

**Intellectual capital characteristics for competitive advantage:  
case study of a multinational corporation**

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by

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## **Abstract**

The competitive environment in the banking industry globally and in South Africa is putting immense pressure on companies to keep track of changes in technology, customer demands, and market trends. Responses to the above will allow a company in South Africa to improve customer service and thus remain competitive and relevant.

This dissertation is to determine the status and interpretation of intellectual capital (intangible assets) within a South African banking and service company. This study explores the way in which intellectual capital characteristics contribute towards a competitive advantage.

A case study method was applied and interviews were conducted to capture responses. The questions were structured, but the discussions allowed for additional questions to be asked during the interviews.

The findings suggested that the value of intellectual capital is less of importance than those assets on the financial statements, but it still adds value to remain competitive. Structured capital was valued most.

## Declaration

I declare that “**Intellectual capital characteristics for competitive advantage: a case study of a multinational corporation**” is my original work and that all the sources I have used or quoted have been acknowledged as complete references, and that the work has not been submitted for degree purposes before.

.....

**Name**

.....

**Date**

**Signature: - .....**

## **Acknowledgements**

I could not have accomplished this great milestone in my personal life and career without the following people:

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## Chapter 1 – Orientation

*“Globalisation has changed us into a company that searches the world, not just to sell or to source, but to find intellectual capital - the world's best talents and greatest ideas. “*

*Jack Welsh*

### 1.1 Introduction

#### 1.1.1 Background of this study

##### Why intellectual capital as a topic

Intellectual capital seems to be the “buzz word” in modern business discussions. However, when valuing a company, the market value of a company is usually measured against those assets on the balance sheet, called tangible assets. And yet, it is clear that innovation, skills, entrepreneurship are all key drivers to an organisation to remain competitive. Maree (2001) feels strongly that an investor will consider paying more for a share than what the underlying asset value is, and this may be related to the value of intellectual capital of the enterprise. Carrell (2007) acknowledges this view in a study on intellectual capital, referring to a Fortune 500 company, claiming that its improved growth, profitability and global expansion are due to a result of placing emphasis on intellectual capital. Intellectual capital is all about those intangible assets which would not typically appear on a balance sheet, but without it, an organisation may find it rather challenging to succeed.

This study is based on the premises to understand how a South African multinational corporation within the banking industry values intellectual capital characteristics as competitive advantage. According to Yau, Chun & Balaraman (2009), physical assets are being replaced by intellectual capital as key driver of

corporate future performance and success as it cannot be easily acquired or imitated by competitors. It further suggests that the ability of a company to create value is becoming more dependent on intellectual capital than on tangible assets and this is evident through the increasing gap between the market value and the book value of a company. Akpinar and Akdemir (no date) rightly point out that; even though intellectual capital does not appear on the balance sheet of a company, it is of more value than a company's physical assets. They elaborate further by stating that physical assets depreciate over time, whilst intellectual capital needs to grow should a company want to remain prosperous. In their introduction to a study done on intellectual capital, Arenas and Lavanderos (2008:1) make the following comment: "Capital and work are no longer the differentiating and generating factors of sustainable competitive advantage". It becomes evident from literature reviews that many authors are of the opinion that intellectual capital is a key driving factor for success in the twenty-first century. Moon and Kym (2006) agree that intellectual capital is the most powerful asset and it can promote value and competitive advantage.

Intellectual capital comprises three main dimensions: human, structural and relational capital. The diagram below is an illustration of intellectual capital as understood by the author.

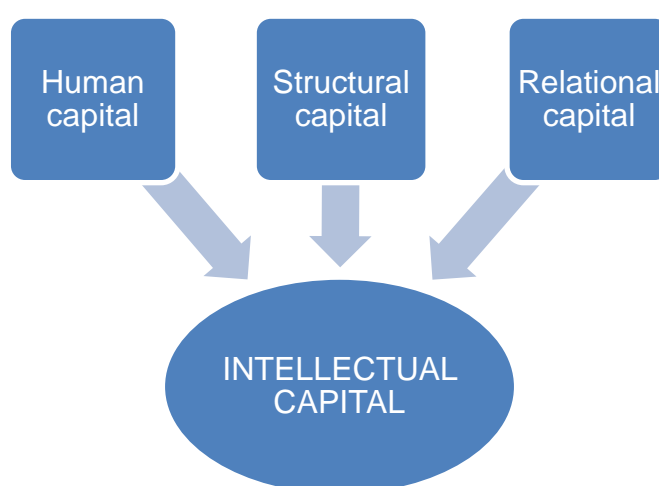


Figure 0.1: Intellectual Capital Diagram

In many discussions, there seems to be an understanding that intellectual capital and human capital are the same terms, whilst the literature review in Chapter 2 confirms that human capital is only one component of intellectual capital. A key motivation for the current study is to understand all the components of intellectual capital and how it contributes towards a competitive advantage.

Within the South African context, education is a burning topic in the political and economic spheres. Evoh (2007) points out that an educated and skilled labor force is needed for an emerging information-based economy. It is thus evident that people possess one key component: knowledge. It is the opinion of Evoh (2007) that a shortage of human capital makes it difficult for a country to secure the benefits of a global economy. The literature suggests that knowledge is a factor of human capital. People form an important part of intellectual capital. The capturing of that knowledge is essential to the success of a company as people exit a company with applied and theoretical knowledge and thus reduce the value of intangible company assets. Many strategies are based around people and information. Brian Joffe, founder of the diverse Bidvest Group has the following to say on the topic of people and their innovative ideas: "If we get our people right, the financials fall into place" (Bidvest Annual report, 2010:2).

This study is based on the background of various studies conducted on the topic of intellectual capital and is aimed at determining the value of intellectual capital and its characteristics, within the context of a listed South African multinational company. It is clear that education and knowledge are important and the results of this study will indicate whether human capital of which education and knowledge are part of, is also a key intellectual factor within the selected organisation.

#### Socio-economic and political environment of the study

South Africa entered the global arena in 1994 when the Apartheid era gave way to a democratic government representing a diverse population. The post-Apartheid era has been followed by a transformational process; and a period of

new beginnings began for every South African citizen. South Africa needs to adapt to changes, and not just on the political transformational front. Worldwide technological, political and economic changes have also had an impact on South African Businesses (Firer, 2005). National borders have become merely an indication of physical barriers and are not seen as limitation for South African companies. Cross-border transactions and relations have become more attractive.

Competition is becoming intense in this world of sophisticated technology and the liberation of trades (Yau, Chun & Balaraman, 2009). Due to the inequality which existed prior 1994, South Africa was challenged to acquire and increase intellectual capital to become competitive. Part of the transition of South Africa is to change from a traditional reliance on natural resources to a base of intellectual capital (Firer and Stainbank, 2003). Evoh (2007) rightly points out that the Apartheid educational system which was in place prior to 1994 has caused a gap in human capital and thus has prevented South Africa from being able to meet the demands of its emerging macro-economic system. Groenewald and Shurink (2003) concur that neglecting South Africa's talent will restrict the potential growth rate of businesses which will result in less competitive enterprises. South Africa has had to experience extensive transition across social, political and economic systems (Firer and Stainbank, 2003; Evoh, 2007). Not only do the changes mean a new focus on the South African educational system, but also the need to invest in the right labour force from skills and, know-how perspective. All of these factors form part of intellectual capital. This statement coincides with the view of Evoh (2007:2): ".....there was a need to train the workforce required to compete effectively in an emerging global economy".

In a research developed by Scott, Yeld and Henry (2007) based on a case for "Improving Teaching and Learning in South African Higher Education"; it became clear that the Higher Education Sector should aim at what is expected to be achieved from the perspective of South African needs. The latter statement may

not be appropriate if there is not a clear understanding of which intellectual capital characteristics need to be emphasised.

### **1.1.2 Purpose of this study**

“Organisations’ intangible intellectual capital assets must be selected and optimised with the intent of enhancing organisational performance and, therefore, organisational survival in the 21<sup>st</sup> century” (Carell, 2007:77). The intent of this study is to understand which characteristics of intellectual capital are valued by one of the leading banks in South Africa in order for this organisation to be competitive. Is it the know-how, or the brainpower, or the process, or the knowledge of employees (Vargas-Hernández, 2010) which is viewed as the source of competitive advantage? The results of a study done by Firer and Stainbank (2003) on South African companies have indicated that there is a positive relationship between intellectual capital and profitability. However, the findings could not support the hypothesis that there is a strong relationship between intellectual capital and performance and intellectual capital and market valuation. Firer and Stainbank (2003) further recommend that management should identify those characteristics of intellectual capital (expertise, brand, capabilities etc.) that can create value. In a research study done by Yua *et al.* (2009) on public listed companies in Malaysia, the results reflected that the most reported attributes on human capital were education with 5.8%, work related competencies with 3.9% and work related knowledge with 2.9%. Know-how attributes were hardly mentioned. It would presume that know-how attributes would not be viewed as important as education and work-related knowledge for public listed companies in Malaysia.

As depicted in the diagram below, Marr (2008); suggests a five step model to manage intellectual capital successfully.

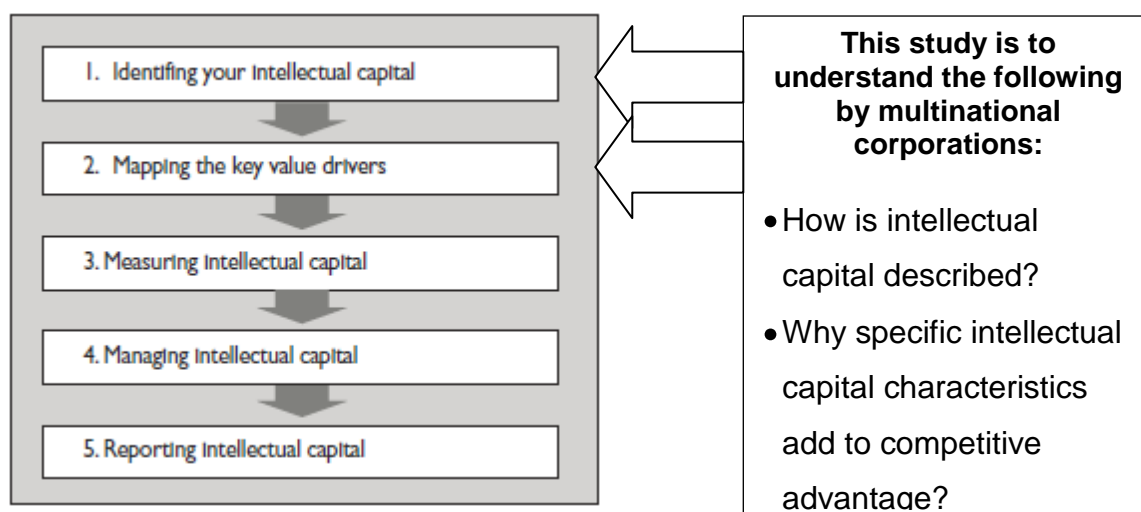


Figure 0.2: Five-step Intellectual Capital Management Model

Source: Marr (2008:7)

### 1.1.3 Scope of this study

Just as there is an expectation to have a positive return on investment, the effort and costs invested in obtaining intellectual capital should also provide a positive return on investment, for personal, financial, knowledge gain, and to add value in the workplace. It is not within the scope of this study to measure the value of intellectual capital against a company's financial indicators such as the balance sheet or financial ratios as various studies have been conducted on this topic (Maree, 2001; Firer, Stainbank, 2003; Vodak, 2010; Maditinos, Chatzoudes, Tsairidis & Theriou, 2011). The emphasis is to explore what characteristics of intellectual capital will motivate the management of the selected multinational corporation to invest their time, effort and funds in achieving a competitive advantage. The scope of this study does not include determining how this multinational corporation manages and implements intellectual capital management across its operations. The focus is more on why respondents within this multinational corporation have chosen specific intellectual capital characteristics to remain competitive within a global environment.

The three dimensions of intellectual capital which will be valued are structural capital, human capital and relational capital. This is being done so that each dimension on its own can be seen as a thesis. However, the purpose of this study is not to do a detailed study on each dimension, but to focus on those overall dimensions or characteristics which lead to a competitive advantage in the eyes of a particular multinational corporation.

## **1.2 Research statement and sub-statements**

A case study mode of reasoning is not based on the formulation of a specific hypothesis (Mouton, 2011), but rather around an expectation or general statement. This section describes the statements to be tested in Chapter 3. The questions to be addressed in this study are of an explanatory nature and they are aimed at understanding the “why” of selecting specific intellectual capital characteristics as a form of competitive advantage and “how” intellectual capital is defined and viewed by this particular corporation.

### The primary research statement

The terms, capital and assets relate to financial drivers and thus suggest an expectation of financial results. According to accounting standards, an asset should be tangible. So, where does intellectual capital fit into this structure since it is an intangible asset? Firer (2005) points out that there is no statutory requirement to report on intellectual capital. The theory of intellectual capital argues that this way of defining an asset is too narrow and limits businesses to focus on knowledge assets (Stewart, 1997). It is possible to value items such as patents and trademarks, but these are only a small component of intellectual capital as a whole. It may be easy to see the value of intellectual capital in future economic performance for an enterprise, but the challenge is “how” to value the asset. (Maree, 2001; Abdulsalam, Al-Qaheri & Al-Kayyat, 2011). Structural, human and relational capital are all dimensions of intellectual capital. It is important for organisations to understand which characteristics of intellectual capital are valuable to them, as not all these characteristics would be necessarily

valued as being equally important (Marr, 2008). Within the banking industry and global operations, financial indicators are the driving factors for reporting to the shareholders and analysts. However, a multinational company also requires very specific skills, structures and client base to be successful. People and infrastructure come at a price and this leads to the primary research statement set out below.

**The aim of the research is to determine which intellectual capital characteristics are valued by a multinational corporation as a competitive advantage.**

Even though financial accounting may not measure intellectual capital, Stewart (1997) argues that markets do. In his commentary on Stewart's work, Robert (1997) highlights this fact by stating that it is not unusual for the market to give a company a much higher stock value than what the accounting books prevail. Maree (2001) adds that intellectual capital is a combination of facets which, if working as a unit, can produce synergy and thus it gives a company a competitive advantage. This statement is in line with one of the objectives of Lee's (2011) work which was to explore the interrelationships between the elements of intellectual capital. In his review of Stewart's work (1997), Robert (1997:5) summarises the relationship between the various intellectual capital dimensions as follows: "Human capacity is the capacity of individuals to provide solutions for their customers. Structural capital transforms know-how into the group's property. Customer capital allows relations with customers to be perpetuated." Nazari (2010) concludes in his empirical study that human capital is indeed positively and strongly associated with structural capital. The author also points out that organisations will only benefit from tacit knowledge if they invest in infrastructure and communication to make this knowledge explicit. This suggests that intellectual capital consists of more than one variable. Even though there may be other dimensions added to intellectual capital, this study will focus on the following dimensions:



Intellectual Capital		
Structural Capital	Human Capital	Relational Capital

Based on the above dimensions, the following sub statements need to be tested in order to underpin the main research statement:

Statement 1: *Which intellectual capital dimensions are valued most by a multinational company?*

Statement 2: *Why does a multinational corporation select specific intellectual capital characteristics in order to give it a competitive edge?*

Yin (2009) points out that this type of “what” question lends itself to a justifiable rationale and thus, can be viewed as explanatory. It is not to determine how much or how many of intellectual capital characteristics are valued, but rather, why those are selected.

### 1.3 Research Objectives

This study contributes to the business environment in many ways: it aims to get answers to various business questions, such as these listed below.

- Is it the supportive (retaining knowledge) components such as the infrastructure of structural capital which allow a company to be competitive?
- People are the “carriers” of human capital – is it the innovative nature of people (investing in people) which give the competitive edge?
- In most cases, revenue is driven by customers. Does this mean that company image or social responsibilities are key drivers to sustain a competitive advantage?

It furthers help to identify the main characteristics on which businesses should focus on to remain competitive.

The following fields of studies can benefit from this study.

- ❖ The first is the question of how to *manage* intellectual capital in order to gain the maximum output from its people, systems and customers (Field of Management).
- ❖ The second refers to which characteristics need to be addressed from an *educational* level to gain most from academic qualifications in the workplace (Field of Education). A study done by Del Valle and Castillo (2009) was based on investigating the relationship between training and performance. This is part of human capital theory. The findings supported the resource and capacity theory and confirmed that training is the main way of creating human capital. This current study will ascertain if South African multinational companies value training as a core characteristic (education has been identified as a characteristic).

#### **1.4 Importance of the study**

Why would the study of intellectual capital be seen to be of any importance? According to Ding and Li (2010), there has been an upward trend in the importance and value of intellectual capital in Japan, US and Germany in the period evaluated (1990 – 2001). As stated by Ding *et al.* (2010:213): “.....the importance of intellectual capital management is indubitable....” Market competition in the modern times is about innovation on products, marketing channels and services (Ding *et al.*, 2010). Vargas-Hernández (2010), points out that the fast expansion of goods and products has established intangible assets as the basis of competitive differentiation in many industries. In addition, Firer (2005) agrees that the importance of intellectual capital, in other words, the relationships with business partners, and the awareness of a company brand and innovation capabilities, have increased over the past two decades. This study is to add additional insight but also to support previous studies on the value of intellectual capital to organisations, specifically, to a multinational based in South Africa.

There may not be a direct link to intellectual capital on a balance sheet as it is seen as an intangible asset, but, indirectly it still touches the people factor, and

the infrastructure as it captures knowledge obtained by people and finally, sales, as it drives relational behaviour. This makes the study of intellectual capital an important driving business factor. It is recommended by Maree (2001) that it may be easier to value intellectual capital in financial terms if specific aspects of intellectual capital affecting an industry or a company have been identified first. According to Vargas-Hernández (2010), management theory and practice have already recognised the importance of intangible assets, reputation, and technology know-how, and added to these, customer loyalty. The importance of understanding which characteristics of intellectual capital are valued by a multinational corporation as creating a competitive advantage will help to identify any possible gaps between knowledge and application. Marr (2008) takes it a step further and comments that intellectual capital can be valued by the company's strategy and thus it is important to understand which drivers need focus.

## **1.5 Chapter 1 – Summary**

Intellectual capital is the way forward for companies to remain competitive. Steyn (2004) points out that the knowledge which is embedded through experiences, skills and abilities is becoming a significant challenge for improving organisations. Steyn (2004) further elaborates to say that if an organisation wants to remain competitive, then it needs to adapt to the management of knowledge. This knowledge should thus be captured and maintained within an organisation. Advanced technology is allowing companies to transform raw data (input) into meaningful information which, if managed and controlled well within a company, will create a competitive advantage. This statement is supported by Marti (2001) that structural capital transforms human capital intellect and innovation to create wealth. Since the collapse of the Apartheid system, South African companies have been facing the challenge of competing against more advanced market players and thus have had to focus on increasing knowledge and business skills to build up a sustainable platform for intellectual capital. It is therefore beneficial to various fields of study to understand what characteristics of intellectual capital

within its dimensions of structural, human and relational (customer) capital are valued by a South African multinational corporation.

## **Chapter 2 – Literature Review**

### **2.1 Introduction**

Chapter 1 discussed the role of intellectual capital within an ever changing business environment. The value of intellectual capital is not easy to capture, however, without understanding the need for specific intellectual characteristics. A corporation may be caught off guard in a competitive environment. Chapter 1 pointed out a few factors which can contribute towards a competitive advantage.

Chapter 2 will look at those intellectual capital factors, where the dimensions and underlying characteristics have already been identified through previous studies and theories. This chapter will also explore the link between intellectual capital and competitive advantage.

Based on various guidelines derived from the literature review, the end result of such a review should answer at least the majority of the following points.

- How is the concept under discussion defined?
- It will determine whether authors' are in agreement on the topic of discussion.
- It will discuss the importance of the topic – does it add value to the broader economy?
- It will answer the question: Is the main purpose of this research to add new insights to this topic or is it an extension of work already done?

The main focus of the literature review is to identify what type of research has already been conducted on the topic of intellectual capital and where, if possible, a gap exists to explore.

## 2.2 The value of Literature Review

According to Leedy and Ormrod (2010), the literature review is beneficial in the sense that it helps to the current research topic in perspective. Even though the topic of Intellectual capital has already been widely researched, it is clear from the literature review that intellectual capital has various dimensions and can be studied from various angles. This statement is in line with a study conducted by Tan, Plowman & Hancock (2008) in which these authors only focused on evolving research on intellectual capital. The study reviewed various definitions, models, measures and applications presented over a period of time. Plowman *et al.* (2008:601) quote the following comment made by Marti (2001): “Researchers in the areas of sustainable competitive advantages have come to the conclusion that the only thing that gives an organisation a competitive edge, the only thing that is sustainable, is what it knows, how it uses what it knows, and how fast it can know something new.” The key role of knowledge as a source of competitive advantage is to produce intellectual capital in an efficient way. In order to gain a better understanding of the various types and outcomes of studies conducted on intellectual capital, the author found it best to position findings based on the review in various categories as this study is based on exploratory questions. As Mouton (2011) states, a literature study around a theme or construct is not to test the theory or to review the literature only, but rather to find a common (or not) classification or clear definition of the key construct for this study. The result of such a division will emphasise the gap or alignment of definitions and/or characteristics of the specific constructs between various authors.

From the literature, the researcher may identify a gap which exists between current and past classification of this study’s topic. The intention of this report is to confirm whether those common definitions and characteristics are relevant to the sample. The aim is to add additional value which may be used in further studies in the future to better understand the phenomenon of intellectual capital and the value it may or may not add to creating a competitive advantage.

Even though there was no shortage of literature on this topic, it was rather challenging, as the concept of intellectual capital and the impact of it on creating competitive advantage could be described in various terms.

Carrell (2007) had two specific research questions of which one specifically addresses if organisations value their intellectual capital. The study was aimed at executives by means of personal interviews to determine how and if they value intellectual capital. Her assessment, in a small way, was to see if the gap between executives and what theory revealed on intellectual capital has narrowed down. Like Carrell (2007), theorists try to find interpretive solutions to management trends, whilst executives are of the opinion that organisations survive through leaner operations and more virtual and global environments. Executives find it a challenge to see the benefits of intellectual capital through the demand of employee knowledge, interconnectivity and the capturing thereof for competitive advantage. Carrell's study is thus appropriate to review as it supports this current study which is to determine which characteristics of intellectual capital are valued by executives by means of a questionnaire, also to identify if there is a gap between theory and business operations. It will be very difficult to identify the correct academic curriculum provided by tertiary institutions if research studies are not conducted. Even though Carrell's research work was done on academia, manufacturing and service industries in Iowa, the same can be applied to executives across the world. In this study, the focus is on executives and senior management at a multinational corporation.

## **2.3 Literature Review**

### **2.3.1 Review framework**

Since intellectual capital is such a broad topic, this researcher has decided to structure the literature in a systematic manner. Through this method, the researcher will be reminded what the focus areas should be in order to address the main objective of this study. Diamantopoulos and Schlegelmilch (2000) support this viewpoint, especially if the literature is extensive. These authors

further suggest that such reviews are best depicted by means of summary tables. The review will therefore be reported as set out below.

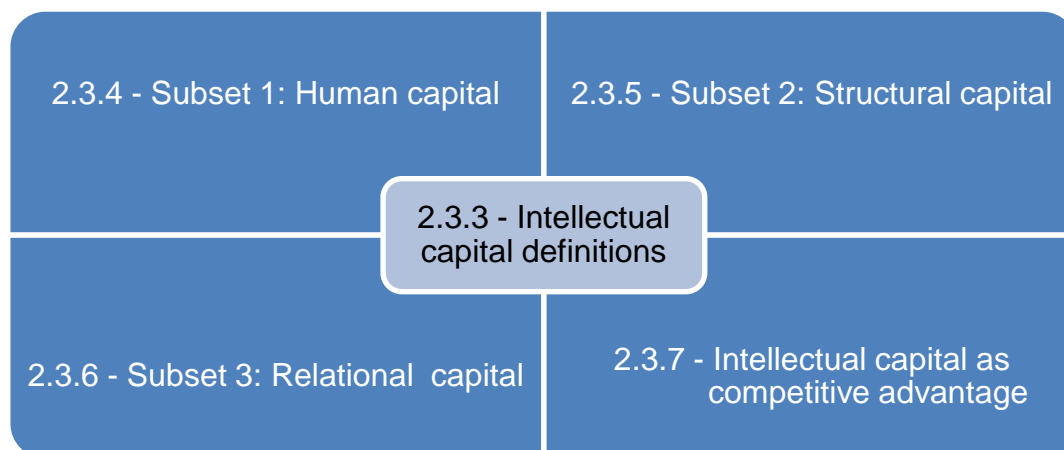


Figure 2.1: Literature Review Framework

### 2.3.2 Definitions

*Business Dictionary.com* (online) defines intellectual capital and its dimensions as set out below.

**Intellectual capital is:** Collective knowledge (whether or not documented) of the individuals in an organisation or society. This knowledge can be used to produce wealth, multiply output of physical assets, gain competitive advantage, and/or to enhance value of other types of capital. Intellectual capital is now beginning to be classified as a true capital cost because (1) investment in (and replacement of) people tantamount to investment in machines and plants, and (2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital.



**Structural capital:** Is one of the three types of intellectual capital, but it is the one component which does not reside in the heads of the employees and remains with the organisation even when they leave.

**Human capital:** Within a business context, human capital is: “the organisation's constantly renewable source of creativity and innovativeness (and imparts it the ability to change) but is not reflected in its financial statements. Unlike structural capital, human capital is always owned by the individuals who have it, and can 'walk out the door' unless it is recorded in a tangible form, or is incorporated in the organisation's procedures and structure”.

**Customer (Relational) capital:** Is the value of a relationship between a firm and its customers and is not captured on a balance sheet.

**Multinational corporation:** Is an enterprise with operations in various countries, but it is managed from one country, the home country.

**Competitive advantage:** Is when a company can provide, either by means of lower prices or higher prices, but through differentiation, the same value as that of its competitors. The matching of core competencies to opportunities is competitive advantage.

The following section records intellectual capital definitions as recognised by previous studies.

### **2.3.3 Intellectual Capital Definitions**

Based on research work done and interviews conducted by various companies, Sullivan (1998) concluded that the definition of intellectual capital consists of an aggregation of ideas, inventions, technologies, general knowledge, computer programs, designs, data skills, processes, creativity, and publications within a company. In simple terms, Sullivan summarises it as a means to convert knowledge into profits for a company. Intellectual capital consists of two elements: human capital and intellectual assets. If the individual at work can apply his/her

human capital - experience, know-how, skills and creativity, then the next obvious step would be the creation of the second part of intellectual capital that is, intellectual assets. Intellectual capital should be supplemented by infrastructure. Structural capital is viewed as those assets can be found on a balance sheet as it is easily identified as “hard assets”. Intellectual assets capture tacit knowledge and codify it by means of documentations, drawings, programs, data, inventions and processes, thus, result into the organisation owning the intellectual property (Sullivan, 1998).

Choong (2008:613) defines intellectual capital as a “non-monetary asset with physical substance but it possesses value or it can generate future benefits”. This statement again confirms that intangible assets should not be underestimated, even though they are not always recorded on the balance sheet. This does not take Choong’s (2008) concern away that there is still no consistency in the definition of intellectual capital.

Intellectual capital, as Stewart (1997) states is knowledge that transforms raw material in something which adds value. Stewart (1997) is of the opinion that each company has the three dimensions of intellectual capital, namely, human, structural and customer capital.

On the other hand, Paoloni, Paoloni, Demartini, Guidotti, & Celli (2010) is of the opinion that even if intellectual capital is a field which attracts a certain amount of research, it is difficult formulated one clear definition of intellectual capital due to its multi- dimensional nature. Paoloni *et al.* (2010) does not define intellectual capital, but rather agree that it consist of structural, relational and human capital of which human capital is the most important. Namasivayam and Denizci (2006) also concur on the subject of these dimensions for intellectual capital.

Kelly (2004) identifies intellectual capital as the potential within an organisation to generate value, but seen as an asset. It is imperative for management to manage these invisible assets, not to be seen as individuals being competent, but to put such knowledge into practice. Kelly (2004) refers to intellectual capital as the

capital resource that originates from relationships between various stakeholders and partners. It is the ability for an organisation to be innovative, to manage change from infrastructure and the knowledge, experience and competencies of its staff. "Knowledge is now acknowledged as the most important resource an organisation has" (Kelly A 2004: 9). Kelly further draws a link between intellectual capital and the management of intangibles. If the organisation follows a traditional controlling approach, then people can only learn what they know they should learn, but an organisation which follows a learning approach will be committed to the management of intellectual capital and people will learn how to learn.

Vodak (2010:7) defines intellectual capital as "organized knowledge which is used in creating wealth of the company". Vodak (2010) rightly points out that technology is developing permanently and thus shifted competitiveness away from production in developed countries, towards more cost effective manufacturing in less developing countries. The author further asserts that intellectual capital consists of human and structural capital of which intellectual capital represents patents and protected technologies.

Pienaar and DuToit (2009) note that intellectual capital relates to intangible assets. However, they distinguish between knowledge and intellectual capital, whereby knowledge can be seen as a concept used in general, while intellectual capital is the knowledge component in a business concept. It is noted also that intellectual capital includes culture as it is a mean of survival in current market conditions. Intellectual capital thus drives a specific behavior within an organisation. As Pienaar and Du Toit (2009) report in their study: the focus of intellectual capital is on management, ownership, the development of knowledge, intangible assets and producers.

Bukh, Christensen & Mouritsen (2005) view intellectual capital as intangible or knowledge-based assets. It is structured around human and structural capital and the interrelationship which exists between them. There is no reference to customer capital. Even though Bukh *et al.* (2005) do not include customer capital in their framework, Nazari, Isaac, Manassian & Kline (2009) divide intellectual

capital into three subsets, namely, organisational capital, human capital and relationship capital. Franco *et al.* (2010) have a slightly different segmentation and see intellectual capital as internal structure, through systemising and creating flows of information through a company, and human capital as the knowledge people possess and relation with the environment refers to the interaction with the external environment.

The difference between structural and human capital is the ownership. Namasivayam and Denizci (2006) based their study on human and structural capital requirements to understand how an organisation can create, develop, maintain and harvest customer capital. In this case, customer capital is seen as a result of human and structural capital. The question arises: Does this mean that the dimensions of intellectual capital can be measured by means of its characteristics?

Lee (2011) defines intellectual capital as the storage of knowledge resources in an organisation in various forms and it contributes to the generation of a competitive advantage. Based on the literature reviews, Lee (2011) lists intellectual capital under four dimensions.

Human Capital – this is the collective knowledge of employees such as skills, know-how and experience.

Structural Capital – this is the knowledge owned by firms in the form of technology, process and data.

Social Capital – this refers to the knowledge gained by employees due to informal discussions.

Relational Capital – this is knowledge imbedded with external partner relationships

Marr (2008) defines intellectual capital as all non-tangible assets which are attributable to an organisation and these are part of the value proposition. This

supports many other views that intellectual capital can be segmented into three dimensions being human, structural and relational capital.

#### **2.3.4 Intellectual capital subsets and characteristics**

Before one can explore the relationship of intellectual capital and competitive advantage, it is necessary to formulate a clear identification of the main components of intellectual capital (Chen, 2009). It is in line of the statement: “.....a wide range of resources, properties and attributes that can be considered as intellectual capital....” (Choong, 2008:1). Based on the diverse views on intellectual capital, Choon (2008) found it necessary to understand which items are seen as intellectual capital and how it adds value to firms. It is thus critical to do an in-depth literature review on the subject of the underlying intellectual capital characteristics. The many characteristics of intellectual capital are best depicted by means of tables. The tables will reveal where authors have a common understanding of intellectual capital characteristics under the dimensions of structural, human and relational capital, but it will also highlight possible gaps. It is observed by Díez, Ochoa, Prieto & Santidrián (2010) that there is more divergence between structural capital conceptual definitions than in the case of human capital. The advantage using tables are that it highlights common or different views between authors more easily.

It was decided to allocate a specific section to each subset, and these are listed below.

##### **Human capital**

The importance of human capital is discussed by AL-Ma’ani *et al.* (2010) as follows.

- It is an important and uncommon source which affects performance.
- New knowledge is created through human capital.
- Others cannot imitate it or at least, it is not easy to do so.

- It contributes towards a competitive advantage.
- It is linked to the efficient use of assets, thus creating better productivity which improves customer service.
- It has a great impact on people who have entrepreneurial skills or new ideas.

Pienaar and Du Toit (2009:122) define human capital as “all the unique ideas, skills and knowledge that an individual owns and contributes to an organization”. The main idea which came to mind for this study is the contributing factor and it is assumed that organisations would place a high value on human capital. The same authors extend the idea of contribution by adding that human capital belongs to the individual within the organisation. The value of it to the organisation only exists in the willingness of the individual to contribute towards innovation and improvement by sharing such knowledge (Marr, 2008) points out that people (human capital) can leave overnight and thus their knowledge will not be available as a company resource unless it is captured.

Sullivan (1998) is of the opinion that the human capital which each individual employee possesses, can be of an advantage if the employee is positioned to utilise these units. Paoloni *et al.*(2010) agrees that human capital is the main constituent of intellectual capital assets and the aim would be to capture these factors in a system so that they can become structural capital and thus useful to the organisation as a whole. The notion that human capital is the most important intellectual capital asset as it is the source of the other capitals is confirmed by the results of the research study of Chen (2009). AL-Ma’ani and Jaradat (2010) see a strong relationship between human capital and intellectual capital. They agree that intellectual capital deals with knowledge in assets, programs and relational network. It is thus a broader view than just the human capital in such as qualifications of the workforce, innovation etc. They conclude that the overall aim results in a competitive advantage.

Even though human capital is seen as part of a company’s assets, it cannot be legally protected as a firm does not own human capital (Stewart, 1997). Human

capital resides in individuals at work, and it is thus in the best interest of an organisation to create an environment for its employees to transform their knowledge into something more practical. Tadic (2010) summarises human capital after various reviews as a representation of stock of competences, through education and experience, knowledge is formed and last, but not least, personal attributes.

Smuts (2008) summarised the main themes which were identified by asking respondents how they would define knowledge (human capital) through an interpretive case study and the findings are included in this table. It is interesting to take note that that education and learning are viewed as emerging themes and not as primary themes.

Valle and Castillo (2008) have identified a gap in various research studies conducted on human capital, where they have found that more research could be done to investigate if training as an instrument allows the generation and accumulation of human capital. As part of their literature review, Valle and Castillo (2008), made the conclusion that companies which adopt a set of training policies can expect to achieve a greater return on investment, as productivity will increase.

In their journal article "*Intellectual capital and value creation in Spanish firms*", Díez, Ochoa, Prieto & Santidrián (2010), refer to characteristics on human capital which they gathered from literature reviews. They understood it to be the following.

- Competence value is generated through knowledge, skills, talent and know-how.
- Attitude value is generated through behaviour of employees in the workplace.
- Intellectual agility refers to the ability to innovate and change practices, reflect on problems and manage to reach solutions through innovation.

Huang, Chou and Sun (2009) point out that human capital is flexible and organisations can adjust human capital to change through education or growth potential. Huang *et al.* (2009) observe that human management resource academics lean towards a positive correlation between human capital and performance.

It is the people factor in a company which creates innovation and allows stimulation to think creatively. Thus, is important to any company to remain successful in its market of operation (Vodak, 2010). Marti (2001:155) agrees that human capital “is the force behind human intellect and innovation of the form”. Iheriohanma and Chukwuma (2009) see human capital as a necessity in the production process, and therefore they support the development of human capital which will enable an individual to acquire skills and knowledge to meet the demands of current and future production goals. Through the development of human capital characteristics, a nation has possession over talent and thus creates competitiveness advantage (Iheriohanma *et al.*, 2009).

Valle and Castillo (2008) concluded that their findings were in line with other resource and capacity theory, which defends the view that training is the main way of creating human capital. This study will also confirm if a South African multinational company specifically values training as a factor for competitive advantage. However, this study will not focus on training as the main characteristic. As part of their findings, Valle and Castillo (2008) suggest that training is indeed a way of creating human capital as a source of sustainable competitive advantage.

If a company focuses on increasing a worker’s capacity, then intellectual capital can be increased (Akpinar and Akdemir, no date). Interestingly, Lee (2011) observes that there is a strong relation between innovation and knowledge. This observation suggests that there is a link between the various characteristics of human capital.



Table 2.1 is a summary of the human capital characteristics identified or discussed by work done through previous studies.

Table.2.1: Human Capital Characteristics

<b>Characteristics</b>	<b>Author/s</b>
Skills (technical and soft skills)	Sullivan, 1998; Pienaar <i>et al.</i> , 2009; Paoloni <i>et al.</i> , 2010; Franco <i>et al.</i> , 2010; Lazear, 2009; Smuts, 2008; Vodak, 2010; Akpinar <i>et al.</i> , no date; Chen, 2009; Stewart, 1997; Marr, 2008
Abilities / Capabilities / Competencies (Proactive and/or reactive)	Sullivan, 1998; Paoloni <i>et al.</i> , 2010; Kamukama <i>et al.</i> , 2010; Vodak, 2010; Chen, 2009; Stewart, 1997; Marr, 2008
Know-how, Expert insight	Sullivan, 1998; Kamukama <i>et al.</i> , 2010; Smuts, 2008
Unique ideas	Pienaar <i>et al.</i> , 2009
Knowledge (not specific whether work or general)	Pienaar <i>et al.</i> , 2009; Paoloni <i>et al.</i> , 2010; Franco <i>et al.</i> , 2010; Akpinar <i>et al.</i> , no date; Chen, 2009; Marr, 2008
Innovativeness / Creativity	Paoloni <i>et al.</i> , 2010; Kamukama <i>et al.</i> , 2010; Lee, 2011; Marr, 2008
Experience, Framed experiences	Paoloni <i>et al.</i> , 2010; Smuts, 2008; Vodak, 2010; Akpinar <i>et al.</i> , no date
Education	Kamukama <i>et al.</i> , 2010; Marr, 2008
Vocational qualifications	Kamukama <i>et al.</i> , 2010; Marr, 2008
Work-related knowledge, contextual information	Kamukama <i>et al.</i> , 2010; Smuts, 2008; Marr, 2008
Work-related competence	Kamukama <i>et al.</i> , 2010; Franco <i>et al.</i> , 2010
Entrepreneurial spirit	Kamukama <i>et al.</i> , 2010; Marr, 2008
Changeability / Flexibility	Kamukama <i>et al.</i> , 2010; Marr, 2008

<b>Characteristics</b>	<b>Author/s</b>
Attitudes / Behaviour	Franco <i>et al.</i> , 2010; Paoloni <i>et al.</i> , 2010; Akpinar <i>et al.</i> , no date
Labour conditions	Franco <i>et al.</i> , 2010
Analytical thought processes	Smuts, 2008
Body of understanding	Smuts, 2008
Connotation	Smuts, 2008
Increased value	Smuts, 2008
Information Processes	Smuts, 2008
Intuition	Smuts, 2008; Akpinar <i>et al.</i> , no date
Judgement	Smuts, 2008
Values	Smuts, 2008
Habits	Vodak, 2010
Motivation and energy	Vodak, 2010
Employee engagement	Marr, 2008
Emotional Intelligence	Marr, 2008
Employee Loyalty	Marr, 2008
Employee Satisfaction	Marr, 2008

## **Structural Capital**

From a perspective of literature richness, structural capital appears to be the most obtainable as firms can easily measure and control structural capital (Lee, 2011). However, it is argued by Elton, Shah & Voyzey (2002), that many organisations have failed to capture the full value of intellectual property, patents, proprietary technologies and processes as a result of not paying enough attention by management in this regard. These authors continue to mention that these are assets which can be exploited more effectively. Knowledge can only be of competitive advantage to an organisation as long as the knowledge resides within the business. Since human capital is owned by an employee, the risk remains

that the employee may leave employment and may take the knowledge with him/her. It is thus important that knowledge is captured by means of structural capital. Maree (2001) insists that structural capital can only be relevant if it is kept “live”, in other words, it consistently needs to be managed, monitored, refined and improved. Birasnav and Rangnekar (2010) explain that organisational knowledge usually emerges forth in two forms: tacit and explicit knowledge. Tacit knowledge is where knowledge has been documented (becomes structural capital), whilst explicit knowledge remains within a person’s mind. Structural capital is all about internal elements and the firm’s capacity for renovation and thus results in protecting those elements (Díez *et al.*, 2010). It is confirmed by Yau *et al.* (2009) and Franco *et al.* (2010) that structural capital is all about internal processes and systems. It appears to be the “capturing” device for knowledge within a company. Díez *et al.*, (2010) further elaborate that structural capital empowers and strengthens human capital, but it allows the organisation to transmit and store its intellectual material. The advantage of the latter is that it keeps intellectual capital within the organisation and does not leave with an employee on exit.

Table 2.2: Structural Capital Characteristics

<b>Characteristics</b>	<b>Author/s</b>
Infrastructure, Systems and Knowledge databases refer to the capturing and storing of knowledge	Díez <i>et al.</i> ,2010; Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010; Paoloni <i>et al.</i> ,2010; Kamukama <i>et al.</i> , 2010; Chen, 2009
Processes can refer to all business processes which encompass Information and networking processes.	Díez <i>et al.</i> (2010); Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010; Paoloni <i>et al.</i> ,2010; Marr, 2008
Business / Corporate Culture	Díez <i>et al.</i> , 2010 ; Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010; Kamukama <i>et al.</i> , 2010; Marr, 2008

<b>Characteristics</b>	<b>Author/s</b>
Commercial Rights	Díez <i>et al.</i> (2010);
Trade secrets	Marr, 2008
Intellectual Property	Díez <i>et al.</i> (2010); Marr, 2008
Management Philosophy	Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010
Financial Relations	Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010
Product Innovations	Paoloni <i>et al.</i> , 2010; Kamukama <i>et al.</i> , 2010
Patents	Paoloni <i>et al.</i> (2010); Chen, 2009; Marr, 2008
Trademarks / Brand Name	Paoloni <i>et al.</i> (2010); Chen, 2009; Marr, 2008
Orientation to quality	Kamukama <i>et al.</i> , 2010
Continuous improvement	Kamukama <i>et al.</i> , 2010
Teamwork	Kamukama <i>et al.</i> , 2010

### **Relational Capital**

According to Moon and Kym (2006), the most important component of relational capital is customer relationships. These authors further state that there has been a shift from companies being product-focused towards a client-centric focus. They further comment that the new client-centric view also focuses on organisations building strong networks and partnerships. The latter “plays an important role in maintaining and managing a company’s competitive edge” (Moon *et al.*, 2006:258). Table 2.3 is a summary of the relational characteristics identified by various authors.

Table 2.3: Relational Capital Characteristics

<b>Relational / Customer capital characteristics</b>	<b>Author/s</b>
Network levels / Formal or informal relationships (including partners, suppliers and business relations)	Kamukama <i>et al.</i> , 2010; Yau <i>et al.</i> , 2009; Paoloni <i>et al.</i> , 2010; Chen, 2009; Marr, 2008
Marketing and Distribution channels	Kamukama <i>et al.</i> , 2010; Yau <i>et al.</i> , 2009
Clients / market relations	Franco <i>et al.</i> , 2010; Yau <i>et al.</i> , 2009; Paoloni <i>et al.</i> , 2010; Moon <i>et al.</i> , 2006; Marr, 2008
Image / trademarks / Company name	Franco <i>et al.</i> , 2010; Yau <i>et al.</i> , 2009; Paoloni <i>et al.</i> , 2010
Social responsibility / network	Franco <i>et al.</i> , 2010; Paoloni <i>et al.</i> , 2010; Marr, 2008
Brand image	Yau <i>et al.</i> , 2009; Marr, 2008
Customer loyalty / Trust	Yau <i>et al.</i> , 2009; Chen, 2009; Marr, 2008
Favourable contracts, Alliances	Yau <i>et al.</i> , 2009; Marr, 2008
Licensing agreements	Yau <i>et al.</i> , 2009; Marr, 2008
Franchising	Yau <i>et al.</i> , 2009
Retention	Chen, 2009
Internet communities	Chen, 2009
Corporate reputation	Marr, 2008
Distribution agreement	Marr, 2008
Joint Ventures	Marr, 2008

Even though Franco *et al.*, (2010), refer to environment relations, it appears that the concepts of relational capital and environment relations are the same.

### 2.3.5 Intellectual capital and competitive advantage

According to Vodak (2010), the way to compete against cheap manufacturing is through intellectual capital as only people who are creative, educated, enthusiastic and self-driven can compete against the high values demanded by customers. It is the creativity, invention, ability of conceptual thinking and cooperation, social interactions and emotional intelligence of people, in other words, intellectual capital which help in creating the competitive edge (Vodak, 2010).

Yau *et al.*, (2009) refer to intellectual resources to be knowledge, applied experiences, organisational technology, customer relationships and professional skills. It is placed under structural, relational and human capital. This view is aligned to those attributes examined by Guthrie and Petty (2000). Both authors confirm that these characteristics could lead to sustainable competitive advantage.

A study conducted by Kamukama *et al.*, (2010) revealed a positive relationship between competitive advantage and intellectual capital. This finding supports the need for this study as the aim is to determine which characteristics of intellectual capital are valued as critical for a multinational company to create competitive advantage. Čater and Čater (2009) concluded in their research work that there is a positive relationship between customer capital and cost-leadership and differentiation advantage and their findings thus open the way for possible further studies to explore competitive advantage and customer relationship. However, the study further found that human and structural capital only had a positive effect on differentiation advantage. Čater and Čater (2009) observed that human capital and structural capital come at a cost as remuneration and staff complement is usually not part of a cost-based strategy. However, it is the distinctive capabilities of people who add value to a differentiation advantage. It is important for companies to focus on those intangible assets as it cannot be easily imitated. Based on their findings, Čater *et al.* (2009) suggest that intellectual

capital investment is critical and managers should instill an appropriate balance between tangible and intangible investments.

If an organisation can manage this process effectively, then strategic decisions based on intellectual capital can increase competitiveness. Pienaar and Du Toit (2009:126) support this view: "As discussed, the management of intellectual capital contributes to the overall and strategic value creation, innovation, and competitiveness of an organisation". "Structural capital is owned by the organisation whereas the individual owns human capital" (Pienaar *et al.*, (2009:123). Structural capital can therefore be seen as the channel to capture and store human capital so that it can be transformed into intellectual property and can thus be protected by an organisation, the latter can give an organisation a competitive advantage.

Ding and Li (2010) adopted and agreed with various other studies that intellectual capital is a meter to all members in an organisation and that it does acquire competitive advantage. They place emphasis on the transformation from knowledge into intellectual capital, in other words, converting knowledge into "capital" (investment) as it then becomes resources to be utilised.

This study is therefore an extension of previous findings and should provide additional valuable understanding to the topic of intellectual capital and how this concept is valued as competitive advantage by a South African multinational company.

Kelly (2004) and Firer (2005) agree that an organisation must regard its knowledge and experience collectively as a source of sustainable competitive advantage. The key drivers of competitive advantage in developed nations are knowledge, competence and intangibles which are related. This statement made by Vargas-Hernández (2010) is not different from those other authors; in fact, it supports the move from tangible towards intangible assets.

For South African organisations to remain competitive in a competitive environment, they have to utilise and strengthen their knowledge capital. The management of the interaction between the characteristics of knowledge capital (knowledge, skills, beliefs and values) can produce a business model that can maintain a company's competitive advantage relative to that of their rivals (Deacon, 2008). Smuts (2008) concurs that knowledge cannot be articulated and that it consequently creates competitive advantage. Sullivan (1998) acknowledges the increasing need for a knowledge-based organisation for maintaining competitiveness in an ever changing global economy, innovation and new technology.

Various studies indicate that human capital is one element which has generated larger economic trends and it is due to the fact that intangible assets, such as employees' skills, abilities, knowledge and the ability to adapt, are hard to imitate and difficult to be replaced (Valle and Castillo, 2008). AL-Ma'ani and Jaradat (2010) also point out that human capital is important in order to achieve success, creates new knowledge, and a competitive advantage.

Mihm-Herald (2010) also supports the other authors' views that education and training are key elements for a knowledge-based economy to gain a competitive edge.

Based on literature reviews done for their study, Kamukama, Ahiauzu and Ntayi (2011), support the notion of intellectual capital promoting competitive advantage. This observation is in line with other authors' findings. The hypotheses on which Kamukama *et al.*, (2010) based their studies support one segment of this current study, which is to determine whether there is a positive relationship between intellectual capital and competitive advantage. Even though Kamukama *et al.*, (2010) based their study on Microfinance firms in Uganda, the results support this study to determine which intellectual capital characteristics create a competitive advantage.



Akpinar and Akdemir (no date) are of the opinion that the fortunes and values of a company depend on how well knowledge is created and captured and it this process which gives intellectual capital a competitive advantage.

## **2.4 Main topics and measurements based on the literature review**

### **2.4.1 Main topics**

It was evident from the review that many studies have been based on intellectual capital as a performance driver from a financial perspective. Even though this study is not to determine the actual book or market value of intellectual capital, it is important to take into account the various studies done on this topic all of which confirm the importance of financial measures to organisations.

However, there have also been studies done based on the reporting of intellectual capital (whether as a concept as a whole or any dimension of intellectual capital and the link to corporate characteristics. One of these studies was done by Moon and Kym (2006). These authors found it best to use the sub-factors, human, structural and relational capital so that organisations can understand their strengths and their weaker areas within the three sub-factors of intellectual capital.

The table below depicts the various indicators used by various authors in conducting their studies. The relevance of this content to the current study is as it identifies considerable specific indicators from this table to include as variables in the research method described in Chapter 3.

Table.2.4: Intellectual Capital Indicators		
Intellectual capital topics	Author & Date	Relevance to this study
Market value and financial performance	Maditinos <i>et al.</i> , 2011; Maree, 2001; Nazari, 2010; Abdusalam <i>et al.</i> , 2011.	Studies based on financial drivers, rather than on the actual characteristics valued by the companies.
Corporate characteristics / indicators	Yau <i>et al.</i> , 2009; Franco <i>et al.</i> , 2010; Lee, 2011; Paoloni <i>et al.</i> , 2010; Mihm-Herald, 2010; Deacon, J.J. 2008; Huang <i>et al.</i> , 2009; Lazear, 2009; Nazari <i>et al.</i> , 2009; Smuts, 2008; Namasivayam, 2006; Pienaar <i>et al.</i> , 2009	Apart from the indicators used by Franco <i>et al.</i> , (2010) which were based more on functionality (stability, efficiency and development) and which do not serve the purpose of this study, all the characteristics (indicators) used in studies are relevant to the current study.
Intellectual capital as competitive advantage	Kamukama <i>et al.</i> , 2010; Del Valle <i>et al.</i> , 2009;	These studies study how certain characteristics (such as training) can create sustainable competitive advantage. These studies provide supporting evidence for this current study.

## 2.5 Conclusion based on the literature review

It has been noted that there are numerous studies done on intellectual capital as a whole or its sub-components (human capital, structural capital, intellectual assets, intellectual property, customer capital and relational capital), but mostly related to a specific country or sector.

Based on the literature review, it is apparent that intellectual capital can be defined in various ways. Even though authors define this topic differently, there is a common thread throughout which is discussed below.

- Intellectual capital consists of various sub-sets, such as human, structural and relational capital. Some authors add social capital as a fourth sub-set.
- Each sub-set has its own characteristics.
- Intellectual capital is indeed viewed as an intangible asset and it is accordingly not easy to determine its value in financial terms.

Even though the latter may be applicable to all organisations worldwide, no study could be found on South African multinational companies listed on the JSE to determine which characteristics or dimensions of intellectual capital they regard as a competitive advantage. However, Van der Westhuizen (2005) carried out a study on intellectual capital management in a South African retail company. From this author's empirical study, it became apparent that there is a need for an intellectual capital management tool in the retail company. There were some intellectual capital, components which were measured. Maree (2001) based a study on how to value intellectual capital from a financial driver perspective, but realised that this is rather challenging, as companies of various industries value various intellectual capital factors as driving forces. The importance of such a study will assist human resource practitioners and senior management of multinational companies to make strategic decisions around their people,

technology and customer relations and this may in turn be revealed in the financial performance of a company.

From work done by Sullivan (1998) and Kelly (2004) it appears that human capital is the initiator of the intellectual capital base. Knowledge management is the collection of knowledge, skills, beliefs and values of people in an organisation (Deacon, 2004). It is thus not possible to focus on human capital as the initiator of knowledge, without studying the other dimensions of intellectual capital such as structural capital which captures and stores the knowledge base. An organisation can only use intangible assets as competitive advantage as long as knowledge remains the property of the company. People leave organisations and therefore take the characteristics of human capital with them, unless it is transferred to either other resources or into information systems.

Structural capital appears to be mostly disclosed by companies. Yua *et al.*, (2009) support this notion and agree that human capital is the least reported throughout all studies.

As concluded by Yau, Chun & Balaraman (2009:32) on human capital: “Despite the importance of human capital development for future competitiveness, human capital attributes were least disclosed among the sample companies in this study. If the low level of human capital disclosure reflects the lack of enthusiastic efforts in developing human resources in those publicised companies, then regulatory intervention or incentives may be needed to encourage Malaysian companies to invest more extensively in their human resource development”.

In the summary by Smuts (2008), it is evident that knowledge is an organisational asset and that knowledge is becoming the primary source of value that will lead the economy. These findings support this current study and they help to understand which characteristics of intellectual capital are valued by a multinational company to give it a competitive edge.

Vodak (2010) suggests that the characteristics of intellectual capital are peoples' inventions, creativity, conceptual thinking ability, the ability to cooperate, the ability to interact socially, and emotional intelligence. Vodak (2010:2) argues that "only creative, educated, enthusiastic and self-driven people are able to compete, by making products with a high customer value".

## **Chapter 3 – Research Methodology**

### **3.1 Introduction**

It is clear from Chapter 2 that there is a great deal of rich and informative literature on the topic of intellectual capital. This leads to the next step which concerns what to do with all of that information and how to design the current research study around those literature reviews. Chapter 3 focuses on the roadmap to either to gain new insight on this topic or to support previous literature reviewed in Chapter 2.

### **3.2 Research Design**

Mouton confirms that once a research problem has been formulated, an appropriate research design should be selected (Mouton, 2011). Yin (2008) points out that a research design can be compared to a logical plan. It suggests that the design is there to help the researcher to proceed from one point to another. The author further sets out five components to what should be part of a design and these are:

1. study's questions;
2. its propositions;
3. its unit or units of analysis;
4. the linking of the data to the propositions and;
5. the criteria for interpreting the findings.

Case studies will typically address questions such as “how” and “why”. To address the above research objectives, the following two research questions are suggested as the basis of defining the research design and methodology structure.

**Statement 1:** *To determine which intellectual capital dimensions are valued most by a multinational company*

Interview questions were structured to address how those specific dimensions were chosen.

Statement 2: *Why does a multinational corporation select specific intellectual capital characteristics in giving it a competitive edge?*

It is not the intention of a case study to do a study on the corporation as a whole, but rather to focus on a particular unit of analysis or specific issue (Noor, 2008). Interview questions were structured to address the question of why specific intellectual capital characteristics are valued as giving a corporation a competitive edge.

As seen in Chapter 1, the objective of the study is to provide possible answers to the questions / propositions set out below.

- Is it the supportive (retaining knowledge) components such as infrastructure of structural capital which allows a company to be competitive?
- People are the “carriers” of human capital – is it the innovative nature of people (investing in people) which gives the competitive edge?
- In most respondents, revenue is driven by customers. Does this mean that company image or social responsibility is key drivers to gain a sustainable competitive advantage?

In addition to the suggested questions, Marr (2008) agrees that companies can ask very specific questions and set Key Performance Areas if they understand their intellectual capital needs. In addition, the author suggests that it may stimulate business to ask some key questions such as these presented below.

- How far do we enhance our international image?
- To what extent do we share knowledge?
- Do we manage to retain talent successfully?
- Do we promote our services in an efficient manner?

- Do we understand how our customers perceive our services?
- How effective is our relationship management?
- What is our level of ability to innovate?
- Do we have an effective communication process in place?
- Do we foster an innovative culture?

The literature review in Chapter 2 indicates that a variety of studies have already been done on the topic of intellectual capital. Some reviews revealed a focus on a specific intellectual capital characteristic within a particular dimension and some authors focused on indicators to measure intellectual capital.

As Chapter 1 states, the objective of this study is to determine which intellectual capital characteristics are valued by a multinational corporation as a competitive advantage.

It is thus important to determine which type of question is appropriate to ask in order to achieve the objectives of this study. The first step is to determine if this study is of an empirical or non-empirical nature. Empirical questions are of an exploratory nature such as: "What are the key factors?" (Mouton, 2011: 53). Another type of question which supports an empirical study is of a predictive nature, thus asking questions such as: "What will the effect of  $x$  be on  $y$ ?" (Mouton, 2011:54). The next aim of this study is to determine what effect the specific intellectual capital characteristics identified as being mostly valued have on a competitive advantage. Based on the above statements, this study will be of an empirical nature.

The difficulty which arises in understanding the characteristics valued mostly by a South African multinational corporation is that these characteristics tend to be industry specific and thus there are diverse opinions as to which characteristics to value (Maree, 2001). It is therefore important to select the best method and sample to make this study reliable and valid for a multinational company. Mouton (2011) states that a research design helps to determine the plan to conduct the



study. It focuses on the end product, in other words, what is the aim of this study and how does the researcher reach this.

Based on the literature review, many authors (Díez *et al.*, 2010; Kamukama *et al.*, 2010; Moon *et al.*, 2006; Marr, 2008) recommend surveys or questionnaires to conduct studies on intellectual capital. Mouton (2011) points out that surveys are applicable where studies are quantitative in nature and the sample is usually a representative sample of a large population. Marr (2008) also supports surveys and confirms that this method is regularly used for conducting studies on intellectual capital. The design is usually of an empirical nature, and it consists of primary data, and of medium control. Díez *et al.*, (2010) conducted an exploratory analysis which also used a survey.

Over and above surveys and questionnaires, Marr (2008) suggests the methods listed below.

- Structured interviews can help to understand relational capital better. They assist in understanding how to improve relationships.
- Focus groups are a good way to understand both human and customer relations.
- Mystery shopping is not as intrusive as surveys and questionnaires and is a good technique for gathering data.
- External assessments by an independent company can help to gather data around brand awareness and customer experience.
- Observations make use of senses to collect data and these results can be recorded in many ways.
- Peer-to-peer evaluation can help to gather data on specific human capital characteristics such as trust, knowledge and experience.

Since the aim of this study is to determine which intellectual characteristics are mostly valued by a South African multinational corporation and its competitive advantage, it has been decided to base this research on a case study, of an empirical nature. A case study helps to provide an in-depth description of a small

number of respondents (Mouton, 2011). Case studies can be quantitative, qualitative or a combination thereof (Eisenhardt, 2007). The benefit of using a case study research is that semi-structured interviews will help to determine which intellectual characteristics (already identified by the literature review) are valued as important competitive advantage factors for the selected multinational corporation (quantitative), whilst open-ended questions will help to identify new characteristics not covered by the literature review.

It became very clear that collecting data relating to the topic of intellectual capital was not an easy task. As known, intellectual capital is difficult to capture due to its intangible nature. In order to ensure that the focus remained on the key objective, it was decided to use a roadmap to achieve the ultimate goal. Figure 4 is an illustration of the suggested roadmap.

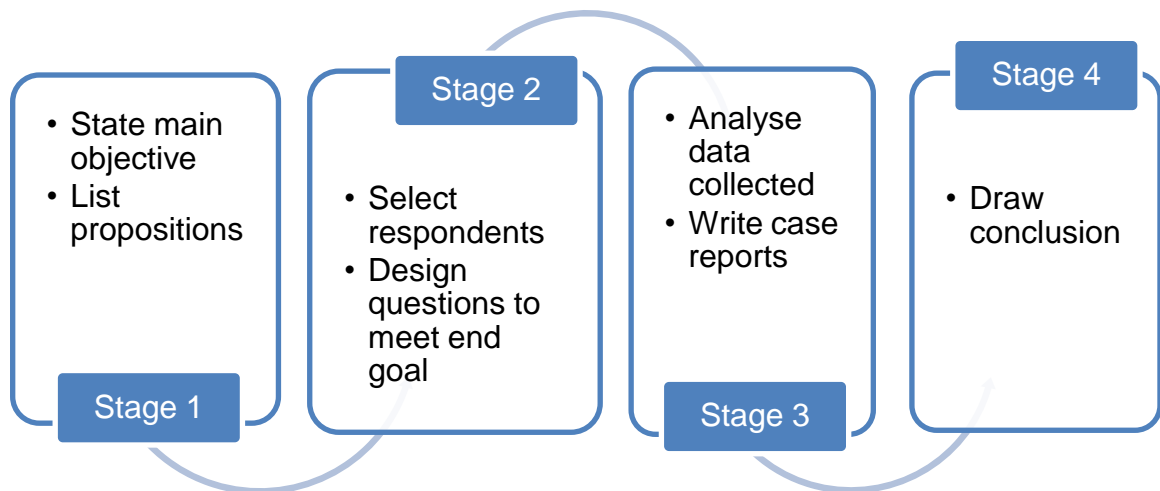


Figure 3.1: Qualitative Method Roadmap

### 3.3 Sampling Design

Convenience sampling relates to a non-probabilistic sampling technique (Diamantopoulos and Schlegelmilch, 2000). It involves a sample selection which is easily available and accessible. However, Greener (2008) insists, the researcher should carefully select the right respondents. If the selected sample cannot answer all questions posed, then it raises the point as to whether the sample is justifiable. For this case study, the following characteristics need to be present:

- a South African corporation with subsidiaries outside South Africa;
- access to respondents in the right roles to conduct interviews.

Selecting a case study as the research method, means dealing with a much smaller number of respondents (Mouton, 2011). Chapter 2 revealed that there are common intellectual capital characteristics identified through various studies, but at the same time, the review also indicated unique characteristics within specific industries. The emphasis of this study is not industry specific, but due to the nature of this corporation, specific subsets and characteristics of intellectual capital may be applicable to give a competitive advantage.

In summary, the sample has been selected as discussed below.

**Population size:** This dealt with a multinational corporation with 16 subsidiaries in the continent of Africa.

**Sample size:** The selected multinational corporation is within the banking industry and is segmented around product delivery. The sample size was based on one of the three segments. The segment provides high value products to medium and large corporations.

The number of respondents across the sample size was fifteen. The respondents were selected on the basis of the roles/positions they fill within the corporation. The table below shows the roles selected across the Africa continent.

Number of respondents: 9

Table 3.1: Case Study Respondents

<b>Case</b>	<b>Title</b>	<b>Role</b>	<b>Regional position (SA, outside SA, global)</b>
1	Senior Manager	Systems and processes	Global
2	Director	Client facing	Africa region (outside SA)
3	Director	Product delivery	Global
4	Director	Product delivery	Africa region (outside Africa)
5	Relationship Manager	Client facing	SA
6	Relationship Manager	Client facing	Africa region (outside SA)
7	Relationship Manager	Client facing	Africa region (outside SA)
8	Risk	Risk	Africa region (outside SA)
9	Financial Manager	Financial reporting	Africa region (outside SA)

The case study interviews will be conducted with respondents within the following roles/positions to address specific intellectual capital characteristics.

In summary, the sample has been selected as follows.

- The sample meets criteria according to the definition of a multinational corporation in Chapter 1.
- The sample was selected on the basis of convenience sampling.
- The sample size has been determined on the basis of convenience due to accessibility and availability of resources and information.

### **3.4 Limitations of a case study**

The findings of this study will be determined based on the results of a case study done on one multinational corporation within the banking industry. The results cannot be generalised across all multinational corporations within the banking industry, however, the findings may result in further studies.

Because the questions are open-ended questions, the measurement is not standardised. However, even though this may be seen as a limitation, open-ended questions are used specifically in this study to identify additional characteristics not identified by previous studies.

### **3.5 Data Collection**

Greener (2008) points out that in business, for academic research, it is important that the questions are structured in a valid and fair manner. The questions should relate to the need to address the main research statement/question. The research exercise should have a clear objective. For this particular study, data was collected by means of a semi-structured interview (face to face, or telephonic interviews due to distance constraints). Specific questions were structured before-hand, but the interviewer could decide to add additional questions during the interview process. The latter is an advantage of a semi-structured interview over structured interviews, as the researcher can decide to put different questions to respondents (Noor, 2008). In order for the participant to be prepared for the interview, a copy of the structured questions has been available to the respondents. Since the topic of intellectual capital is not well-known to many, respondents received a copy of a definition on each of the intellectual capital dimensions. The intention of the latter was to create an “entry” point to the interview sessions. Respondents felt more at ease and could think about specific aspects before the session started.

### 3.6 Research Instrument

The strength of conducting interviews is that questions can be set up to address very specific topics, whilst a question and answer format report helps to avoid the issue of writer's cramp (Yin, 2009). Even though the case study method allows additional questions during conducting interviews, the structured questions were asked. Table 3.2 indicates how the questions were structured to address the overall objective of this study – to determine which intellectual capital characteristics have been valued by a multinational corporation as a competitive advantage. The questions were structured as follows.

Table 3.2: Case Study Questions (Grouping)

Grouping	Questions
To address the holistic concept of intellectual capital (q1 to q5)	<p><i>Business Dictionary.com</i> (online) defines intellectual capital as: "Collective knowledge (whether or not documented) of the individuals in an organisation or society. This knowledge can be used to produce wealth, multiply output of physical assets, gain competitive advantage, and/or to enhance value of other types of capital. Intellectual capital is now beginning to be classified as a true capital cost because (1) investment in (and replacement of) people tantamount to investment in machines and plants, and (2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital."</p> <p>Question 1: Do you agree with this definition? Please elaborate</p>

Grouping	Questions
	<p>Question 2: Intellectual capital consists mainly of three dimensions: human, structural and relational capital. Which dimension (if any) do you value most as giving the corporation in which you work a competitive advantage?</p> <p>Question 3: Based on the above answer – why would you select.....above the others?</p> <p>Question 4: Based on the above answer – what would you say needs to be put in place or is already in place to retain that competitive edge?</p> <p>Question 5: Do you think intellectual capital needs to be valued as being equally important as tangible assets? How would you link these two?</p>
<p>To discuss the first dimension of intellectual capital: human capital (q6 to q9)</p>	<p>Within a business context, human capital is the organisation's constantly renewable source of creativity and innovativeness (and gives it the ability to change) but is not reflected in its financial statements. Unlike structural capital, human capital is always owned by the individuals who have it, and can walk out of the door unless it is recorded in a tangible form, or is incorporated in the organisation's procedures and structure.</p> <p>Question 6: Do you agree with this definition? Please elaborate.</p> <p>Question 7: Which characteristics would you classify as human capital?</p>

Grouping	Questions
	<p>Question 8: I refer to the characteristics which you have classified as human capital. Which of those do you suggest gives this corporation a competitive advantage? Please elaborate on your answer.</p> <p>Question 9: From your perspective – would you say that this corporation values human capital as important and if so, what procedures are currently in place to retain human capital?</p>
To discuss the second dimension of intellectual capital: structural capital (q10 to q12)	<p>Structural capital is defined as: the one component which does not reside in the heads of the employees and remains with the organisation even when they leave.</p> <p>Question 10: From your perspective, would you say that this corporation puts enough emphasis on structural capital?</p> <p>Question 11: Can you describe any structural capital from your viewpoint?</p> <p>Question 12: Which characteristic/s would you say, if any, give a competitive advantage?</p>
To discuss the third dimension of intellectual capital: relational capital (q13 to q15)	<p>Customer (Relational) capital is the value of a relationship between a firm and its customers and is not captured on a balance sheet.</p> <p>Question 13: Can you name at least three characteristics of relational capital?</p>



Grouping	Questions
	<p data-bbox="655 304 1406 450">Question 14: Would you think that relationship has a direct impact on competitive advantage? Please elaborate on this.</p> <p data-bbox="655 506 1358 595">Question 15: Can you say that this corporation understands the importance of relational capital?</p>
General questions on the topic of intellectual capital (q16 to q20)	<p data-bbox="655 618 1390 707">Question 16: What is your view on how educational institutions prepare scholars/students on this topic?</p> <p data-bbox="655 763 1430 965">Question 17: You have given me a few characteristics on what you see as intellectual capital. From all of those, which one would you say should be valued most to give a corporation competitive advantage?</p> <p data-bbox="655 1021 1422 1167">Question 18: What would you think this corporation should have in place to utilise intellectual capital to its capacity?</p> <p data-bbox="655 1223 1430 1368">Question 19: How would you suggest this corporation could select the right intellectual capital characteristics to drive strategy and competitive advantage?</p> <p data-bbox="655 1424 1406 1514">Question 20: Is there anything else you would like to add to this topic?</p>

### 3.6.1 Ethical issues

According to Leedy and Ormrod (2010), ethical issues need to be addressed before the data collection process can be considered. Ethical issues in research can be classified into four categories:

1. protection from harm;
2. informed consent;

3. right to privacy;
4. honesty with professional colleagues.

For the purpose of this study, it is noted that points 2-4 need to be disclosed.

### **3.6.2 Informed consent**

It is suggested by Leedy *et al.*, (2010) that the following information (only those relating to this study are described below) should be included in an informed consent form.

- There should be a brief description of what the study entails.
- A description of what is expected from the respondents with regards to activities and the duration of the participation is needed.
- It is important to include a statement that participation is voluntary and the participant can withdraw at any point in time.
- Communicate that responses are kept confidential and anonymous.
- The research should provide his/her name and contact information.
- Contact information of another individual or office should be provided to respondents in case they have questions with regards to the study.
- The researcher can offer to reveal the findings to the respondents once the study is complete.
- There must be a place for respondents to sign and agree that they volunteer to take part in the study.

**Appendix A** is a copy of the informed consent form used in this study.

### **3.6.3 Right to privacy**

The questions which were used by the interviewer, indicated that no personal details of the participant were required.

### **3.6.4 Honesty with Professional Colleagues**

Leedy *et al.*, (2010:103) state that: “Researchers must report their findings in a complete and honest fashion, without misrepresenting what they have done.....”

### **3.7 Measurement Variables**

The characteristics identified for this study are a combination of those factors identified based on the literature review as well as open-ended questions with the purpose of identifying additional characteristics not explored in the literature review.

### **3.8 Data Analysis**

Analysing the data refers to the segmentation of the data into manageable themes, patterns, trends and relationships (Mouton, 2011).

In a case study, the first step is to collect detailed write-ups from each interview. The next step is to list all questions asked and below each question, group all those answers together which are linked to that specific question.

Yin (2009) suggests that it is best to start with questions, rather than the data. The author is of the opinion that this process will help the researcher to address the main research question, by starting with the minor question first and then proceed to the questions carrying more “weight”.

It is better to develop one’s own strategic analysis if there is a diverse set of evidence (Yin, 2009). It is apparent from this case study that the evidence collected is leaning more towards this suggested process. The author states it clearly: “all empirical research studies, including case studies, have a “story” to tell” (2009: 130). As any other story, it should have a beginning, middle and an end.

Four general strategies are mentioned by Yin (2009) which are described below.

- ❖ Relying on theoretical propositions – this is to follow the path of theoretical propositions on which the case study is based.
- ❖ Developing a case description – this means developing a descriptive framework, highlighting how the case study will be organised for analytical purposes.
- ❖ Using both qualitative and quantitative data – case studies can include an amount of quantitative data and at the same time the qualitative nature of a case study exists.
- ❖ Examining opposing explanations – this is to define and test conflicting explanations

Just to reiterate: *the aim of this current study is to determine which intellectual capital characteristics are valued by a multinational corporation as a competitive advantage.* To address the main objective, the two sub-statements set out below should be analysed.

Statement 1: *To determine which intellectual capital dimensions are valued most by a multinational company*

Statement 2: *Why does a multinational corporation select specific intellectual capital characteristics in giving it a competitive edge?*

It is thus appropriate to apply the first general strategy to this research study. Yin (2009) explains:

- ✓ The objective and design of this case study is based on propositions. The objective of the study is reflected through pertinent research questions and literature reviews.
- ✓ Data collection in this study is shaped around the main objective and sub-statements

## Chapter 4 – Research Results

### 4.1 Introduction

As discussed in Chapter 3, it was decided to use the “theoretical proposition” strategy and to follow Yin’s suggestion of discussing the findings on the “smaller” questions first and work towards the most pertinent questions on which recommendations were based (Yin, 2009). Yin (2009) also says that the advantage of making use of the question-and-answer report finding format, is that the readers of this report may only need to examine the answers related to the same question and thus prompt a reader to follow only those findings on the topic which are of interest to him/her.

### 4.2 Findings of the Report

As a result of the above, the results have been reported on the basis of the more “general” questions first. Then move towards the core findings as to what these respondents identified as intellectual capital factors which have an impact on competitive advantage. The interpretation of the questions by the respondents was based on his/her own perception. The respondents responded to the questions according to his/her position occupied. They are not the guidelines and directions outlined by the company group.

- ◆ *Report findings on the definition of intellectual capital and its dimensions*

In preparation for this case study and feedback from the reviewers assisting the researcher in testing the semi-structured questions, it was necessary to understand how the selected respondents define intellectual capital and human capital. The general perception among the reviewers was that the terms intellectual capital and human capital have the same meaning, but, human capital is only one element of intellectual capital. Questions 1 and 6 were asked in order to determine how the selected respondents would define intellectual capital and

human capital. It is thus appropriate that the findings on Question 1 and Question 6 are combined. The definitions set out below were given to the respondents.

### **1. Intellectual capital**

Intellectual capital can be defined as: “Collective knowledge (whether or not documented) of the individuals in an organisation or society. This knowledge can be used to produce wealth, multiply output of physical assets, gain competitive advantage, and/or to enhance value of other types of capital. Intellectual capital is now beginning to be classified as a true capital cost because (1) investment in (and replacement of) people is tantamount to investment in machines and plants; and (2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital.”

**Question 1:** *Do you agree with this definition? Please elaborate.*

### **2. Human capital**

Within a business context, human capital is: “the organisation's constantly renewable source of creativity and innovativeness (and imparts to it the ability to change) but is not reflected in its financial statements. Unlike structural capital, human capital is always owned by the individuals who have it, and can 'walk out of the door' unless it is recorded in a tangible form, or is incorporated in the organisation's procedures and structure”.

**Question 6:** *Do you agree with this definition? Please elaborate.*

All nine respondents agreed with the definitions. Additional thoughts/ideas were added as to why they would agree or disagree. These definitions encompass various key factors to be explored and it is therefore appropriate to break them down into various sub components. As discussed below.

*This **knowledge** can be used to produce wealth, multiply the output of physical assets, and **gain competitive advantage**”*

**Analysis:**

All of the respondents acknowledged that knowledge is important as long as it can be linked to an end-product (which can generate revenue) and it has to be a collection of pieces of knowledge (individual knowledge is not relevant).

Comments appear below.

*Yes, knowledge is valuable, but it does not give a competitive advantage. People are the “carriers” of knowledge, but in the workplace, they are only “processors”, thus not giving a competitive advantage. <sup>1</sup>*

A further point was made that knowledge, and thus, human capital can represent competitive advantage if applied “up the chain”. In other words, it can be directly related to competitive advantage *if the executive team applies their knowledge to drive strategy in an efficient manner.*<sup>2</sup> Interestingly, one of the respondents felt that executives are those in the organisation who build relationships which matters enough to have an impact on competitive advantage, should they leave the organisation.

*It is not knowledge giving the competitive advantage, but rather intellectual capital as a whole<sup>3</sup> (human, structural and relational).*

It is not that the respondents did not think that knowledge is unimportant, but the focus should be on collective knowledge. It thus leads the analysis towards the next section - to capture the thoughts of the respondents on collective

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<sup>1</sup> Director, product delivery

<sup>2</sup> Director, product delivery

<sup>3</sup> Senior manager, systems and processes

knowledge. Extract from intellectual capital definition: “**Collective knowledge** (whether or not documented) of the individuals in an organisation or society”

### **Analysis**

All nine respondents felt very strongly that the sharing of knowledge, hence, collective knowledge, is what is of value to the bank. It is not the individual knowledge which creates a competitive advantage, but *rather the collective knowledge of all individuals in the corporation. The emphasis is indeed on the “aggregation” thereof*<sup>4</sup>

Four of the respondents, irrespective of their role within the bank, linked the “how”, “why” and “what” of intellectual capital directly to industry. In other words, they have responded within the context relating to the service industry. It is noted that if these four respondents had had to answer the same questions in a different industry, then their answers would most probably have been different. The view is that *since this corporation is within the service industry, it is very much dependent on collective knowledge.*<sup>5 6</sup> *A bank does not own knowledge (human capital), it can only harness it. The sharing of knowledge is important.*<sup>7</sup>

*Collective is the key word, individuals come and go, but the collection of knowledge is what is driving new products as a result of innovation. Collective knowledge is captured by means of a new product (tangible assets), thus flowing into structural capital.*<sup>8</sup>

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<sup>4</sup> Director, client-facing

<sup>5</sup> Senior manager, systems and processes

<sup>6</sup> Director product delivery

<sup>7</sup> Director product delivery

<sup>8</sup> Director, product delivery



In addition to the feedback above, one of the respondents defined intellectual capital as follows: *“Intellectual capital is built up through knowledge in a specific industry and cannot be generalised”*. The respondent explained the collection of knowledge by means of an example, typical to the banking industry.

- Back office: technical knowledge of financial accounting is required, but a back office cannot exist unless,
- front desk used its specialised knowledge of “how” to structure a service or product and thus capture it in,
- systems which is the retention of collective knowledge.

The next factors of the intellectual capital definition were to determine if the respondents agree that intellectual capital can be seen as a cost-benefit driver.

Intellectual capital is now beginning to be classified as “a **true capital cost** because **(1) investment in (and replacement of) people is tantamount to investment in machines and plants, and (2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets**. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital.”

### **Analysis**

The roles which the respondents occupied during the interview sessions had an underlying affect on how the respondents addressed this section of the intellectual capital definition. Two of the respondents felt that their roles were relationship focused and could not be quantified. Two of the respondents did not respond to the question on collective knowledge at all. However, five of the respondents felt very strongly that any concept is only of value if it can be quantified. Again, the respondents made it clear that this might not be the case for all industries. Even though it is difficult to measure intellectual capital, the definition has shed light on how it can be compared to true capital costs.

*Knowledge is a cost to business and it always needs to be quantified, in other*

*words, it needs to show some sort of cost of return in the form of innovation. Within a service industry, people and knowledge are very important factors, thus resulting in expenditure on training and other staff costs.*<sup>9</sup>

In addition, two respondents confirmed that this is the first time they had seen a link made between intellectual capital factors against financial indicators. One of the respondents suggested that it would be critical to business to go into more detail on this.

Two of respondents were of the opinion that if training does not happen consistently, it can be viewed as depreciation of knowledge. *Training can be seen as a liability if “continuous learning” is not instilled in the company’s values. It will become “absolute” eventually. Intellectual capital is viewed as “driving behaviour”- how do you know what it is worth? Perhaps a balanced scorecard, but what do you measure? It is a huge challenge to measure intellectual capital, but worth investing time in it to find the most appropriate measures.*<sup>10</sup>

*Experience is not “free”, it gets bought and comes at a premium, especially in the case of specialist roles on which this organisation in the service industry is dependent. Based on this, intellectual capital should be seen as true capital cost. To replace people, systems or acquire new clients is not without any cost. The question remains: “how” and “what” to quantify.*<sup>11</sup>

All nine respondents indicated that they understood the difference between intellectual capital as a whole and human capital after reviewing the two definitions. This relates to the perception that intellectual capital and human capital have the same meaning, but one respondent stated it best: *Human capital*

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<sup>9</sup> Senior manager, systems and processes

<sup>10</sup> Director, product delivery

<sup>11</sup> Director, client-facing

*is only one of the links in the value chain, whilst intellectual capital is the value chain between the links.*<sup>12</sup>

### **Structural capital**

The next step is to look at each dimension of intellectual capital – structural, human and relational capital. Respondents were not asked to give feedback on the structural capital definition or to determine whether the respondents understood the definition, but to identify how structural capital is seen from their viewpoint. Since the literature review indicated that structural capital is more easily obtainable and measured, it was thus appropriate to give a less detailed definition of structural capital, and to allow the respondents to give their opinion on structural capital.

Structural capital is defined as: the one component which does not reside in the heads of the employees and remains with the organisation even when they leave.

### **Analysis**

All of the respondents were in agreement that structured capital should be part of any corporation; however, the roles fulfilled by the respondents within the company determined to what extent they viewed structured capital as important.

#### **Question 11: Can you describe any structural capital from your viewpoint?**

Three respondents described structural as branding. *Structural capital is all about branding.*<sup>13</sup> Two respondents felt that a well-respected brand is what drives success from a customer point of view.

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<sup>12</sup> Financial manager

<sup>13</sup> Director, produced delivery

Six respondents stated that structural capital is the mechanism which is provided to people to perform their tasks.

One respondent described structural capital as corporate culture as it drives behaviour. According to this case, it is the “how” and “why” individuals interact with internal and external stakeholders.

Two respondents felt that structural capital is a framework or body of an organisation - *it is the “nuts” and “bolts” of an organisation and without that, an individual cannot deliver.*<sup>14</sup> It facilitates individuals in delivering their tasks.

One respondent described structural capital as the business intelligence to build for example the brand. There are two kinds of structural capital: the visual identity (image/brand – external) and the corporate identity (culture – internal).

One respondent felt strongly that structural capital is all about intellectual property and the protection of this.

### **Relational capital**

The last dimension to analyse is relational capital. Since this study has been conducted within the service industry, relational capital is of importance to most of the respondents interviewed. It was therefore decided not to focus too strongly on the definition, but question 13 addresses which characteristics have been identified through the interviews.

**Customer (Relational) capital:** This is the value of a relationship between a firm and its customers and is not captured on a balance sheet.

**Question 13:** Can you name at least three **characteristics** of relational capital?

### **Analysis**

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<sup>14</sup> Senior Manager, systems and processes

Two respondents named the ability to connect with a customer and a chemical mix (emotional connection) between individuals are characteristics of relational capital– to actually “hold” a conversation. *Everyone can network, but personality fit allows two people to connect in a constructive manner.*<sup>15</sup>

Five respondents felt that values are characteristics of relational capital. It is all about trust - the customer expects his/her relationship manager to deliver the transaction successfully. Over and above this, the client should be comfortable around the effective delivery of the message. Responsiveness plays a very important factor in relational capital according to one of the respondents. Other values identified are honesty and openness. Three respondents felt strongly that the needs of the customer must be met, thus relevant solutions and understanding what the customer wants form part of relational characteristics. Customers expect bankers to act as advisors.

Two respondents linked relational capital to economic value. Relationships are built over time which leads to sustainability, and thus results in revenue over time.

It was argued by one respondent as to whether trust, honesty and openness should be seen as relational characteristics. These three factors are actually seen as structural capital as they are a means (process) to building a sustainable relationship. The respondent further explains to say that structural capital should be divided in two levels:

1. macro relates to brand and social responsibility ; and
2. micro relates to understanding the client dynamics.

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<sup>15</sup> Relational manager, client-facing

Now that all three dimensions have been clarified and communicated, the next step towards addressing the main objective is to give feedback on the statements supporting the main objective of this study.

***Statement 1: The aim is to determine which intellectual capital dimensions are valued most by a multinational company***

***Question 2: Intellectual capital consists mainly of three dimensions: human, structural and relational capital: which dimension (if any) do you value most as giving the corporation in which you work a competitive advantage?***

## Analysis

Table 4.1: Dimension Selection by Respondents

Case	Role	Human Capital (HC)	Structural Capital (SC)	Relational Capital (RC)	Key selection driver
1	Product delivery		x		Brand is key and main driver within the banking industry
2	Client-facing	x	x	x	HC carries most weight, then RC and SC to a lesser extend
3	Client – facing	x	x	x	RC is priority, then HC and SC to a lesser extend
4	Client – facing	x	x	x	HC & RC equally important, SC takes years
5	System & Processes	x			HC is the starting point of innovation
6	Product delivery	x	x	x	HC, SC & RC in that order
7	Risk		x		Without capturing, no competitive advantage
8	Business enabler / finance	x	x	x	It is a value chain, link will be broken if one is excluded
9	Client – facing		x	x	Clients loyal to brand, the test is relationship

Table 4.1 indicates that five out of the eight respondents valued all three sub-sets of intellectual capital as important factors in providing competitive advantage. However, out of the five selecting all three dimensions, it is clear from the key comments that the respondents have arrived at their opinions from different angles. The weightings were different and not consistent across all the respondents which is an indication that industry and role within the organisation were key drivers in obtaining these results.

A case study is an effective method to understand “why” specific decisions/comment/factors are chosen. Question 3 explain in further detail why the respondents interviewed value dimensions above others or why they should be valued as equally important.

**Question 3:** Based on the above answer – **why** would you select.....above the others?

### **Analysis**

**Structural capital** – One responded felt very strongly that within the banking industry, brand is a key risk measure. Brand is measured for risk (what impact will it have if brand is linked to bad reputation or negative media reports?). Capital and liquidity are directly linked to the organisation’s brand. Another responded suggested that it takes years to build a brand; the key is to maintain that image. Two respondents selected structural on the basis of capturing intellectual capital and the process flow thereof throughout the organisation. Business continuity is about retaining intellectual capital, thus the capturing of key intellectual capital characteristics will allow sustainability

Yet, from another perspective, two of the respondents emphasised the “know how” component within **human capital**. Expertise and industry specific skills allow the organisation to be innovative which will lead to a credible brand and therefore flow over to retaining clients. Human capital consists of innovation and creativeness and in this specific organisation, the “right product at the right time”



is key. One of the respondents pointed out that it is all about the right people in the right roles. *Human capital is the starting point of which innovation is the underlying factor*<sup>16</sup>. The latter initiates the process.

In the case of **relational capital** as seen as the most important dimension, one respondent selected it on the basis of *it is due to the fact that it is the only external dimension, the other two dimensions are internal, thus, controllable. It is important to manage customer relationships with care.*<sup>17</sup> Even though one respondent selected relational capital as number one, it was mentioned that a client links relationship with brand. The client stays loyal to a brand on the bases of how the relationship is handled.

One respondent could not select a specific dimension as the person felt that all three dimensions are part of the value chain and are equally important.

**Statement 2: Why does a multinational corporation select *specific intellectual capital characteristics* in giving it a competitive edge?**

It is best to give feedback on intellectual characteristics in the same manner as done in the literature review in chapter 2. This statement will be divided into two feedback sections: firstly, listing all characteristics identified as new insight will be easily identified by comparing two tabular formats. Secondly, the second section of statement 2 is addressing the question of “why” specific characteristics are seen as a competitive advantage.

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<sup>16</sup> Senior manager, systems and processes

<sup>17</sup> Director, client-facing

**Analysis** - Section 1 of statement 2:

Table 4.2: Characteristics chosen by Respondents

Question	Dimension	Characteristics	# of cases
7	Human capital	Capability / competency	2
		Ability to learn / potential	2
		Shared mind / vision	
		Innovation/creativity & new ideas	6
		Leadership	2
		Education (Academic & on the job) / training	4
		Know-how / knowledge	3
		Expertise	2
		Empowerment	1
		Skills (technical skills and soft skills)	5
		Efficiency	1
		Talent selection	4
		Experience (work- related)	1
		Entrepreneurial	2
12	Structural capital	Brand	2
		Social responsibility	2
		Knowledge sharing / teams	2
		Systems and processes	2
		Corporate culture	2
13	Relational capital	Responsiveness	1
		Understand business and industry needs / client dynamics	5
		Networking / relationships / ability to connect	5
		Trust / honesty / openness / empathy	4
		Relevant solutions	1
		Quality	1

Section 2 of statement two refers to the question: “Which of the above characteristics are giving that competitive advantage?” The questions were structured in such a way so that the “why” is also addressed. Questions 8, 12 and 14 relate to understanding which characteristics create competitive advantage. Table 4.3 summarises some key points based on the responses given.

### **Analysis**

Table 4.3: Characteristics as Competitive Advantage

<b>Characteristics</b>	<b>Why seen as competitive</b>
Brand	<ul style="list-style-type: none"> <li>➤ A well respected brand creates competitive advantage as it is the “mirror” to the world.</li> <li>➤ Social branding of a competitor is a current “threat” for the corporation of this case study.</li> <li>➤ “CI” and “VI” – Corporate identity (culture and values) and visual identity (the corporate image) are all about the “how” organisations connect and in return attracts the right customer who “wants” to be associated with this corporation.</li> </ul>
Capabilities / competencies & abilities	<ul style="list-style-type: none"> <li>➤ It is the “how” and the “when” to apply which creates a competitive advantage, otherwise people will just be “processors” and not adding value.</li> </ul>
Talent selection	<ul style="list-style-type: none"> <li>➤ Retaining the right talent creates competitive advantage. Competitors always try to “head hunt” those “known” in the market. They are prepared to pay a premium for talent.</li> </ul>
Trust	<ul style="list-style-type: none"> <li>➤ If trust is broken, then the client is lost and competitive advantage is at jeopardy.</li> </ul>
Entrepreneurial	<ul style="list-style-type: none"> <li>➤ It is the “go getter”, the new ideas, creating a competitive advantage. It relates to having the right talent on board.</li> </ul>

<b>Characteristics</b>	<b>Why seen as competitive</b>
Systems and processes	<ul style="list-style-type: none"> <li>➤ Competitive advantage is when an organisation has the capability to facilitate (the right environment) individuals to bring the most (and the best) out of individuals.</li> <li>➤ Capturing intellectual capital is the competitive driver.</li> </ul>
Networking / relationships	<ul style="list-style-type: none"> <li>➤ Competitive advantage means: “to be more relevant” in an external relationship. To be “dominant” in the customer world is creating competitive advantage.</li> <li>➤ Your customer is your competitive advantage.</li> <li>➤ The same products are delivered across this industry; it is the relationship with the customer which counts.</li> </ul>
Quality	<ul style="list-style-type: none"> <li>➤ Product quality drives competitive advantage.</li> </ul>
Responsiveness	<ul style="list-style-type: none"> <li>➤ The customer experience is what counts, the how quickly an organisation responds to customer needs</li> <li>➤ The timing of producing the right product - customers are willing to pay a premium for a product that is delivered “on time” and “in time”.</li> </ul>
Relevant solutions	<ul style="list-style-type: none"> <li>➤ Innovative and relevant products are what competitive advantage is about – There can be many products, but it is the differentiator factor.</li> </ul>

Finally, questions 9, 10 and 15 address the question of how to retain those intellectual capital factors seen as competitive advantage:

### **Analysis**

#### **Human capital**

Two respondents felt that talent management or talent mapping is the correct way to remain competitive advantage. It is not worth a large workforce if the right people are not in the right roles. In addition, two respondents felt strongly that a

substantial reward and incentive scheme for retaining critical staff should be in place. Pay a retention fee if necessary. One respondent argued that a reward system to retain critical staff could only be of competitive advantage (by not letting human capital “walk out of the door”), if it was a collective award system. Granting rewards to specific individuals creates a way to cause conflict and does not enhance teamwork. However, if rewards are collective by nature, then people will motivate each other to work towards that monetary goal.

Part of keeping human capital competitive, is to allow more training, specifically on the job training. This specific respondent agrees that tertiary education is necessary, but in many respondents in general *people don't use or apply any of their academic qualifications in the workplace*<sup>18</sup>. The same respondent suggested that life skills need to be part of the training modules

Two respondents want to see career planning as part of the retaining of human capital. These respondents are of the opinion that people will not leave unless they know that there is a future for them with the organisation.

### **Structural capital**

Seven of the nine respondents agreed that the correct mechanism should be in place for the people to perform their duties. The environment must be conducive, culture and values play an important role. Another way of creating the right environment is to have the right organisational structure in place. Hierarchy is necessary, but it can prevent an individual from growing to his/her fullest potential. *Give people the right “tools” to perform their duties.*<sup>19</sup> One respondent mentioned that the correct environment will motivate people to “want” to perform. Often, people know that they are capable of doing more, but the strong hierarchical

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<sup>18</sup> Senior manager, Risk

<sup>19</sup> Senior manager, systems and processes

structure limits their growth, hence this comment: *Consider a “flatter” organisational structure – it stimulates the balance of power*<sup>20</sup>.

Teamwork must be encouraged as it is the channel through which knowledge is shared in an organisation. Teamwork from this perspective was seen as part of structural capital as it is a method or process of transferring.

To have a good structure in place, governance should be in place. *Policies drive behaviour*<sup>21</sup>

### **Relational capital**

One respondent suggested that training in “soft skills” needed to happen more – to prepare “client facing” staff members. A great deal of training goes towards financial courses and networking skills, but not enough emphasis is placed on the “how” to network, but rather the “why” one should network.

It was argued by one respondent that, even though this multinational company places great focus on a coverage model, not all stakeholders have bought into it yet. This respondent felt strongly that a relationship model can only be of competitive advantage if every member supports it.

### **General**

The questions below do not relate to any specific dimension. They are aimed at understanding factors which may have an impact on the successful implementation of intellectual capital management .

Question 16: What is your view on how educational institutions prepare scholars/students on this topic?

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<sup>20</sup> Director, client-facing

<sup>21</sup> Financial manager, enabler

## **Analysis**

Four respondents answered this question as the rest felt that they were not in touch with current curriculum and therefore could not respond. One respondent felt very strongly that degrees do not prepare potential new workforce as they are theory based and not linked enough with the workplace environment. Another comment made was that tertiary curriculum focuses on the academic learnings and not enough attention is given to “soft skill” training. This was confirmed by another respondent stating that soft skills training seems to be “hidden” in marketing related degrees, whilst financial degrees do not expose chartered accountants enough to the “people” side of business. It was suggested that business leaders need to engage more with academic institutions. Business leaders can assist by sharing and guiding students through lectures.

Respondents felt that questions 17 and 18 had been addressed previously and thus did not respond to it.

Question 19: How would you suggest this corporation can select the right intellectual capital characteristics to drive strategy and competitive advantage?

Two respondents responded and identified two ways of including intellectual capital to drive strategy: communication sessions across all levels to obtain feedback from the workforce and the vision and values statements. Intellectual capital has so many factors and it needs to be shared more formally

Question 20: Is there anything else you would like to add to this topic?

Question 20 was to gain a sense of what the respondents took away or have learnt from the interview discussions. Most of the respondents agreed that intellectual capital is an important driver from the corporation’s perspective, however, some of them found it very challenging to discuss something which was “not an everyday” topic.

Positive comments were made, such as these presented below.

*The risk team will definitely factor processes around intellectual capital on operating model going forward<sup>22</sup>*

*Very informative, now understanding the end-to-end process and that all three dimensions should be in place<sup>23</sup>*

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<sup>22</sup> Senior manager, risk

<sup>23</sup> Financial manager, enabler



## Chapter 5 – Discussion, conclusions and recommendations

### 5.1 Discussion

Chapter 1 starts off with the following quote:

*“Globalisation has changed us into a company that searches the world, not just to sell or to source, but to find intellectual capital - the world's best talents and greatest ideas. “*

*Jack Welsh*

Indeed – the findings coincide with the above quote - best talents and entrepreneurial skills are viewed as a competitive advantage and therefore make this topic and study relevant to the current workplace environment.

Chapter 1 highlighted the importance of studying intellectual capital. It addressed the need for intellectual capital growth since 1994. For a while, South Africa was “alienated” from big business competitors. Post-apartheid, South African companies had to gear themselves against the “big players” and the ever changing technological environment. It thus prompted a need, or rather curiosity to determine how a South African multinational corporation within the banking industry prepares itself for a challenging and competitive ride. Much emphasis is placed on education and training specifically yet the findings of this study concluded that these two factors are not important drivers for competitive advantage at this particular multi-national organisation. However, a conclusion can be made that on-the-job training seem to be more effective and valuable a opposed to a formal tertiary/academic qualification.

Chapter 2 was a review of the literature on the topic of intellectual capital and how it supports the current study. Since intellectual capital is such a broad term, it was decided to segment the literature review into sub-sections. The first aim was to review various definitions as it would help to focus on the right dimensions and characteristics. The second was to understand the various dimensions of

intellectual capital, being, human, structural and relational capital. This helped to segment the case study questions accordingly. Before a person can explore the relationship of intellectual capital and competitive advantage, it is necessary to have a clear identification of the main components of intellectual capital (Chen, 2009). Finally, each dimension is defined by specific characteristics already identified by previous authors. By using a tabular diagram, “common” or new characteristics are listed. This study supported a few of those characteristics already identified. Even though not identified by the literature reviews stated in this study, the following new characteristics have been reported by the respondents’ of this study:

- ❖ relevant solutions to the customer (relational capital);
- ❖ shared mind/vision (human capital); and
- ❖ ability to learn (human capital).

Chapter 3 focused on methodologies used by various authors and it further explained why a case study was selected. No study as far as the literature review was concerned, has been done on a South African multinational corporation and based on the latter, it was thought that a case study might highlight possible new findings not identified yet, in the same time, interviews gave presence to structure questions throughout the interview sessions. The selection of a case study interview helped the interviewer to explain intellectual capital in more practical terms. Most respondents concluded that it would have been difficult for them if a quantitative method had been selected. It was evident from the diverse findings that intellectual capital is not a “out of the box” solution, but rather dynamic and flexible. Industry and the role occupied within that industry do play a role in the application of intellectual capital characteristics.

Chapter 4 is structured around the case study interviews’ results. It was interesting to record feedback from respondents on what they could “take from the interview”. However, it is even more important to compare these findings with the reviews expressed in chapter 2.

In summary, all respondents found it extremely challenging to take part in a discussion about intellectual capital. This is partly because the definition used in the interviews triggered different responses agrees with Choong's (2008) statement – that the challenge posed around intellectual capital is that there is no consistency in defining intellectual capital.

Even though Evoh (2007) and other authors placed huge emphasis on knowledge as a very important human capital factor, the results confirmed that knowledge is important as long as it is in collective form (Kelly, 2004; Firer, 2005). The findings highlighted that this observation could be due to the type of industry. This coincides with the statement made by Maree (2001) that it is easier to put financial indicators in place to measure intellectual capital once the industry is known.

The theory of intellectual capital argues that this way of defining an asset is too narrow and limits businesses to focusing on knowledge assets (Stewart, 1997). Other authors agree that it is not difficult to see the value of intellectual capital, but the difficulty is the "how" to measure it in monetary terms (Maree, 2001; Abdulsalam, Al-Qaheri & Al-Kayyat, 2011). Study confirmed this notion and commented that it is rather challenging to measure, but it is not impossible. The mere fact supports that some respondents could link knowledge (training), replacing costs on people and systems as measurable costs, support statements made by previous authors.

With regards to the underlying dimensions of intellectual capital and its characteristics, the results were based on industry- specific views and the role of the respondent within the organisation.

As noted in the literature review, Sullivan (1998) is of the opinion that the human capital which each individual employee possesses, can be of an advantage if the employee is positioned to utilise these units. This is one key statement which came out very clearly in the interviews. A person can have the greatest ideas and aspirations, but if the organisational structure, whether it is the reporting

hierarchy, lack of systems and process, lack of information availability or culture does not allow the freedom to apply those ideas, then intellectual capital will not reach its full potential within an organisation.

In a sense, the findings came to a different conclusion than work done by Paoloni *et al.*, (2010) and Chen (2009) as the authors felt that human capital is the main concept of intellectual capital assets and the aim would be to capture these factors in a system so that it could become structural capital and thus useful to the organisation as a whole. Instead, the findings suggested that structural capital is the key driver – the rest will follow.

One finding in particular was that intellectual capital is only of competitive advantage if there is an end-product coming out of the three dimensions. Thus, people can be around, systems can be in place, but if there is no tangible asset or value linked to it, then its purpose is defeated (Čater *et al.*, 2009). It is therefore important to capture what is in someone's thoughts. These findings agree to what Díez *et al.*, (2010) stated in their study which implies that structural capital empowers and strengthens human capital, but it allows the organisation to transmit and store its intellectual material. The advantage of the latter is that it keeps intellectual capital within the organisation and this capital does not leave with an employee on exit.

Moon and Kym (2006) felt that relational capital is all about relationships with the client. The results of this study argued that there is more to relational capital than just building a relationship. In fact, in this particular case study, delivering results on an effective and relevant product solution to the client is seen as a competitive advantage. In addition, the relationship with a client should be maintained by adhering to high principles. Trust came out very strong in the findings.

Table 4.3 in Chapter 4 has a summary of key intellectual capital characteristics which were identified by the respondents as being of competitive advantage. These factors are aligned with various authors' work as seen in Chapter 2

(Vodak, 2010; Yau *et al.*, 2009; Guthrie *et al.*, 2000). They all agree that these characteristics could lead to sustainable competitive advantage.

Mihm-Herald (2010) also supports the other authors' believe that education and training are key elements for a knowledge based economy to gain a competitive edge. The findings suggested that education and training are important if they are linked to the workplace, example, on the job training.

## **5.2 Conclusion**

There was no doubt that the topic of intellectual capital "attracted" the interest of respondents to be interviewed, and yet, many thought that intellectual capital is synonymous to human capital only. Even though, this particular multi-national organisation could not initially see a link between human, structural and relational capital to intellectual capital, there was enough evidence to conclude that all three dimensions were visible across various business units and across borders.

The literature review suggested that human capital is the "initiator" of intellectual capital. However, the findings of this study suggested that industry plays a role in determining which dimension is valued most and initiates the intellectual capital process. In this case, structural capital is the framework within which all other components of intellectual capital are linked.

In conclusion - the aim of this study was to *determine which intellectual capital characteristics are valued by a multinational corporation as a competitive advantage*. Since it is such a broad statement, two sub-propositions were made.

Statement 1: This was *to determine which intellectual capital dimensions are valued most by a multinational company*

Statement 2: *Why does a multinational corporation select specific intellectual capital characteristics in giving it a competitive edge?*

The findings of this study addressed the overall objective of this research report by structuring the case study interview questions accordingly.

In summary, the following key characteristics listed below were identified by most respondents.

### **Human capital**

- i. Innovation/creativity & new ideas
- ii. Skills (technical and soft)

### **Structural capital**

- i. Brand

### **Relational capital**

- i. Understand business and industry
- ii. Trust / honesty / openness / empathy

Even though the above characteristics have been identified, the following were seen as creating a competitive advantage:

1. *Brand* – this is because the brand portrays the organisation both externally and internally. It is the “mirror” of this organisation and all eyes are on this reflective image.
2. *Capabilities / competencies & abilities* – It is one thing to have human capital on board, but another to know “what” and “how” to transform it into a competitive advantage.
3. *Talent selection* – This means selecting the right people as opposed to having a workforce not adding value. Competitors “headhunt” very specific talent in an industry such as banking.
4. *Entrepreneurial* – This links in with talent selection. In a highly competitive environment, new products, ideas and innovation is the way to the market.

5. *Trust* – Mention has been made to new characteristic identified – relevant solutions to the customer. This goes hand in hand with trust. The customer “entrusts” the organisation with its investments and once the trust is broken, may lead to serious harm to the corporate image and customer retention. All banks have clients, but it is how that client perceives the relationship to be, that determines whether he/she will remain a client in future.
6. *Systems and processes* – It is fine to have the right people/talent on board, but not competitive if that knowledge cannot be captured. An idea in a person’s head becomes a product which in its turn adds value to a client’s needs/requirements. Systems and processes relate to the capturing of that idea into something more sustainable.
7. *Networking & Relationships* – Anything can add value on the condition that it is relevant. The only way to determine what a customer wants or needs to be in place is to understand those needs. Building a relationship takes time, but the long-term effect creates a competitive advantage.
8. *Quality*– So often, a product is offered at a reasonable market price, but it does not stand the test of time due to a lack of quality.
9. *Responsiveness* – It is one thing to release a product into the marketplace but if the timing is not relevant, then the chances for competitive advantage diminish.
10. *Relevant solutions* – In this particular industry, the focus is on product and service. If the customers’ needs are not understood, then the product may not be relevant, and this may have a negative influence on customer retention and will impact competitive advantage.

All of the above are aspects of intellectual capital and seen as important drivers for this multi-national company to compete in the global environment.

Respondents were representative from across the globe and the findings suggest that the same intellectual characteristics apply across borders.

The implementation of specific intellectual capital value drivers appeared to be a challenging factor. This listed multinational corporation operates within a regulated service industry which in turn is obliged to report its performance by means of financial indicators such as annual financial statements, capital and risk measures etc. There is no regulatory requirement to report on intellectual capital and thus is not seen as a priority.

Establishing the right environment for people to “want” to work there, it is essential to retain the human capital that is critical to the delivery of successful and relevant products and ensure that the client-company relationship is based on trust. These factors appear to be the key competitive intellectual capital drivers for this multi-national company.

As stated in Chapter 1 and Chapter 3, over and above the key objective of the study, it was to add new insight and perhaps give this particular organisation some guidance on specific questions / propositions faced by decision makers.

**Question:** Is it the supportive (retaining knowledge) components such as infrastructure of structural capital which allows a company to be competitive?

**Conclusion:** It was evident that structural capital, specifically brand and a conducive working environment were important factors in remaining competitive.

**Question:** People are the “carriers” of human capital – Is it the innovative nature of people (investing in people) which gives the competitive edge?

**Conclusion:** Yes, innovation and new ideas represent one of the factors identified by respondents (entrepreneurship).

**Question:** In most cases, revenue is driven by customers. Does this mean that company image or social responsibilities are key drivers to sustain a competitive advantage?



**Conclusion:** Brand was the most identified as competitive advantage. However, it was also noted, that this competitive factor develops over time.

In addition to the suggested questions, Marr (2008) agrees that a company can ask very specific questions and set key performance areas if they understand their intellectual capital needs. Also, the author suggests that it may stimulate business to ask some key questions.

How far do we enhance our international image? This company has achieved its goals with regards to positioning its brand across the globe. It is a well-respected brand. With regards to the question whether knowledge is shared, it can be concluded that teamwork is a significant driver in this organisation. However, the capturing of the output of these team meetings and teamwork needs to be revisited. The result of not capturing the output imposes risk.

Do we achieve in retaining talent successfully? These findings suggested that talent retention is in place, but perhaps more can be done. Rivals are targeting each other's workforce since there are only a few big players in the banking industry in South Africa and due to the global expansions, headhunting is on the increase.

With regards to whether the organisation is promoting its products and services well enough, it became clear that visibility to the markets could be increased. There is a fine line between arrogance and successful social responsibility.

On the point of understanding how the organisation's customers perceive their services, there was no clear evidence from the interviews to report any concrete findings to this question – this could be an opportunity for further research.

As mentioned in Chapter 4, even though there is a good coverage model in place, there is an opportunity for further improvement.

What is the organisation's level or ability to innovate? It was concluded that to be successful in innovation, the environment must be "open" towards new ideas and

innovation. The current structure does not allow people to grow to their fullest capacity.

It is one thing to have communication channels in place of which this organisation has many, but maybe not “effective” enough.

Does the organisation foster an innovative culture? Based on the findings, the structure and environment do not produce an innovative culture.

### **5.3 Recommendations**

The case study interviews also covered ways to retain those dimensions or characteristics of intellectual capital which add to a competitive advantage. In summary, one recommendation came out strongly – it is essential to create the right environment and structure which will allow people (human capital) to transform their ideas (human capital factor) into a solution which can be beneficial and add value in the future (a product solution or process – structural capital) and finally reach the end-user (customer) by means of a business relationship (relational capital).

The study of intellectual capital is extremely challenging and it is not easy to track its performance in practice. Based on the findings of this study, it is thus recommended that further studies are conducted on the following:

- to determine which intellectual capital characteristics and dimensions are seen as competitive advantage in other industries in South Africa;
- to understand how other South African companies track or implemented intellectual capital measures; and
- from a customer perspective: to determine which factors would they want to see in the banking industry and why.

## **5.4 Closing**

Not only did this study attracted diverse opinions on the subject of intellectual capital, but it also supported previous work done by researchers.

The value of intellectual capital is perhaps not tracked or measured by companies, yet, the interview discussions confirmed that it is seen as an important driver in the workplace. It appears to be the framework or base of operations.

New technology and new ideas need to reach the fast-growing and fast-changing market demand as quickly as possible. Tighter competition and a volatile economy all have an impact on how companies should manage intellectual capital to meet needs and demands.

Intellectual capital is dynamic and new factors become relevant as external and internal changes are implemented. It is therefore critical for an organisation to keep track of the latest intellectual capital needs and perhaps in future, to include the value of intangible assets in a sustainability report.

## REFERENCES

Abdulsalam, F., Al-Qaheri, H., and Al-Kayyat, R. 2011. 'the intellectual capital performance of Kuwaiti banks: an Application Capital of VAIC Model™'. *iBusiness* [online], 1(3): 88-96. Retrieved April 28, 2011. From Scientific Research database. Available from : <<http://www.SciRP.org/journal/ib>> [Accessed 28 April 2011].

Akpinar, A.T.and Akdemir, A. No date. *Intellectual Capital* [online]. Turkey: Kocaeli University. Available from: <<http://www.opf.slu.cz/vvr/akce/turecko/pdf/Akpinar.pdf>> [Accessed 7 June 2011].

AL-Ma'ani, A.I. and Jaradat, N. M.S. 2010. 'Impact of Human Capital on the Organisation Performance'. *Interdisciplinary Journal of Contemporary Research in Business*, 2 (4): 63-73.

Arenas, T. and Lavenderos, L. 2008. 'Intellectual Capital: object or process?'. *Journal of Intellectual Capital*, 9 (1): 77-85.

Birasnav, M. and Rangnekar, S. 2010. 'Knowledge management structure and human capital development in Indian Manufacturing industries'. *Journal of Business Process Management*, 16 (1): 57-75.

*Business Dictionary*. No date. Edited by: Business Dictionary Online. Available from: < <http://www.businessdictionary.com/definition/intellectual-capital.html>> [Accessed 2 June 2011].

*Business Dictionary*. No date. Edited by: Business Dictionary Online. Available from: < <http://www.businessdictionary.com/definition/service-industry.html>> [Accessed 9 September 2011].

- Carrell, J.ed. 2007. *Intellectual Capital: An Inquiry into Its Acceptance: proceedings of the Texaz A & M American Management Seminar and 2007 IABPAD Conference, Spring 2007.*
- Čater, T. and Čater, B. 2009. '(In)tangible resources as antecedents of a company's competitive advantage and performance'. *Journal for East European Management Studies*, 14 (2): 186-209.
- Chen, S. 2009. 'Identifying and prioritizing critical intellectual capital for e-learning companies'. *Journal for European Business Review*, 21(5): 438-452.
- Choong, K.K. 2008. 'Intellectual capital: definitions, categorization and reporting models'. *Journal of Intellectual Capital*, 9 (4): 609-638.
- Deacon, J.J. 2008. The Contribution of Knowledge Management practices in generating a Corporate culture of Innovation. MBL thesis. University of South Africa, Pretoria.
- DeCoster, J. 1998. 'Overview of Factor Analysis'. Available from: <http://www.stat-help.com/notes.html> [Accessed 7 July 2011].
- Del Valle, I.D. and Castillo, M.A.S.2009. 'Human Capital and sustainable competitive advantage: an analysis of the relationship between training and performance'. *Journal of International Entrepreneurial Management*, 5 (1): 139-163.
- Diamantopoulos, A. and Schlegelmilch, B.B. 2000 '*Taking the Fear Out of Data Analysis*'. London: Cengage Learning.
- Diaz, J.M., Ochoa, M.L., Prieto, M.B. and Santodrián, A. 2010. 'Intellectual capital and value creation in Spanish firms'. *Journal of Intellectual Capital*, 11(3): 348-367.
- Ding, Y. and Li, G. 2010. 'Study on the management of Intellectual Capital'. *Journal of Business and Management*, 5 (2): 213-216.

Eisenhardt, K.M. 1989. 'Building Theories from Case Study Research'. *The Academy of Management Review*, 14 (4): 532-550.

Elton, J.J., Shah, B.R. and Voyzey, J.N. 2003. *Intellectual Property, Partnering for Profit* [online]. New York: McKinsey Quarterly. Available from: <[https://www.mckinseyquarterly.com/Intellectual\\_property\\_Partnering\\_for\\_profit\\_1248](https://www.mckinseyquarterly.com/Intellectual_property_Partnering_for_profit_1248)> [Accessed 8 July 2011].

Evoh, C.J. 2007. ' ICTs, Secondary Education, and the Knowledge Economy: Exploring the Roles of the Private Sector in Post-Apartheid South Africa'. *Journal of Education for International Development*, 3(1): 1-25.

Firer, S. and Stainbank, L.2003. 'Testing the relationship between intellectual capital and a company's performance: Evidence from South Africa'. *Journal of Meditari Accountancy Research*, 11(1): 25-44.

Firer, S. 2005. 'Using intellectual capital as a success strategy in South Africa'. *South African Business Review*, 9 (1): 1-20.

Franco, L.V.H., Hernández, P.R. and Mora,G.M. ed. 2010. *Artistic Organisations in Mexico: Model and Indicators of Intellectual Capital, The 2<sup>nd</sup> European Conference on Intellectual Capital, held at ISCTE, Lisbon University Institute, Lisbon, Portugal, March 29-30, 2010*. Academic Conferences International.

Greener, S. 2008 '*Business Research Methods* [online]. Dr.Sue Greener & Ventus publishing ApS. Available from: <<http://www.bookboon.com/uk/textbooks/marketing-media/introduction-to-research-methods>>[Accessed on 21 August 2011].

Groenewald, T. and Schurink, W. 2003. 'The contribution of co-operative education in the growing of talent in South-Africa: A Qualitative Phenomological Exploration. *SA Journal of Human Resource Management*, 1(3): 93-104.

- Huang, K., Chou, C.J. and Sun, C. 2009. 'The effect of social capital on Human capital: A Resource Acquisition Perspective'. *International Journal of Organisational Innovation*, 2 (2): 6-21.
- Iheriohama, E.B.J. and Chukwuma, U. 2009. 'The Development of Human Capital and the Challenges of Knowledge-Based Production: The Nigerian Situation'. *Interdisciplinary Journal of Contemporary Research in Business*, 1 (6): 48-61.
- Kamukama, N., Ahiauzu, A. and Ntayi, J.M. 2010. 'Competitive advantage: mediator of intellectual capital and performance'. *Journal of Intellectual Capital*, 12 (1): 152-164.
- Kelly, A. 2004. *The Intellectual Capital of Schools*. Netherlands: Kluwer Academic Publishers.
- Lazear, E.P. 2009. 'Firm-Specific Human Capital: A Skill-Weights Approach. *Journal of Political Economy*, 117(5): 914-940.
- Lee, J.Y. 2011. Incremental Innovation and Radical Innovation: The Impacts of Human, Structural, Social and Relational Capital Elements. Doctor of Philosophy Dissertation. Michigan State University.
- Maditinos, D., Chatzoudes, D., C. and Theriou, G. 2011. 'The impact of intellectual capital on firms' market value and financial performance. *Journal of Intellectual Capital*, 12(1): 132-151.
- Maree, K.W. 2001. Valuation of Intellectual Capital in South African Companies: a comparative study of three valuation methods. Master of Commerce dissertation. Rhodes University.
- Marr, B. 2008. 'Impacting future value: How to manage your Intellectual Capital'. *Journal of accountancy*. [online]. Retrieved July 12, 2011. Available from:

<<http://media.journalofaccountancy.com/JOA/Issues/2008/09/MAG%20IntCapital-Eng.pdf>> [Accessed 12 July,2011].

Marti, J.M.V. 2001. 'ICBS – intellectual capital benchmarking system. *Journal of Intellectual Capital*, 2(2): 148-164.

Mihm-Herald, W. 2010. Considering human capital theory in assessment and training: Mapping the gap between current skills and the needs of a knowledge-based economy in northeast Iowa. DBL dissertation. Iowa State University, Ames, Iowa.

Moon, Y.J. and Kym, H. G. 2006. 'A model for value of Intellectual capital. *Canadian Journal of Administrative Sciences*, 23 (3): 253:269.

Mouton, J. 2011. *How to succeed in your Master's & Doctoral Studies*. Pretoria: Van Schaik Publishers.

Musson, D. 2006. The production of Mode 2 knowledge in Higher Education in South Africa. DBL Thesis. University of South Africa, Pretoria.

Namasivayam, K. and Denizci, B. 2006. 'Human capital in service organisations: Identifying value drivers'. *Journal of Intellectual Capital*, 7 (3): 391-393.

Nazari, J.A., Herremans, I.M., Isaac, R.G., Manassian, A. and Kline, T.J. 2009. 'Organizational characteristics fostering intellectual capital in Canada and the Middle East'. *Journal of Intellectual Capital*, 10 (1): 135-138.

Nazari, J.A. 2010. An investigation of the Relationship between Intellectual capital components and Firm's Financial Performance. DBL thesis. University of Calgary.

Noor, K.B.M. 2008. 'Case study: a Strategic Research Methodology'. *American Journal of Applied Sciences*, 5 (11): 1602-1604.

Paoloni, M., Paoloni, P., Demartini, P., Guidotti, M.V. and Celli, M. ed. 2010. *The Choice of Intellectual Capital Statements in Systems Integration in a Leading*



*High-Tech Company: proceedings of the 7<sup>th</sup> International Conference on Intellectual Capital, Knowledge Management and Organisational Learning, The Hong Kong Polytechnic University, Hong Kong, China, November 11-12, 2010.* Academic Conferences International.

Pienaar, .J.J and Du Toit, A.S.A. 2009. 'Role of the learning organisation paradigm in improving intellectual capital'. *Journal of Contemporary Management*, 6(1): 121-137.

Robert, H. 1997. *Intellectual Capital. The New Wealth of Organisations* [online]. Available from: <<http://www.scribd.com/doc/53652421/Intellectual-Capital>> [Accessed 21 February 2011].

Smuts, J.L. 2008. Towards a Comprehensive Knowledge Management System Architecture. Master of Science Degree Dissertation. University of South Africa, Pretoria.

Steyn, G.M. 2004. 'Harnessing the power of Knowledge in Higher Education '. *Journal of Faculty Education*, 124 (4): 615-631.

Stewart, T.A. 1997. *Intellectual Capital* [online]. QFinance. Available from: <<http://www.qfinance.com/human-and-intellectual-capital-best-practice/intellectual-capital?full>> [Accessed 30 May 2011].

Sullivan, P. H. 1998. *Profiting from Intellectual Capital*. New York: John Wiley & Sons, Inc.

Tadic, I. ed. 2010. 'Human Capital Practices in Different Industries in Croatia'. *The Business Review, Cambridge*, 15 (2): 239-246.

*The Choice of Intellectual Capital Statements in Systems Integration in a Leading High-Tech Company: proceedings of the 7<sup>th</sup> International Conference on Intellectual Capital, Knowledge Management and Organisational Learning, The*

*Hong Kong Polytechnic University, Hong Kong, China, November 11-12, 2010.*  
Academic Conferences International.

Tan, H.P., Plowman, D. and Hancock, P. 2008. 'The evolving research on Intellectual capital'. *Journal of Intellectual Capital*, 9 (4): 585-608.

Van der Westhuizen, C. 2005. Intellectual Capital in a retail company in South Africa. Masters of Information Science dissertation. University of Johannesburg.

Vargas-Hernández, J.G. 2010. 'How Intellectual Capital and Learning Organisation Can Foster Organisational Competitiveness'. *International Journal of Business and Management*, 5 (4): 183-193.

Vodák, I.J. 2010. 'How to measure return on investment into human capital management'. *Journal of Social Sciences*, 7 (1): 1-20.

Yau, F.S., Chun, L.S., and Balaraman, R. 2009. 'Intellectual Capital Reporting and Corporate Characteristics in Public- Listed Companies in Malaysia', *Journal of Financial Reporting and Accounting*, 7 (1): 17-35.

Yin, J. 2009. *Case Study Research*. 4<sup>th</sup> ed. California: SAGE Publishers, Inc.

## APPENDIX A

### Intellectual Capital characteristics for competitive advantage: Case study of a multinational corporation

Dear Sir / Madam

I am currently doing a research report as partial fulfilment of the Master's Degree in Business Leadership (MBL) in my final year at The Graduate Business School of Leadership, Unisa.

You are being invited to participate in a study to determine which intellectual capital characteristics are mostly valued by a South African multinational company and how it contributes towards a competitive advantage.

The results of this study may be useful to explore very specific questions/comments with regards to intellectual capital within an organisation. It further helps an organisation to understand which of these characteristics are worth investing more time, funds and efforts into to remain competitive. If you agree to participate, you will be asked to set aside time for an interview with me to discuss topics relevant to the underlying factors needed to analyse to achieve the correct results.

The interview will be based on specific questions around intellectual capital characteristics and competitive advantage. The interview questions are semi-structured around 4 sections. The first section is to determine your view on Intellectual capital as a topic and the importance thereof. The next 3 sections consist of the intellectual dimensions identified after a thorough literature review. These sections are human, structural and relational capital. Your participation is completely voluntary and your responses will be treated with the highest level of confidentiality and thus, no personal details except for your grade level and position will be requested during the interview. Please do not hesitate to contact me should you have any questions with regards to the study.

**Consent:** I have read the above and understand the guidelines of this study. I confirm that through participating in this study, I have not waived any legal or human right. I understand that I can contact the researcher or her supervisor at the Graduate Business School of Unisa at any point in time, should I require further information (Researcher, Margaret Roodt – 082 940 3509 or Prof. P Msweli – [PMsweli@sbleds.ac.za](mailto:PMsweli@sbleds.ac.za)). I am aware that I have the right to withdraw my participation at any point without prejudice.

Signature of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of researcher: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX B**

### **Case study interview questions: Intellectual capital characteristics for competitive advantage**

#### **Interview Prep Questionnaire**

Hi there

My name is Margaret Roodt and I'm a final year MBL student. Part of the final year curriculum is to complete a research report on a business topic of interest. I have based my research on intellectual capital as I value people, systems and customers as key intangible assets to any institution.

The aim of the study is to determine which characteristics/factors of intellectual capital is valued most by multinational corporations and which of those factors can be seen as a competitive advantage.

After various discussions with my supervisor, Prof. P. Msweli, it was decided to select semi-structured interviews (face to face, but in specific respondents, telephonically) as the research method. I have followed all internal guidelines to ensure that permission was granted to proceed with interviews. I will use the responses from the interviews to support previous research done on this topic, and to possibly identify additional intellectual characteristics. The findings may add new insight to the field of intellectual capital, but also to highlight opportunities or areas of improvement within the corporation. The interview will take approximately 45 minutes and personal information will be kept confidential and I will refer to a multinational within the banking industry. A letter of consent will be handed to you prior to the interview.

I have identified you as a participant in my research on the basis of your role within the organisation. I hereby ask your permission to set up an appointment with you.

Your participation will be highly appreciated and valued. The findings/results will be shared with you (if you wish to receive it).

Intellectual capital can be defined as: "Collective knowledge (whether or not documented) of the individuals in an organisation or society. This knowledge can be used to produce wealth, multiply output of physical assets, gain competitive advantage, and/or to enhance value of other types of capital. Intellectual capital is now beginning to be classified as a true capital cost because (1) investment in (and replacement of) people tantamount to investment in machines and plants, and

(2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital.”

**Question 1:** Do you agree with this definition? Please elaborate

**Question 2:** Intellectual capital consists mainly of three dimensions: human, structural and relational capital: which dimension (if any) do you value most as giving the corporation in which you work a competitive advantage?

**Question 3:** Based on the above answer – why would you select.....above the others?

**Question 4:** Based on the above answer – what would you say needs to be put in place or is already in place to retain that competitive edge?

**Question 5:** Do you think intellectual capital needs to be valued equally important as tangible assets? How would you link these two?

Within a business context, human capital is: “the organisation's constantly renewable source of creativity and innovativeness (and imparts it the ability to change) but is not reflected in its financial statements. Unlike structural capital, human capital is always owned by the individuals who have it, and can 'walk out the door' unless it is recorded in a tangible form, or is incorporated in the organisation's procedures and structure”.

**Question 6:** Do you agree with this definition? Please elaborate

**Question 7:** Which characteristics would you classify as human capital?

**Question 8:** I refer to the characteristics which you have classified as human capital, which of those do you suggest gives this corporation a competitive advantage? Please elaborate on your answer

**Question 9:** From your perspective – would you say that this corporation value human capital as important and if so, what is currently in place to retain human capital?

**Structural capital is defined as:** The one component which does not reside in the heads of the employees and remains with the organisation even when they leave.

**Question 10:** From your perspective, would you say that this corporation put enough emphasis on structural capital?

**Question 11:** Can you describe any structural capital from your viewpoint?

**Question 12:** Which characteristic/s would you say, if any, gives a competitive advantage?

Customer (Relational) capital: Is the value of a relationship between a firm and its customers and is not captured on a balance sheet.

**Question 13:** Can you name at least three characteristics of relational capital?

**Question 14:** Would you think that relationship has a direct impact on competitive advantage? Please elaborate on this.

**Question 15:** Can you say that this corporation understands the importance of relational capital?

**General:**

**Question 16:** What is your view on how educational institutions prepare scholars/students on this topic?

**Question 17:** You have given me a few characteristics on what you see as intellectual capital. From all of those, which one would you say should be valued most to give a corporation competitive advantage?

**Question 18:** What would you think this corporation should have in place to utilize intellectual capital to its capacity?

**Question 19:** How would you suggest this corporation can select the right intellectual capital characteristics to drive strategy and competitive advantage?

**Question 20:** Is there anything else you would like to add to this topic?

Thank you for your time and honesty on this topic. I would like to share with you my summary and evaluation of this interview. Would you be interested in reviewing it?