR procedure (eg a short listing procedure or the criteria used for selection or promotion). If an employer is challenged on these grounds, it may be necessary to show that the process has a sound basis. The best way to achieve this is through systematic evidence generated by the job analysis process (Pearn & Kandola, 1993).

In SA assessment processes are going through a phase of transformation (Saunders, 2000). The LRA and the EEA both have significant implications on the assessment process. Although at this stage there is still a lack of clarity in terms of their full implications, it would appear that the underlying intentions are that of fairness and objectivity. As in the UK and the US, assessors could be called to account for the fairness and objectivity of their methods in the Industrial Court (Saunders, 2000). Given that job analysis is the fundamental cornerstone on which all human resource management practices are developed, its ability to gather accurate and objective information is critical (Clifford, 1996).

2.1.2.2 Changing Organisational Structures

The current trend in organisations is to downsize and this often results in the redesign or reorganisation of jobs (Landis et al, 1998). This redesign is often coupled with an increase in technology. The restructuring of jobs, together with the increasing introduction of technology into organisations, has highlighted a renewed need for job analysis to be conducted in order to determine how the jobs should be grouped or re-grouped. Job analysis can play an important role in assessing the conceptual skills and underlying attributes (eg increased flexibility, greater accountability, readiness to learn, etc) that may be required for these new job roles (Pearn & Kandola, 1993). Neerincx and Griffioen (1996) report that modern jobs comprise more cognitive tasks than was the case in days gone by, largely as a result of the amount of information technology being introduced into the workplace. If this is the situation, then the traditional task-oriented job analysis techniques may no longer be appropriate (Landis et al, 1998) and according to Landy,

Shankster-Cawley and Moran (as cited in Landis et al, 1998), there may then be a need for new job analysis methods to be designed that are capable of identifying the key tasks and the knowledge, skills and abilities that are required of jobs in the modern workplace.

For the period up until the mid 1980s, job analysis was used in its contemporary form. Significant progress was noted at this time with the development of structured job-analysis procedures that allowed for the quantification of job analysis information. According to McCormick (1985) this development made a significant contribution to both systematic research dealing with the world of work and to the various operational objectives in HRM.

Overall, developments in this field appear to have been slow. Current workplace practices and global pressures could lead to new integrated job analysis methods being developed. The general lack of innovation in the topic until recently is evidence that job analysis has been a neglected field.

2.1.3 Job Analysis Methodologies

A substantial number of job analysis techniques are available today that can be used, either separately or in combination to analyse jobs and formulate competencies (Levine, Thomas & Sistrunk, 1988). The choice of method would be easier if there was a strong theory underlying the analysis of work. If work behaviour is of central importance to the science of industrial and organisational psychology, then one should be able to determine which job descriptors are the most appropriate for analysing such behaviour (Levine et al, 1988). Job analysis methods have, however, been developed with their ultimate applications in mind (eg selection or training, etc) rather than this scientific aim. The job descriptors of the various job analysis methods correspond loosely to various theories of behaviour and paradigms. For example, the Position Analysis Questionnaire (PAQ) describes behaviours in terms of unobservable sensory and cognitive processes and thus may be linked to a cognitive tradition. The Functional Job Analysis (FJA) relies on tasks as their unit of analysis and thus may be linked to a behavioural tradition. However neither method's descriptors are linked theoretically

to the variables concerned (Levine et al, 1988). In the absence of theoretically determined ways of choosing a job analysis approach, the choice of method lies with the needs of the user.

- **Selection of a Job Analysis Method**

Job analysis methods have been developed from a number of different perspectives (Shoaf et al, 1998), for a number of different purposes. One of the main challenges with job analysis is to choose a method that will not distort the job, task or role being analysed (Pearn & Kandola, 1993), but rather to select a method that is capable of generating accurate, representative and meaningful information.

Job analysis methods differ in a number of ways, including the job descriptor or unit of analysis, the level of sophistication, the structure, the information source, the range of convenience, the level of sensitivity, user outcomes, timing and costs, the information gathering techniques, and the degree to which the information gathered is dependant on the computer to generate results (Levine et al, 1988; Kandola & Pearn, 1992). These aspects are discussed below.

2.1.3.1 Job Descriptor or Unit of Analysis

Information may be gathered in a number of different ways. The way job tasks are described is referred to as the job descriptor or unit of analysis (Levine et al, 1988). Limited research has been carried out on the efficacy of the different job descriptors (Cornelius, 1988). Cornelius reports that the choice of job descriptor has an impact on the final job classification. This is supported by Clifford (1996) who, when comparing the Position Classification Questionnaire and the Task Inventory approach, found that each job analysis method generated different results. This highlights the importance of selecting a method with a job descriptor that will generate the appropriate type of information (Levine et al, 1988). The consequences of an incorrect choice are potentially severe. Job descriptors can be any unit of analysis as selected by the user. Common job descriptors include task/job-oriented descriptors, trait/attribute-oriented descriptors or

behaviour/worker-oriented descriptors, responsibilities, products and services, performance indicators, etcetera (Levine et al, 1988). Descriptions of three widely accepted job descriptors are listed below.

(a) Task/Job-oriented Approach

This approach focuses on task and outcomes. This information can be used for developing training curricula, job design and determining performance appraisal standards. The job descriptions generated when using this approach are very specific. This is beneficial to the extent that the data generated is very specific to the job(s) analysed. However this is also a limitation to the extent that the information is not easily generalised (Pearn & Kandola, 1993).

(b) Attribute/Trait-oriented Approach

This approach describes jobs in terms of human attributes (ie abilities, characteristics, knowledge attained, etc) required to perform the job effectively (SHL, 1994). This is a good approach if the results are to be used for selection purposes.

(c) Behaviour/Worker-oriented Approach

This approach describes work in terms of generalised behaviours (SHL, 1994). Although this approach is less specific in its outcome, the behaviours identified are common to a wider range of jobs. The PAQ, CIT and RGT are all examples of this approach. The main applications of behaviour/worker-oriented methods are defining selection criteria, developing assessment centre standards and identifying career development paths (SHL, 1994). According to Ash (1988), behaviour-oriented approaches focus on the knowledge, skills, abilities, aptitudes and attitudes of workers believed necessary in order to perform effectively in the job.

2.1.3.2 Level of Sophistication

This refers to the demands that the system will place on the user. How sophisticated or complex does the system need to be? Will statistics need to be generated and used? What qualifications will the user need to operate the system? Is the training readily available? (Kandola & Pearn, 1992).

2.1.3.3 Structure

This determines the information gathering techniques that will be used (Kandola & Pearn, 1992). Information can be gathered using structured or unstructured techniques. The WPS is a structured technique whilst the RGT and CIT are semi-structured techniques (Kandola & Pearn, 1992). Levine, Ash and Bennett (1980) recommend that both structured and semi-structured methods are used where possible.

2.1.3.4 Source of Information

Factors such as cost, time and availability of analysts will determine the optimum source for the information. Sources of job information include (Cornelius, 1988):

- Job incumbents
- Supervisors and managers
- Subordinates
- Clients
- Job materials
- Published materials

Cornelius (1988:51) reported the following with respect to the source of job related information.

- Supervisors and job incumbents are more in agreement about the tasks performed than the attributes required. Supervisors and incumbents should therefore be used as the source of information when the content is task-oriented. If the content is attribute-oriented, trained analysts should be used as the source of information.

- Job incumbents and supervisors may tend to inflate job ratings more than a job analyst would do, especially those job elements that are high in social desirability. Incumbents and supervisors should therefore not be used as the

primary source of data if the purpose of the analysis is to make decisions that are loaded in desirability (eg salaries).

- Supervisors and subordinates organise work differently and attach different meanings to work dimensions.

- Trained observers can give similar estimates of job characteristics to those of job incumbents.

- Naïve raters cannot provide information on structured questionnaires that is equivalent to that of job experts.

2.1.3.5 Occupational Versatility/Suitability

Occupational versatility is the extent to which the system meets the needs of the user. There is research evidence to suggest that methods are application specific, as they appear to have more utility for some roles/jobs than for others (Levine et al, 1988). Using a method that generates inappropriate information is both costly and may have far reaching implications for the HRM practices for which it is intended to support (Levine et al, 1988).

2.1.3.6 Sensitivity

This refers to the extent to which the method can detect the less visible but critical aspects of job performance (Kandola & Pearn, 1992). Some methods are more general in their application and have a predetermined structure and content, which, if used alone might fail to detect some critical but subtle aspects. The CIT and the RGT are well respected job analysis techniques that are capable of detecting unusual or discretionary aspects of a job (Pearn & Kandola, 1993). According to Kandola and Pearn (1992), low sensitivity is one of the strongest arguments against the sole use of commercially available systems for identifying competencies.

2.1.3.7 User Outcomes

An important criterion in selecting a job analysis method is the extent to which the system will generate information that is relevant to the user. Will the outcome be computer generated or must the information gathered still be translated into statements about human attributes, skills and values? (Kandola & Pearn, 1992). Will the outcomes be legally defensible? Will the results be of a high standard? Levine et al, 1988). In the US, the UK and SA employers may be called upon to defend the reliability and validity of the job-related information generated.

2.1.3.8 Timing and Costs

Factors to be considered here include efficiency, number of analysts involved, cost of generating results from the computer, cost of materials, time taken to gather the information, etcetera (Kandola & Pearn, 1992; Levine et al, 1988).

2.1.3.9 Information Collection Techniques

Historically the methods used for collecting job analysis information were fairly rudimentary and were often surrounded by details that did not lend themselves to systematic analysis and scrutiny. Today the tools and methods for fact gathering are more scientific and specific (Ash, 1988). The most common methods of collecting data include (Cornelius, 1988; Kandola & Pearn, 1992):

- Observation
- Questionnaires
- Diaries
- Individual or group interviews
- Job expert conference meetings

These methods are characterised by the fact that information is gathered and the job studied in terms of tasks required of the job incumbent (Cornelius, 1988). Cornelius (1988:53) reports the following with respect to the method of obtaining job related information.

- Job analysts observing the same behaviours agree on what constitutes a task. This lends credibility to task-based job analysis methods.

- Simple job analysis methods can also produce job data that are as adequate as the more sophisticated methods. This means that if a choice amongst methods must be made, less sophisticated methods can also be considered.

The information collection methods developed subsequently were substantially more complex than those referred to above. These methods often incorporated multiple data collection methods, multiple sources of information and both quantitative and qualitative forms of information (Ash, 1988).

2.1.3.10 Computer Assistance

The more sophisticated methods can only be operated with the assistance of a computer (eg WPS). Other methods (eg RGT and CIT) are less dependent on a computer for generating the results (Kandola & Pearn, 1992).

2.1.3.11 Off-the-shelf availability

Off-the-shelf-availability refers to the extent to which the system is ready to be used or the extent of customisation that is required before the system meets the needs of the organisation (Kandola & Pearn,1992).

The number of dimensions described above highlight the many ways in which a job analysis methodology can vary. It also brings to the fore the difficulty associated with selecting a job analysis method and the varying levels of complexity of the different methodologies. Having considered the above factors, the next section will review some of the contemporary methods available.

2.1.4 Job Analysis Methods

According to Gael (1988), there are in excess of 40 job analysis methods available. As it is not feasible to list all the methods, a selection of some of the

most effective and modern methods have been described. These have been categorised into task-oriented or behaviour-oriented approaches.

2.1.4.1 Task-oriented Approaches

There are numerous task-oriented approaches available. These include observations, self-descriptions, diaries, interviews, FJA and Hierarchical Task Analysis (Pearn & Kandola, 1993). The diary technique and FJA are described below.

(a) Diary Technique

The diary technique uses any written or recorded descriptions of work provided by the job incumbent. There are three ways in which the information can be obtained (Pearn & Kandola, 1993), namely:

- Ask the individual or group of individuals, who do the same the job, to record their job activities at regular intervals over a given period.
- Ask job incumbents to make a record in their diary every time they change from one major activity to the next.
- Ask job incumbents to make a note of specific activities they engage in over a specified period.

This job analysis technique is easy to organise and is low in sophistication. It is most suitable for managerial positions where the tasks are not easily observable. The information generated is narrative in nature and needs to be analysed and compared with other job incumbents.

(b) Functional Job Analysis (FJA)

FJA is a technique that focuses on interactions between the work, workers and the organisation (Pearn & Kandola, 1993). It is both task- and worker-oriented. Each task is rated and analysed on the following seven scales (Fine & Getkate, 1995):

- Data Functions Scale
- People Functions Scale
- Things Functions Scale

- Worker Instructions Scale
- Reasoning Development Scale
- Mathematics Development Scale
- Language Development Scale

2.1.4.2 Behaviour-oriented Approaches

Many of the approaches commonly used today are behaviour-oriented in their design. These approaches include the PAQ, the Ability Requirement Scale, the RGT, the WPS and the CIT. All of these methods have been described below. The WPS, RGT and CIT are behaviour-oriented methods that will be used in this research. According to Ash (1988), behaviour-oriented methods are well suited for the purpose of formulating competencies.

(a) Position Analysis Questionnaire (PAQ)

The PAQ is a structured technique (Pearn & Kandola, 1993:57) comprising 194 job elements. Of these 187 relate to job activities and the remainder to other organisational activities or functions. Elements are organised into six categories:

- Information input
- Mental processes
- Work output
- Relationships with people
- Job context
- Other job characteristics

(b) Ability Requirement Scale

The Ability Requirement Scale is a technique that concentrates on the characteristics and abilities the job incumbent needs to perform the job rather than the job tasks or specific activities involved (Pearn & Kandola, 1993). This technique relies on a predetermined list of 37 human abilities that are designed to provide a way of specifying the individual differences in worker performance and learner ability. There are four categories of abilities: mental abilities, physical abilities, psycho-motor abilities and sensory abilities. This technique is very time and labour intensive.

(c) Repertory Grid Technique (RGT)

The RGT enables the dimensions on which good and bad performers differ to be identified (Pearn & Kandola, 1993). This is achieved by focusing exclusively on the underlying characteristics of individuals. This technique does not consider the tasks of the job. These need to be obtained using other means (Kandola & Pearn, 1992). The technique is developed from Kelly's Personal Construct Theory (PCT) (Easterby-Smith & Thorpe, 1996). In terms of this theory, the way people view the world is known as personal constructs. These constructs are elicited through the RGT (Pearn & Kandola, 1993). The RGT will be described in detail in chapter 4 (see section 4.2.2).

(d) Critical Incident Technique (CIT)

The CIT is a technique for collecting observed incidents that have proved critical to performance (Flanagan, 1954). More specifically, the method identifies the psychological characteristics or factors that contribute to effective job performance (Kandola & Pearn, 1992). The technique does not identify the precise activities and tasks to be performed. It is a very flexible approach, is appropriate for all levels and types of jobs and requires a moderate level of sophistication from the user. The method focuses on incidents that have already happened. It is therefore not suitable for analysing a job, which does not yet exist. This method can generate both qualitative and quantitative data. The approach relies on the abilities of the jobholders and supervisors to generate the critical incidents (Pearn & Kandola, 1993). The CIT will be described in detail in chapter 4 (see section 4.2.3).

(e) Work Profiling System (WPS)

The WPS is a relatively new job analysis technique that was developed by SHL in 1989 (Pearn & Kandola, 1993). The WPS combines new technology and presentational techniques previously used for personality questionnaires. The WPS recognises that jobs can be very different and has designed different questionnaires for different types and levels of work. It can also be used as a self-report tool. The selection of the "cards" (see section 4.2.1.4) and the validation interview are important components of the process (Pearn & Kandola, 1993). The

WPS is more than a job analysis technique – it is an expert system. Further details of the WPS will be provided in chapter 4 (see section 4.2.1).

Most of the methodologies described above have only appeared in print over the last 20–30 years (Ash, 1988). The emergence of these contemporary methods represents significant progress. HR professionals now have at their disposal comprehensive methods that facilitate the compilation of more complete and adequate databases for use in managing the human resources within their organisations. The methods require analysts to follow carefully prescribed steps. This ensures that the information generated and the HRM systems designed, meet both the legal and business environment challenges of the future (Ash, 1988).

2.1.4.3 Comparison of Job Analysis Approaches

Given that job analysis is fundamental to the development of valid personnel procedures, the effectiveness and accuracy of the various approaches to job analysis is extremely important (Clifford, 1996).

According to Cornelius (1988), no one method or technique deserves more attention than another. However, Cornelius reports that there is evidence to suggest that job analysis methods are application specific, and that some methods are better suited to certain applications than others. Gael (1988) reports that about 40 different job analysis methods are available. They range from highly task-oriented techniques to psychologically-oriented approaches, focusing on human qualities required to do the job.

There has been little research reported on the efficacy of different job analysis methods. A study conducted by Clifford (1996) found that an analysis of the same work, using two different job analysis methods, yielded different results with respect to how work should be organised into jobs and how jobs should be organised into classifications. The results of a job analysis can potentially have a significant impact on subsequent HR decisions and procedures. The choice therefore of the most appropriate job descriptor and job analysis method becomes critically important. Cornelius (1988) reports that when conducting a job analysis

for job classification purposes, careful consideration should be given to the type of job element selected as the basis for the classification, as different job descriptors may produce different results.

In another study Levine et al (1980), compared job analysis methods in order to justify selection devices. In their study, which compared the PAQ, the CIT, job elements and a task-oriented approach, no differences between the methods could be found in terms of the final product. The PAQ was found to be the least costly, but also the least desired, and the CIT was viewed favourably. However all methods produced a product that was viewed as job related.

Literature to date suggests that there is no best method for a job analysis and that no one method will suit all purposes as each method has its strengths and weaknesses (Levine et al, 1980; Levine et al, 1988; SHL, 1994). Experts overwhelmingly endorse the strategy of using a multi-method approach as the strengths of one method will counterbalance the weaknesses of another method. Ash (1988) and Levine et al (1988) recommend a combination of methods that contain descriptors covering both activities performed in the job and worker attributes needed to carry out the activities. The method/techniques selected will depend on the application or desired outputs of the study (Ash, 1988; McCormick, 1976; SHL, 1994).

The number of ways in which a job analysis can vary, together with the lack of research evidence as to the efficacy of the different methods, makes the choice of job analysis method difficult and totally discretionary. An incorrect choice can have repercussions on all HRM practices and decisions.

2.1.5 Planning a Job Analysis Project

Every job analysis project will require a certain amount of planning, in order to ensure that the information gathered is useful and accurate. According to SHL (1994), there are 11 steps to planning a job analysis project. These are listed below:

Step 1: Identify purpose
Step 2: Ensure heterogeneity in defining the sample
Step 3: Select population sample and job analysis method
Step 4: Communicate the project
Step 5: Collect all relevant materials
Step 6: Arrange times, dates and locations
Step 7: Analyse the job
Step 8: Write up the data
Step 9: Integrate the data
Step 10: Review the findings
Step 11: Feedback outcomes

The importance of effective planning to the ultimate success of the job analysis project cannot be underestimated. A properly planned project will result in relevant and accurate job-related information being gathered in the most efficient manner.

2.1.6 Application of Job Analysis Information

The importance of job-related information has long been recognised but typically has been under utilised (Primoff & Fine, 1988). Although the information collected is central to most HRM activities, job analysis does not always receive the attention that it deserves within organisations. From an HR perspective, job analysis has been conceptualised as a support activity for many of the primary functional activities (Ash, 1988).

A comprehensive job analysis process can provide many stakeholders with valuable and useful information. Some organisational applications are listed below (Levine et al, 1988:340):

- Job descriptions
- Job classifications
- Job evaluation
- Job design/restructuring
- Personnel requirements/specifications

  - Recruitment, selection and placement
  - Determination of competencies and performance criteria
- Performance appraisal
- Worker training
  - Training and personal growth programmes
- Worker mobility
  - Career planning and development
  - Succession planning
- Efficiency/safety
- Workforce/resource planning
- Legal requirements
  - Labour relations
- Remuneration and reward

In addition to the organisational applications listed above, job information can also serve a number of useful purposes outside of the organisation (McCormick, 1985). The impact of accurate and relevant job information is of major consequence to individuals as it could materially affect their career choices and future jobs they may hold (McCormick, 1985).

Academia and the research environment could also use the information as a basis for conducting further research (Gerber, Nel & Van Dyk, 1987; McCormick, 1976; McCormick, 1985).

From the above it is evident that the uses of job-related data are not mutually exclusive or independent. Researchers and practitioners must therefore be cautioned against being parochial about their areas of work.

2.1.7 Legal Requirements of Job Analysis

Changing employment legislation in the US, the UK and SA has highlighted the legal requirements of a job analysis process. Although assessors may be called upon to defend their assessment processes (Saunders, 2000), it would appear that at this stage there is not sufficient research data available to guide

practitioners in the selection of a job analysis approach that will justify the use of a selection device.

Many of the US court decisions dealing with the fairness of a particular selection device have been decided based on the adequacy of the job analysis on which the selection device was developed (Arvey & Faley, 1979; Thompson & Thompson, 1982).

An analysis of case law by Thompson and Thompson (1982:872) has revealed a number of important requirements concerning the job analysis procedure and the data collected. These include the following.

- A formal job analysis must be performed. The job(s) analysed should be the exact job(s) for which the selection device is to be used. This means organisations cannot rely on the "informal knowledge" about a job (ie the presumed knowledge, skills and abilities required for the job).

- The job analysis process and the results of the job analysis must be well documented.

- Data for the job analysis must be collected from several up-to-date sources (eg interviews with job incumbents and supervisors, training manuals, observed on-the-job performance, questionnaires, etc). The data should be collected by an expert job analyst and from a representative sample.

- All tasks, duties and activities relevant to the job must be included in the job analysis, but only the most important need to be covered by the test (Arvey & Faley, 1979).

From the above it appears that in order to constitute a job analysis, formal data gathering and reporting procedures must have been adhered to. Cornelius (1988) reports that other studies have demonstrated that the task-oriented and FJA approaches have been used in the past to justify selection devices.

Assessment processes (of which job analysis is a component) in SA are currently in a state of change (Saunders, 2000). The ultimate aim is the introduction of a set of coherent, standardised guidelines on which to base an objective system of assessment. Given that there are no precedents in this area (Saunders, 2000) and the inevitable lack of judicial sophistication in South African courts on these types of issues, there is every possibility that international experience will be considered.

With the spotlight on assessment processes (and job analysis being the foundation of the process) it appears that in the future enormous pressure will be placed on practitioners to ensure that the job analysis models used are of the requisite standard.

2.1.8 Reliability and Validity of Job Analysis Information

The information obtained from a formal job analysis process can increase the reliability and validity of selection decisions. In a study conducted by Arvey and Champion (as cited in Harris, 1989), it was concluded that the reliability and validity of the interview was increased if panel interviews and a formal job analysis process were used to form questions for a structured interview. The study also acknowledged that the determination of selection and promotion criteria, as well as behaviours for appraisal and performance assessment, will be more accurate and less biased if based on behaviours that have been evident in jobs studied.

The validity of a job analysis is a circular process that is dependent on the validity of the products for which the job analysis was undertaken (Primoff & Fine, 1988). The reliability and validity of the specific instruments used in this research are discussed in chapter 4 (see sections 4.2.1.6; 4.2.2.6 and 4.2.3.6).

However, despite the problems that haunt the process, job analysis continues to fulfil a number of useful purposes as the fundamental cornerstone in HRM.

2.1.9 Shortcomings of Job Analysis

The importance and fundamental role played by job analysis in human resource management systems has been reported numerous times (Morgeson & Campion, 1997). While the process of job analysis has become a lot more sophisticated and scientific in recent years, it remains a process that is largely based on human judgement. Research in the fields of social and cognitive psychology has demonstrated that human judgement is fallible and subject to considerable inaccuracy. It is this factor of human judgement that is central to many of the shortcomings and limitations levelled at job analysis (Morgeson & Campion, 1997).

In a similar vein, another criticism levelled at job analysis is that the typical essay descriptions of job activities do not always accurately reflect the jobs in question, especially those jobs that deal primarily with decision and communication activities (McCormick, 1976).

The challenge of obtaining accurate and meaningful data is made more difficult by the fact that jobs are not static and change over a period of time. There is a risk that a job analysis intervention will take a snap shot of the job or role giving little insight into how the job has evolved or may evolve in the future (Landis et al, 1998; Pearn & Kandola, 1993). The current trend in organisations to reorganise jobs on a frequent basis may demand the development of more appropriate job analysis techniques (Landis et al, 1998). There is also a concern that the impact of technology in the modern workplace has been so great, that the traditional job analysis techniques may no longer be adequate (Neerincx & Griffioen, 1996). To a certain extent, the more contemporary methods (eg the WPS) may address this concern.

Other problems frequently associated with job analysis initiatives are the cost and time implications. A thorough analysis is very costly and time intensive, with the perceived benefits not always outweighing the costs. Information obtained is not always used to its full potential. In addition, the terminology used to describe the job analysis process remains confusing to many (McCormick, 1976).

2.2 JOB ANALYSIS AND THE AUDITING PROFESSION

There are numerous job analysis methods available (Gael, 1988), and some are better suited to certain applications than others (Levine et al, 1988). A search on the PsycINFO database (for the period 1990–current) did not reveal any literature regarding the use of any specific job analysis technique relating to the accounting profession.

Information relating to the job of an auditor is still required. Whilst it appears that no common or preferred approach to job analysis is being used in the industry or profession, the HR applications of recruitment, training, performance management and training amongst others, still have extreme relevance to the auditing profession. The lack of a common or preferred job analysis method in the accounting profession may in itself highlight a need for the development of a job analysis method that is suited to identifying the conceptual skills as well as the underlying attributes that are required of an auditor. The auditing profession has not missed the impact of technology and the increasing demands from business. All of these factors suggest that there is still a great need for a job analysis method in the auditing profession. Improved HR practices will have implications that will be beneficial for the individual, the organisation and the auditing profession at large.

2.3 FUTURE OF JOB ANALYSIS

The changing nature of work suggests that any job analysis method used in the auditing profession would need to be future- or strategically-oriented (Schippmann et al, 2000).

From the following analogy, "job analysis is to the personnel specialist what the wrench is to the plumber", (Ash, 1988:11) it is evident that Ash believes that the future of job analysis is secure. However, there appears to be sufficient research evidence to suggest that the traditional job analysis methods may no longer be sufficient or appropriate for the modern workplace (Lawler, 1994; Schippmann et al, 2000; Shoaf et al, 1998). It is with this as a backdrop that competencies and competency modelling have emerged.

Lawler (1994) challenges the view that jobs are the building blocks of organisations. He purports the view that in a world that is characterised by global competition and constant change, a focus on individuals and their competencies, is far more appropriate. Lawler (1994) argues that a job-based approach to work is one that fits the mass production era of the 20th century. Rapid developments in computing, information technology and the movement towards a global economy have changed the focus and face of business. The type of work performed in developed countries today is far more knowledge-oriented. Companies therefore need to be adaptable and able to compete on the basis of their core competence (Prahalad & Hamel, 1990). Lawler (1994) argues that it is more appropriate to think of people management in terms of human resources (who bring with them various competencies) and who work for the organisation, rather than individuals who have specific jobs. This change from a job-based approach to managing, to a competency-based system of managing will require a fundamental change in virtually every HR system. Schippmann et al (2000) report that in the future an increasing number of organisations will be using a competency-based approach to managing.

In an era of change, when organisational leaders are eagerly seeking useful information that can drive decision making, it is fascinating that a powerful tool like job analysis is viewed as a mundane activity, that is an element in a process focused on developing other applications (Schippmann et al, 2000). They believe that the thinking around job analysis needs to be updated to an approach that is viewed as an organisational development intervention. If the future of job analysis is to be secure, then it may need to focus on the strategic and future oriented needs of the business. According to Schippmann et al (2000), job analysis as a process needs to start looking at those aspects that are similar across jobs in order to build up a platform of information that can be used to support a broad range of applications in an HR system.

Guion (as cited in Schippmann et al, 2000), suggests that the job analysis process can be improved in the future by the inclusion of variables such as personality and value orientations into the mix of potentially useful descriptive content The goal

here is to identify and measure those characteristics that tap into an individual's willingness to "fit in" with the work culture of a particular organisation. Typically job analysis approaches have been slow to incorporate such aspects into their models (Schippmann et al, 2000).

REMARKS

At the conclusion of this chapter, one of the theoretical aims of this research, namely to conceptualise job analysis and its relevance to the auditing profession, will have been achieved. It was found that progress in the field of job analysis has been slow, although it would appear from literature, that the pace of development should increase significantly. The need for a job analysis method that meets the need of the auditing profession was also identified.

2.4 CHAPTER SUMMARY

In this chapter job analysis was defined, its development and application in industry was discussed and various job analysis methodologies were described. In addition, limitations associated with the job analysis process were highlighted, the relevance of job analysis to the auditing profession was discussed, and the future of job analysis was reviewed. The next chapter will look at competencies.

CHAPTER 3 COMPETENCIES

Chapter 3 continues to form part of the literature review. The aim of this chapter is to conceptualise competencies and their relevance to the auditing profession. In this chapter competencies will be discussed with reference to the following factors: definition, development, description of methods that identify competencies, structuring a competency model, application of competencies and the benefits and limitations of competencies. Existing competency models will also be compared. In addition the relevance of competencies to the auditing profession and the future of competencies will also be discussed. The chapter will conclude with a chapter summary.

3.1 CONCEPTUALISATION OF COMPETENCIES

Competencies and the practice of competency modelling have emerged at such a rate that it has caused a great deal of confusion amongst researchers, practitioners and consumers (Schippmann et al, 2000). In this section a conceptual framework on competencies and their relevance to the auditing profession will be presented.

3.1.1 Definition

Definitions of the concept competency are plentiful. Woodruffe (1992:17) defines a competency as "the set of behaviour patterns that the incumbent needs to bring to a position in order to perform its tasks and functions with competence." Klemp (as cited in Hay, 1990:310) defines a competency as "an underlying characteristic of a person which results in effective and/or superior performance in a job". Hay/McBer (as cited in Trotter, 1996:7) define competencies as "the underlying characteristics which enable someone to perform a job better in more situations, more often, with better results. Competencies are those factors that distinguish the best from the rest in a given role. They are not the tasks of the job, they are what enable people to do the tasks". Esp (1993:61) describes competencies as "the predisposition to behave in ways shown to be associated with the achievement of successful outcomes". Hay (1990:305) refers to competencies as "orientations" and describes

them as "that part of the personality that can be inferred through observations of behaviour". "Competencies are underlying characteristics of people that indicate ways of behaving or thinking, generalising across situations, and enduring for a reasonably long period of time" (Spencer & Spencer, 1993:9). Boyatzis (1982:21) defines a competency as "an underlying characteristic of a person. It may be a motive, trait, skill aspect of one's self-image or social role, or a body of knowledge, which he/she uses". In addition he says they are "characteristics that are causally related to effective and/or superior performance in a job. This means there is evidence that indicates that possession of the characteristic precedes and leads to effective and/or superior performance in a job".

The wide range of definitions of the concept '*competency*', highlights the difficulty in reaching a common definition. For the purposes of this research Mirabile's definition will apply (see section 1.5.4.2). Mirabile (1997:75) defines competencies as "a knowledge, skill, ability or characteristic associated with high performance on a job". This definition has been selected as it specifically refers to characteristics that drive excellence and superior performance in a job.

Spencer and Spencer (1993) use the analogy of an iceberg to describe competencies. Knowledge and skills form the top of the iceberg, which is above the surface and visible. Knowledge and skills are necessary for excellent performance but are not sufficient to guarantee it. These characteristics are often referred to as surface competencies. Training is the most cost-effective way of securing these competencies. The underlying elements of a competency are not so apparent. They are more central to personality and are therefore more difficult to assess and develop. Traits, motives, attitudes, values, etcetera are personal attributes and behaviours that predict longer term success. It is therefore more cost effective to recruit and select according to these characteristics (Spencer & Spencer, 1993; Weiss & Hartle, 1997). According to studies reported by Constable and McCormick (1987), innate ability and job experience are the most important determinants of an effective manager. Innate abilities can be likened to competencies (Schippmann et al, 2000).

The Iceberg Model (Spencer & Spencer, 1993) comprises five key characteristics. These are motives, traits, self-concept, knowledge and skills (Weiss & Hartle, 1997:30), and are defined as follows:

- *Motives*: The things that drive or direct behaviour towards certain actions and away from others (eg desire to achieve)
- *Traits*: The physical characteristics and consistent responses to situations or information (eg good listening skills)
- *Self-concept*: An individual's attitudes, values or self-image (ie the "inner self")
- *Knowledge:* The information an individual has in specific content areas (eg using Excel)
- *Skills:* The ability to perform a particular physical or mental task (eg balancing a budget)

The Iceberg Model (Spencer & Spencer, 1993) is diagrammatically illustrated below.

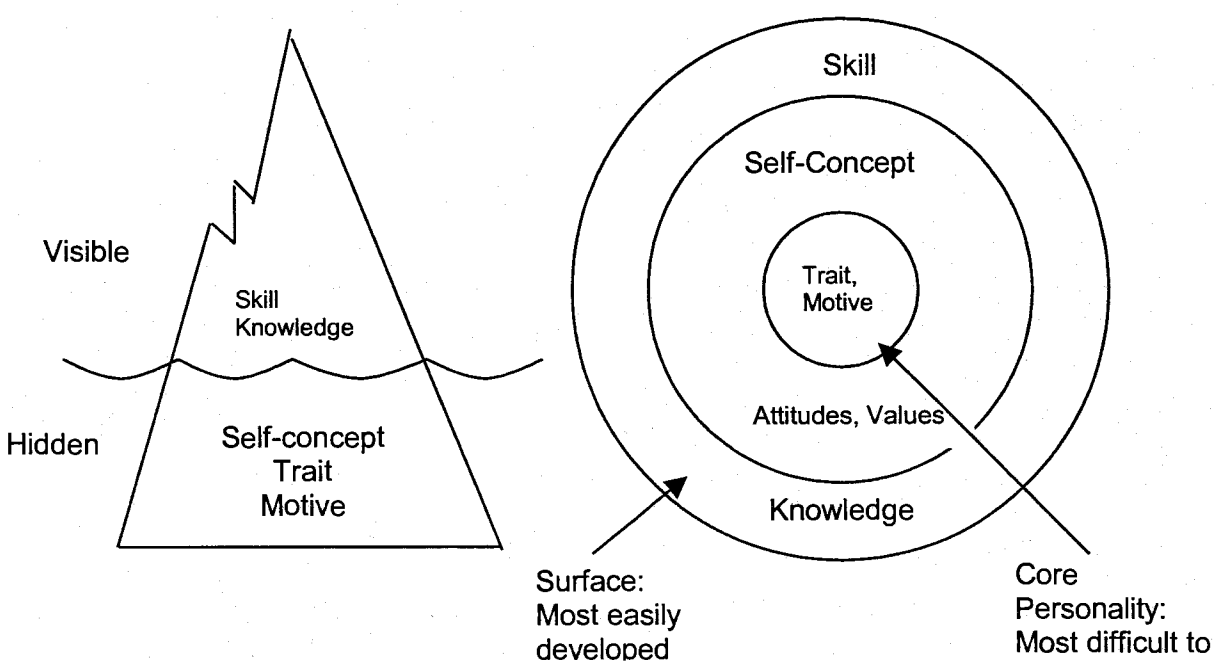

Figure 3.1 Central and Surface Competencies (Spencer & Spencer, 1993:11)

3.1.2 Comparison of Concepts

The field of competencies has evolved at an alarming pace (Schippmann et al, 2000) to the extent that both practitioners and consumers are confused as to its exact purpose or definition. As with job analysis, the language of competencies can be confusing as terms are not defined and used uniformly. From the preceding discussions, it is evident that the language of competencies (and job analysis) can be confusing. In this section the concepts competence and competency will be defined and compared, as will the concepts job analysis and competency modelling.

3.1.2.1 Competence and Competencies

Having defined the concept competency (see section 3.1.1) it is important to define the concept competence as the terms are often used interchangeably but do have two separate meanings.

Competence, according to Lloyd and Cook (1993:14) is "the ability to perform activities to the level expected within employment". According to Tate (1995:83), "a competence is external to the person; it is what he or she demonstrates in a job".

Following is a summarised version of the differences between the terms competence and competencies, as described by HayGroup (n.d.b).

Table 3.1 Comparing the Concepts Competence and Competencies

Competence	Competencies
Describes knowledge, skills and attitudes (with some personal behaviours)	Describe behavioural repertoires which individuals bring to the job or role that is associated with success
Is typically identified through functional analysis of job roles and responsibilities (eg FJA)	Are typically identified through Behavioural Event Investigation Techniques, eg CIT, Behavioural Event Interviewing, RGT, Observation, etc
Focuses on task-centred job analysis techniques that reflect expectations of workplace performance	Focus on person-centred job-analysis techniques that reflect effectiveness
Indicates the fields of knowledge in which a person must perform effectively	Indicate what people need to bring to the role/job in order to perform at the required level of excellence
Reflects the threshold/minimum standards of knowledge that you require in order to perform the job	Are characteristics of (superior) individual performance (ie it is a standard that distinguishes characteristics of superior performers)
Has generic application across organisations and occupations	Are unique to the organisation (or job/role)
Is assessed at an occupational and sector level, based on a sample of key jobs	Are assessed at a job level or in terms of the management hierarchy
Is held by the organisation and granted to the individual	Are held by the individual and brought to the organisation

(Adapted from HayGroup, n.d.b).

From the above table it is evident that the two concepts describe different things, they are identified through the use of different techniques, they have a different purpose and therefore have a different focus area. Their applications and levels of appropriateness within organisations also differ. Competence can be described as output focused, whilst competency is input driven.

3.1.2.2 Job Analysis and Competency Modelling

Job analysis has been defined for the purposes of this research as "any systematic procedure by which one describes the way a job is performed, the tasks that constitute a job, and/or the skills and abilities necessary to perform a job" (Friedman & Harvey, 1986:779). No definition for the term competency modelling could be found, but it is generally understood to be the process that is undertaken in order to formulate competencies. The distinction between the terms job analysis and competency modelling is not always understood even though the processes have some fundamental differences. Their similarities and differences are discussed below.

Table 3.2 Comparing the Concepts Job Analysis and Competency Modelling

Job Analysis	Competency Modelling
Is job/task and worker/behaviour oriented	Is worker/behaviour oriented
Focuses on "what" is accomplished	Focuses on "how" objectives are met
Is typically not strategically oriented	Is linked to business/strategic goals
Focuses on the differences and uniqueness of jobs	Focuses on the similarities (ie individual level competencies that are common or core to jobs)
Incorporates technical/functional knowledge associated with the job	No technical knowledge is included
Generates outcomes that are often specific to particular jobs	Generates outcomes that have "broad applicability"
Is designed for "short term fit" (ie based on assumption that jobs will be static)	Is designed for "long term organisation fit"
Outputs are typically used for recruitment and performance appraisals	Outputs are typically used for training and development
Slowly evolving concept	Rapidly developing approach

(Schippmann et al, 2000)

Table 3.2 indicates the numerous ways in which the concepts of job analysis and competency modelling differ. Listed below are a number of ways in which the concepts are similar (Schippmann et al, 2000:713).

- Neither job analysis nor competency modelling are singular approaches to studying work.
- The results of both approaches are seldom used as the end product. They are further developed as a tool for HRM.
- The level of reporting in both the approaches is similar.
- The methodology or approach adopted in conducting a job analysis or a competency-modelling project is similar.

From the above it would appear that the concepts have a different orientation, use different methodologies or techniques and have different applications. They could, however, be thought of as being on different points on a job analysis continuum.

3.1.3 Development of Competencies

Over the years a number of studies have been undertaken to try and determine the reason why some people are more successful than others. The brightest and the best do not always succeed, making it increasingly difficult to predict who will succeed or to make the best choices about people and jobs (Marshall, 1996).

In 1973 McClelland published a paper called "Testing for Competence rather than Intelligence" (McClelland, 1973). In the paper McClelland argued that there was little correlation between the results of the traditional aptitude tests and the performance of an individual at work. McClelland believed that the tests were culturally-based and therefore were often biased against women, minorities and persons from the lower socio-economic strata. In addition he believed that other measures such as references and examination results were equally poor at predicting success (Marshall, 1996; Spencer & Spencer, 1993). McClelland was also cautious of administering a readily available psychometric instrument to a real life problem for which the instrument was never really designed (McClelland, 1994). McClelland (1973) believed that it was more accurate to assess

competencies directly related to outstanding peformance in specific lines of work than to try and predict job performance from intelligence tests. He therefore set out to find an alternative to traditional aptitude testing and it was these alternative variables that he labelled competencies. At about this time the public were very sceptical about psychometric testing, and both the public and the courts felt that an interview had more "face validity" than tests (Marshall, 1996; Spencer & Spencer, 1993). This led McClelland to an approach that included two methods (Marshall, 1996:50): (1) the use of criterion samples; and (2) the use of behavioural event interviews in order to identify the thoughts and behaviour patterns of people who were successful in the jobs being studied. The basis of the method was simple, with the primary objective being to identify what created success in a job and then to compare the best performers with what the average or poor performers were doing (ie creating a criterion sample). He believed he needed to know what they did as well as why they behaved the way they did. In this way he believed the "drivers of behaviour delivering excellent performance" would be revealed (Marshall, 1996:50). The behavioural event interviewing (BEI) technique was used to gather this information. The BEI is a more structured form of the CIT and focuses on the characteristics of the individual rather than the tasks or activities comprising the job.

The origins of the competency approach can however be traced back to as early as the 1920s in the US (Esp, 1993). Up until the late 1960s the work in the field of competencies was limited to the area of education and training, with the primary objective being at the time to identify the behaviours that should be learned by trainee teachers. It was only during the late 1970s that industry identified the usefulness of competencies as a means of identifying distinguishing characteristics of managers who demonstrated superior performance at work (Esp, 1993).

Up until the 1970s very little research had been done in the UK in the area of competencies, although some of the large corporations had been using the competency models and approaches developed in the US (Trotter, 1996). At about this time, the UK government wanted to develop a national strategy for vocational qualifications. The work done in the US in the field of competencies was then

taken to the UK and developed further into what was later known as the National Vocational Qualifications (NVQ's). The National Council for Vocational Qualifications was set up to "secure standards of occupational competence and ensure that vocational qualifications are based on this" (Esp, 1993:17).

Much of the work done in the UK, including the NVQ framework, placed the emphasis on outcomes (ie in terms of the performance required for an individual to perform at an average level of performance), whilst the work done in the US was focused on identifying the competencies of superior performers, with a particular emphasis on their qualities, skills and behaviours (Esp, 1993). Most research, (including this dissertation), has concentrated on identifying the characteristics linked to superior performance.

Research work in the area of competencies resumed at a later stage in the US (Esp, 1993) under the American Management Association (AMA) and the McBer Corporation, a consultancy firm under the guidance of McClelland, with the specific aim of determining the distinguishing characteristics associated with high performers within organisations.

From a business perspective the period up until the 1970s was fairly stable and the focus for organisations was on meeting the increasing production demands (Boam & Sparrow, 1992). Employees were an economic resource and their activities were closely monitored and controlled. Organisations focused on the "best way of doing things" and therefore competence was viewed in terms of mastering techniques (Boam & Sparrow, 1992). However, during the 1980s the market became more competitive as a result of the globalisation of markets, the technological boom, financial deregulation, increased availability of information, the drive for quality and a shortage of talented labour (Hooghiemstra, 1990; Trotter, 1996). The above-mentioned factors forced organisations to redefine the nature of work and jobs within the workplace. In addition it forced organisations to think about their businesses differently, to manage their people differently and to view the relationship between the organisation and its people differently (Trotter, 1996). These changes resulted in problems and challenges for both organisations and the people working within them.

The extent and pace of change at this time led to the development of a new approach to managing people at work, called HRM and it is within this framework that competency-based approaches emerged (Storey, 1989).

3.1.4 Methods for Identifying Competencies

Various methods can be used for identifying competencies and the formulation of a competency model (Dubois, 1993). Typically organisations use one of the five methods (or variations thereof) listed below:

- Job Competence Assessment Method
- Modified Job Competence Assessment Method
- Generic Model Overlay Method
- Customised Generic Model Method
- Flexible Job Competency Model Method (Dubois, 1993:71)

3.1.4.1 Job Competence Assessment Method (JCAM)

This method relies on the use of a rigorous, empirical research procedure called "Job Competence Assessment" (Dubois, 1993), which is a process that differentiates excellent from average behaviour. Once competencies have been identified, they are used in conjunction with other elements to develop the competency model.

3.1.4.2 Modified Job Competence Assessment Method

This method is similar to that described above with the modification of having the excellent and average performers record their critical behaviour stories rather than have them told in a one-on-one interview (Dubois, 1993).

3.1.4.3 Generic Model Overlay Method

When this method is adopted, the organisation obtains an already prepared model and then superimposes it on a job within the organisation (Dubois, 1993).

3.1.4.4 Customised Generic Model Method

The method requires the researcher to identify a universe of generic competencies that characterise the attributes of both excellent and average performers of a job within an organisation (Dubois, 1993). This list is then researched and interpreted within the context of the organisation. The specific competencies that characterise the successful individual are verified or denied by research. These competencies are then used to develop the competency model (Dubois, 1993).

3.1.4.5 Flexible Job Competency Model Method

The above method relies on having a wide number of comprehensive information sources for inclusion in the model (Dubois, 1993). A key feature of this method is the identification and inclusion of future assumptions about the organisation and the job. Both internal and external sources of information can be used.

Other approaches that can be adopted for the development of competencies include the use of criterion samples, the identification of operant thoughts and behaviours causally related to successful outcomes, the use of a short study using expert panels and studies using single incumbents (Spencer & Spencer, 1993:93).

The JCAM was selected as the method of preference for this research as it is aligned with the definition of competency used in this research. Both the competency methodology and the definition of a competency used in this research are oriented towards the identification of factors predicting superior performance. The JCAM comprises the following six key steps (Spencer & Spencer, 1993:94):

Step 1: Define performance effectiveness criteria
Step 2: Identify a criterion sample
Step 3: Collect information
Step 4: Analyse information and develop a competency model
Step 5: Validate the competency model
Step 6: Prepare applications of the competency model

(a) Define performance effectiveness criteria

The most critical step in the design of a competency model is the identification of the measures that define "superior" or "effective performance". Both "hard" and "soft" criteria can be identified (Spencer & Spencer, 1993). According to Spencer and Spencer (1993), a competency model based on superior performance cannot be any better than the criteria against which the subjects were selected. If incorrect criteria are used, then the model will identify the incorrect competencies.

Over the years significant amounts of time and money have been invested in trying to identify those characteristics which differentiate "the best from the rest" within a given environment (HayGroup, n.d.a). The determination of the traits that characterise effectiveness and superior performance has significant implications for organisations in terms of their recruiting strategy, development and learning programmes and performance management systems. According to Hodgeson and Cranier (1993:119) "high performance demands a pot-pourri of skills, sensitivities and awareness. It pulls together a wide range of skills rather than treating them as mutually exclusive".

One way to define "high performance" is to establish a standard. In establishing the standard one could ask the following questions: "Who are the best performers and why are they the best performers?". Anyone who matched the definition/standard could be classified as a high performer (Hooghiemstra, 1990).

(b) Identify a criterion sample

A criterion sample involves the comparison of successful performers with those people who have been less successful in order to identify the characteristics associated with success (Spencer & Spencer, 1993). This approach is used typically when the "most value added" jobs are being analysed. This is the most expensive method to adopt.

(c) Collect information

Data collection methods vary depending on the style of competency model being used (Spencer & Spencer, 1993). The six most common methods used to develop competency models are (1) behavioural event interviews (2) expert panels (3)

surveys (4) competency model database "expert system" (5) job function/task analysis and (6) direct observation (Spencer & Spencer, 1993:97).

Kandola and Pearn (1992) recommend using both structured techniques (eg WPS and PAQ) and semi-structured techniques (eg CIT and RGT) as they each provide a different perspective on a job role. Consequently they all make a very valuable contribution, in terms of deriving, defining and describing competencies, which is the final step in the process.

(d) Analyse information and develop a competency model

At this stage, information from all sources and methods is analysed to identify the characteristics that distinguish superior performers from average performers (Spencer & Spencer, 1993). This process is often referred to as "thematic analysis" or "concept formation". Data can be analysed in any manner that is preferable to the researcher. Themes and concepts can be documented as they emerge or appear in the data or an approach can be adopted whereby specific themes or concepts (eg as generated by the WPS) are confirmed by evidence (Spencer & Spencer, 1993). Themes not generated by an expert system (eg the WPS) but appearing in other tools used (eg in the RGT) would need to be identified and included in the final model (Spencer & Spencer, 1993).

The process of gathering and thematically analysing data and formulating competencies that reflect superior performance, is the foundation of any competency model and its complexity should not be underestimated (Spencer & Spencer, 1993).

(e) Validate the competency model

Having identified the distinguishing characteristics of superior performers, the model should be validated. There are three ways in which a model can be validated (Spencer & Spencer, 1993:105), namely:

- *Concurrent cross-validation:* This involves collecting BEI data from a second criterion sample of superstars and average performers. Scores from this group can then be used to see if the competency model based on the first

study predicts the superior and average performers in the second sample (Spencer & Spencer, 1993).

- *Development of tests*: Tests can be designed to measure the competencies described in the model and used to test people in a second criterion sample of superior and average performers (Spencer & Spencer, 1993).

- *Predictive validity:* Given that the primary objective of a competency model is to predict performance, the most powerful way of validating the model is to train people in using the competencies and see if these people actually perform better in the future (Spencer & Spencer, 1993).

(f) Prepare applications of the model

This is discussed in detail in section 3.1.6.

3.1.5 Structure of a Competency Model

A competency model is described by HayGroup (n.d.b) as "a list of relevant competencies for a role with definitions and behavioural statements of what each competency looks like in action". An illustration of a competency is shown in table 3.3.

Table 3.3 Illustration of a Competency

Competency Title	Information Seeking
Definition	An active curiosity and desire to know more about things, people or issues. Makes an effort to find out more, doesn't accept situations at face value, goes beyond routine questions; scans for information that may be of future use
Descriptions	Asks questions of people involved in a situation, even those not actually present. Even in a crisis takes time to gather any available information before taking action Personally investigates: gets out and about and finds out from people closest to the problem Digs deeper: probes below the surface to get to the root of problems Contacts others who are not personally involved to get their perspective Does research: makes systematic effort over limited time period to get data; uses media and other sources to gather information Establishes own systems for gathering and using information, including walking the job and using meetings Involves others who aren't involved to seek out information

(Adapted from Spencer & Spencer, 1993:34-35)

3.1.5.1 Categories of Competencies

Having identified the various competencies required for a specific role, they need to be categorised into a logical structure. According to Spencer and Spencer (1993), competencies should always be presented in clusters. Competencies can be clustered in several ways. These include by dictionary cluster (eg achievement oriented, power related, interpersonal, self-management, etcetera, by job task or

responsibility or by logical sequence in time. Competencies can be categorised or prioritised in different ways depending on the needs of the user (SHL, 1994).

(a) Spencer and Spencer's categories

Spencer and Spencer (1993) use the category titles of threshold and distinguishing competencies to categorise competencies.

(i) Threshold Competencies

Threshold competencies are the essential characteristics that you require a person to possess if they are to be minimally effective in their job, but are not causally related to superior performance on the job (Spencer & Spencer, 1993). They suggest that a threshold competency for a CA could be the understanding of a profit and loss account.

(ii) Distinguishing Competencies

Distinguishing competencies are characteristics that differentiate between superior and average performance (Boyatzis, 1982; Spencer & Spencer, 1993). Work orientation, reflected in an individual's willingness to work long hours to complete an engagement on time, could be an example of a distinguishing competency for an auditor (Spencer & Spencer, 1993). Distinguishing competencies can be further categorised into generic or specific competencies.

- *Generic competencies*: Those competencies which would be universally applicable or applicable across organisational boundaries (ie applicable in a number of organisations). Organisational specific competencies are those competencies which are specific to positions within a particular organisation (Woodruffe, 1992). The evidence supporting the existence of certain generic management competencies, irrespective of the specifics of the job, is strong, but not conclusive (Boak, 1991). During the mid 1980s a significant effort was made in the field of competencies to develop generic models that reflected the competencies of superior performing managers. Examples of these models are detailed in section 3.1.8. The key concern associated with generic models is that the terminlogy used is not always concruent with the organisational culture within which the model is to be used. This can result in

a situation where a specific behaviour can be described in the model as "achievement orientation" where in the user organisation the same behaviour is referred to as " drive for results" (McClelland, 1994:6). Generic models also assume a uniformity of job titles and hierarchical structures. Another limitation with generic competencies is that generic lists are often seen as applicable in their entirety and the problem is selecting only those competency dimensions which are applicable or necessary (Woodruffe, 1992). In addition generic models do not take into account the specific demands of the job (Boak, 1991). Generic models are good as a comparative base, after specific competencies have been identified. The advantages of a generic model are the cost and time savings as well as the reassurance that the competencies are thoroughly researched and valid.

- *Organisational Specific Competencies:* Those competencies which are specific to positions within a particular organisation (Woodruffe, 1992). Most jobs/positions require some unique characteristics which can account for up to 20% of a job. Typically these charcteristics would not be reflected in a generic model and for this reason developing competencies for a specific position is a more advisable option (Spencer & Spencer, 1993; Woodruffe, 1992). The key limitation in developing specific competencies is that it is very time consuming, and it is often not possible to analyse all positions. Cannon (1995) and Tovey (1994) both strongly support the development of specific competencies within organisations. The decision to use a generic competency model or to develop organisational specific competencies rests with the application and purpose of the model.

(b) HayGroup's categories

HayGroup have a different set of categories. They use the following terminology to categorise competencies: emerging competencies, maturing competencies, transitional competencies and core competencies. Their rationale is that the competencies within each of these categories may vary depending on the life stage of the organisation and the industry within which the organisation operates (HayGroup, n.d.b).

(i) Emerging Competencies

Competencies that are termed as emerging are those that may not be particularly relevant to the organisation or job role today, but given the strategic direction of the organisation, greater emphasis will be placed on them in the future (HayGroup, n.d.b). An example of an emerging competency (Spencer & Spencer, 1993) could be "integration of diversity in the workplace"/cross-cultural sensitivity. Today it could be argued that "integration of diversity in the workplace" is no longer an emerging competency, but rather an essential or threshold competency.

(ii) Maturing Competencies

Competencies may be described as maturing when their relevance in the organisation is beginning to wane. The projected drop in relevance may be due to a shift in strategy or due to new developments (eg developing others) (HayGroup, n.d.b). An example of a maturing competency in organisations today could be "managing others".

(iii) Transitional Competencies

Transitional competencies are those that are currently not important to the organisation or are deemed not to be important to the organisation in the long term. However, these competencies represent an integral part of the change process and as such are highly relevant. Examples of transitional competencies identified by British Petroleum, Cadbury Schweppes, National Westminster and Shell include the following: the capacity to live with uncertainty, to manage stress, to cope with pressure and to manage conflict (HayGroup, n.d.b). Once again, the above-named competencies could be argued to be "core" or "threshold " competencies, as managing change is an integral part of the modern workplace.

(iv) Core Competencies

Core competencies are those that are defined as stable or enduring (HayGroup, n.d.b). They lie at the heart of effective performance and often underlie the processes of continuity and implementation. HayGroup (n.d.b) suggest reasoning or analytical ability as examples of core competencies.

3.1.5.2 "Shelf-life" of Competencies

Organisations today need to be dynamic if they are going to succeed (Lawler, 1994). As companies move through different stages of maturity the relevance of some or all of the competencies may change (HayGroup, n.d.b). Thus what constitutes effective performance today may not be the same tomorrow. The competency model selected or developed therefore needs to have a flexible framework that allows for or reflects the changing relevance of competencies both today and in the future. HayGroup (n.d.b) believes that competencies will change at a rate that is in proportion with the speed of change within the business life and the nature of the job. Mirabile (1990) believes that the actual competencies will not change but rather the ranking and proficiency requirements of the competencies will change. In line with Mirabile's (1990) thinking, one would expect some of the competencies to change competency groupings over time (eg "emerging" to "maturing"). While it is not possible to place a life expectancy on any competency, HayGroup (n.d.b) and Mirabile (1990) both believe that the need to redefine and reclassify competencies should occur every two to three years.

3.1.6 Application of a Competency Model

After a competency model has been validated, it can be used in a number of different ways (Spencer & Spencer, 1993). Competencies provide a common language and method for integrating all HR functions (SHL, 1999a). This includes all aspects of selection, (including assessment, job matching, recruitment and placement), performance management (including performance appraisals and retention management), career and succession planning, training and development, and compensation and reward. By understanding the competency requirements of each position, employees can be more accurately assessed for the position. Selection will therefore be based on competencies known to be successful. If employees are optimally matched to their jobs, both job performance and job satisfaction will be higher (Spencer & Spencer, 1993). In addition, training or development needs can be identified early in the process as being the difference between what the individual brings to the job and what is required for effective/superior performance in the job. Staff will know from the outset what is

required of them and managers will have a clearer understanding of the capabilities of their staff as well as a more accurate knowledge of the tasks they can expect to be performed by the job incumbents (SHL, 1999a; Spencer & Spencer, 1993).

By expressing values in terms of behaviours, competencies provide a powerful tool for shaping organisational performance. Competencies are a tool which can and should be used to embed the culture of the organisation in the day to day behaviour of its people. A properly designed competency model should be a common language for people issues and can be used effectively in the measurement and management of people's performance at work (SHL, 1999a).

3.1.7 Benefits and Limitations of Competencies

The benefits and limitations associated with competencies are listed below.

3.1.7.1 Benefits

A competency-based approach to HR is advantageous in that:

- It is couched in terms of behaviours (ie what they actually do, not espouse to do) (Boam & Sparrow, 1992; Dinius & McIntyre, 1979; Spencer & Spencer, 1993).
- It is sensitive to and incorporates the needs of those individuals who are operating at the coal face.
- It is a pragmatic approach and looks at the effective behaviours of superior performers.

The above factors provide a solid foundation on which the people processes within the organisation can be integrated (Boam & Sparrow, 1992).

3.1.7.2 Limitations

The following comment was made by Zemke (as cited in Dubois, 1993:76) with regard to the JCAM:

> Its strength is that it isolated critical features of high performers. A weakness is that traits or behaviours which don't vary between high and low performers fail to appear in the final competencies. He also reported that needs for technical job knowledge tend to be lost in this process since 'entry level' knowledge and skills tend not to distinguish high and low performers, especially in higher level job classifications.

This comment highlights the point that, traditionally, competencies are understood to be differentiating characteristics, and core or threshold factors must still be incorporated in the final product developed, as is appropriate. Additional limitations of competencies are highlighted below.

Whilst the development of competency models is at the leading edge of people development practices, many organisations may not yet be at a stage of maturity/readiness to effectively implement the concept appropriately. Competencies should not be implemented in isolation and will require that other HR processes and systems be adapted or redesigned in order to realise their full benefits (Lawler, 1994).

A competency model is only as good as the methods used and the information gathered (Spencer & Spencer, 1993). If the "effectiveness or performance criteria" are not accurately defined, the model will identify the wrong competencies.

Competencies are intended to be dynamic and therefore need to be constantly reviewed and updated. A multi-method approach to developing a competency model is very costly and time consuming and it is unlikely that any company would be able to afford to conduct an exercise where the model could be cross-validated using a criterion sample (McClelland, 1994).

3.1.8 Comparison of Models

Given that little has been reported in literature on the underlying characteristics of high-performing accountants, it was felt that it would be useful to compare some general characteristics of high performers.

There is an abundance of literature available on topics covering "the studying of success" (Trotter, 1996), making it impossible to list or evaluate them all. In table 3.4, six models that have identified general management competencies of high performers have been selected and compared. The following models were compared: Schroder's 11 High-performance managerial competencies (as cited in Tate, 1995), the Management Charter Initiative (MCI) model (as cited in Boak, 1991), the AMA model (as cited in Boak, 1991), McBer's Dictionary of Competencies (as cited in Trotter, 1996), Constable's model (as cited in Tate, 1995) and the Klemp and McClelland model (as cited in Boak, 19991). These models have been selected as they were all developed at similar times (during the 1980s). In addition they were all developed for the specific purpose of trying to identify generic competencies (Boak, 1995).

Competencies have been selected to be listed in the table where they have appeared in at least two of the models that are being compared. Where competencies are specific to one particular model, they have not been listed. Full descriptions of the competencies that comprise these six models are detailed in the appendix.

Table 3.4 Comparison of Six Management Models

Competency Title	Schroder	MCI	AMA	McBer	Constable	Klemp
Concept formation	X	X	X	X	X	
Self-confidence	X	X	X	X		X
Impact	X	X	X	X		X
Achievement orientation	X	X	X	X	X	
Leadership	X		X	X		X
Development orientation	X	X	X	X		
Information seeking	X	X		X		X
Proactive orientation	X		X	X	X	
Planning & organising		X	X	X		X
Conceptual flexibility	X		X	X	X	
Interpersonal search	X	X		X		
Directive influence		X		X		X
Analytical thinking		X	X	X		
Self-control		X	X	X		
Relationship building		X		X		
Presentation skills	X		X			
Resilience			X		X	
Decisiveness		X			X	

In comparing the above models, the similarity in the competencies identified is very noticeable. Of the 18 competencies listed above, the following 10 competencies are common to at least four of the six models being evaluated: concept formation, self-confidence, impact, achievement orientation, leadership, development orientation, information seeking, proactive orientation, planning and organising, and conceptual flexibility. All 10 of these competencies are included in the McBer model. Such a strong overlap in competencies identified provides support for the development of generic models, that reflect the commonality of skills required at management level (Spencer & Spencer, 1993).

A more recent model that has identified managerial competencies of high performers is the Generic Managerial Model developed by Spencer and Spencer (1993). The Generic Managerial Model has been developed based on the results of 36 different managerial models covering a wide range of levels and functions. The competencies, which are listed in decreasing order of frequency, are (Spencer & Spencer, 1993:201):

- Impact and influence
- Achievement motivation
- Teamwork and co-operation
- Analytical thinking
- Initiative
- Developing others
- Self-confidence
- Directiveness/assertiveness
- Information seeking
- Team leadership
- Conceptual thinking

The characteristics listed below have been identified by Hodgeson and Cranier (1993) as the foundations of high performance:

- Awareness of limitations and shortcomings
- Clarity and action
- Commitment and energy

- Key simplicities
- Contributing as a leader
- Fluency with their environment

Rich (1988) identified the following 10 core competencies:

- Self-confidence
- Motivation
- Effort
- Responsibility
- Initiative
- Perseverance
- Caring
- Teamwork
- Common-sense
- Problem-solving

The competencies identified by Spencer and Spencer (1993) and Rich (1988) are fairly recent models (late 80s and early 90s) and are very similar to those identified in earlier models. Competencies by definition focus on those individual aspects that are common or core amongst jobs. The above models highlight these similarities and broad applicability. Given this broad applicability, the above generic models would appear to be relevant to the auditing profession, specifically for years 4–5+, where their responsibilities are more managerial in nature.

3.2 COMPETENCIES AND THE AUDITING PROFESSION

It is well recognised today that all professions require more than just (technical) knowledge in order to be successful. To function successfully, professionals need specific competencies (McClelland, 1994). A search on the PsycINFO database (1990–2001) did not reveal any literature on specific competency models developed for auditors. The following attributes, skills and reported profiles of CAs and auditors were found.

3.2.1 Attributes and Skills Required of Chartered Accountants

Investigations into the general and specific characteristics of those in the accounting profession have interested researchers for many decades (Amernic, Aranya & Pollock, 1979). However, limited research was available where the behavioural traits of CAs had been examined.

Abdolmohammadi and Shanteau (1992) conducted a study to investigate the personal attributes of expert auditors. The study reviewed three groups of auditors: managers/partners, seniors/supervisors and auditing students. The following findings were reported (Abdolmohammadi & Shanteau, 1992:168):

- Their primary finding was the similarity between the groups. However, there were some notable differences: the manager/partner group tended to place more emphasis on how experts think rather than on how they behave; the senior/supervisor group tended to put more importance on decision-making skills; and the student group tended to stress externally identifiable characteristics.

- "Knowledge", "knows what's relevant" and "experience" emerged as the most important characteristics. These can all be described as cognitive characteristics.

- The second group of important characteristics reflected style or presentation characteristics (eg "assumes responsibility" and "self-confidence").

- The next most important characteristics have been termed "strategic" or "problem-solving" competencies. These included characteristics such as "creativity", "problem simplification" and "analytical" type skills.

- Characteristics such as "personal appearance" emerged as unimportant in this study.

In a study conducted by Dinius and McIntyre (1979), it was found that successful accounting students were highly motivated; had a strong desire to succeed; had superior exam taking ability; and were very conscientious and persistent. They remained cool in stressful situations and were uninterested in creativity, although they were extremely interested in problem solving.

SAICA (2000:9) has identified three categories of skills that they believe are required of CAs. These are described below.

3.2.1.1 Intellectual Skills

- The ability to conduct research, to apply the principles of abstract logical thinking and to apply inductive and deductive reasoning
- The capability to identify and solve problems in a consultative process
- The ability to prioritise resources and activities
- To adapt readily to change
- The ability to apply theoretical knowledge to real world problems

3.2.1.2 Interpersonal Skills

- The ability to work with others particularly in a team environment
- To lead the team and to be able to resolve and avert conflict as appropriate
- To interact with culturally and intellectually diverse people
- To negotiate acceptable solutions

3.2.1.3 Communication Skills

- To present, discuss and defend views both formally and informally
- To present ideas and views effectively both verbally and in written format
- To listen effectively
- To source and integrate different types of information and data effectively

From the above lists, it appears that the ability to interact and communicate with other people is as important as one's cognitive skills.

3.2.2 Personality Profiles of Chartered Accountants

The following was found in literature regarding the personality attributes ascribed to CAs.

- Maslow (as cited in Aranya, Barak & Amernic, 1981) describes CAs as precise when it comes to detail, uncreative and people who prefer not to encounter new things without being thoroughly prepared for them.

- O'Dowd and Beardslee (as cited in Amernic et al, 1979) described CAs as passive, constructive, stable and well balanced people who prefer to work in a well balanced environment. They are also reported to have low social interests.

- De Coster and Rhode (as cited in Aranya, Meir & Bar-Ilan, 1978) found that CAs scored higher in sociability (ie friendliness, personal acceptance and psychological sensitivity) and communality than other professions taking part in the California Personality Inventory questionnaire.

- Using Holland's theory, CAs are described as the conventional type (Aranya et al, 1981). Given the challenges that are facing the accounting profession, the profession needs to attract more people with creative characteristics (Amernic et al, 1979).

- In a study using the Myers–Briggs Inventory (Shackleton, as cited in Granleese & Barrett, 1990) it was found that the " Introversion, Sensing, Thinking, Judging" (ISTJ) and "Extroversion, Sensing, Thinking, Judging" (ESTJ) types acccounted for 40% of the variance on a study of CAs. These individuals are described as the type of people who focus their attention on facts rather than possibilities, handle these with impersonal analysis rather than personal warmth, tend to be matter-of-fact and are well organised.

- Granleese and Barrett (1990) tested 100 members of the Institute of Accountants in Ireland. Their results suggested that CAs are socially conforming, stable introvert, calm, even tempered, controlled and unworried. They enjoy books, like to plan ahead, are reliable, pessimistic and place great value on ethical standards.

- Aranya, Meir and Bar-Ilan (1978) reported that accounting students displayed a higher interest in the business and organisational fields when compared with psychology students who demonstrated an interest in the service field.

- Jacoby (as cited in Booth & Winzar, 1993) found in a study of three of the Big 8 Public Accounting Firms in the US that all subjects had high frequencies of "Thinking, Judging" (TJ) combinations (55%), with "Sensing, Thinking, Judging" (STJ) combinations comprising 34% and "Introversion, Sensing, Thinking, Judging" (ISTJ) combinations comprising 20%.

- A study undertaken by Van der Linden (as cited in Booth & Winzar, 1993) found that the dominant Myers-Briggs Type Indicator (MBTI) profile of accounting students was consistent with that of practising accountants.

- According to Pavlock (as cited in Amernic et al, 1979) future professionals (eg CAs) will need to be more flexible (ie display a tolerance for ambiguity) and adaptable in order to be able to cope with the accelerating pace of change.

The above-mentioned characteristics are all measured profiles of CAs. One of limitation of personality profiles is that they measure what an individual says or thinks he will do (Dinius & McIntyre, 1979). This is contrasted with competencies, which, if identified correctly, are context sensitive and therefore describe what effective performers actually do rather than what the theories say are required for effectiveness (Dinius & McIntyre, 1979; Spencer & Spencer, 1993).

3.3 FUTURE OF COMPETENCIES

Competencies and competency modelling is an approach that is evolving rapidly (Schippmann et al, 2000). If the current focus on competencies is a response to changing organisational and environmental conditions, then it would appear logical to consider future developments in order to consider which competencies will be required for the future (Woodruffe, 1992). Schippmann et al (2000) believe that in the future, work in the field of competencies will be more technologically driven with improved software applications. Schippmann et al (2000) also believe that in the future the borders between job analysis and competencies will blur, resulting in a blend of best practice where the strengths of each approach are leveraged.

In an attempt to predict which competencies will be required in the future, Spencer and Spencer (1993) reviewed the various studies reported in their book *"Competence at Work"*. Spencer and Spencer (1993) concluded that relatively few competencies predict success at work and life, in general. Their recommendation is that if these predictions are true, then these competencies should be developed from an early age in a programme that is cumulatively-oriented and supported by parents, educational institutions and employers. The competencies of the future, predicted by Spencer and Spencer (1993:343), are the following:

- Achievement orientation
- Initiative
- Information seeking
- Conceptual thinking
- Interpersonal understanding
- Self-confidence
- Impact and influence
- Collaborativeness

Spencer and Spencer (1993) also report that because the business environment of the future is predicted to be dramatically different from its current state, it is critically important that organisations prepare for these changes by incorporating future competencies into their current models.

Competencies reported to be important for managers in the future are (Spencer & Spencer, 1993:343):

- Flexibility
- Change implementation
- Entrepreneurial innovation
- Interpersonal understanding
- Empowering
- Team facilitation
- Portability

Competencies reported to be important for employees in the future are (Spencer & Spencer, 1993:343):

- Flexibility
- Information-seeking motivation; and ability to learn
- Achievement motivation
- Work motivation under time pressure
- Collaborativeness
- Customer service orientation

It could be argued that the competencies "of the future" predicted by Spencer and Spencer (1993) almost eight years ago, are actually the competencies that are required in organisations today. According to Neercinx and Griffioen (1996), the competencies required in the future will be more cognitively-oriented as a result of the level of technology that is being introduced into organisations.

REMARKS

Having provided a conceptual framework that integrates the literature on competencies and reviews the relevance of competencies to the auditing profession, the theoretical aim of this chapter has been achieved. The literature suggests that although the field of competency modelling is emerging at an alarming pace, its application in the field of auditing to date has been limited. It does, however, appear to have much relevance and many potential applications.

3.4 CHAPTER SUMMARY

In this chapter competencies were defined, their development and application in industry was discussed and various approaches and techniques for identifying competencies were described. Models and literature pertaining to both competencies in general and specifically to auditors were also discussed. In addition, limitations and benefits associated with competencies were highlighted and the future of competencies was also discussed. The next chapter will look at how the research was conducted.

CHAPTER 4 EMPIRICAL STUDY

The empirical aims of this research are to develop a competency model for trainee accountants and CAs working in a professional services environment. This chapter details how the research was conducted. The empirical study consists of eight steps. These are listed below.

Step 1: Determination and description of the sample
Step 2: Selection of the job analysis tools and techniques
Step 3: Collection of the information
Step 4: Processing and analysis of the information
Step 5: Reporting and interpretation of the results
Step 6: Conclusions of the research
Step 7: Limitations of the research
Step 8: Formulation of recommendations

Steps 1–4 are reported in this chapter and step 5 in chapter 5 and steps 6–8 in chapter 6.

4.1 DETERMINATION AND DESCRIPTION OF THE SAMPLE

The following factors were considered when choosing the size and composition of the population to be sampled:

- Recommendations in literature
- Geographical location of the sample
- Time constraints (ie availability) of the subjects
- Time and financial constraints of the researcher
- Academic requirements

It was decided to limit the study to the audit division of one organisation and to sample all levels of staff (ie year 1&2, year 3, year 4, year 5+, including partner level). In total 33 people participated in the research.

Table 4.1 Breakdown of the Sample per Job Analysis Tool and Level

Job analysis tool	Partner	Year 5+	Year 4	Year 3	Year 2&1	Total
Work Profiling System	-	5	5	5	5	20
Repertory Grid	1	2	1	1	1	6
Critical Incident Technique	-	2	1	1	3	7
Total	1	9	7	7	9	33

Subjects were trainee and registered CAs from one of the "Big 5" audit firms. All subjects were selected based on their performance (ie rated as superior performers by a panel of audit partners). No contrasting sample was used. Information was collected from the sample group using a number of different job analysis tools and techniques, and each level was dealt with separately.

4.2 SELECTION OF THE JOB ANALYSIS TOOLS AND TECHNIQUES

The following factors were considered when choosing the job analysis tools and techniques:

- The opinions of "industry experts"
- Evaluation of the available and appropriate tools and techniques (ie those that would identify thoughts and behaviours causally related to successful outcomes)
- The literature review
- Cost and time constraints of the researcher
- Time and geographical constraints of the subjects

For the purposes of this research, a multi-method, behaviour-oriented approach was adopted. This approach was selected as it focuses on identifying the underlying characteristics of people that influence the orientation and ways in which they use their skills and knowledge (Spencer & Spencer, 1993). The tools and techniques that were used are viewed as complementary and have been selected as they generate different types of information. Kandola and Pearn (1992) and Levine et al (1980) all support the idea of a multi-method approach.

The following instruments were selected to be used in this research project:

- Work Profiling System (WPS)
- Repertory Grid Technique (RGT)
- Critical Incident Technique (CIT)

Each of these instruments will be discussed in more detail in sections 4.2.1, 4.2.2 and 4.2.3 respectively.

4.2.1 Work Profiling System (WPS)

The WPS will be discussed with reference to the rationale, development, description, administration, interpretation, reliability and validity of the instrument and motivation for inclusion in the study.

4.2.1.1 Rationale of the WPS

Over the past decade assessment methods have become increasingly more sophisticated (SHL, 1991). This has emphasised the complexity of matching people to jobs. This matching process has become more sensitive as a result of legislation that dictates against the discrimination of candidates on unfair grounds. Fair assessment is dependent on a thorough initial analysis of the job in question. The concept of an integrated job analysis system is not new, but developments in job analysis have not kept pace with developments in assessment technology. The WPS was developed in response to the above situation (SHL, 1991).

4.2.1.2 Development of the WPS

The WPS was developed by SHL (1995), a group of consulting psychologists in the UK during the period 1986–1990.

The key objectives when developing the WPS were (SHL, 1991):

- To develop an integrated job analysis system that would profile jobs both in terms of tasks/context involved and the relevant human attributes necessary for effective performance.
- To develop a system that could be operated easily by personnel specialists (ie not only by psychologists).
- To provide a knowledge base and expertise that would account for the complexity in a matching process (ie people to jobs).

Following in diagrammatic format is an overview of the development process for the WPS. Comprehensive details of the procedures followed are documented in SHL (1991).

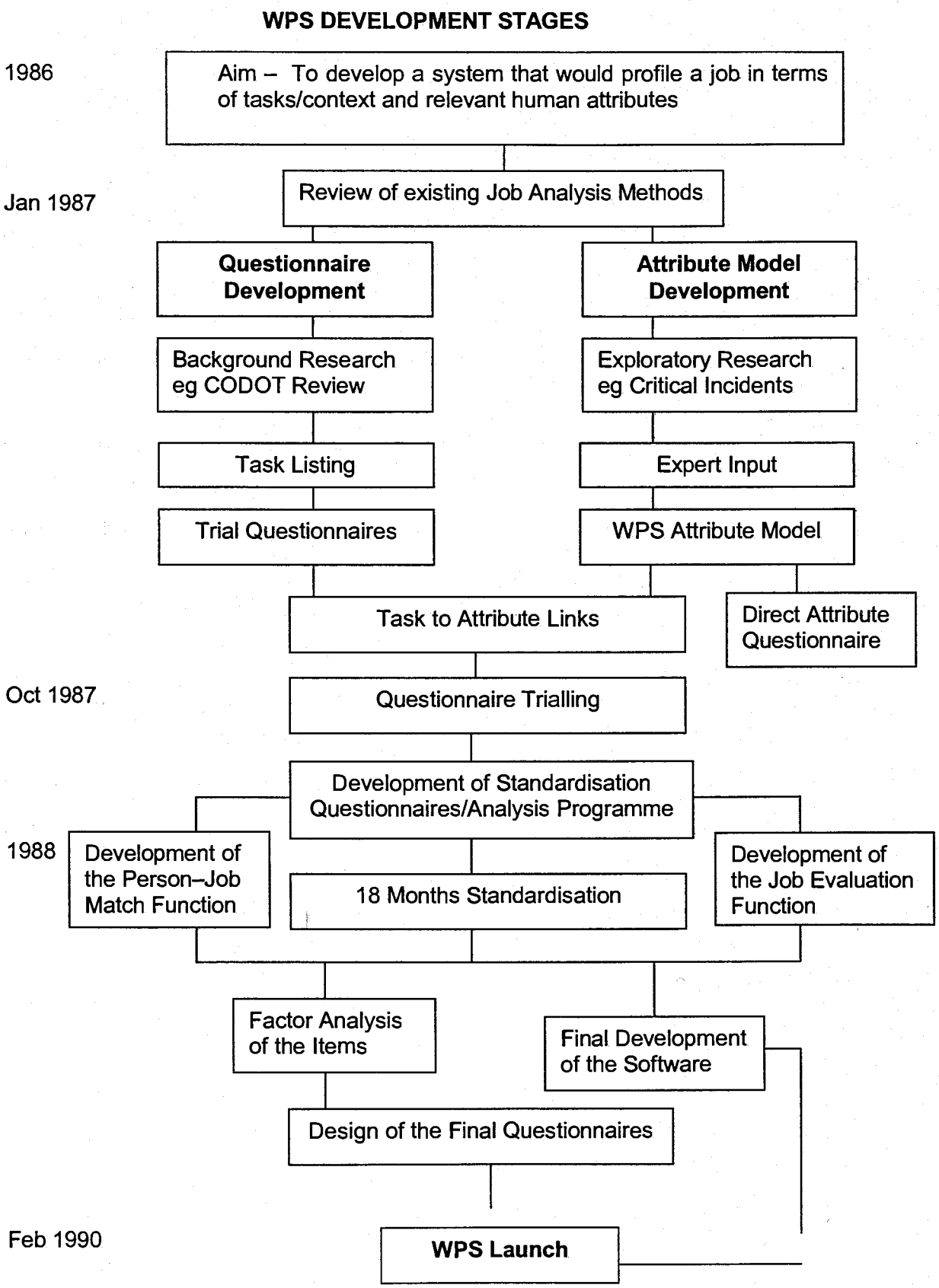

Figure 4.1 WPS Development Stages (SHL, 1991)

4.2.1.3 Description of the WPS

The WPS is an integrated job analysis system that has a behaviour-orientation (SHL,1994). It has been designed to gather comprehensive and appropriate information in a structured and efficient manner. The information can be used to meet a variety of objectives including (SHL, 1994:1):

- Providing a profile of job tasks and context
- Providing a profile of human attributes required for effective job performance
- Identifying relevant assessment methods
- Conducting job evaluations
- Identifying training requirements

The WPS comprises three separate questionnaires, which cover all types and levels of jobs (SHL, 1994):

- Managerial/Professional occupations
- Service/Administrative occupations
- Manual/Technical occupations

The questionnaires are identical in format, but cover different aspects of jobs to reflect the various demands of the different jobs (SHL, 1994).

4.2.1.4 Administration of the WPS

The WPS job analysis questionnaires can be administered to groups of respondents or administered individually (SHL, 1995). They may also be completed manually (ie paper and pencil) or electronically. For the purposes of this research, the managerial/professional questionnaire was used and was administered to groups of respondents/job experts (a minimum of five people were in each group). The responses were completed manually. Although only one questionnaire was completed per job level, the responses contained therein reflected the agreed views of all those participating in the session.

According to SHL (1995), the WPS administration process consists of the following nine steps:

Step 1: Introduce the procedure
Step 2: Complete the analyst information sheet
Step 3: Elicit the job objectives
Step 4: Select the task categories
Step 5: Rate the task statements
Step 6: Rank the task categories
Step 7: Complete the job context
Step 8: Close the session
Step 9: Validate the data

(a) Introduce the procedure

As with most other psychological procedures, it is critically important that respondents are fully aware of the purpose of the activity and the process that is to be followed. If this has not been communicated to the respondents, the job analyst should communicate it at this stage (SHL, 1995; Spencer & Spencer, 1993).

During the introduction stage all respondents should be provided with a questionnaire booklet, a set of task category cards and an analysis form. In this research respondents each received a questionnaire booklet and a set of task category cards. As only one analysis form was completed per group, this was retained by the job analyst, who had the responsibility of recording the responses on the answer sheet.

(b) Complete the analyst information sheet

This form comprises questions about the job being analysed. The section of the form should be completed before the job analysis section commences (SHL, 1995).

(c) Elicit the job objectives

Job objectives refer to the desired work outcomes (Spencer & Spencer, 1993). It is recommended that between 5 and 10 key job objectives are generated. Job objectives generally begin with the word "to" and usually include a time or quality component. The development of the job objectives is a critical part of the WPS

process as respondents are later asked to rate task statements for importance in meeting these job objectives (SHL, 1995).

In this research each respondent in the group was asked to independently write down their 10 most important job objectives. (Each job objective was written on a single "post-it"). Job objectives from all of the respondents were then grouped together on a flip chart into common categories or work output areas. As a group, a listing of the key job objectives were agreed and finalised. These job objectives were then copied on to the information sheet. The pool of job objectives generated were used later in the process to generate some of the behavioural statements.

(d) Select the task categories

This part of the process involves selecting job-relevant task categories (SHL, 1995). Each questionnaire type is made up of 28–31 task categories organised into activity sections (SHL, 1995). The managerial/professional questionnaire comprises seven activity sections (A–G). Each of these activity sections is then further divided into a number of sub-categories, referred to as task categories (31 in total). Each of these task categories comprises a number of task activities. The seven activity sections and their task categories are listed below (SHL, 1996).

MANAGING TASKS

A1 Planning
A2 Implementing/Co-coordinating
A3 Controlling/Directing
A4 Reviewing/Evaluating

MANAGING PEOPLE

B1 Supervising/Directing
B2 Appraising/Evaluating/Developing
B3 Motivating
B4 Assisting/Caring
B5 Disciplining/Disputes/Grievances
B6 Counselling
B7 Co-ordinating/Liaising

RECEIVING INFORMATION

C1 Investigating/Observing/Searching

C2 Taking information from the senses

THINKING CREATIVELY

D1 Artistic Creativity

D2 Problem Solving/Designing

WORKING WITH INFORMATION

E1 Assessing/Evaluating

E2 Analysing/Diagnosing

E3 Integrating/Coding/Estimating

E4 Calculating

E5 Interpreting

E6 Checking

E7 Deciding

E8 Learning/Researching

COMMUNICATING

F1 Influencing/Advising

F2 Presenting/Instructing/Briefing

F3 Informing/ Discussing/Interviewing

F4 Writing/ Administration

F5 Representing/Selling

F6 Public Relations/Developing Relationships

PHYSICAL ACTIVITIES

G1 Performing Physical Tasks/Operating Vehicles

G2 Using Tools/Machinery

Respondents are instructed to select from the cards, the 8–12 task categories (from the 31 available) that are most important to achieving their job objectives. To

help with this process, it is recommended that the cards be divided into the following three sections:

- Definitely a key job objective
- Definitely not a key job objective
- Not sure – possibly a key job objective (SHL, 1995)

In this way certain activities are eliminated immediately and the remaining activities can be prioritised appropriately.

It is recommended that between 8 and 12 (and no less than five) task categories be selected as most important to meeting the job objectives. If too many cards are selected, the respondent has not differentiated sufficiently between those activities that are of primary and those that are of secondary importance. Too few cards could indicate an over simplification or leaving out of significant components of the job (SHL, 1995). Additional task categories can be removed later if respondents realise that not one of the task statements is relevant. Additional task categories can also be added if respondents deem this necessary at a later stage.

In this research respondents individually chose ten task categories. As a group the task categories were then sorted and prioritised into the 10 most important categories. These were then recorded on the form.

(e) Rate the task statements

This stage of the process requires each respondent to have a questionnaire booklet and the WPS analysis form (SHL, 1995). Detailed instructions are contained in the questionnaire booklet. The respondent should also be shown how the analysis form fits under the questionnaire to ensure that the responses are coded accurately (SHL, 1995). The rating scale to be used to rate the task statements is also contained on the inside cover of the questionnaire booklet. Each task category consists of a list of task statements. Below is an example of a task category card detailing task statement(s).

Table 4.2 WPS Task Rating Scale

A	Managing Tasks 1: Planning / Implementing	Time	Importance
1	Planning **short-term** (task) **objectives**		
2	Planning **long-term** (strategic) **objectives**		
3	**Setting priorities** for utilising resources		
4	**Defining objectives** for an organisation or department		

(SHL, 1996)

For each task statement chosen as being important to achieving his/her job objectives, the respondent is asked to indicate the proportion of time spent performing those tasks. Tasks are rated using the following scale:

Table 4.3 WPS Time Rating Scale

Scale position	Proportion	Per week	Per month	Per year
A	Up to 5%	Up to 2 hrs	Up to 1 day	Up to 3 weeks
B	6–10%	2,1 to 4 hrs	1,1 to 2 days	3,1 to 5 weeks
C	11–20%	4,1 to 8 hrs	2,1 to 4 days	5,1 to 9 weeks
D	21–50%	8,1 to 20 hrs	4,1 to 10 days	9,1 to 24 weeks
E	Over 50%	Over 20 hrs	Over 10 days	Over 24 weeks

(SHL, 1996)

Where time is spent performing the task or behaviour, the respondent is asked to indicate its importance to achieving his/her job objectives. Not all the tasks listed on the task statements will be relevant to all jobs. Where a task is not applicable, it should be left blank. Where items have been selected as being important to meeting job objectives, both time and importance ratings must be given. Tasks are rated using the following scale:

Table 4.4 WPS Importance Rating Scale

7	Essential to the total job objectives
6	Very important to the total job objectives
5	Important to the total job objectives
4	Moderate importance to the job objectives
3	Little importance to the job objectives
2	Very little importance to the job objectives
1	No importance to the job objectives

(SHL, 1996)

At this stage SHL (1995) recommend that respondents scan the remaining cards to ensure that the task categories and task statements that they previously identified as not job relevant, have not changed in status (SHL, 1995). In this research, time and importance ratings were determined as a group.

(f) Rank the task categories

After all the task categories have been rated for time spent and their relative importance to achieving job objectives (SHL, 1995), the chosen task categories must be ranked from 1–8, (with 1 being the highest rating and 8 the lowest) according to their importance to the meeting of job objectives. Equal ratings can be assigned to task categories but should be avoided where possible, as the objective of this step in the process is to differentiate between most and least essential activities (SHL, 1995). It is essential that task categories be ranked appropriately.

In this research each respondent independently ranked the task categories. The final list was determined by using those categories that received the highest number of 'votes'. The group agreed to the final list of ranked categories.

(g) Complete the job context

This section collects the information pertaining to the context in which the job takes place (eg environmental conditions, travel requirements, degree of change taking place in the job, etc) (SHL, 1995). Each item has its own question and

rating scale. In the managerial/professional questionnaire this section comprises 38 sections each with its own sub sections.

In this research the job context questions were completed as a group.

(h) Close the session

At this stage respondents are asked to check the form for completeness. Thereafter the respondents are to be thanked for their time and their contribution (SHL,1995).

In this research the form was checked for completeness by the job analyst/researcher.

(i) Validate the data

This involves reviewing the information gathered on the Job Analysis Questionnaire (JAQ) to ensure that it makes sense (SHL, 1995). This can be done immediately after the session or later. It is the responsibility of the job analysts to ensure that the information gathered is an accurate reflection of the job. It is also an ideal opportunity to gather more information about the job. Any information gathered at this stage should be documented and included in the job analysis documentation (SHL, 1995).

In this research the information generated by the JAQ was validated at a later session with members of the team.

The entire procedure takes approximately 4–5 hours to complete.

Analysts must be trained by SHL before being allowed to administer the instrument. The researcher attended training before commencing with the research.

4.2.1.5 Interpretation of the WPS

Given the volume and complexity of the information gathered, all information needs to be computer analysed (SHL, 1995). Reports that describe what the job involves and which attributes and abilities are required for effective performance can be generated (SHL, 1994). The system does not focus on specific knowledge or functional skills required. These technical skill requirements are available from SAICA (2000). A number of reports are available and have been designed for various purposes. The different report types are listed below (SHL, 1994):

- Job Description Report
- Person Specification Report
- Assessment Methods Report
- Individual Development Planner Report
- Performance Review Form
- Job Evaluation Report
- Interview Schedule
- Personality Caveat
- Perspectives In Management Competencies Report

The reports and profiles generated provide a solid framework from which clearly defined competencies can be developed (Kandola & Pearn, 1992). For the purposes of this research the Person Specification Report (SHL, 1999b) will be the primary report used. This report has been selected as it identifies the most relevant job competencies based upon an analysis of the tasks, activities and work context of the job under review. The profile generated is based on one of SHL's competency models, called Inventory of Management Competencies (IMC). The IMC comprises 16 competencies, grouped into four categories. The names and descriptions of these competencies are presented in table 4.5. The IMC model has been selected as it provides an established base against which key trends and themes from the other tools and techniques can be grouped.

Table 4.5 IMC Competencies

Competency	Description
Action orientation	Demonstrates a readiness to make decisions, takes initiative and originates action
Commercial awareness	Understands and applies commercial and financial principles. Views issues in terms of costs, profits, markets and added value
Flexibility	Successfully adapts to changing demands and conditions
Creativity and Innovation	Creates new and imaginative approaches to work related issues. Identifies fresh approaches and shows a willingness to question traditional assumptions
Interpersonal sensitivity	Interacts with others in a sensitive and effective way. Respects and works well with others
Leadership	Motivates and empowers others in order to reach organisational goals
Verbal communication	Speaks clearly, fluently and in a compelling manner to both individuals and groups
Personal motivation	Commits self to work hard towards goals. Shows enthusiasm and career commitment
Persuasiveness	Influences, convinces or impresses others in a way that results in acceptance, agreement of behaviour change
Planning and organising	Organises and schedules activities and resources. Sets up and monitors time scales and plans
Problem solving and analysis	Analyses issues and breaks them down into component parts. Makes systematic and rational judgements based on relevant information

Competency	Description
Quality orientation	Shows awareness of goals and standards. Follows through to ensure that quality and productivity standards are met
Specialist knowledge	Understands technical or professional aspects of work and continually maintains technical knowledge
Strategic	Demonstrates a broad based view of issues, events and activities and perception of their longer term impact or wider implications
Written communication	Writes in a clear and concise manner using appropriate grammar, style and language for the reader
Resilience	Maintains effective work behaviour in the face of set-backs or pressure. Remains calm, stable and in control of themselves

(SHL, 1999b)

4.2.1.6 Reliability and Validity of the WPS

The possibility of error in measurement has been well considered in the development of the WPS (SHL, 1995). The system relies on numerical rating scales and therefore its reliability and validity can be measured. It remains however a job analysis system that, like most others, is heavily dependent on the language used, the phrasing of the questions and the conceptualisation of constructs based on personal/individual experiences (SHL, 1995). These factors impact the ease with which the reliability and validity of the system can be assessed.

(a) WPS Reliability

The WPS measures the perception of a job through one or more job subject matter experts (SHL,1995). The analysis system allows for multiple questionnaires

to be completed for one job, and provides variance measures as an indication of any differences in job perceptions. Differences in perceptions about the job are not treated as an error of measurement but rather as another source of information (SHL,1995). It is the responsibility of the job analyst to resolve any differences in job perceptions. Although more practical, inter-rater reliability is not viewed as the most appropriate form of reliability measurement. A reasonable level of stability would however still be expected (SHL, 1995).

In a test–retest reliability study conducted jointly by SHL and Sheffield University (SHL,1995), high reliability coefficients were reported. The component of the study conducted by SHL, using the managerial/professional questionnaires, with a sample size of 101 managers (*n = 101*) yielded the following reliability coefficients (SHL, 1995):

Table 4.6 Reliability Coefficients (Managerial/Professional)

		Managerial/Professional
Part 1	Importance scale	0,73
	Time scale	0,71
Part 2	All context items	0,66

The component of the study conducted by Sheffield University (SHL, 1995), using the managerial/professional and service/administrative questionnaires yielded the following reliability coefficients. This component of the study consisted of 16 *(n = 16)* service/administration interviews and 27 *(n = 27)* managerial/professional interviews.

Table 4.7 Reliability Coefficients (Service/Administration and Managerial/ Professional)

		Service/Administration	Managerial/Professional
Part 1	Importance scale	0,82	O,79
	Time spent scale	0,97	0,96
Part 2	All context items	0,89	0,87

It should be noted that when all zero scores on the item scale were excluded (ie 100% relevant items included) the median reliability coefficients reduced to about 0,70 for the service/administration questionnaires and about 0,60 for the managerial/professional questionnaires (SHL, 1995).

No other studies could be found where the reliability of the WPS has been investigated.

From the evidence presented, it would appear that the system has a high level of reliability.

(b) WPS Validity

The WPS provides a way of collecting job related information and analysing this data in order to present a comprehensive description of the job in terms of the tasks performed and the human attributes required by incumbents for effective performance (SHL, 1995). Validation therefore refers to the extent to which the job description accurately reflects the job. Validation can be measured in two ways (SHL, 1995):

- Comparison with other job analysis methods
- Conducting a person–job match study

(i) Comparison with other Job Analysis Methods

In a study undertaken by Huba and Melchior (as cited in SHL, 1995), where the WPS was compared with another more conventional job analysis method (name of method not specified), it was found that the results of the WPS analysis closely reflected the results of the other method. The conventional method was completed over several weeks, whilst the WPS was completed over a much shorter time period. In the overall summary of the research the following was reported:

"There was significant convergence in the sources of information in identifying the same factors as critical" (Huba & Melchior, as cited in SHL, 1995:118).

The WPS is designed to gather detailed information within a reasonable time frame (SHL, 1995). The above-mentioned study provides strong support for the

validity of the WPS. The output of the WPS is very comparable with the more traditional methods. It also highlights that the WPS is capable of detecting the subtleties which make jobs unique and which are usually only detected by the more conventional and time consuming methods (SHL, 1995) such as FJA and the PAQ. (Full details of the study are available from SHL).

The results of the above studies indicate that the validity of the WPS is high.

No other studies could be found where the validity of the WPS was investigated.

(ii) Conducting a Person–Job Match Study

SHL have been using the WPS since 1989 to assist with job analysis for personnel selection and validation research (SHL, 1995). During this time a number of studies have been conducted in which assessment methods recommended by the WPS have been correlated against measures of job performance (SHL, 1995).

To evaluate the integrity of the mappings between the WPS content and context items, the Human Attribute Model and the recommended assessment methods, the data from seven separate criterion-related validation studies were analysed to determine the relationship between the Person–Job match (as per the original WPS reports) and overall performance ratings. Overall performance was used as it was the only criteria common across all seven of the studies. These studies involved different job types, assessment methods and organisations. A total of 536 candidates were included in the study (SHL, 1995).

The results indicate a high correlation between WPS match scores and overall job performance. This suggests that workers achieving higher match scores were more likely on average to receive higher overall job performance ratings (SHL, 1995).

Table 4.8 WPS Person–Job Match Scores Correlated with Overall Job Performance Ratings

Study	Job Description	*n*	*r*
1	Administrators	91	0,40**
2	Billing clerks	55	0,32*
3	Credit analysts	80	0,31*
4	Customer service	97	0,25**
5	Financial analysts	85	0,38**
6	Maintenance workers	23	0,60**
7	Production workers	105	0,38**
	Combined group	536	0,36**

Note ** indicates significance at the 0,05 level; * at the 0,01 level, one tail (SHL, 1995)

These results provide evidence of the validity of the WPS for identifying relevant assessment methods and person specifications from structured work-oriented questionnaires completed by job experts (SHL, 1995).

4.2.1.7 Motivation for Inclusion

The WPS was used in this study for a number of reasons. These are:

- It is a tool that has been specifically designed for the work place (SHL, 1994).
- It has high reliability and validity coefficients.
- The results are generated by an expert system (ie are computerised), which not only makes the process more efficient, but also makes the results less subjective.
- It was recommended in the literature survey (Kandola & Pearn, 1992).

4.2.2 Repertory Grid Technique (RGT)

The RGT will be discussed with reference to the rationale, development, description, administration, interpretation, reliability and validity of the technique, and motivation for inclusion in the study.

4.2.2.1 Rationale of the RGT

The RGT was developed by Kelly (1955) as a basis for understanding how people perceive their environment and how that perception in turn influences their behaviour. Most job analysis methods are not linked to a scientific theory or approach (Levine et al, 1988). The RGT is an exception. It is derived from the PCT of Kelly (1955). The PCT was developed by Kelly (1955) in the 1930's as a basis for counselling students. Kelly's approach at the time was to focus in depth on the individual. It assumed that people were fundamentally active, inquisitive and keen to investigate all aspects of themselves and their environment (Easterby-Smith & Thorpe, 1996).

The four assumptions underlying the grid technique are described below (Easterby-Smith & Thorpe, 1996).

- *A person's processes are psychologically channelled by the ways in which he/she anticipates events:* This means people are oriented towards the future rather than the past. A person's approach to anticipating what will happen in the future will influence the way they act or operate in the present. It also assumes that the individual is an active user of knowledge in an organisation and not a passive recipient.

- *Persons differ from one another in their construction of events:* Essentially this means that two people may perceive and react to the same situation in two different ways.

- *To the extent that one person employs a construction of experience that is similar to that employed by another, his psychological processes are similar to those of the other person:* This suggests that people can construe in similar ways and that individuals are not entirely unique. The point to note is that one cannot assume either communality or individual difference.

- *A person's construction varies as he or she successively construes the replication of events:* This means that people learn and develop from their experiences. In addition it implies that people may change their view of the world as a result of these experiences (Easterby-Smith & Thorpe, 1996).

Although the methodology of the RGT is straight forward, it is useful to have an understanding of the theory that underlies it (SHL, 1994).

The terms *element* and *construct* are important when using the RGT (SHL, 1994): An element is described as the 'objects' (ie people, places, things) within a person's environment; and a construct is described as the 'qualities' which the person uses to describe and differentiate between the elements.

4.2.2.2 Development of the RGT

The RGT has been established as a psychological technique for over 40 years (Easterby-Smith & Thorpe, 1996). It was developed by Kelly (1955) who suggested that an individual's personality is based on the use of mental patterns or "personal constructs" that are used by people to interpret their environment. It is people's perception of their environment that in turn influences their behaviour. Kelly believed that individuals developed theories about the environment in which they lived and that these theories are tested through behaviour and then modified accordingly. This happens on a continuous basis. In effect therefore, the individual is continuously developing thoughts about his environment. In the language of the RGT, the individual is "construing" about "elements" in the environment (SHL, 1994).

In addition, Kelly (1955) suggested the existence of *constructive alternativism*, a mental process by which two choices, objects or people can be distinguished mentally. The concept of constructive alternativism led Kelly to the development of a measurement instrument, (known today as the Repertory Grid Technique), based on a subject's assessment of bipolar adjectives or constructs (Baldwin & Greene, 1996).

Up until the mid 1960s the majority of its applications had clinical orientations and it was only after this time that the potential of the instrument was realised in non-clinical areas and it is in even more recent years that applications in the Human Resources Development field have been identified (Easterby-Smith & Thorpe, 1996).

4.2.2.3 Description of the RGT

The RGT is a (semi) structured interviewing technique which can be used for a number of purposes including job analysis.

Used as a job analysis tool, it provides a bipolar basis for eliciting constructs and classifying information (SHL, 1994). More specifically, it is used to identify the specific skills and characteristics possessed by more effective performers, which differentiate them from those, which are less effective (Pearn & Kandola, 1993). The RGT is a powerful way of bringing to the fore people's perceptions, attitudes or concepts in an uncontaminated manner (Easterby-Smith & Thorpe, 1996; Honey, 1992). It is essentially a representation of relationships. The key, however, is to determine what the constructs reveal about the person's way of thinking and acting.

There is no set format as to the layout of a repertory grid. SHL (1994) recommend that the grid be set out as illustrated in table 4.9.

Table 4.9 Illustration of a Repertory Grid

	Elements								Constructs	
Sort no	1	2	3	4	5	6	7	8	Why two constructs are similar	Why one construct is different
1	7	5	6	5	4	1	3	2	Makes careful plans for the future	Only reacts to situations

(Adapted from SHL, 1994).

4.2.2.4 Administration of the RGT

The RGT is a flexible tool which can be self-administered or administered by a practitioner (Honey, 1992). Whilst the technique relies heavily on the interviewing skills of the analyst, the concepts associated with the technique can be quickly learned. This gives the method a tremendous amount of appeal (SHL, 1994). In this research, a practitioner will administer the RGT.

When used in job analysis the RGT broadly comprises the following five steps (Easterby-Smith & Thorpe, 1996):

Step 1: Introduce and explain the procedure
Step 2: Determine the type of element
Step 3: Elicit the constructs
Step 4: Explore and clarifiy the constructs
Step 5: "Dry up" and close the session

(a) Introduce and and explain the procedure

As with any job analysis technique (or other psychological instrument), an explanation of the purpose and format of the interview as well as a description of how the intervention contributes to the bigger project, is vital (Spencer & Spencer, 1993).

(b) Determine the type of element

This step requires respondents to select appropriate elements. Elements may be people, objects or choices.

In this research, elements were effective and less effective performers who were currently performing the job or who have recently performed the job. Respondents were asked to select the names of four effective performers and four less effective performers, and to write each name on a piece of paper numbered 1–8. (These slips of paper remained at all times with the respondent).

(c) Elicit the constructs

Constructs can be determined by either "supplying them" or by eliciting them from triads.

In this research the latter approach was adopted. Effective and less effective behaviours were identified, by presenting the respondent with predetermined triads and asking the following: *"Describe a way in which two of these people are similar and different from the third in the way they perform their job".*

The responses were recorded on the grid by ticking the similar elements and crossing the different one. In this way one is then able to retain a record of those elements that have been compared.

In addition, respondents were asked to indicate the most effective behaviour. The process continues until no more constructs can be identified.

Finally each respondent is asked to give a numerical rating to each element using either a five-point scale (Stewart & Stewart, 1981) or a seven-point scale (SHL, 1994). In this research respondents were not asked to rate each element on each construct. The content of the construct was used only in a qualitative and descriptive way (SHL, 1994).

(d) Explore and clarify the constructs

Everyone articulates constructs differently. Some will express them as single words and others as long, vague or verbose descriptions. It is therefore essential that constructs be probed in order to clearly understand what the respondent understands and means by the construct (Spencer & Spencer, 1993). This probing is referred to as laddering (Easterby-Smith & Thorpe, 1996). Laddering is a way of exploring a person's understanding in more depth and relates to the notion of constructs having a hierarchical relationship. Constructs can be recorded as a single word or as a phrase. What is most critical is that constructs are recorded as the respondent understands it. Full descriptions of each construct identified should be written up after each interview, to ensure that maximum information is preserved (Spencer & Spencer, 1993).

(e) "Dry up" and close the session

There is no right or ideal number of constructs to be elicited from a single interview. One needs to probe until the respondent can no longer generate constructs or ideas (Easterby-Smith & Thorpe, 1996; Spencer & Spencer, 1993). Thereafter the respondent should be thanked for his/her time and contribution.

The entire process is conducted anonymously. At no stage are the names of the respondent or of the subjects that were evaluated revealed. The process takes approximately ninety minutes to administer.

4.2.2.5 Interpretation of the RGT

Having completed all the interviews, each interview transcript needs to be analysed in order to identify key themes or constructs. Data can be analysed and interpreted manually or with the aid of a computer.

The following seven-step procedure is recommended for the analysis of RGT information (Honey, 1992:84):

Step 1: Number the forms

Step 2: Score each form

Step 3: Extract the "top" data

Step 4: Extract the "tail" data

Step 5: Sort and categorise the data

Step 6: Compare the "top" and "tail" data

Step 7: Produce the list of competencies and behavioural indicators

(a) Number the forms

This can be done using any coding or numbering system of preference. The level of sophistication depends on the number of sub-groupings involved.

(b) Score each form

This is done by establishing the differences between each set of ratings.

(c) Extract the "top" data

Extract the four lowest scoring items from each form, as these are the items that are most closely associated with the most /least effective behaviours.

(d) Extract the "tail" data

This is the reverse of the previous step. The four highest scoring items should be selected from each form, as these will be the factors that are least associated with the most/least effective behaviours.

(e) Sort and categorise the data

The "top" and "tail" data will need to be sorted and categorised into groupings of competencies. Once categories are coherent, competency titles can be selected that reflect the culture of the organisation and the flavour of the behavioural indicators.

(f) Compare the "top" and "tail" data

Similarities between these groups suggest that there is no clear consensus on what the effective behaviour constitutes.

(g) Produce the list of competencies and behavioural indicators

The findings from the "top" data should be summarised and formulated into competencies with behavioural indicators. The "tail" data should be used to help interpret the "top" data.

In instances where numerous repertory grids have been administered, it is possible to analyse the information quantitatively. Cluster analysis, discrimination and frequency counts are all techniques that are capable of providing numerical data (Easterby-Smith & Thorpe, 1996).

In this research respondents were not asked to rate each element on each construct. As a result the forms could not be scored as suggested by Honey (1992). All RGT information in this research was analysed manually on a thematic basis. Analysing the information thematically is a critical part of the exercise (Honey, 1992). The main objectives of qualitative analysis are (SHL, 1994:1):

- To describe the constructs which have emerged (per job) and to classify them into categories.
- To provide an indication of their relative importance (through the frequency of mention).

The themes or competencies generated by the IMC were used as the primary categories for grouping information. Themes or competencies not included in the IMC but emerging in the RGT were added.

4.2.2.6 Reliability and Validity of the RGT

The RGT is an interview technique that is qualitatively-oriented and one that does not rely on numerical rating scales. As such its reliability is very difficult to measure. As with most qualitative tools, the reliability of the instrument is largely dependent on the skills of the interviewer or analyst. No studies could be found where the reliability and/or validity of the RGT (as developed by Kelly, 1955) are reported. According to Easterby-Smith and Thorpe (1996:6), the RGT is a popular technique that has a "taken-for-granted" quality.

4.2.2.7 Motivation for Inclusion

The RGT was included in the study for a number of reasons (Honey, 1992):

- It is recommended in the literature (Honey, 1992; Kandola & Pearn, 1992) as an excellent way of identifying people's perceptions, attitudes or concepts in an uncontaminated way.
- It is a well recognised technique that by virtue of its popularity has an approved level of quality (Easterby-Smith & Thorpe, 1996).
- The results are valid irrespective of the size of the population.
- It is easy to use.
- It generates valuable and generous amounts of information.
- It describes competencies in terms of effective and less effective behaviours.

4.2.3 Critical Incident Technique (CIT)

The CIT will be discussed with reference to the rationale, development, description, administration, interpretation, reliability and validity of the instrument and motivation for inclusion in the study.

4.2.3.1 Rationale of the CIT

The CIT grew out of studies conducted in the Aviation Psychology Programme, where the aim was to develop programmes for selection and classification of aircrews. The rationale of the CIT was to obtain valid information regarding the truly critical requirements for success in a specific assignment. Procedures were therefore developed for making systematic analyses of causes of good and poor performance (Flanagan, 1954).

4.2.3.2 Development of the CIT

The CIT was developed by Flanagan (1954) and can be traced back to the studies of Sir Francis Galton. It was developed as a procedure for collecting direct observations of human behaviour (Flanagan, 1954). The CIT essentially grew out

of studies in the Aviation Psychology Programme of the United States Army Air Forces during World War II (Flanagan, 1954). The aim of the programme was to develop procedures for the selection and classification of aircrews. At the end of World War II some of the psychologists involved with the wartime studies established the American Institute for Research, an organisation that focused on the systematic study of human behaviour. It was in this institute in 1947 that the CIT was more formally developed and given its present name (Flanagan, 1954).

4.2.3.3 Description of the CIT

Flanagan (1954:327) describes the technique as a "set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles". It is a procedure for gathering important information concerning behaviour in defined situations, but does not consist of a set of rules governing data collection.

An incident is defined by Flanagan (1954:327) as "any observable human activity that is sufficiently complete in itself to permit inferences to be made about the person performing the act". For an incident to be critical "the incident must occur in a situation where the purpose or intent for the act seems fairly clear to the observer and where the consequences are sufficiently definite to leave little doubt concerning its effects".

A critical behaviour is defined by McCormick (1985:76) as "behaviours that are considered to be critical to the job in that they reflect especially desirable or especially undesirable job behaviours". What emerges when using this technique, are those behaviours that are essential for job performance and which make the difference between success and failure (SHL, 1994).

In summary, Flanagan (1954:355) said:

> The Critical Incident Technique, rather than collecting options, hunches and estimates, obtains a record of specific behaviours from those in the best

position to make the necessary observations and evaluations. The collection and tabulation of these observations makes it possible to formulate the critical requirements of an activity. A list of critical behaviours provides a sound basis for making inferences as to requirements in terms of aptitudes, training and other characteristics.

The CIT has a number of uses within the framework of employee rating and job analysis (McCormick, 1985).

4.2.3.4 Administration of the CIT

The CIT is a less structured interviewing technique. According to Flanagan (1954:336–345), the CIT should be applied in five consecutive steps:

Step 1: Establish the general aims of the activity
Step 2: Develop the plans and specifications
Step 3: Collection the data
Step 4: Analyse the data
Step 5: Interpret the data

Flanagan's (1954) approach has largely been adopted in this research. Steps 1–3 are reported in this section, and steps 4 and 5 are reported in section 4.2.3.5.

(a) Establish the general aims of the activity

In order to evaluate the specific behaviours of individuals performing specific jobs or roles, it is imperative that the general aims of the activity or job are clearly articulated. The general aims of the job can be determined by asking "What is expected to be accomplished in this job?" (Flanagan, 1954).

This component of the empirical study was aimed at eliciting the key job objectives for each job level that could later be explored in more detail using specific critical incidents.

(b) Develop the plans and specifications

One of the primary aims of scientific techniques is to ensure objectivity for the observations being made and reported (Flanagan, 1954). In order to focus attention on those aspects of behaviour which are believed to differentiate performance and which are critical to developing a functional description of the job, precise instructions need to be given to the respondents. The instructions to the respondents therefore need to be as clear and specific as possible. The instructions should clarify the types of situations to be reported, the relevance of the observation to the general aim, the extent of detail required, etcetera (Flanagan, 1954). Incidents that are to be reported should be defined as extreme behaviour, either extremely effective or extremely ineffective in attaining the general aims of the job. By reporting only the extreme behaviours, the efficiency of the process is improved. The information may be reported in an interview on a one-to-one basis, or written up independently by the individual/job incumbent (Flanagan, 1954).

In this research, incidents were recorded during a one-on-one interview. It was the responsibility of the job analyst to record the necessary information.

(c) Collect the data

The collection of data comprises the following four steps (Spencer & Spencer, 1993: 119):

Step 1: Introduce and explain the process
Step 2: Define the job responsibilities
Step 3: Elicit the critical incidents
Step 4: Conclude and summarise

These steps are described in more detail below.

(i) Introduce and explain the process

As with any job analysis technique, an explanation of the purpose and format of the interview as well as a description of how the intervention contributes to the bigger project, is vital (Spencer & Spencer, 1993). If the interview time is to be

used optimally, the above communication should take place before the actual interview (SHL, 1994). This allows the interviewee time to think of relevant incidents (Spencer & Spencer, 1993).

(ii) Define the job responsibilities

This should be a brief statement of the job objectives obtained from the job incumbents. Job objectives are the desired work outputs (Spencer & Spencer, 1993). Job objectives are the reason for doing the job.

In this research, respondents were asked to formulate four to six key job objectives.

(iii) Elicit the critical incidents

This step involves asking the interviewees to report critical incidents (Flanagan, 1954). Specifically respondents are asked to report incidents in which they were involved, which contributed significantly to achieving or not achieving the set job objectives. Ideally each job objective should have two reported incidents; one with a positive outcome and one with a negative outcome. The procedure is as follows:

- Job incumbents are asked to describe an incident, which did or did not meet a particular job objective.
- Job incumbents are then asked to describe what led up to the incident.
- Job incumbents are then asked to describe what the person did (ie the actual behaviours displayed) and say why it was or was not effective in meeting the particular job objective.
- Some references to time and place should be reported.

This process is followed until no more incidents can be reported (Kandola & Pearn, 1992).

It is imperative that the information gathered is accurate and comprehensive. According to Mouton and Marais (1990), one of the most important considerations in descriptive studies is to collect accurate information or data on the domain phenomena under investigation. Evidence regarding the accuracy of the reporting

is contained in the incidents themselves. It is well known that incidents displaying more extreme behaviour can be more accurately recalled than incidents where the behaviour is more average in character (Flanagan, 1954). If full and precise details are reported then one can assume that the information is accurate. Vague reports suggest that the incident is not well remembered and some of the facts reported may not be correct (Flanagan, 1954).

In this research, respondents were asked to report four critical incidents, where at least one had a positive outcome and one had a negative outcome.

(iv) Conclude and summarise

This is the final stage of the data collection process. Key incidents and the required attributes that have been identified should be summarised and fed back to the respondent at the end of (or after) the session (SHL, 1994).

In this research, the information gathered during the session was validated with the respondent before the session was concluded. In validating the information, key findings were summarised and fed back to the respondent for his/her agreement.

4.2.3.5 Interpretation of the CIT

Analysing and interpreting the information is a critical component of the process (Flanagan, 1954). In the absence of an adequate theory of human behaviour, this step is usually inductive and is relatively subjective (Flanagan, 1954). The behaviours should be evaluated, classified and recorded while the facts are still fresh in the mind of the observer (Kandola & Pearn, 1992). An intuitive feel for the relative importance of different pieces of evidence can be achieved by gathering more quantitative information through, for example, frequency counts of the attributes elicited (SHL, 1994). It is the responsibility of the analyst to uncover the meanings and themes from the experiences relayed. The power of the CIT lies in the identification of unique themes for populations and situations (Feinberg, de Ruyter, Trappey & Lee, 1995).

Critical incidents should be transcribed onto a record sheet, which provides for the following information: respondent's name, job title, analyst name, date, "incident name", incident details, outcome of incident, abilities and characteristics identified (with descriptions). The aim of the analysis section is to report the information in an easy to read format, while sacrificing as little as possible (Flanagan, 1954).

The approach provides concrete behavioural examples of the person at work within their job and the sort of specific situations to which they are exposed. It also provides contextually based information about the attributes that are required of an individual within that position (SHL, 1994).

Although administered to a small sample, the CIT can provide a rich source of qualitative information (Kandola & Pearn, 1992). The approach however relies very heavily on the flexibility and interviewing skills of the analyst. It is also a time intensive technique. The process takes approximately ninety minutes to complete.

4.2.3.6 Reliability and Validity of the CIT

The CIT has been widely researched and used (SHL, 1994). It has stood up well in critical examination in terms of its ability to generate relevant information for a variety of purposes and reliability. According to Levine et al (1980), the CIT compares favourably with other job analysis methods.

It is, however, a qualitative tool that does not rely on numerical rating scales and therefore its reliability and validity is difficult to measure. To a large extent the validity or accuracy of the data obtained lies with the interviewing skills of the analyst. If the analyst does not obtain the requisite information with sufficient detail, the subsequent analysis and output will not be sufficiently comprehensive. Therefore the validity and reliability of the information obtained is influenced largely by the skills and capabilities of the both the interviewer and the interviewee.

According to Anderson and Nilson; Ronan and Latham; and White and Locke (as cited in Feinberg et al, 1995), the general reliability and validity of the CIT method has been confirmed.

4.2.3.7 Motivation for Inclusion

The CIT was included in the study for the following reasons:

- It was recommended in the literature study (Kandola & Pearn, 1992).
- It is widely used and researched (SHL, 1994) and is a reliable tool.

4.3 COLLECTION OF THE INFORMATION

This step refers to the process of data collection. The procedures for gathering the information, using the various tools and techniques have been explained in detail in the sections above (see sections 4.2.1.3; 4.2.2.3 and 4.2.3.3).

In addition, in gathering the information the following procedures were followed:

- Each participant nominated to participate (by the Division Head: Audit) was contacted telephonically and asked to participate.
- Each participant was provided with the following information:
  - the purpose of the research;
  - the dates and times when their participation would be required; and
  - an explanation of the activity (ie the techniques) in which they would be participating.
- At each job level, and for each job analysis tool administered the same procedures were followed. Conditions were standardised as far as possible.

4.4 PROCESSING AND ANALYSIS OF THE INFORMATION

The information gathered using the above named tools, was analysed and categorised in order for it to be formulated into competencies. The information gathered using the WPS was computer analysed. Various reports (see section 4.2.1.5) can be generated, including a job tasks report and a profile of human attributes required to complete the specified tasks.

The information gathered using the RGT and the CIT was analysed manually. Information was categorised using the competencies generated in the IMC as the basis of the classification system. Any additional competencies that emerged were added to the list.

REMARKS

The empirical aims of this research are to develop a competency model for trainee accountants and CAs working in a professional services environment. This chapter describes how the research was conducted in order to gather the requisite information in order to achieve the above specified aims.

4.5 CHAPTER SUMMARY

In this chapter steps 1 to 4 of the empirical study were discussed. More specifically this chapter reviewed how the sample was selected, the factors influencing the choice of job analysis tools and techniques, and how the information was collected using the selected tools and techniques. The next chapter will report and interpret the results of the study.

CHAPTER 5 RESULTS

In this chapter the results of the research are reported and interpreted in terms of the overall purpose of this research. In addition, the model(s) developed in this research will also be compared with other models and/or research findings. At the conclusion of this chapter, two of the empirical aims of the research, namely to develop a competency model for trainee accountants and CAs working in a professional services environment, would have been met.

5.1 REPORTING OF RESULTS

The findings will be reported and discussed by reviewing the results of each job analysis tool independently. The results of the WPS will be reported per level (ie year 1&2, year 3, year 4 and year 5+). All other techniques will be reported according to the following categories: year 1–3 (trainee accountants) and year 4–5+ (CAs). The data has been analysed according to these two categories (ie year 1–3 and year 4–5+).

5.1.1 Results of the Work Profiling System (WPS)

The results will be presented in the following categories:

Year 1&2	(Trainee Accountants)
Year 3	(Trainee Accountants)
Year 4	(CAs)
Year 5+	(CAs)

Each level or grade of job places a different emphasis on the various tasks/activities comprising their work. The WPS translates these tasks and ratings into competencies with an accompanying importance indicator. The definitions of the importance levels used in the IMC profile are listed below.

Table 5.1 Importance Level Definitions for IMC Profile

Baseline (B)	Basic level of competency expected in all jobs, not unique to this job or directly linked to job objectives
Moderate (M)	Slightly more important for this job – relatively more important for meeting at least *some* job objectives
High (H)	More important for this job – relatively more important for meeting *most* job objectives
Extreme (E)	Much more important for this job – essential for meeting nearly *all* job objectives

(SHL, 1999b)

Following is the IMC profile report detailing the importance levels of all the competencies for all the categories of staff.

Table 5.2 IMC Profile – All Categories

Competency	Year 1&2	Year 3	Year 4	Year 5+
Commercial awareness	M	M	M	M
Specialist knowledge	E	M	M	M
Problem-solving and analysis	E	E	E	E
Creativity and innovation	M	M	M	M
Strategic	H	M	E	H
Planning and organising	E	E	E	E
Action orientation	H	M	H	H
Verbal communication	M	M	M	M
Written communication	M	H	M	M
Interpersonal sensitivity	M	E	M	H
Persuasiveness	M	H	H	H
Leadership	M	E	E	E
Quality orientation	M	H	M	H
Flexibility	H	H	H	H
Resilience	M	M	H	H
Personal motivation	M	H	H	E

The key competencies emerging as extremely important for year 1&2 are the following:

- Specialist knowledge
- Problem-solving and analysis
- Planning and organising

In addition the following competencies are also reported as being highly important:

- Strategic
- Action orientation
- Flexibility

The key competencies emerging as extremely important for year 3 are the following:

- Problem-solving and analysis
- Planning and organising
- Interpersonal sensitivity
- Leadership

In addition the following competencies are also reported as being highly important:

- Written communication
- Persuasiveness
- Quality orientation
- Flexibility
- Personal motivation

Having reviewed the information above, the competencies listed below emerged as the most important for the trainee accountant group (year 1–3):

- Specialist knowledge
- Problem-solving and analysis
- Planning and organising
- Interpersonal sensitivity
- Leadership
- Flexibility

Competencies were selected on the basis that they were rated as:

- "extreme" in either or both year 1&2 and year 3; or
- "extreme" in one year and "high" in the other year; or
- "high" in both years.

The key competencies emerging as extremely important for year 4 are the following:

- Problem-solving and analysis
- Strategic
- Planning and organising
- Leadership

In addition the following competencies are also reported as being highly important:

- Action orientation
- Persuasiveness
- Flexibility
- Personal motivation

The key competencies emerging as extremely important for year 5+ are the following:

- Problem-solving and analysis
- Planning and organising
- Leadership
- Personal motivation

In addition the following competencies are also reported as being highly important:

- Strategic
- Action orientation
- Interpersonal sensitivities
- Persuasiveness
- Quality orientation
- Flexibility
- Resilience

The competencies listed below have been identified as the most important for the CA group. Competencies have been selected on the same basis as that used for the trainee accountant group:

- Problem-solving and analysis
- Strategic
- Planning and organising
- Action orientation
- Persuasiveness
- Leadership
- Flexibility
- Resilience
- Personal motivation

On comparing the "most important" competencies for both year 1–3 and year 4–5+, the following competencies emerged as common to both groups:

- Problem-solving and analysis
- Planning and organising
- Flexibility
- Leadership

The above results highlight the importance of both intellectual and interpersonal skills in an auditor. All of the competencies will be discussed in more detail in section 5.2.

5.1.2 Results of the Repertory Grid Technique (RGT)

The results of the RGT for the trainee accountant group (year 1–3) are shown in table 5.3. Examples of effective behaviours have been listed for each of the competencies identified.

Table 5.3 Results of the RGT for Trainee Accountants (Year 1–3)

Competency	Examples of effective behaviours
Commercial awareness	**Commercial orientation** • Displays an interest in business and or commerce • Has a working knowledge of the client's business • Attempts to identify cost saving opportunities at the client
Specialist knowledge	**Technical skill and competence** • Technically very strong (passed Board 1st time) • Knows own technical limitations • Technically is very sound – detailed explanations are always provided • Technically very strong • Competently applies the theory/theoretical knowledge • Has good computer skills (This characteristic was mentioned more times than it is documented. Subjects were instructed, where possible not to repeat constructs.)
Problem-solving and analysis	**Information gathering** • Disregards unnecessary information/data **Problem analysis** • Grasps difficult concepts quickly • Understands new concepts quickly • Works at solving problems, not just raising issues • Thinks independently – brings solutions not only problems • Works in a logical and structured manner • Logical / methodical approach to work • Thinks in a structured manner • Completes tasks relatively unsupervised
Planning and organising	**Management control** • Manages own time well • Manages and prioritises own tasks and time in order to complete task in the most efficient manner • Prioritises tasks at hand • Keeps an accurate record of what is happening/issues still to be addressed etcetera • Monitors the time and resource budget tightly • Completes tasks on or before the scheduled time • Makes appropriate and timely decisions

Competency	Examples of effective behaviours
	Objective setting • Plans work well up front • Plans own work • Clarifies and understands the work objectives
Action orientation	**Execution** • Works at a task until it is complete • Works independently – proactively drives tasks to completion • Follows through on issues identified • Works on tasks relatively unsupervised (knows when to ask for assistance) • Works at a task until it is complete • Has a sense of responsibility – is self driven to complete allocated tasks • Can be relied on to complete an assigned task • Is capable of multi-tasking well • Is proactive in following up on issues/completion of tasks • Remains focused on critical path tasks • Completes tasks quickly • Focuses on the task at hand • Follows through on a task from beginning to end • Adheres to rules and instructions • Accepts instructions • Adheres to the plan **Initiative** • Takes on more responsibility than is required for his/her particular level • Takes on new responsibilities on own initiative • Takes ownership • Displays initiative in completing work tasks
Verbal communication	**Oral communication skills** • Articulates him-/herself well • Communicates in a succinct manner • Communicates using facts (is not emotional) • Speaks in a confident manner (both to clients and internal staff) • Is non aggressive in his/her communication style • Regularly updates the manager on the status of the project
Written communication	**Written communication skills** • Takes pride in the work product delivered

Competency	Examples of effective behaviours
	• Work is presented neatly and in logical format • Neat presentation of work • Documents work in a logical and neat manner • Writes documents in a logical and concise manner • Tasks/work allocated is always completed accurately • Good documentation skills: neat, structured, organised • Audit trail is set out in an easily understandable format
Interpersonal sensitivity	**Building and maintaining relationships** • Good people skills – is able to win over hostile clients • Interacts with the client in a manner that facilitates the timely completion of the audit • Maintains the relationship established at the client • Interacts well with both the client and fellow team members **Team work** • Actively participates in the team and willingly does his/her share (and more if required) in order to get the task completed • Contributes to the team • Interacts well with others and supports the team members • Displays a willingness to help/assist others (beyond own role) • Is a positive influence on the team • Respects both management and fellow colleagues on the team • Is very supportive towards fellow team members • Motivates team members by being a good role model (always positive etc)
Persuasiveness	**Persuasiveness** • Prepared to argue a viewpoint • Has the ability to win the co-operation of difficult client personnel • Is willing to discuss/question issues
Leadership	**Providing direction** • Has a clear understanding of his/her own roles and responsibilities • Commands respect from colleagues **Empowering others** • Delegates work where appropriate (in order to optimise the resources available)
Quality orientation	**Risk management** • Is aware of own technical limitations and asks for assistance when necessary • Asks for assistance when required

Competency	Examples of effective behaviours
	Concern for excellence • Pays attention to detail – reviews matters and issues thoroughly
Flexibility	**Flexibility** • Adapts to changing circumstances • Willing to accept the view point of others
Resilience	**Stress tolerance** • Copes well with stress/pressure • Is emotionally strong • Is able to remain positive and motivated even during stressful times • Handles pressure well • Controls own emotions well
Personal motivation	**Drive** • Self driven • Self motivated • Goal driven • Focused • Is energetic • Keen and enthusiastic • Displays a willingness to learn and obtain more experience • Puts in more effort than is required • Very ambitious – has a personal agenda of what he/she wants to achieve **Work ethic** • Is prepared to work very long hours • Works lots of overtime • Works very hard • Views work seriously • Has a balanced lifestyle (Allows sometime for him/herself) • Is able to separate work and business effectively **Attitude to work** • Always positive • Displays an interest and positive attitude towards work • Displays a sense of personal responsibility • Takes ownership of the process • Has a mature attitude
Impact	**Image** • Is concerned/aware of own image

Competency	Examples of effective behaviours
	• Self image is appropriately managed • Professional image is good • Displays a professional attitude at all times • Acts appropriately in front of clients • Is well mannered and respectful of others • Has a high sense of integrity **Self- confidence** • Presents him-/herself in a confident manner • Is assertive/outgoing (but not over powering) • Is relatively outspoken • Is confident in own abilities and solutions (is not easily persuaded by the views of others)

The key competencies emerging from the RGT for the trainee accountant group (year 1–3) are the following:

- Specialist knowledge
- Problem-solving and analysis
- Planning and organising
- Action orientation
- Interpersonal sensitivity
- Personal motivation
- Impact

These competencies highlight the importance given to both the cognitive and interpersonal competencies required of an auditor.

Competencies have been selected based on frequency of mention. The results of the RGT for the CA group (year 4–5+) are shown in table 5.4. Examples of effective behaviours have been listed for each of the competencies identified.

Table 5.4 Results of the RGT for Chartered Accountants (Year 4–5+)

Competency	Examples of effective behaviours
Commercial awareness	**Commercial orientation** • Has a broad interest in business • Is able to quickly get a grasp of the client's business • Has a sound understanding of the client's business • Has a functional understanding of the client's industry • Sells work • Networks effectively • Brings in new clients and work • Identifies opportunities and acts on them • Involves other service lines in new work opportunities • Has the confidence to bring in more work • Bills and collects fees on time **Cross functional awareness** • Actively participates in Firm's activities (training, mentoring, etc)
Specialist knowledge	**Technical skill and competence** • Is comfortable using technology • Uses technology to improve the audit • Is technically sound • Keeps up to date with technical developments in audit practice • Is viewed as an expert in his/her field • Readily shares (technical) knowledge with others • Accounting technical knowledge is kept up to date • Is able to apply the technical changes as they occur • Needs to be 100% sound with regard to technical knowledge base
Problem-solving and analysis	**Information gathering** • Understands what has to be done and gathers the relevant information quickly • Interprets and makes sense of information quickly • Challenges the information provided – ensures it makes sense (not just accepting the status quo) **Problem analysis** • Thinks logically through problems • Very conscientious – identifies and solves problems with little

Competency	Examples of effective behaviours
	partner involvement • Deals with the core issues • Anticipates possible issues or problems and researches the matter prior to it's emergence (ie can solve problems through the quick identification of potential issues) • Regularly visits the project team on site and follows up on outstanding issues • Solves problems independently • Works independently – to solve problems before taking them to the partner
Creativity and innovation	**Innovation** • Willingly takes on new and non-routine tasks and projects
Strategic	**Strategic perspective** • Sees the bigger picture – thinks broadly • Has bi-focal vision. Is capable of seeing the bigger picture without losing the detail of the present
Planning and organising	**Management control** • Very conscious of where time is being spent • Keeps tight time controls • Almost always meets deadlines • Very time conscious • Time and fee conscious – is very budget aware • Delivers the product on time • Manages the time and human resources very closely • Uses less expensive resources for the "wrap up" procedures • Manages more than one project at once • Prioritises tasks effectively • No "slack time" allowed on the project • "Chases upwards" • Uses a project structure that has clearly defined roles and responsibilities • Keeps up to date with the status of the audit **Objective setting** • Plans own activities/work tasks very well • Plans the team's activities very well • Planning is done accurately – minimum overtime is planned for • Work is reviewed as soon after it is received from the staff (ie

Competency	Examples of effective behaviours
	not left and then rushed at the end) • Does the engagement planning in conjunction with the team members • Ensures that the project plan is adhered to • Filing and performance reviews are scheduled and conducted timeously
Action orientation	**Execution** • Is achievement focused • Follows through until a task is complete • Is delivery focused • Will complete the task at whatever cost • Displays a sense of urgency – makes things happen **Decisiveness** • Not afraid to make decisions or take risks **Initiative** • Shows initiative – operates proactively • Wants to take on responsibility
Verbal communication	**Oral communication skills** • Communicates regularly with the partner • Is comfortable dealing with senior level executives • Communicates well with all levels of staff • Is confident dealing with strangers • Makes an effort to talk to people he/she doesn't know • Keeps the client and the partner informed of the status of the audit • Non-aggressive when dealing with others • Articulates his/her thoughts and plans clearly to the team • Is confident speaking to others
Written communication	**Written communication skills** • Clear and concise in the way he/she documents his/her work • Work is documented very thoroughly
Interpersonal sensitivity	**Team work** • Very supportive of his/her team • Gets on well with the team • Is team oriented **Building and maintaining relationships** • Socialises well with colleagues and clients • Friendly, easy going nature

Competency	Examples of effective behaviours
	• Has a sense of humour • Makes the time to socialise with both clients and staff regularly • Interacts well with others • Speaks and acts in a supportive manner • Has good relationships with the client • Gets good co-operation from the clients • Communicates regularly with senior level clients • Builds good relationships with the client – easier to get the required information • Good people skills – interacts well with the client • Is confident dealing with the client • Is respected by the client • Is tactful and diplomatic when dealing with sensitive matters • Client is comfortable dealing with the individual **Developing others** • Willingly coaches team members on technical concepts/aspects of work • Regularly provides feedback to staff (formal and informal)
Leadership	**Providing direction** • Uses a more participative approach – not domineering in his/her approach • Is respected as a leader by his/her team (ie has earned their respect) • It is clear that he/she is the leader – takes charge • Understands and accepts the role of a manager • Roles and responsibilities are clearly outlined **Empowering others** • Delegates work effectively – to the appropriate levels **Motivating others** • Motivates people into developing delivering a good work product
Quality orientation	**Concern for excellence** • Quality of work is always good • Produces work that is accurate – has been reviewed thoroughly • Displays pride in the work he/she delivers • Asks for help when required

Competency	Examples of effective behaviours
	• Applies Firmwide standard procedures on engagements **Customer service orientation** • Understands and delivers what the client wants
Flexibility	**Flexibility** • Open to suggestions from others • Recognises the skill and contribution of others • Can adapt in changing and demanding circumstances
Personal motivation	**Drive** • Displays a sense of urgency – makes things happen • Knows what he/she wants – has a clear personal agenda • Is self driven • Prepared to put in the extra effort • Energetic • Keen and enthusiastic to do the work • Career oriented **Attitude to work** • Interested in the work he/she is doing • Positive • Is interested enough to do the necessary research • Displays an interest in activities around him/her (even if they don't directly concern him/her)
Impact	**Image** • Polite when dealing with people • Has a presence • Is noticed more **Self-confidence** • Is confident (in own abilities) • Speaks confidently • Presents him-/herself well

The key competencies emerging from the RGT for the CA group (year 4–5+) are the following:

- Commercial awareness
- Problem-solving and analysis
- Planning and organising
- Action orientation
- Verbal communication skills

- Interpersonal sensitivity
- Personal motivation

These competencies are also oriented towards cognitive and interpersonal skills and capabilities.

On comparing the RGT results for the categories year 1–3 and year 4–5+, the similarity in the competencies emerging is very evident. The following competencies emerged as common to both groups: problem-solving and analysis, planning and organising, action orientation, interpersonal sensitivity and personal motivation. All of the competencies will be discussed in more detail in section 5.2.

5.1.3 Results of the Critical Incident Technique (CIT)

The results of the CIT for the trainee accountant group (year 1–3) are shown in table 5.5. Distinguishing abilities and characteristics have been included for each competency.

Table 5.5 Results of the CIT for Trainee Accountants (Year 1–3)

Competency	Distinguishing abilities and characteristics
Commercial awareness	**Commercial orientation** • Has a working knowledge of the client's business • Needs to be aware of new opportunities/new work on the engagement
Specialist knowledge	**Technical skill and competence** • Ensures own technical knowledge is sound • Has a very sound technical knowledge base • Is able to apply the theoretical concepts • Remains up to date with new developments in legislation or appropriate technology • Has good operational computer skills • Is strong technically
Problem-solving and analysis	**Information gathering** • Is capable of identifying issues • Gathers and collates data from multiple sources • Understands the complexity of the task at hand • Probes for information • Clarifies issues/thoughts as soon as possible **Problem analysis** • Pays attention to detail. Completes the work thoroughly
Creativity and innovation	**Adherence to rules and instructions** • Follows instructions and sticks to the plan • Completes routine tasks • Follows instructions properly **Process efficiency/ improvement** • Reviews the previous years' file to look for ways of enhancing the audit or completing it in the most efficient way possible
Planning and Organising	**Management control** • Manages his/her own time and that of the junior staff • Ensures tasks are completed within the allocated timeframes • Manages his/her time and tasks • Communicates delays to the manager as soon as possible • Discusses deadlines and timelines at the outset • Prebooks regular meeting times with the client • Sends the "PBC" (planned by client) listing to client timeously • Groups issues together and solve them at one meeting

Competency	Distinguishing abilities and characteristics
	• Planning is key to efficiency on the audit • Co-ordinates feedback/progress meetings with the client • Keeps a schedule of all additional work and delays in order to discuss overruns on the budget • Reviews work from staff soon after it is received
Action orientation	**Execution** • Follows through on issues identified • Completes tasks allocated to him/her • Works quickly • Completes tasks quickly and accurately **Initiative** • Shows initiative • Does more than is required or expected • Takes on tasks without being asked
Verbal communication	**Oral communication** • Keeps in regular contact with the client • Holds formal progress meetings with the client (with the manager present) • Provides the manager with regular updates/feedback on the project status
Written communication	**Written communication skills** • Clearly documents all proposed adjusted journal entries (PAJEs) detailing reasons, motivations, etcetera • Writes neatly, using standard formats, where appropriate • Has clear logical working papers
Interpersonal sensitivity	**Teamwork** • Is willing to support and coach fellow team members • Communicates with the team members regularly **Developing others** • Gives regular feedback to staff (as required) • Encourages staff to ask questions Asks for support from the management team
Leadership	**Providing direction** • Ensures individuals are clear on their areas of responsibility/tasks to be completed • Understands the job/task required and plans accordingly **Empowering others** • Delegates tasks and responsibilities to the right people

Competency	Distinguishing abilities and characteristics
Resilience	**Stress tolerance** • Works well under pressure
Personal motivation	**Drive** • Displays enthusiasm • Is self driven and motivated • Is enthusiastic about his/her work **Attitude to work** • Has an attitude of being interested • Remains positive – even when stressed • Enjoys what he/she is doing • Is interested in the task at hand • Has a positive attitude towards work
Impact	**Image** • Remains professional in all interactions with the client

The key competencies emerging from the CIT for the trainee accountant group (year 1–3) are the following:

- Specialist knowledge
- Problem solving and analysis
- Planning and organising
- Action orientation
- Personal motivation

These competencies can be described as thinking or cognitive in their orientation.

Competencies have been selected based on frequency of mention.

The results of the CIT for the CA group (year 4–5+) are shown in table 5.6. Distinguishing characteristics and abilities have been included for each competency.

Table 5.6 Results of the CIT for Chartered Accountants (Year 4–5+)

Competency	Distinguishing characteristics and abilities
Commercial awareness	**Commercial orientation** • Identifies opportunities in the market • Submits a proposal • Consults with the other divisions/service lines • "Audit is a commodity that will be outsourced to the cheapest supplier – but it is also the key to new opportunities". Needs to bear this in mind in all job engagements • Sells work for the division • Takes ownership of the selling process • Bills clients timeously • Manages inventory well
Problem solving and analysis	**Information gathering** • Probes for information • Actively "searches for the hidden facts" • Effectively "negotiates" the information out of people **Problem analysis** • Works and thinks logically • Works through problems and issues systematically • Ensures work is completed accurately and thoroughly • Thinks "deeply" about issues
Creativity & innovation	**Innovation** • Is not prescriptive in terms of the process used or the layout of work documents. Only insists on a quality end product
Planning and organising	**Management control** • Works effectively with the resources available • Arranges a project team and defines roles and responsibilities at the outset of the engagement **Objective setting** • Plans work so that minimum overtime is necessary • Designs a project timetable at the outset • Plans the audit well and in detail • Sticks to the plan • Tries to plan to allow time for "admin" processes (eg staff evaluations etc)

Competency	Distinguishing characteristics and abilities
Action orientation	**Decisiveness** • Makes decisions based on the information available • Draws conclusions based on the information provided
Verbal communication	**Oral communication skills** • Keeps client informed of all progress • Holds regular team meetings to discuss progress and encourages people to make decisions
Written communication	**Written communication skills** • Is capable of writing value added documents (eg memo of accounting matters, advice on risk management controls that should be implemented, etc)
Interpersonal sensitivity	**Building and maintaining relationships** • Builds holistic relationships with client (not only during audit period) • Makes the client feel part of the process • Asks for feedback from the client • Tries to maintain good relationships at all levels with the client • Meets "face to face " with the Financial Director on a regular basis • Establishes relationships with the decision makers **Developing others** • Gives staff evaluations a high priority (Needs to be disciplined or it won't be done) • Boosts confidence by providing support and feedback to staff • Provides feedback to the group and to individuals regarding quality of work, time scales, budgets, etcetera
Leadership	**Providing direction** • Manages only the team leaders, but supports the whole team • Ensures team leaders understand their roles and responsibilities • Facilitates activities between various role players (ie team leaders and client) • "Fights battles together" **Empowering others** • Orchestrates the audit, but does little of the detailed technical work • Gives staff appropriate levels of responsibility • Delegates categories of work to team leaders who further delegated work to their teams

Competency	Distinguishing characteristics and abilities
	• Allocates work based on abilities • Allocates work based on the inherent strengths of the individuals
Quality orientation	**Risk management** • Knows risk areas based on experience and technical knowledge • Minimises risk by staying close to the team • Routinely uses the Firm's methodologies • Uses "professional judgement" • Manages risk by understanding the clients business • Has developed a relationship with the Financial Director and is therefore more readily able to identify risks • Documents all new work/additional work in a job arrangement letter
Personal motivation	**Drive** • Shows enthusiasm and energy
Impact	**Self-confidence** • Is confident when interacting with others (both internally and externally)

The key competencies emerging from the CIT for the CA group (year 4–5+) are the following:

- Commercial awareness
- Problem solving and analysis
- Planning and organising
- Interpersonal sensitivity
- Leadership
- Quality orientation

A comparison of the results for the categories year 1–3 and year 4–5+, revealed the importance of cognitive skills for an auditor. Common competencies emerging from the CIT are problem-solving and and analysis, and planning and organising.

5.1.4 Summary of Identified Competencies

Table 5.7 gives a summary of the competencies identified for both the trainee accountant group, (ie year 1–3) and the CA group (ie year 4–5+), using the various tools.

Table 5.7 Summary of Identified Competencies

	Year 1–3			Year 4–5+		
Competency	WPS	RGT	CIT	WPS	RGT	CIT
Commercial awareness					X	X
Specialist knowledge	X	X	X			
Problem-solving and analysis	X	X	X	X	X	X
Strategic				X		
Planning and organising	X	X	X	X	X	X
Action orientation		X	X	X	X	
Verbal communication					X	
Interpersonal sensitivity	X	X			X	X
Persuasiveness				X		
Leadership	X			X		X
Quality orientation						X
Flexibility	X			X		
Resilience				X		

	Year 1–3			Year 4–5+		
Competency	WPS	RGT	CIT	WPS	RGT	CIT
Personal motivation		X	X	X	X	
Impact		X				

From table 5.7 it is evident that cognitive skills emerged very strongly as a requirement for a superior performing auditor. Although many of the skills are common to both groups, the level specific competencies are still noticeable.

5.1.5 Design of Final Model

The model in this research has been developed around two levels: trainee accountants (ie those people who are completing their articles of clerkship) and registered CAs (ie those people who have written and passed the qualifying examinations and have completed their period of clerkship).

The differentiating characteristics or behaviours that have been identified have been clustered into logical groupings and given a label that describes a characteristic or a quality. The groupings are referred to as the competencies. The competency titles have been generated by the IMC. The original behaviours (ie the characteristics and skills) are called behavioural indicators. Each competency and behavioural indicator listed in the model is described using a number of behavioural statements. These statements are examples of excellent behaviour and can be used to determine the extent to which an individual demonstrates the particular competency. The behavioural statements are intended to be cumulative, meaning that the statements listed for the year 4–5+ group assume that the individual has mastered and continues to demonstrate the behaviours identified for the year 1–3 group. The behavioural statements have been generated using multiple sources: those provided by respondents during the WPS session, the McBer and Company's JND Scale Dictionary (1993) and suggestions by Spencer and Spencer (1993).

The competencies listed in the model are those which have been identified as relevant to the specific jobs being reviewed (ie trainee accountants [year 1–3] and CAs [year 4–5+] respectively). This will account for both similarities and differences in the competencies identified at the different levels. Where competencies are the same/common across these levels, the behavioural statements will indicate the level of performance required. In addition the competencies have been categorised as either "established" or "emerging" competencies. Established competencies are those competencies that have emerged strongly in at least two out of the three job analysis tools used. Emerging competencies are those competencies that have "emerged" strongly in only one of the job analysis tools. Definitions of all the competencies are listed in chapter 4 (see section 4.2.1.5).

The absence of a competency in the model developed in this research could mean that it is a threshold competency or that it is not a differentiating competency.

The final competency model for each group is detailed in sections 5.1.5.1 and 5.1.5.2.

5.1.5.1 Final Competency Model for Trainee Accountants (Year 1–3)

The final competency model for trainee accountants (year 1–3) comprises nine competencies represented by 15 behavioural indicators. These are listed below.

Specialist knowledge

Technical skill and competence

Problem-solving and analysis

Information gathering

Problem analysis

Planning and organising

Management control/Objective setting

Action orientation

Execution

Adherence to rules and instructions

Initiative

Interpersonal sensitivity

Building and maintaining relationships

Teamwork

***Leadership**

Providing direction

Empowering others

***Flexibility**

Personal motivation

Drive

Attitude to work

***Impact**

Image

Self-confidence

* Emerging competencies. All others are established competencies.

Table 5.8 Final Competency Model for Trainee Accountants (Year 1–3)

Competency	Behavioural Indicators	Behavioural Statements
Specialist knowledge	• Technical skills and competence	• Has a sound knowledge of accounting and auditing practices • Keeps abreast of technical developments in the field • Is able to apply theoretical knowledge in practice • Demonstrates an ability to grasp new technical concepts quickly • Uses technology to improve operational efficiency • Is confident and competent using technology
Problem-solving and analysis	• Information gathering • Problem analysis	• Gathers relevant information quickly • Is able to distinguish between relevant and irrelevant data • Effectively integrates information • Pays attention to detail – ensures all facts are accounted for • Critically analyses problems and issues • Solves problems using a variety of problem solving tools and techniques • Attempts to understand the causes and consequences of problems • Uses a structured approach when trying to solve problems • Identifies problems or risk areas with assistance
Planning and organising	• Management control/ Objective setting	• Prioritises and manages own work load effectively • Delivers work within the agreed time frames • Plans ahead – deals with the most urgent tasks immediately • Keeps management well informed on the progress and problems encountered • Is very aware of the limited availability on management's time and uses it wisely • Keeps studies and work up to date

Competency	Behavioural Indicators	Behavioural Statements
Action orientation	• Execution	• Completes tasks accurately and efficiently • Completes work despite obstacles and pressure • Is very productive • Takes ownership of the task at hand • Remains focused on the key tasks to be completed • Has good concentration skills
	• Adherence to rules and instructions	• Clarifies what is expected before commencing with a task/activity • Is able to understand and follow both written and verbal instructions • Works within the set boundaries and parameters • Willingly accepts instructions given by superiors
	• Initiative	• Takes action before being asked to do so • Recognises opportunities and takes responsibility for their completion • Acts proactively • Volunteers to take on both routine and non-routine tasks or activities that are not expected for this level
Interpersonal sensitivity	• Building and maintaining relationships	• Builds relationships with individuals in other service lines/business units within the Firm • Maintains existing client relationships • Establishes relationships at an appropriate level at the client • Is willing and capable of socialising and interacting with the client
	• Team work	• Interacts effectively with fellow team members • Is capable of working with a wide range of people • Willingly assists others to ensure that tasks are completed on time • Demonstrates respect for the differing views of other team members

Competency	Behavioural Indicators	Behavioural Statements
Leadership	• Providing direction	• Delegates work to junior staff where appropriate in order to create development and learning opportunities • Uses his/her official authority in a fair and equitable manner
Flexibility		• Is willing to change or adapt his/her routine at short notice • Is accommodating of others in the team • Is open to suggestions from others • Recognises the skill and contribution of others
Personal motivation	• Drive	• Takes on tasks that are not normally required at this level • Wants to succeed • Has drive, energy and enthusiasm • Will make sacrifices of a personal nature in order to succeed
	• Attitude to work	• Demonstrates a loyalty to the Firm and the division • Displays a willingness to learn and gain experience • Positive • Highly motivated
Impact	• Image	• Displays a sense of urgency – moves quickly to gets tasks completed • Has a positive and good self image • Is professional at all times • Communicates a positive image of the Firm when interacting with others
	• Self-confidence	• Responds positively to change and pressure • Presents him-/herself in an impressive manner • States own view confidently, even if it may result in conflict • Believes in his/her own level of competence and performance abilities • Is confident and self assured when dealing with others

5.1.5.2 Final Competency Model for Chartered Accountants (Year4–5+)

The final competency model for CAs (year 4–5+) comprises 13 competencies represented by 23 behavioural indicators. These are listed below.

Commercial awareness

Commercial orientation

Problem solving and analysis

Information gathering

Problem analysis

***Strategic**

Strategic perspective

Planning and organising

Management control

Objective setting

Action orientation

Decisiveness

Execution

Initiative

***Verbal Communication**

Oral communication skills

Interpersonal sensitivity

Building and maintaining relationships

Developing others

Teamwork

***Persuasiveness**

Leadership

Providing direction

Empowering others

Motivating others

***Quality orientation**

Risk management

Concern for excellence

***Flexibility**

***Resilience**

Coping skills

Personal motivation

Drive

Attitude to work

* Emerging competencies. All others are established competencies.

Table 5.9 Final Competency Model for Chartered Accountants (Year 4–5+)

Competency	Behavioural Indicators	Behavioural Statements
Commercial awareness	• Commercial orientation	• Demonstrates an understanding of broad business issues • Identifies and actions real business opportunities • Strives for maximum recovery of costs on engagements • Sells new work to both new and existing clients • Bills and collects fees timeously • Effectively manages work in progress (inventory management) • Is bottom-line focused
Problem solving and analysis	• Information gathering	• Organises complex information into relevant constituent parts • Knows where to search for relevant information • Builds networks for gathering information • Generates alternative plans for gathering information that is not readily available • Is prepared to challenge the ideas and recommendations of others (including senior executives)
	• Problem analysis	• Solves difficult problems with limited assistance • Develops strategies for complex problems • Is capable of identifying core issues/problems and potential risks • Thinks logically and systematically through problems • Looks at problems from various perspectives • Generates solutions to problems that are holistic
Strategic	• Strategic perspective	• Prioritises work in line organisational goals • Considers the "big picture" when selling work or submitting proposals • Actively contributes to the development of the strategy for the division • Is aware of anticipated changes in the industry and its possible impact on the division

Competency	Behavioural Indicators	Behavioural Statements
Planning and organising	• Management control	• Utilises the available resources effectively • Manages more than one project at a time • Prioritises tasks (own and team's) to ensure that the engagement is completed on time and within budget • Is quickly able to ascertain those barriers that will prevent the completion of the task or goal • Plays a facilitating role to ensure a win-win for both the client and the Firm
	• Objective setting	• Prepares project plans/schedules in advance • Competently plans and manages all logistical aspects of an audit • Develops plans and budgets that are realistic and practical • Sets goals and targets that will lead to the desired outcome

Competency	Behavioural Indicators	Behavioural Statements
Action orientation	• Decisiveness	• Makes decisions based on the (limited) information available • Encourages others to participate in making decisions • Acts quickly in times of crisis • Is prepared to make decisions that may involve a degree of risk
	• Execution	• Takes steps to make things happen • Completes tasks efficiently • Works to overcome problems in order to ensure completion of the activity • Encourages team members to maintain focus and to ensure that common goals are achieved • Takes ownership of the situation and sees it through to completion
	• Initiative	• Takes on more than is required • Creates opportunities • Is a self-starter – takes responsibility for new projects • Readily accepts challenge and change
Verbal communication	• Oral communica-tion skills	• Speaks clearly and fluently • Demonstrates an ability to communicate effectively at a senior level • Is comfortable communicating with executives with whom he/she is not familiar • Can "package and present" information effectively/ succinctly to suit the needs of the audience • Is confident and assertive when dealing with senior executives • Liaises with the client on both technical and non-technical matters

Competency	Behavioural Indicators	Behavioural Statements
Interpersonal sensitivity	• Building and maintaining relationships	• Addresses client's concerns in an efficient and effective manner • Maintains regular contact with the client throughout the year • Builds a network with key client personnel (eg MDs, FDs) and others in the community • Is able to see things from the other person's perspective • Initiates social contact with the client and team members • Shows sensitivity to the client's culture and work environment
	• Developing others	• Provides on the job training to others • Provides regular and accurate feedback to team members • Shares knowledge and learning points readily with others • Provides technical assistance to the more junior staff • Allocates work fairly thereby giving everybody equal opportunities for development • Demonstrates commitment to the principle of continuous learning • Is sought after as a mentor and role model
	• Team work	• Willingly accepts new people into the team • Shares credit for success with the team • Builds a team with strong complementary skills and talents • Gives credit publicly to those who have worked well
Persuasiveness		• Gains the willing co-operation of others • Is able to persuade others in senior positions to change their thinking or perspectives on certain issues • Impresses and convinces others with his/her technical knowledge and business understanding, thereby winning their confidence

Competency	Behavioural Indicators	Behavioural Statements
Leadership	• Providing direction	• Defines and communicates the goals and objectives to the team • Ensures that the project scope is clearly articulated • Arranges the necessary resources (human and hardware) to ensure that deadlines are achieved
	• Empowering others	• Manages costs and times by delegating work to the appropriate levels • Encourages and empowers all members to contribute to the team and the final work product • Demonstrates a trust in the capabilities of others • Schedules staff appropriately and fairly on assignments for the specific purpose of developing skills
	• Motivating others	• Constantly pushes him-/herself and others to achieve a high standard of work product • Creates enthusiasm and the desire to excel • Is able to resolve conflict in a diplomatic manner • Is sensitive to the needs of others • Listens well and therefore is able to quickly recognise problems and concerns
Quality orientation	• Risk management	• Checks own work and that of others thoroughly to ensure that it meets the Firm's standards • Is aware of and consistently applies the Firm's risk procedures • Delivers work that is of a standard that is higher than that set by management/Firm (ie sets own work standards)
	• Concern for excellence	• Delivers solutions that are cost effective and value added for the client • Defines quality standards for the engagement

Competency	Behavioural Indicators	Behavioural Statements
Flexibility		• Easily adapts to different roles and environments • Adapts quickly and willingly to unforeseen circumstances • Is willing to change an approach to work if necessary
Resilience	• Coping skills	• Remains calm even in difficult and stressful situations • Takes control of him-/herself and calms others in difficult or crisis situations • Is willing and able to work long hours for extended periods of time
Personal motivation	• Drive	• Takes responsibility for his/her own career advancement • Wants to succeed • Takes on increasingly challenging tasks • Is ambitious – looks for new and exciting challenges • Sets personal goals that are ambitious and stretching
	• Attitude to work	• Displays a positive disposition at all times • Social, friendly, warm – enjoys interacting and being with others • Responds positively to pressure and challenge

5.2 INTERPRETATION OF RESULTS

Having reported all the results they will now be interpreted.

5.2.1 Key Findings

From all the evidence the following was concluded:

- Competencies or skill sets appear to develop systematically or progressively
- Some competencies are common to all levels and some are specific to particular levels
- Similar competencies emerged from the different tools
- The competencies identified are consistent with those found in literature

5.2.1.1 Development of Competencies

SAICA (2000) has suggested that an accountant needs a variety of skills, including intellectual skills, interpersonal skills and communication skills. These skills need to be developed progressively over the period of articled clerkship. The evidence in this research suggests that competencies are developed systematically in the following order: firstly cognitive or intellectual skills are developed, then leadership skills and finally communication skills.

5.2.1.2 Competency Groupings

Competencies can be grouped into various categories. For the purposes of this research the category titles "common competencies" and "level specific competencies" have been chosen. Common competencies are those competencies that are common to both groups. These competencies are differentiated by the behaviours that are to be demonstrated at each level. Level specific competencies are the unique competencies required by a specific job or level. In this research there are both common competencies and level specific competencies.

The following competencies emerged as common competencies: problem solving and analysis; planning and organising, action orientation, interpersonal sensitivity, leadership, flexibility and personal motivation. Specialist knowledge and impact emerged as level specific competencies for the trainee accountant group (year 1–3). Commercial awareness, strategic, oral communication, persuasiveness, quality orientation and resilience have emerged as level specific competencies for the CA group (year 4–5+). All competencies identified in this research will be discussed in the section that follows.

As can be seen from the results above the competencies identified for the trainee accountant group (year 1–3) are not dramatically different from those of the CA group (year 4–5+). There are a large number of common competencies. In these instances the dimensions of complexity and breadth will come into effect (Spencer & Spencer, 1993). The most notable difference between the two groups is the

change in focus from technical/specialist knowledge (ie a focus on cognitive skills) during the early years to a strong emphasis on leadership and managerial competencies in later years.

The emergence of common and level specific competencies supports the findings reported by Abdolmohammadi and Shanteau (1992), where similar findings emerged.

5.2.1.3 Same Competencies, Different Tools

It is not surprising to see the emergence of similar competencies from the various job analysis tools used. Such a pattern/trend is encouraging and suggests a strong presence and recognition of the specific competency. However, the benefit of using different and varied tools is that they complement each other (Levine et al, 1980; Kandola & Pearn, 1992). This may result in one method identifying competencies not being identified by the other methods. Competencies that have not emerged strongly in more than one of the job analysis tools should not necessarily be discarded, as they may be indicative of new or emerging competencies. In this research the researcher has used the terminology "established and emerging" (see sections 5.2.2.1 and 5.2.2.2) to further categorise the competencies. Most of the emerging competencies appear to emerge in the WPS. This suggests to the researcher that respondents were possibly not able to succinctly articulate some behaviours in the RGT or CIT, but were able to recognise the manifested behaviours on the WPS cards.

5.2.1.4 Comparison with other Models/Research

Having conducted and interpreted the results of this research it is interesting and valuable to compare the model(s) developed in this research with models from previous research. In comparing the models the following was noted:

- With the exception of action orientation and personal motivation all of the competencies identified for the year 1–3 group can be found in the McBer Model (as cited in Trotter, 1996).

- With the exception of oral communication skills, action orientation and resilience, all the competencies identified for year 4–5+ group can be found in the McBer Model (as cited in Trotter, 1996).

- Trotter (1996) reports that the competencies reported in the McBer model will account for 80–98% of competencies identified in other models. The results of this research support this claim.

- The model(s) developed in this research bear a strong resemblance to the competencies identified by Rich (1988).

The results of this research (specifically year 4–5+) provide support for the development of a generic management model. The following competencies are common to both this research and the generic managerial model: interpersonal sensitivity (understanding), leadership, problem solving and analysis. Spencer and Spencer (1993:199) report that "superior managers of all types and at all levels, share a general profile of competencies. Managers of all types are also more like each other than they are like the individual contributors they manage". This finding highlights the similarities between managerial jobs, including those of specialised professions such as auditing.

5.2.1.5 Measurability

The inability to accurately measure constructs associated with success has been a long-standing criticism of assessment processes (Dinius & McIntyre, 1979). Rich (1988) has called for more explicit measurement and training of competencies, specifically motive, self-concept, cognitive and interpersonal skills.

All of the competencies identified in the model are described in terms of behaviours and therefore can all be easily measured (SHL, 1994). This has particular importance and implications for the utility of the model, especially in the areas of recruitment, training and performance measurement.

5.2.2 Discussion and Interpretation of the Competencies

A discussion on the competencies identified for the trainee accountant group (year 1–3) and the CA group (year 4–5+) follows.

5.2.2.1 Trainee Accountants (Year 1-3)

Below, the competencies that have been identified for the trainee accountant group (year 1–3) have been categorised into "established and emerging" competencies as mentioned in section 5.2.1.3.

Table 5.10 Categorisation of the Competencies Identified for Trainee Accountants (Year 1–3)

Established Competencies	Emerging Competencies
Specialist knowledge*	Leadership
Problem solving and analysis	Flexibility
Planning and organising	Impact*
Action orientation	
Interpersonal sensitivity	
Personal motivation	

* indicates a level specific competency

(a) Specialist Knowledge

Specialist knowledge emerged from all the analysis tools as an extremely important competency for this group. Specialist knowledge, generally understood to be the technical competence of individuals, is regarded as critically important during the first two or three years. Specialist knowledge is specifically assessed during the period of clerkship with the writing and passing of the QE. In this research, specialist knowledge emerged as a level specific competency. This can be explained in terms of the specific company culture, where in post-article years (year 4—5+), technical knowledge/competence is assumed. Boyatzis (as cited in Boak, 1991), categorises specialist knowledge as a threshold competency, thus concuring with the above findings. Technical/professional expertise is mentioned in McBer's model (as cited in Trotter, 1996) as a characteristic of high

performance. Cognitive skills, specifically knowledge and its application emerged as the most important factor in the Abdolmohammadi and Shanteau (1992) study.

(b) Problem-solving and Analysis, and Planning and Organising

Analysing and solving problems, and planning and organising have both emerged as critically important competencies for this group. Support for these competencies was evident across both levels and from all the job analysis tools and techniques. The frequency and strength with which these competencies emerged, could suggest that they are core/fundamental skills. The above competencies are also present in the AMA model (as cited in Boak, 1991), the MCI model (as cited in Boak, 1991) and McBer's model (as cited in Trotter, 1996). Problem-solving was also identified by Dinius and McIntyre (1979) as a competency prevalent in successful CAs.

Spencer and Spencer (1993) refer to problem-solving and analysis, and planning and organising as analytical thinking competencies. Analytical thinking is described by Spencer and Spencer (1993:68) as "the ability to organise the parts of a problem or situation in a systematic manner, to set priorities on a rational basis and the ability to identify causal relationships". According to Spencer and Spencer (1993), the analytical thinking scale comprises two dimensions: complexity and breadth. Complexity refers to the number of different causes, reasons, consequences or action steps included in the analysis. Breadth refers to the size of the problem being analysed and the impact of the effect of the consequences. In terms of this research, it is the dimensions of complexity and breadth that will determine the differentiating behaviours required at each level (ie as people progress and become more experienced, they will be expected to deal with problems that are more complex and have more far reaching effects). Superior performers in more complex or senior jobs appear to think about problems in a more complex manner (Spencer & Spencer, 1993). Problem-solving and analysis and planning and organising would therefore appear to be appropriate competencies for both groups.

Reported personality profiles have described accountants as people who like to plan ahead and are well organised (see section 3.2.2). The results of this research

strongly support this finding. Planning and organising emerged as a very important characteristic of effective performers.

(c) Action Orientation

An orientation towards action and high energy has also emerged as an important competency. This is supported in literature by Constable (as cited in Tate, 1995), Spencer and Spencer (1993) and Hodgeson and Cranier (1993) who have all reported this competency as a characteristic of superior performers. An action orientation is closely linked to task completion and the seizing of opportunities. Action-oriented people tend to display initiative and often do more than is required in order to complete the task or enhance the results of a job (Spencer & Spencer, 1993). The RGT and the CIT both indicate high support for this competency. An action or high-energy orientation appears to be linked to impact as those are people who typically complete tasks quickly and tend to make a positive impression on others (Spencer & Spencer, 1993). Impact was also identified in this study as a characteristic of effective performers. This competency is described later in this section.

(d) Interpersonal Sensitivity

Interpersonal sensitivity, defined by Spencer and Spencer (1993:343) as "the ability to understand and value the inputs of diverse others", emerged from the WPS as very important for this group. Evidence from the RGT would support a moderate level of sensitivity at this stage. No evidence could be found in the CIT for this competency. At this early stage, such a competency would be used predominately for the interaction with colleagues, specifically within a team environment. This competency becomes increasingly important in later years and will be discussed in more detail under the competency model in section 5.2.2.2.

(e) Personal Motivation

Personal motivation is a competency that is not commonly reported on. It has, however, emerged very strongly in this research. High levels of motivation and persistence were identified by Dinius and McIntyre (1979) as being some of the characteristics of successful accountants. Personal motivation in this research was generally described in terms of trainee accountants' attitude towards "articles" and

their enthusiasm and willingness to maximise the opportunities arising from the situation. Personal motivation is reported by Rich (1988) as being one of the 10 *megaskills*. It is also reported in the MCI model (Boak, 1991:12) as "personal drive"). Spencer and Spencer (1993:88) describe personal motivation as a *common unique competency* as it has been found repeatedly in studies but not frequently enough to be labelled generic.

(f) Leadership

Typically leadership would not be a skill required of trainee accountants, with the exception of perhaps managing a small audit in their final year of articles. It has, however, been included in the model as an emerging competency, motivated by the recent changes in organisational structures. Current workplace structures are becoming increasingly flatter and therefore it is reasonable to assume that in the future people may have to take on this leadership responsibility at an even earlier stage. It is envisaged that with time, this competency will grow in importance for this group.

Leadership is generally understood to be a management competency. It will therefore be discussed in more detail in the competency model in section 5.2.2.2.

(g) Flexibility

Flexibility is described as the ability to change one's own behaviour or approach to suit the situation (Spencer & Spencer, 1993). It is also referred to as conceptual flexibility in Schroder's model (as cited in Tate, 1995), stamina and adaptability in the AMA model (as cited in Boak, 1991), or adaptability in Constable's model (as cited in Tate, 1995). Flexibility has emerged strongly from the WPS for both groups. Strong support in the WPS and limited support from the other tools could suggest that flexibility is an emerging competency. The need for increased flexibility is supported in literature. Pavlock (as cited in Amernic et al, 1979) reported that CAs need to display a higher tolerance for ambiguity and change (see section 3.2.2). The results of this study support Pavlock's findings. Flexibility has also been predicted by Spencer & Spencer (1993) as a competency that will be required of employees in the future.

(h) Impact

Impact, which reflects an individual's personal concern with his/her effect on others, has also emerged as a characteristic of high performers. Spencer and Spencer (1993) report that those people who are high in impact, are aware of the effect of their actions and carefully manage their image. They appear to be self-confident, have good "organisational awareness" and know whom to impress. Typically this includes superiors and members of the management team (ie is wider than their peer group/colleagues). It is this wide breadth of impact that differentiates these people. Impact has emerged in most of the models reviewed. It has also been identified as a required competency for the future (Spencer & Spencer, 1993).

Impact is not specifically measured by the IMC but it emerged very strongly in the RGT. This can be explained in terms of the company culture in which the research was carried out, where the ability to create a credible impression on others is both demanded and rewarded. Impact can be affected by professional appearance, dress sense and level of self-confidence (Spencer & Spencer, 1993). Impact can affect an individual's level of perceived effectiveness. This research identified self-confidence as a component of "impact". Impact and self-confidence are included in most models of high performance (Boak, 1991; Spencer & Spencer, 1993; Tate, 1995).

5.2.2.2 Chartered Accountants (Year 4–5+)

Below, the competencies that have been identified for the CA group (year 4–5+) have been categorised into "established and emerging" competencies as mentioned in section 5.2.1.3.

Table 5.11 Categorisation of the Competencies Identified for Chartered Accountants (Year 4–5+)

Established Competencies	Emerging Competencies
Commercial awareness*	Strategic*
Problem solving and analysis	Oral Communication*
Planning and Organising	Persuasiveness*
Action Orientation	Quality orientation*
Interpersonal sensitivity	Flexibility
Leadership	Resilience*
Personal Motivation	

* indicates level specific competencies

(a) Commercial Awareness

Commercial awareness, typically understood by respondents, to be the ability to sell work and understand business principles, has emerged very strongly for this group, particularly from the RGT and the CIT. Its notable absence from the WPS may be indicative of the lack of an "appropriate mindset" amongst the current job incumbents. It may also reflect a component of the company culture that may not reward this competency adequately. The literature suggests that in order to be successful, people need to start thinking in a more "business minded" or entrepreneurial manner. "Entrepreneurial innovation," described as "the motivation to 'champion' new products, services and production processes" has been identified as one of the key competencies required of managers for the future (Spencer & Spencer, 1993:343). A study by Aranya et al (1978), reported that accounting students displayed a higher interest in business and organisational fields when compared with other students. From this it can be assumed that members of the sample population would be business oriented. It is the opinion of the researcher that a lot of emphasis should be placed on this competency.

(b) Problem solving and analysis

This competency was discussed in section 5.2.2.1.

(c) Planning and Organising

This competency was discussed in section 5.2.2.1.

Kotter (1982) reported that effective managers spent approximately half of their time working on activities that they prioritised as urgent. According to Kotter, effective managers made little attempt to work on the small issues that tend to add up to lots of activity. Their philosophy was to work on those few items that would gain the most mileage in the long term. The complexities and breadth of responsibilities undertaken by an audit manager demand that one is able to effectively plan and prioritise tasks and activities (both ones own and that of others).

(d) Action Orientation

This competency was discussed in detail in section 5.2.2.1. There was strong evidence for this competency, particularly from the WPS. At this senior level it appears that the focus of this competency changes from one where tasks and activities are completed quickly to one where one needs to "orchestrate" activities and make decisions quickly in order to ensure that tasks are expedited quickly.

(e) Interpersonal Sensitivity

This is also a "common competency" and has been discussed in detail in section 5.2.2.1.

Interpersonal sensitivity appears to be a commonly recognised characteristic of high performers. It is common to many of the models (McBer's model, as cited in Trotter; 1996; MCI model, as cited in Boak, 1991; Schroder's model, as cited in Tate, 1995) reviewed in this research. Interpersonal sensitivity has also been identified as an increasingly important competency for managers in the future. As a manager, "the ability to understand and value the inputs of diverse others accurately" is crucial (Spencer & Spencer, 1993:343). With work place demographics changing so quickly, cross-cultural sensitivity is currently being viewed as a component of interpersonal sensitivity. It is described by Spencer and Spencer (1993:37) as "a special case of interpersonal understanding across cultural divides" and includes skills such as empathy, listening skills and sensitivity to others.

The identification of interpersonal sensitivity, including cross-cultural sensitivity as a required competency would therefore appear appropriate. This skill or competency would be used extensively both internally with the engagement team and externally with the client.

Spencer and Spencer (1993) view interpersonal sensitivity as a component of leadership (see leadership below).

(f) Leadership

Spencer and Spencer (1993) believe that managerial and leadership competencies, are particularly important. They report that managerial and leadership competencies are well developed in the generic dictionary because they are so common among the groups (managers and others) that they have studied. Leadership is also referred to as managing interaction (Schroder's model, as cited in Tate, 1995), collaborative influence (Klemp & McClelland model, as cited in Boak, 1991), managing group processes (AMA model, as cited in Boak, 1991) or team facilitation (Spencer & Spencer, 1993). Team facilitation (according to Spencer & Spencer, 1993) has been identified as one of the key competencies required of managers for the future.

The leadership/managerial competency, according to Spencer and Spencer (1993), has a particular focus on the intention to lead and develop others, either individually or in a team.

(i) Team Leadership

To operate effectively as a (team) leader would require a certain level of "self-confidence, initiative, relationship building skills and organisational awarenes" (Spencer & Spencer, 1993:66). With the exception of organisational awareness, all these competencies emerged in this study as criteria for superior performance. According to McBer (as cited in Trotter, 1996), organisational awareness is a component of the competency group "Impact and Influence".

(ii) Developing Others

The role of developing others implies a certain level of interpersonal understanding in order to recognise and respond to the developmental needs of others (Spencer & Spencer, 1993). Interpersonal sensitivity (as it is called in this research) was identified in this research study as being critical for effective performance. It is discussed in detail earlier in the chapter .

In terms of this research, people from their 3rd year onwards would be expected to perform the roles of developing and leading others and therefore the leadership competency is appropriate.

(g) Personal Motivation

Personal motivation is a less obvious competency and is not frequently mentioned in literature. It is perhaps therefore unusual to find this competency rated so highly at such a senior level. This competency has been interpreted in terms of the specific corporate culture in which the research was undertaken, where success, understood to be admission to the partnership, will only materialise if you possess and display high levels of this characteristic. In addition, the evidence in this research suggests that this competency/skill is essential, particularly for those who have completed their articles of clerkship (4th year +) or are nearing the end of their clerkship (3rd year) and are working in the profession out of personal choice.

(h) Strategic

Strategic thinking was identified as a key competency for this group of people by the WPS. It has also been identified as being an important competency of the future for executives (Spencer & Spencer, 1993).

At this relatively senior level, it is appropriate to see the emergence of such a competency as one is in a position to influence others, in order to meet the needs, priorities and goals of the organisation. It is also expected that at this level one is able to demonstrate a broader based view of issues and their longer-term implications. Literature suggests that more superior performers are able to visualise further into the future (Spencer & Spencer, 1993). This competency can also be categorised as an "emerging" competency as it is not frequently reported

in literature. Cannon (1995) strongly supports the development of strategic competencies in organisations. The researcher believes that significantly more emphasis should be placed on this competency.

(i) Verbal Communication

Very few of the models reviewed identified communication or presentation skills as a differentiating competency. In this research, written skills emerged as more important during the early years, whilst in later years verbal skills emerged as more important. The ability to articulate one's thoughts succinctly, to persuade and influence others and to build relationships (both internally and with clients) emerged as critically important at this stage.

(j) Persuasiveness

Persuasiveness, being the ability to influence and persuade others emerged strongly in the following models: Klemp & McClelland, (as cited in Boak, 1991); McBer, (as cited in Trotter, 1996); and MCI, (as cited in Boak, 1991). Persuasiveness can be classified as a component of verbal communication skills. Persuasiveness emerged in the WPS as critically important for all levels from year 3 onwards. The ability to persuade and influence others would be used extensively in the selling and presentation of work and is thus a critical skill for the job of an audit manager or supervisor. Influence, which is a similar behaviour to persuasiveness, is also one of 21 competencies reflecting superior performance in the McBer model (as cited in Trotter, 1996).

(k) Quality Orientation

The setting of ambitious targets and the delivery of a high standard of work product, emerged very strongly from the CIT for this group. Given that the nature of the work performed by an auditor, is the giving of professional financial advice, it would appear reasonable to assume that an orientation towards quality and the avoidance of errors would be inherent, given the implications of an error in its absence. An orientation towards quality is typically clustered under competency titles such as achievement orientation (McBer, as cited in Trotter, 1996) or efficiency orientation (AMA, as cited in Boak, 1991). Whilst it has emerged in this

study as a differentiating characteristic, it would not be unreasonable to classify it as a threshold competency in this research.

(l) Flexibility

This competency emerged very strongly in the WPS for both groups. It is described in detail in section 5.2.2.1. Flexibility has also been identified as a key competency required of managers for the future (Spencer & Spencer, 1993).

(m) Resilience

Resilience, sometimes described as stamina or perseverance, emerged as a highly important competency for staff from their 4th year onwards. Work pressures at this stage/level demand that one is able to display emotional self-control and maintain their operational performance under stressful or difficult circumstances. Resilience is most often found in lower-level managerial jobs and is less mentioned by high performing upper level managers. According to Spencer and Spencer (1993) this may be because at this senior level the behaviour is so ingrained that it is taken for granted or because the stress faced by people operating at this senior level is of a nature that is more on-going rather than immediately stressful. The AMA model (as cited in Boak, 1991) and the Constable model (as cited Tate, 1995) both report this competency in their model. According to Spencer and Spencer (1993) the ability to work under pressure is assumed at this level. Given the above findings, resilience could be described as a "threshold " competency.

(n) Competencies Reported in Literature not Emerging in this Research

Creativity and organisational awareness are two competencies that were evident in literature but did not emerge in this research. Possible explanations will be discussed below.

(i) Creativity

Creativity is a competency that did not emerge strongly at any level in this research. Research conducted by Amernic et al (1979), suggests that the accounting profession needs to attract more people with creative characteristics.

The reasons for the competency not emerging in this research could be numerous but could include the following:

- It is a self-perpetuating situation. Those that don't possess this skill don't value it. Those that did possess the skill may already have left the organisation as it may not have been a skill that was sufficiently recognised or valued
- The nature of work performed by a CA does not permit large amounts of creativity

(ii) Organisational Awareness

Organisational awareness refers to the individual's ability to understand the power relationships that are taking place within organisations (Spencer & Spencer, 1993). This includes the ability to identify the real decision makers and the individuals that influence them. Organisational awareness is a parallel scale to interpersonal sensitivity, only here the focus is on the organisation and not individual people. The two are not dependent on each other. Indicators of organisational awareness include understanding the informal structures and recognising unspoken organisational constraints (Spencer & Spencer, 1993).

It is perhaps unusual not to see the emergence of such a competency, particularly at the more senior levels. A possible explanation could be that at the senior levels this competency is not openly mentioned.

REMARKS

Having reported and discussed the results of the research, the empirical aims of this research, namely to develop a competency model for trainee accountants and CAs in a professional services environment, have been achieved. The results suggest that the competencies of trainee accountants are largely consistent with that of registered CAs. Threshold competencies are however evident at both levels.

5.3 CHAPTER SUMMARY

In this chapter the results of each tool were reported and discussed for each level. The competencies identified were integrated and formulated into a competency model for trainee accountants and CAs respectively. The next chapter will draw final conclusions on the research conducted. In addition, limitations and recommendations pertaining to the research will also be reported.

CHAPTER 6 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter addresses steps 6 to 8 of the empirical study. Firstly, conclusions will be formulated with regards to the research. This will be followed by a discussion on the limitations and recommendations pertaining to the research.

6.1 CONCLUSIONS

This research set out to address the following problem: "What are the competencies required of auditors working in a professional services environment?". This problem was solved with the identification of competencies for both trainee accountants and CAs.

The general aim of the study was to develop a competency model for auditors working in a professional services environment. The competencies identified, using the various job analysis tools, were integrated into a model for trainee accountants and CAs respectively. The general aim of the research has therefore been achieved.

The first theoretical aim of the research, namely the conceptualisation of job analysis and its relevance to the auditing profession, was achieved in chapter 2. It was found that the absence of a commonly used job analysis system, together with the increasing demands from business leaders for job related information that assists in decision making, highlighted the need and usefulness of job analysis within the auditing profession.

The remaining theoretical aim was achieved in chapter 3 by providing a conceptual framework for competencies and their relevance to the auditing profession. It was found that whilst much development work has taken place in the field of competency modelling, very little has taken place that specifically relates to the auditing profession. The relevance and application of competencies within the profession was very evident.

The first empirical aim was met with the development of a competency model for trainee accountants (ie year 1–3). This was achieved by using the competencies identified in the WPS, RGT and CIT respectively. It was found that cognitive and intellectual skills were the most important competencies at this stage. This model is presented in section 5.2.2.1. This aim has therefore been achieved.

The second empirical aim of this research was to develop a competency model for CAs using the competencies identified in the WPS, RGT and the CIT respectively. The information obtained using the above named tools, was integrated and developed into a competency model for CAs (ie year 4–5+). It was found that managerial competencies are most important at this stage. The model is presented in section 5.2.2.2. This aim has therefore been achieved.

6.2 LIMITATIONS

The limitations of this research are discussed in respect of the literature review and the empirical study.

6.2.1 Limitations Pertaining to the Literature Review

With regard to the literature review the following limitations are highlighted.

- Current literature pertaining to job analysis tools and techniques was limited.

- Literature pertaining specifically to the WPS, which is a new job analysis instrument, was also limited. A possible explanation could be that the WPS has been developed as an organisational tool and therefore it is being used predominately in industry. Typically these users do not publish their findings. Those in academia, who would typically publish literature, are often not trained in organisational tools, probably for cost and time reasons.

- A limited amount of literature was available with regard to job analysis that specifically related to the auditing/accounting profession.

- A limited amount of literature was available with regard to competencies that specifically related to the auditing/accounting profession.

- Many of the studies reported used different job analysis tools to those used in this study.

- All the competency models evaluated in the literature study were management models. No models at a below manager level were available.

6.2.2 Limitations Pertaining to the Empirical Study

With regard to the empirical study, the following limitations are highlighted.

- This research was conducted primarily for academic purposes, with the scope being limited to the development of a competency model. The competencies identified in this research have therefore not been validated. The model should therefore be used cautiously until this process has been undertaken. Once validated the identified competencies can be used for a number of different human resource purposes.

- The study is potentially limited in its generalisability. The information has been gathered and the results have been interpreted within the context of the organisation within which the research was conducted. The researcher does however believe that the results are generalisable to a limited degree - namely to other professional services organisations employing trainee accountants and CAs. Caution should however still be exercised in these instances.

- The model has been based on competencies that have been identified in a single study of outstanding performers at a particular point in time (McClelland, 1994). In order for the model to remain up to date and relevant, it will need to be reviewed from to time.

- The key to the success of the implementation of a competency model such as the one developed in this research, is a well-structured implementation plan. The development of such a plan is beyond the scope of this research and therefore would need to be developed by any future users.

- Weightman (1994) cautions against developing lists of competencies that are either too general and obvious or too prescriptive and controlling. Given the "limited" number of competencies identified for each group, the model could possibly be perceived as being too prescriptive.

- The competencies in this research have been selected on the basis that they differentiate performance. No baseline or threshold competencies have therefore been included in the models presented. These would need to be included if the model is intended to be used for purposes of performance/assessment or technical development.

- The WPS information was gathered using an "expert panel" format (Spencer & Spencer, 1993). The limitation with such an approach is that if an activity or (emerging) behaviour is not recognised by the majority of the group, it may be discarded.

- All the methods used in this research to gather the information (WPS, RGT, CIT) are worker-oriented in approach. The research is therefore subject to human error and subjectivity.

6.3 RECOMMENDATIONS

Having considered the conclusions and limitations of the study, recommendations regarding future research will now be formulated. Recommendations of a general nature and those that relate specifically to the HR practices of recruitment, training, performance management and career counselling will be discussed.

6.3.1 General

Given that the field of competencies is a new and growing discipline, the opportunities for research are varied and plentiful (Lawler, 1994). A few options have been highlighted below.

6.3.1.1 Validation of the Model

The validation of the model developed in this study was outside the scope of the research. An opportunity therefore exists to test the validity of the competencies as predictors of performance.

6.3.1.2 Industry-wide Study

Given that this research was limited to one firm, it is important to recognise that there may be other characteristics that may also contribute to successful performance as an auditor but that these may not have been identified in this research. An opportunity therefore exists for similar research to be conducted at an industry level. In addition, research investigating whether the competencies of CAs operating in a commercial environment are consistent with those of CAs in a professional services environment could also be investigated.

6.3.2 Human Resource Practices

The following is recommended with respect to the HRM practices of recruitment, training, performance management and career counselling.

6.3.2.1 Recruitment

Job specific competencies should be categorised as either recruitment or training competencies. Effective recruitment requires the identification of critical competencies. The identification of those competencies which should be present and developed prior to starting employment, would assist in increasing the reliability and validity of recruitment techniques. In order to identify at an early

stage those people who are most likely to succeed in the profession, it is recommended that the competencies identified be used in conjunction with the traditional predictors of success.

6.3.2.2 Training

It is recommended that training be focused on those skills and competencies that are required for auditors. Competencies that are identified as "training" competencies should be incorporated into development plans for employees. The development of these competencies will enable the employee to progress from an entry level position to a desired or targeted position within the Firm. From an organisational perspective, training will be more cost efficient as it will be more individually focused, and conducted only for those employees who require it.

6.3.2.3 Performance Management

Competencies are described in terms of behaviours and therefore are able to be measured. It is recommended that the competencies identified as being critical for effective performance, be translated into a performance management system. In this way, performance expectations are clarified at the outset and the assessment of performance is fair and objective, as all job incumbents are assessed on the same basis.

6.3.2.4 Career Counselling

The identification of competencies that predict superior performance as an auditor will be of benefit and interest to both present and future members of the profession. It is recommended that this information be communicated in a manner that will enable recipients of the information to make informed decisions. Work dissatisfaction resulting from unfulfilled career aspirations is one of he most serious problems facing accounting, as well as other professions (Amernic et al, 1979).

REMARKS

At the end of this chapter, having drawn conclusions, discussed the limitations and formulated recommendations, the overall aim of the research will have been achieved.

6.4 CHAPTER SUMMARY

In this chapter steps 6 to 8 of the empirical study (see chapter 4) were addressed. Firstly, conclusions were formulated with regards to the research. This was followed by a discussion on the limitations pertaining to the study. Recommendations of a general nature and those relating specifically to HRM were also formulated.

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APPENDIX COMPETENCY MODELS FOUND IN LITERATURE

Listed below is a full listing of the competencies (some with descriptions) that comprise the six management models that were compared in chapter 3 (see table 3.4).

1. Schroder's 11 High–Performance Managerial Competencies (as cited in Tate, 1995:19)

Information search	Gathers many different kinds of information and uses a wide variety of sources to build a rich informational environment in preparation for decision making in the organisation
Concept formation	Builds frameworks or models or forms new concepts etc on the basis of information; becomes aware of patterns and trends and cause/effect relations by linking disparate information
Conceptual flexibility	Identifies feasible alternatives in planning and decision making; holds different options in focus simultaneously and evaluates their pros and cons
Interpersonal search	Uses open and probing questions, summaries, paraphrasing etcetera to understand the ideas, concepts and feelings of others
Managing interaction	Involves others and is able to build a co-operative teams in which group members feel valued and empowered and have shared goals
Developmental orientation	Creates a positive climate in which individuals increase the accuracy of their awareness of their own strengths and limitations and provides coaching and training to improve performance

Impact	Uses a variety of methods (eg modelling behaviour or appealing to the interests of others) to gain support for ideas, strategies and values
Self-Confidence	States own position on issues; unhesitatingly takes decisions when required and commits self and others accordingly
Presentation	Presents ideas clearly, with ease and interest so that the other person understands what is being communicated
Proactive orientation	Structures the task for the team; implements plans and ideas; takes responsibility for all aspects of the situation
Achievement orientation	Possesses high internal work standards and sets ambitious yet attainable goals; wants to do things better

2. **MCI Model** (as cited in Boak, 1991:12)

Cluster 1	• Showing concern for excellence • Setting and prioritising objectives • Monitoring and responding to actual against planned activities
Cluster 2	• Showing sensitivity to the needs of others • Relating to others • Obtaining the commitment of others • Presenting oneself positively to others
Cluster 3	• Showing self confidence and personal drive • Managing personal emotions and stress • Managing personal learning and development
Cluster 4	• Collecting and organising information • Identifying and applying concepts • Taking decisions

3. **AMA Model** (as cited in Boak, 1991:10)

- Efficiency orientation
- Proactivity
- Concern with impact
- Diagnostic use of concepts
- Use of unilateral power*
- Developing others*
- Spontaneity*
- Accurate self assessment*
- Self control
- Stamina and adaptability
- Perceptual objectivity
- Positive regard*
- Managing group process**
- Use of socialised power
- Self confidence
- Conceptualisation**
- Logical thought*
- Use of oral presentations

* threshold competencies

** senior management competencies only

4. McBer's Dictionary of Competencies (as cited in Trotter, 1996:12)

Achievement and Action	• Achievement orientation • Concern for order • Information seeking • Initiative
Helping and Human Service	• Interpersonal understanding • Customer service orientation
Managerial	• Developing others • Directiveness • Teamwork and co-operation • Team leadership
Cognitive	• Analytical thinking • Conceptual thinking • Technical/Professional expertise
Impact and Influence	• Influence • Organisational awareness • Relationship building
Personal Effectiveness	• Self-control • Self-confidence • Flexibility • Organisational commitment

5. Constable's Model (as cited in Tate, 1995:21)

- Ability to make sound judgements
- Creativity
- Willingness to take risks
- Decisiveness
- High energy levels
- Ability to take initiatives
- Results orientation
- Tenacity
- Ability to take independent action
- Integrity
- Adaptability

- Resilience
- Ability to deal with detailed information
- Lateral thinking

Later he added the following skills

- Self management skills: – Learning skills, communication skills, time management
- To manage other people: – Selection procedures, appraisal systems
- Managing and controlling: – Setting objectives, forecasting, budgeting and planning
- To manage relationships outside the organisation: – Dealing with other organisation cultures, language skills

6. Klemp and McClelland Model (as cited in Boak, 1991:11)

- Planning/causal thinking
- Diagnostic information seeking
- Conceptualisation/synthetic thinking
- Concern for influence
- Directive influence
- Collaborative influence
- Symbolic influence
- Self confidence