Cape Peninsula
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THE EFFECTIVE APPLICATION OF INFORMATION SYSTEMS WITHIN SMMES FOR LONG TERM COMPETITIVE ADVANTAGE

by

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DECLARATION

I **Abd-al Malik Madina Ahmat,** declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed **Date**

ABSTRACT

It has been shown that the South African insurance landscape takes up an important place in the African continent, contributing nearly three quarters of the total African insurance sector (Paul, Twala & Marwala, 2012). The industry landscape has shown development at a compound annual growth rate (CAGR) of 11.7% between 2004 and 2008. The life insurance industry is assumed to grow at a CAGR of 8.3%. Small, medium and micro-sized enterprises (SMMEs) are important role players in every economy and provide a major contribution to the gross domestic product (GDP) and employment. Many South African enterprises have in the past focused on local markets, but more recently SMMEs have been forced to respond to competition in the global market as markets expand. The role of SMMEs is considered critical in terms of poverty alleviation, employment creation, and international competitiveness.

However, resource limitations have made it difficult for many SMMEs to enter new markets and compete effectively. The effective application of information systems (IS) are viewed as a way for SMMEs to become more competitive and drive business benefits such as cost reduction, improved profitability, enhanced customer service, new market growth opportunities, and more efficient operating relationships with trading customers and partners. There are an increasing number of new opportunities and competition in the marketplace because of business globalisation. The marketplace and business globalisation dynamics have a major influence on SMMEs and their operations. SMMEs require a critical evaluation of their internal processes and seek out solutions to be able to sustain their growth and competitiveness.

This research study adopted an inductive approach to describe the rational process of establishing a general proposition on the basis of observing particular facts. An in-depth case study is used to explore the multiple perspectives of the complexity and uniqueness of SMMEs. One-on-one interviews were conducted to collect data from 17 financial advisors using an interview guide with semi-structured questionnaires. The data were analysed through the process of thematic coding which is common in case study research, and labels were assigned to form and organise the themes in groups and categories. Ethical consideration was presented before data collection commenced, and the autonomy, self-respect and human dignity of all respondents during the data collection process were considered. The findings reveal that financial service providers (FSPs) have a different understanding of IS, what competitive means, and what it can do for a business. Further to this, regulatory compliance creates an additional workload for FSPs, and the cost of ICT remains a challenge. To respond to these challenges, FSPs need support from the

government in terms of access to finance, training, and skills development that can empower individuals through learning how to grow and move up the value chain.

Keywords: Information Systems (IS), competitive advantage, financial service advisors, Information and Communications Technology (ICT), SMMEs.

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DEDICATION

Dedicated to my mother Mrs Mariam Tchere Titimbaye
for her love and measureless support from Chad;
she is to me my rock.
She is by far the strongest woman I have ever known.
I am forever grateful!

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CLARIFICATION OF TERMS

Term	Definition
CAGR	Compound Annual Growth Rate is a useful measure of growth over multiple time periods
CA	Competitive Advantage is a condition or circumstance that puts a company in a favourable or superior business position
CSBD	Centre for Small Business Development
DTI	Department of Trade and Industry is a department of the South African government responsible for commercial and industrial policy
FSB	Financial Service Board is the body that regulates the financial services industry in the public interest
FAIS	Financial Advisory and Intermediary Service Act is a statute that supervises and controls the activities relating to financial services rendered by financial institutions
FSP	Financial Service Provider refers to any person, other than a representative, who as a regular feature of his business furnishes advice
IDC	Industrial Development Corporation
ICT	Information and Communications Technology is a term used to describe communication devices or applications
IT	The use of any computers, storage, networking, and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data
IS	Information Systems refers to hardware or software that helps people organise and analyse data to solve problems relevant to the mission of an organisation
GDP	Gross Domestic Product is the monetary value of all finished goods and services produced within a country's borders in a specific time period
NEF	National Empowerment Fund
NDA	National Development Agency
SEDA	Small Enterprise Development Agency
SETA	Sector Education Training Authority is an institution that serves under DTI to provide skills education and training for businesses
SMMEs	Small, Medium and Micro-sized Enterprises
SAMAF	South African Micro-Finance Apex Fund
SIS	Strategic Information Systems are information systems developed in response to corporate business initiatives which are intended to give a competitive advantage to the organisation

Term	Definition
TRA	Theory of Reasoned Action is a psychology used in communication discourse as a theory of understanding persuasive messages
TPB	Theory of Planned Behaviour is a theory that links beliefs and behaviour
TAM	Technology Acceptance Model is an information systems theory that models how users come to accept and use a technology
TIO	Theory of Industrial Organisation builds on the theory of the firm by examining the structure of the firms and markets
RBT	Resource-Based Theory as basis of a firm lies primarily in the application of a bundle of valuable tangible or intangible resources at the firm's disposal
TDC	Theory of Dynamic Capabilities is the ability of a firm to integrate, build and reconfigure internal and external competences to address a rapid changing environment
KBT	Knowledge-Based Theory considers knowledge as the most strategically significant resource of a firm

CHAPTER ONE: INTRODUCTION TO THE RESEARCH STUDY

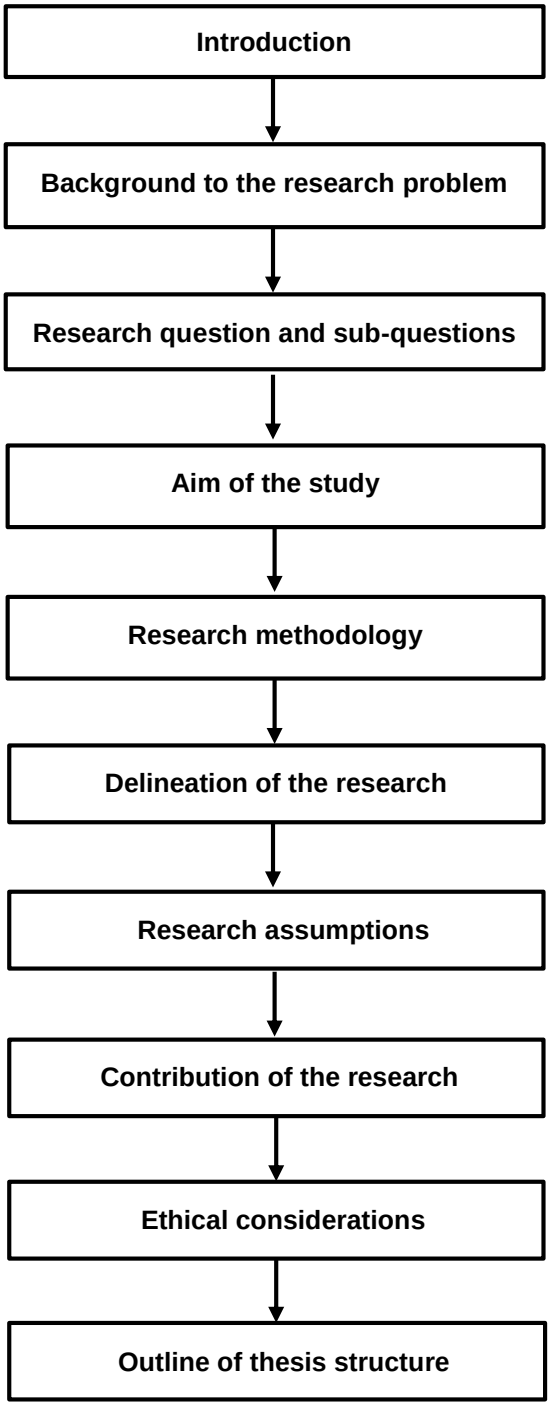

Figure 1.1: Graphical representation of Chapter One

1.1 Introduction

Studies show that South African small, medium and micro-sized enterprises (SMMEs) employ half of the population's work force and provide the foundation for economic growth by contributing approximately 50% to the national gross domestic product (GDP) (Fatoki, 2011). SMMEs contribute significantly to job creation, investment, revenue generation, poverty mitigation, and economic growth by means of the innovation of new products and technological affinity to gain a competitive advantage in business (Booyens, 2011). There is an increased acknowledgment of the role SMMEs play in the economic development of countries (Abor & Quartey, 2010).

Information flow is important for SMMEs and the failure or success of organisational operations depends on how information flow is managed (Okello-Obura, Minishi-Majanja, Cloete & Ikoja-Odongo, 2008; Cheung, Lui & Lee, 2015). Improvement in organisational management can be attributed to investment in IS which improves the quality of managerial decisions (Phusavat, Kanchana & Lin, 2009). Okello-Obura and Matovu (2011) state that SMMEs are confronted with informal decision making systems whereby decisions are made haphazardly and not grounded on accurate business information. Cragg, Caldeira and Ward (2011) found that with competent managerial and technical IS skills, SMMEs can exploit the advantages market opportunities offer. The opportunities being created by the modern economic environment are shaped by globalisation, hyper-competition, and knowledge which have revolutionised the way business operates and as a result positioned IS as an important tool for business (Dadameah & Costello, 2011; Mu, Krisch & Butler, 2015).

Organisations are investing in IS for various reasons, including the ability to cut cost, produce more without increasing costs, and increase the value of service or products delivery in order to remain competitive in business (Krstajiic, Cvetkovic & Majstorovic, 2014). Thus, IS offers a wide range of benefits to financial advisors in the form of reduced business costs, enhanced productivity, improved quality, and diffusion of knowledge. Businesses are therefore required to acquire the necessary hardware and software to computerise and improve their business processes (Adeniran & Johnston, 2014).

1.2 Background to the research problem

The complexity of aligning IS strategy to business strategy remains a challenge for SMMEs (Musangu & Kekwaletswe, 2011). According to Benbya and McKelvey (2006), the challenge of information systems is highlighted by the continuous changes in business strategy because of the shift in organisational needs and dynamic external environments. The strategic use of IS consists of emerging technologies accessible to the business in relations to production support through the application of tools, hardware and software components that can assist in improving the different activities of IS to gain a competitive advantage (Adeniran & Johnston, 2012).

The competitive environment is largely created by new technologies as the availability to manage large volumes of information requires business to be knowledgeable about new technologies accessible to them (Kyobe & Namirembe, 2015). The need for and the adoption of new technology is apparent through the effective investment and application of IS for business growth (Madhani, 2012). The effective application of IS in businesses and the acceptable quality of IS have been identified as an important strategy in achieving long-term maintainable economic growth in developed and developing countries (Cui, Ye, Teo & Li, 2015). However, South African SMMEs are still faced with inadequate adoption and alignment of IS and business strategies to gain a long-term competitive advantage (Dahiru, Mass & Allison, 2014).

1.2.1 Research problem

The benefits attributed to the successful use of IS for competitive advantage have been well documented (Peppard & Ward, 2004; Wade & Hulland, 2004; Levy & Powell, 2005; Duhan, 2007; Tarafdar & Gordon, 2007; Cragg, 2008; Doherty & Terry, 2009; Cragg *et al*. 2011; Cohen, Mou & Trope, 2014). However, SMMEs do not capitalise on the competitive advantage IS can generate for their businesses, for example knowledge about competitors and the market place (Green, Toms & Clark, 2015). SMMEs have been found struggling to survive in the market environment even though IS creates a distinct advantage affecting the direction of business development and strategy formulation (Dadameah & Costello, 2011). Thus, the significance of the application of IS in SMMEs shows that strategic benefits cannot be obtained unless IS becomes an integral part of business strategy (Herselman, 2012). SMMEs are faced with a number of challenges such as the need for suitable information to improve productivity and enable market access, and competitive services which hover their existence (Cragg *et al*. 2011). According to Abor and

Quartey (2010), managerial competency, inadequate planning, poor financial control, and constant changes in technological innovations and customers' demand as well as the need to remain flexible, continue to be major challenges for SMMEs. The survival rate of SMMEs is a major concern, with the failure rate of South African SMMEs estimated between 70% and 80%, which is the highest in the world (Adeniran & Johnston, 2012).

Despite increased spending on IS globally and an abundance of IS/IT assessment and benefit awareness programmes, many owners/managers, especially SMMEs, still do not understand the importance of the IS investment evaluation and its impact benefit realisation (Adeniran & Johnston, 2014). IS investment is a strategic decision as it involves technology transfer and adoption within the business processes (Kyobe & Namirembe, 2015). A number of studies show that IS investment and utilisation are directly related to organisational performance (Cragg, 2008; Nguyen, 2009; Kruger & Johnson, 2010; Adeniran & Johnston, 2014). In complex environments, businesses require the ability to predict problems and exploit opportunities through the effective use of IS (Dadameah & Costello, 2011; Nylen & Holmstrom, 2015).

1.2.2 Problem statement

The problem addressed by the research is that SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy.

1.3 Research questions and sub-questions

Table 1.1 presents the problem statement, research questions, research sub-questions, methods to get to the answer, and the objectives of the questions.

Table 1.1: Summary of research questions, sub-questions, methods and objectives

Problem Statement	SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy	
Research Question 1 (RQ1)	What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?	
Research Question 2 (RQ2)	How can SMMEs use IS to create a competitive advantage in their business?	
Research sub-questions	**Methods**	**Objectives**
RSQ1.1: What competitive advantages can IS create for SMMEs?	Literature review	To evaluate the advantage IS offers SMMEs to create competitive advantage in the business
RSQ1.2: What are the current factors preventing SMMEs from creating a competitive advantage through IS?	Semi-structured interviews	To investigate the challenge SMMEs face in creating competitive advantage through IS usage
RSQ2.1: What frameworks and guidelines exist to assist SMMEs in utilising IS to create a competitive advantage?	Literature review	To identify available IS frameworks or guidelines that can be used by SMMEs to create a competitive advantage
RSQ2.2: How can SMMEs deploy IS strategies in their business to gain a competitive advantage?	Literature review	To identify possible IS strategies for SMMEs to use for gaining competitive advantages

1.4 Aim of the study

The aim of the research study is to explore the challenges faced by SMMEs (financial service advisers) hindering them to capitalise on the competitive advantage IS offers the business. The study also aims to propose guidelines that will assist SMMEs to capitalise on the competitive advantage IS can generate for the business.

1.5 Research methodology

1.5.1 Research philosophy

Research design is the rational phases connecting the empirical data to a study's initial research question and eventually to its conclusion (Yin, 2003). According to Quinlan (2011), a research methodology is guided by the research focus, research question and data type required for the research. The aim is to acquire an in-depth understanding of a specific topic, programme, institution or system to create knowledge that informs professional practice as well as civil and community action (Gregor, 2006). The disparities in worldviews and paradigms underling quantitative and qualitative approaches are the reflection in dissimilarity of conception about the nature of reality (ontology) and knowledge (epistemology) (Murthy & Bhojanna,

2010). Quinlan (2011) explains that epistemology relates to our understanding of knowledge, how it is obtained, and the value we ascribe to the knowledge created. The interpretivist paradigm interprets the worldview through an individual and unique interpretation where everyone constructs their own realities (Quinlan, 2011). This research is based on the interpretivist paradigm which allows for the exploration and understanding of challenges SMMEs are faced with, and hinders them from capitalising on the competitive advantage IS can generate for their business.

1.5.2 Research approach

According to Mitchell (2007), an inductive approach involves the development of a theory from the data gathered during the study and proposed as a possible theory for further research. According to Saunders, Lewis and Thornhill (2009), an inductive approach expands our understanding of meanings attached to events. Zikmund, Babin, Carr and Griffin (2010) describe inductive research as a rational process of establishing a general proposition on the basis of observing particular facts. Findings from this research will be used to complement and possibly expand on the adopted theory to contribute to the academic knowledge of the subject matter.

1.5.3 Research strategy

Simons (2009) states that “a case study is an in depth exploration of multiple perspectives of the complexity and uniqueness of a particular project, institution, programme or system in a real life context”. This research applied a multiple case study strategy to provide an understanding of the different individual cases. Multiple case studies are “used in various circumstances to contribute to knowledge of individuals, groups, organisations, social, political, and related phenomena” (Yin, 2003). Rule and John (2011) describe multiple case studies as a variety of purposes to form an understanding of an exact circumstance by providing a description of the case to explore the general problem or issue within a limited and focused setting. A multiple case study provides familiarity with a phenomenon by collecting data from multiple cases that will give insight into the nature of the case (Rule & John, 2011). This research employed a literature analysis to collect data and identify concepts and constructs which formed the theoretical foundation of the research.

1.5.4 Data collection

A data collection method enables the research problem under investigation to be answered using queries with a greater amount of flexibility. The research falls within the interpretivist paradigm where the aim is to explore and understand the meanings a participant ascribes to various phenomena. Data were collected by means of an

interview guide using semi-structured questionnaires. Interviews are tools for gathering valid and dependable data pertinent to the research questions and objectives (Saunders *et al*., 2009). One-on-one interviews were used to collect data from 17 financial advisors in the selected FSPs. Semi-structured interviews provided an opportunity to probe answers from the interviewees to further explain and build on their responses. Zikmund *et al*. (2010) indicate that semi-structured interviews are developed in written form, asking participants for short essay responses to precise open-ended questions. Interview questions were therefore used to explore responses that are of significance to the research topic. Interview questions were used to explore and identify why SMMEs do not capitalise on IS available to them in order to create a competitive advantage. Data were also collected through a literature analysis to access information relevant to the case study.

1.5.5 Data analysis

Quinlan (2011:20) describes qualitative data as "non-numeric data that can take any form or state to articulate feelings, beliefs, opinions, and perspective". It can also be in the form of interview transcripts, narratives, and other text-based data requiring different ways of analysis. The data analysis method where data are broken down into smaller pieces by working from codes to themes (thematic analysis), is common in case study research (Rule & John, 2011). Coding is a process of selecting labels and assigning them to different parts of data in order to organise these labels into similar groups and categories (Rule & John, 2011). The interview notes were transcribed for each individual case and codes were assigned to label the different keywords that emerged from the data. Further analysis of categories showed patterns of similar meanings formed, leading to the development of themes. The transcriptions were given to the interviewees to validate the information provided.

1.5.6 Unit of analysis

Mitchell (2007) explains that the unit of analysis is the main single entity being investigated in the research study. The units of analysis for the research were the 17 SMMEs. The units of analysis were selected subject to a non-probability sampling approach. According to Yin (2003), the unit of analysis in cases is interrelated to the central problem of defining what the "case" is. The 17 SMMEs selected are all financial service providers (FSPs) who were chosen based on the assumption that they are using some form of ICT in their business. Monette, Sullivan, DeJong and Hilton (2014) emphasise that an important element in the research process is the decision regarding the unit of analysis to be investigated. The same authors further indicate that the unit of analysis are the characteristics of specific objects or

elements the researcher wishes to describe or explain and which data will be collected from. Monette *et al*. (2014) cite that there are five types of units of analysis commonly used in human services research; these include individual, groups, organisations, programs, and social artefacts.

1.5.7 Unit of observation

According to Richey and Klein (2007), the unit of observation is the subject under investigation from which information is collected. Researchers base their conclusions on information that has been collected and analysed, so defining the unit of observation assists in clarifying a reasonable conclusion that can be drawn from the information collected. The unit of observation is the subject within the FSPs, for example, IT managers, IS managers, and business owners who participated in the study Dumay and Cai (2015) state that focusing on the unit of observation throughout the research study, from beginning to conclusion, will assist the researcher later on in presenting an organised explanation of the phenomenon and keep the explanation relevant to the data collected. Creswell (2015) indicates that the unit of observation is the level at which the researcher collects the data.

1.5.8 Sampling techniques

Quinlan (2011) indicates that in a research study, selecting the entire population of the study is complex and is therefore beyond the scope of the researcher. Sampling is the process of obtaining information about an entire population by examining only a part of it. According to Zikmund *et al*. (2010), non-probability sampling does not attempt to select randomly from the population of interest; rather, a subjective method is used to decide which elements are included in the sample. A non-probability purposive sampling selection technique was used in this research. The objective was to produce a sample considered as being representative of the population. The selection criteria were based on a sector and sub-sector of SMMEs (financial sector, financial service providers) in accordance with the standard industrial classification of the South African Department of Trade and Industry. FSPs were chosen using convenience sampling. FSPs are well organised in South Africa and belong to organisations that are easily accessible and willing to work with universities.

1.6 Delineation of the research

The research was conducted in selected SMMEs that provide financial advice services (i.e. FSPs). The services provided include financial planning, short and long term insurance, and life insurance. At the time of the research, all participating SMMEs were located in and around the Cape Metropolitan and Peninsula areas of

Cape Town. Other SMME sectors were not included in this study. The research included financial advisors using some level of IS within their business and experiencing challenges in realising the competitive advantage IS can offer the business.

1.7 Research assumptions

The evolution of IS has influenced the way in which organisations conduct business and enabled businesses to automate their business process operations to compete (Dehbokry & Chew, 2014). Most importantly, FSPs are seeking software and hardware that can integrate their business processes and assist them in being more compliant with legislation (Nylen & Holmstrom, 2015). This presents a challenge for FSP owners/managers as there is no assistance on what and how components of IS and resources contribute towards business improvement and sustainable competitive advantage (Mohlameane & Ruxwana, 2014). It is clear that FSP owners/managers, if endowed with proper knowledge and skills through education and training, will be enabled to find solutions suitable for the challenges they face. However, many FSP owners/managers lack skills and knowledge on the importance of IS investment evaluation, adoption of new technology, and the impact benefit realisation within their businesses. The inadequacy of education and training has shortened the management ability to improve their business processes and increase efficiency and competitiveness within FSPs. The concept of having a competitive advantage is of main importance to FSPs; this has made IS an essential enabler to enhance, transform or create processes or systems to finish tasks, resolve problems, or create value for current and prospective customers (Touray, Salminen & Mursu, 2013; Chuang & Lin, 2015). Organisations apply IS in their business to address the persistent challenges stumble upon when providing customer service and generating competitive services that improve their business value (Chuang & Lin, 2015).

1.8 Contribution of the research

The research contributes to the general body of knowledge in the financial services advisory sector through the gained knowledge of effective IS application within FSPs. In the financial services sector, little has been done to explore the effective use of modern IS to create a competitive advantage for the business. This study aims to assist FSPs in adopting a suitable channel of communication to market their services effectively and efficiently. The adopted system can ultimately ensure reduced business cost, enhanced productivity, improved quality, and increased diffusion of knowledge. This in turn can create a competitive advantage for FSPs

through improved market share, information accessibility, and profits margin. Furthermore, the research provides information to stakeholders to consider the effective application of IS which enables organisations to continuously derive and leverage business value through a proposed guideline.

1.9 Ethical considerations

Ethical considerations were presented before data collection commenced. The relevant ethical clearance from the Research Ethics Committee at the Cape Peninsula University of Technology was obtained. The autonomy, self-respect and human dignity of all the respondents during the data collection process were considered. A permission of informed consent form was signed by both researcher and participants before interviews were conducted. The consent letter informed and assured participants that no harm would be caused to them through their participating in the study. Participants were also informed of their confidentiality and right not to respond to certain questions. The research opened new avenues for the participants to obtain knowledge on the competitive advantage IS can offer to their business through reduced cost and increased productivity. All participants who were selected as respondents participated voluntarily and of their own free will, and were informed of their right to withdraw at any time during the research.

1.10 Outline of thesis structure

The dissertation covers six chapters:

Chapter One: An introduction of the research study followed by the background to the research problem is presented, and the research questions and sub-questions are articulated. A narrative description of the research methodology proposed is given. The delineation, assumption, contribution and ethical consideration of the research study are formed.

Chapter Two: A review of the existing literature is presented which includes definitions of IS and competitive advantage, distinguished features of SMMEs, challenges of SMMEs to capitalise on IS benefits, and how SMMEs can utilise IS to create a competitive advantage. Additionally, an IS strategic management and planning framework for integrating IS strategies and business strategies is presented, as well as the type of IS suitable for FSPs. The chapter includes the theoretical framework of the research study.

Chapter Three: This chapter presents the philosophy and design of the research study. It covers the research philosophy, approach, strategy and method used to

conduct the research. It defines the unit of analysis, unit of observation, sampling techniques, data collection, and ethical considerations.

Chapter Four: This chapter outlines the participants within the participating organisation and presents the findings that emerged from the categories developed. The interviewee responses are analysed, discussed and presented.

Chapter Five: This chapter presents the themes developed as well as the headline findings. It provides a further discussion of findings in relation to the literature review and research questions. Answers to the research questions are provided.

Chapter Six: Conclusions and recommendations are grounded to the research study objectives. Limitations of the research study are presented. A reflection on the research journey and recommendations for future research are provided.

CHAPTER TWO: LITERATURE REVIEW

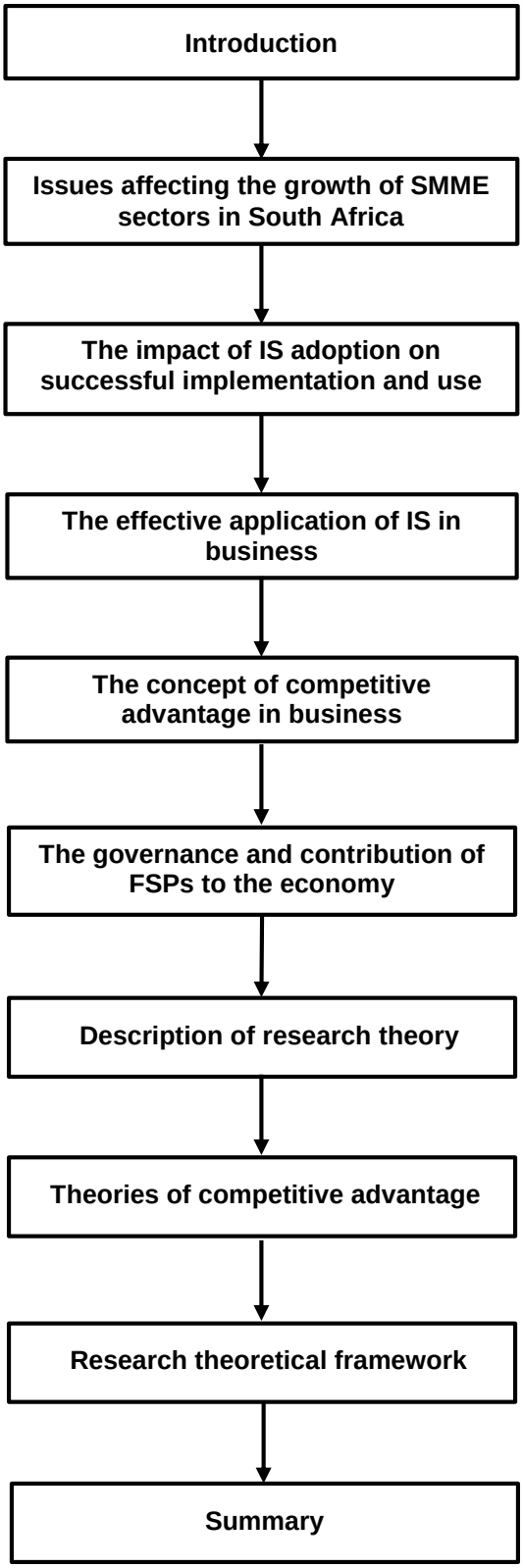

Figure 2.1: Graphical representation of literature review

2.1 Introduction

In this chapter the general state of SMMEs in South Africa as well as the issues affecting their growth are presented, followed by the effective application of IS in business and the concepts of competitive advantage. Focus is then shifted to the unit of analysis—the FSPs—after which the governance and contribution of FSPs to the economy is discussed. Lastly, the description of theory and research theoretical framework is presented.

The literature review is based on the research problem that SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy. The keywords used to examine the literature were derived from the problem statement and research questions, namely 1) What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer, and 2) How can SMMEs use IS to create a competitive advantage in their business? The literature review was conducted based on the aim of the study, namely to explore the challenges faced by SMMEs (financial service advisers) which hinder them to capitalise on the competitive advantage IS offers the business. Databases from the CPUT library were used to find applicable references. Databases consulted to explore literature available on the topic include Google Scholar, Emerald, Scopus, EBSCOhost, IEEExplore digital library, and Proguest.

The ever changing market environment forces organisations to make changes to their daily activities. These changes frequently lead to the implementation of new tools that can optimise current business and implement new business (Černá, 2014). The author further indicates that information represents one of the supreme scarce and essential assets of the company. Correct and complete information assists managers in making decisions that lead to future successful business operations. Importantly, decision making in the organisation is connected to suitable IS selection, which enables organisations to have error-free business processes and effective communication that improve their position in the market (Musiolik, Markard & Hekkert, 2012).

According to Peppard, Galliers and Thorogood (2014), modern organisations in every sector of industry, businesses or government are deeply reliant on IS. Organisations would therefore come to an end should the technology underpinning their business activities ever becomes wanting. The need to be flexible and proactive in business, which is enabled by technology advancement, is increasingly

growing important to organisations (Krstajiic *et al*., 2014). In order to successfully utilise market opportunities while operating in a dynamic environment, SMMEs need to significantly improve, promote and manage their capabilities and resources (Dehbokry & Chew, 2014). There is a growing need for improvement in business management in terms of business structure, strategies, governance, processes, information technology and corporate knowledge (Aghamirian *et al.,* 2015). A number of studies show that IS investment and assets are directly related to organisational performance (Cragg, 2008; Nguyen, 2009; Kruger & Johnson, 2010; Peppard *et al*., 2014). However, organisational innovation through application and use of technology which drives competitiveness in international trade has received little attention in South African SMMEs (Cragg & Mills, 2011). The ability of SMMEs to realise organisational goals in line with IS strategy depends on how well they acquire, interpret, synthesise, evaluate and understand how IS supports information channels and organisational processes (Gareed & Naicker, 2015).

2.1.1 The state of South African SMMEs and their impact on the economy

SMMEs are a distinct unit consisting of cooperative organisations and non-governmental enterprises administered by one or more owners, including its branches or subsidiaries (Fatoki & Asah, 2011). SMMEs are defined in various ways, however the common criterion used for defining SMMEs is the number of employees in the firm (Okello-Obura & Matovu, 2011). Definitions of small businesses usually depend on the constituency and development of a small business in the respective economies. The National Small Business Act 102 of 1996 classifies South African SMMEs into five categories of the business sector. The classification is determined by the number of employees (the general form of definition) per organisation size classification joint with annual turnover (Abor & Quartey, 2010). The classifications of SMMEs in South Africa are indicated in Table 2.1 below.

Table 2.1: Definition of SMMEs in South Africa
(Source: Abor & Quartey, 2010:5)

Enterprise size	Number of employees	Annual turnover (in South African Rand)	Gross assets, excluding fixed property
Medium	100 to 200 depending on the industry	R4 million to R50 million, depending on the industry	R2 million to R18 million, depending on the industry
Small	Fewer than 50	R2 million to R25 million, depending on the industry	R2 million to R4.5 million, depending on the industry
Very Small	10 to 20 depending on the industry	R200 000 to R500 000, depending on the industry	R150 000 to R500 000, depending on the industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

The National Small Business Act 102 of 1996 identifies development and empowerment of entrepreneurs as a necessary way for economic growth in the South African SMME sector. The National Strategy for Development and Promotion of Small Business in South Africa reiterates that SMMEs symbolize an imperative means to improve the challenges of job creation, economic growth, and equity within the country (Adeniran & Johnston, 2012). According to Musangu and Kekwaletswe (2011), the strategy is not only focused on improving competitiveness of small business within South Africa, but also in the international market. There is thus a need to encourage the development and growth of SMMEs because of their potential. Fatoki (2014) emphasises that SMMEs dominate the South African economy and therefore their contribution cannot be ignored.

The contribution of the South African SMMEs to the GDP is estimated at approximately 35% (Badenhorst-Weiss & Cilliers, 2014). In the study of Garg and Choeu (2015), a recent survey has shown that the SMME sector in South Africa accounts for 40% of GDP and 60% of the workforce within the formal employment sector, and their contribution to economic growth is highly significant for the development of the country. Booyens (2011) asserts that more emphasis is currently being placed on the potential of SMMEs to generate employment, hence contributing to poverty mitigation. Adeniran and Johnston (2014) indicate that SMMEs are the main players of innovation as well as source of competitive advantage and economic development in most developing countries. There is growing acknowledgement that SMMEs play a significant role in the economies of both the developing and developed world, especially in galvanising the economy, creating jobs, fostering innovation, and spurring economic growth.

2.1.2 The impact of internationalisation on the SMME sector

Post democratisation of South Africa in 1994 has seen the country's economy develop and grow into a recognised player within the global economy (Gareeb & Naicker, 2015). The subsequent release of capital and mobility across the country after post democratisation has brought about increased competition and quality in the local market, paving the way for expansion into international trade (Abor & Quartey, 2010). The impact of world trade is growing fast and opening up a multiple of opportunities for the SMME sector to capitalise on prospects, which are opening through growth in information and communication technologies, trade liberation, and government support. There is an increased need for developing countries to provide a platform for SMMEs to expand their local operations (Mudalige, 2015). According to Oberholzer, Cullen and Adendorff (2014), the internationalisation of SMMEs can

provide a country with increased innovation performance and create a more favourable balance of payment value that can assist businesses improve productivity, support socio-economic development, and increase employment opportunities.

Studies show that internationalisation provides benefits to SMMEs, including better survival prospects, increased revenue, growth, better innovative capability, and an improved level of productivity compared to non-internationalised SMMEs (Azar & Molavi, 2014). Venturing into internationalisation can be risky given the limited resources and condition of SMMEs. Many developing countries have not yet developed to the level where they can release their SMMEs into the global market competition and as a result, lag behind in adding value to the economy (Oberholzer *et al*., 2014). According to Mudalige (2015), most SMMEs are confronted with barriers preventing them from entering the international market. These barriers include the threat of international competition, networking issues, policy and regulation matters, and financial constraint which may occur during or after the process of internationalisation. Results from a study on SMEs in the USA identify insufficient intellectual property protection, taxation, financing, the inability to locate foreign partners, and difficulty in obtaining funding as major barriers. The most common barriers to internationalisation are access to finance, identifying international business opportunities, and limited information on market. However, such situations—where market information and opportunities to form networks at a low cost is abundant—seem unrealistic (Mudalige, 2015). According to Černá (2014), social networking is an efficient means to assist internationally oriented SMMEs going global more rapidly; this can be attributed to three information benefits: knowledge of foreign market opportunities, experiential learning, and referral trust.

2.2 Issues affecting the growth of the SMME sector in South Africa

Although the importance of SMMEs to the economic development of South Africa is recognised, emphasis should be directed on SMMEs' awareness of available technologies that can be utilised to improve business processes (Cassin, Soni & Karodia, 2014). The importance of strategic business planning and operations is emphasised with statistics showing that 75% of new SMMEs created in South Africa do not succeed within the first two years of operation (Adeniran & Johnston, 2012). In this section, the issues affecting the growth of the SMME sector in South Africa in the form of management skills, provision and access to finance, education and training, the South African regulatory environment, regulation of IT challenges in

industry, technology adoption challenges, and lack of strategic planning, are presented.

Management skills: Managerial capabilities are sets of knowledge, skills, behaviours and approaches that contribute to individual value in an organisation (Olawale & Garwe, 2010). The authors state that managerial competencies are very significant to the existence and growth of SMMEs. Dwivedi, Wastell, Laumer, Henriksen, Myers, Bunker, Elbanna *et al.* (2014) found that the lack of managerial experience and skills are one of the main reasons why SMMEs fail. Phillips, Moos and Nieman (2014) point out that in South Africa, the absence of education and training reduces management capability in SMMEs and leads to a low level of ground-breaking activities and a high failure rate among SMMEs. An investigation by Cassin, Soni and Karodia (2014) reveals that the lack of technical and managerial skills in SMMEs impacts extremely negative on business development in South Africa. To buttress the point made by other authors regarding the dearth of management skills by SMMEs, Xesha, Iwu and Slabbert (2014) declare that half of all SMME failures are as a result of poor decision making and management capacity.

Provision and access to finance: The lack of access or availability to financial resources can be a limitation to business growth (Ramasobana & Fatoki, 2014). The access of small business owners to adequate and appropriate financial outlay to enable business growth should always be a concern for policymakers in general (Matchaba-Hove, Farrington & Sharp, 2015). Access to finance is a main problem for the South African small businesses owners. Urban and Mothusiwa (2014) agree that lack of financial support is the second utmost described contributor to SMME failure in South Africa after education and training. Masutha and Rogerson (2015) state that only 2% of new SMMEs in South Africa are able to access bank loans, while Makoza and Chigona (2012) report that 75% of applications for bank credit by SMMEs in South Africa are rejected. This situation intends that SMMEs without proper access to finance are liable to unfavourable conditions affecting their survival and growth. This position is also supported by Ramasobana and Fatoki (2014).

Education and training: The lack of education and training is publicised as the most predominant cause of common business failure among SMMEs in South Africa (Masutha & Rogerson, 2015). It is alleged that the majority of small business owner/managers lack education and training, and have little or no knowledge on available technologies to use for maximum profit and growth (Urban & Mothusiwa, 2014). The DTI admits that the lack of necessary education and training is a major

stumbling slab to the growth of the SMME sector (Mago & Toro, 2013). Fatoki (2014) affirms that South African SMMEs are often found with very limited skills, which corresponds to the significance of training and the procurement of skills for SMME development. In support of the above argument, Paul *et al*. (2012) and Masutha and Rogerson (2015) stress that the bulk of the challenge for small and medium businesses is created by limited resources, lack of formal mechanisms and practices, and shortage of educated, trained and experienced managers, owners and staff.

South African regulatory environment: According to Michael (2015), South African SMMEs function in a distinctive governing setting characterised by over regulation, lack of resources distribution, high level of illiteracy, and lack of funding's. It is noted that IT have a significant role in the improvement of SMMEs in terms of addressing issues such as poverty alleviation, facilitating interaction and association between consumers and vendors, and improving market capability. It is also evident that SMMEs are struggling with particular reference to compliance with regulation on the use of IT resources (Cant, Erdis & Sephapo, 2014). Michael (2015) argues that little support or assistance is available to SMMEs on how to address these concerns; consequently SMMEs are struggling with compliance, which creates a high regulatory burden for SMME businesses. Tai and Ku (2014) state that government's escalation of regulation and lack distribution of resources carries on threatening the achievement of the small business division; certain areas apprehension include legislation on taxation, labour and IT.

Regulation of IT industry challenges: According to Michael (2015:02), the IT industry's main challenge relates to IT security, overpriced bandwidth snags, difficulty of the ICT industry regulations and shortage of resources and skills to address the requirement of current IT regulations. The author further mentions that the scarcities of capital, lawful skills, lack of planning, and high illiteracy levels are shared complications fronting the SMME division in South Africa. Varanasi and Prasad (2015) state that the effect of resource restrictions and the implication of several laws create challenges for SMMEs to implement successfully and react confidently to legal demands. In an industry characterised by limited resources, it is important to realize the implication that the law enforced on regulated units is accordingly develop and suitable to answers to the challenges (Cant *et al*., 2014).There is a growing concern over the effect of the regulation on the IT capability of small businesses. The resultant effect of over-regulation is captured by Michael (2015) who posits that if regulatory issues are not taken care of as soon as

possible the economic support and the role of South African SMMEs in the international market could be impacted.

Technology adoption challenges: Steyn and Leonard (2012) reveal that many SMME owners initially seek assistance with adoption of technologies from friends, relatives or other SMME owners. Such practices are counterproductive because of the lack of adequate ICT knowledge and limited exposure from the people consulted for advice. Thus, often SMMEs do not necessarily adopt suitable technology due to a lack of knowledge of the potential value of technology (Mohlameane & Ruxwana, 2014). Cohen *et al*. (2014) report that top management support has the strongest direct effect on the adoption of new technologies, hence quality decision making by management remains a challenge in SMMEs. Mvelase, Dlamini, Macleod, Dlodlo and Sithole (2014) classify the challenges of ICT adoption into five categories, namely organisation awareness, access to infrastructure, self-assurance in the security framework, information systems practice among business associates, and adaptation of business processes. ICT infrastructure has also been a major source of challenge for SMMEs in terms of accessibility, standards and cost. The point made above is in line with Ukpere, Slabbert and Ukpere's (2014) observation which states that the adoption of technology by South African SMMEs is slow due to poor ICT infrastructure available to them.

Lack of strategic planning: The lack of strategic planning in SMMEs is often closely related to owners/managers' personal perception of strategic planning as being unnecessary (Olawale & Garwe 2010). With regard to strategic planning, Chao and Chandra (2012) suggest that lack of time, lack of particular capability, lacking knowledge of the planning processes, unwillingness to involve employees, and limited external consultations in strategic plans compromise strategic planning in SMMEs. Paul *et al*. (2012) emphasise that the concentration of ownership among top management of the business often leads to risk aversion and a lack of willingness to engage in strategic planning and change activities such as enterprise diversification, product innovation, and diversifying into new international markets. Gnan, Hinna and Monteduro (2013) reiterate that involvement of the ownership board and top management from the same family puts small businesses at a disadvantage in terms of strategic planning and risk bearing, and often promotes a lack of vision in the organisation. This practice of autonomous family control is often founded on the need to honour family legacy dictated by inherent values and age accompanied by conservative tendencies. Makoza and Chigona (2012) confirm that

the owner's age has a negative effect on information technology adoption and change initiatives for the business.

2.3 The impact of IS adoption on successful implementation and use

Information technology adoption is a process by which a decision is made to adopt specific hardware or software technology (ThuyUyen, Newby & Macaulay 2015). This process involves aspects such as managerial, expert and staff come together within and outside the environment of the organisation, all of which should be considered prior to the given technology can be physically deployed in the business. Moghavvemi and Salleh (2014) found that difficulties after implementation have been encountered in more than half of the businesses that implemented IT.The implication of the lack of success proposes that the interruption in the middle of mission and implementation significantly affect use of the technology. ThuyUyen *et al*. (2015) allude that the success of implementation is openly influenced by organisational elements, mostly executive management as well as external IS expertise.

Olupot, Kituyi and Noguera (2015) state that the motivation of adoption influence the decision to accept IS while considering the effect of adoption on the surrounding environment, which in turn affects the chances of implementation being successful; therefore, the success of application is regarded as an outcome of the adoption environment. ThuyUyen *et al*. (2015) state that the most common objectives of IS implementation and use are to improve organisational existence or development and innovative capacity, and remain competitive in business. According to Irani, Sharif, Kamal and Love (2014), the application success of IS can be witnessed in terms of efficient use of the new technology where the purpose of adoption meets the desired result. Therefore, the purpose of successful application can vary from increase sales, profit or improve the quality of service and products (Vătuiu, Vaduva & Udrică, 2014).

According to Govender and Pretorius (2015) Management and employees communication on change is indispensable; miscommunication can initiate a doubt in employees regarding the value of the new technology, causing a undesirable attitude headed for the change, fear of job security, and low level of drive.Moghavvemi and Salleh (2014) mention that the ability of SMMEs to grasp current knowledge, interpret it for use, and create new knowledge, impact the IS application process. According to Irani *et al*. (2014), management should ensure effective knowledge sharing among personnel's within the organisation as the IS implementation and use practice necessitates cooperation and approval through all

occupations within the organisation. According to Govender and Pretorius (2015), SMMEs usually lack IT skills and knowledge. Small businesses need to learn and consult with IS expert when it comes to IS implementation and use. Seeking assistance from IS expert or IT vendors can help small businesses or managers/owners to get valuable information about implementation and use, since they don't have necessary ability or understanding of certain IT systems? Olupot *et al*. (2015) suggest that the outsourcing of IT capability plays an essential role in the IT implementation process.

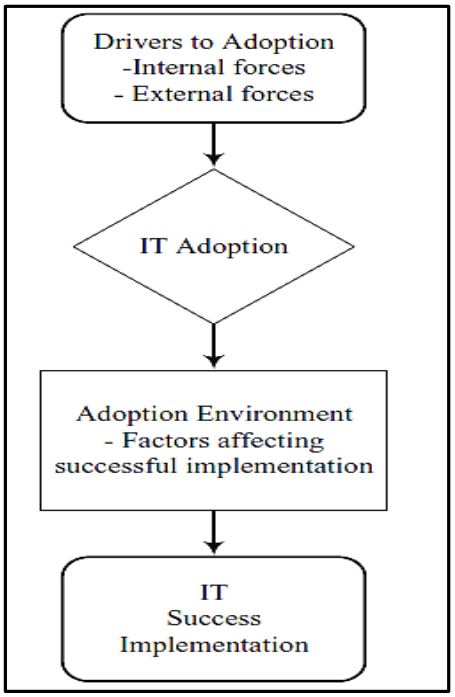

Figure 2.2: IT adoption stages
(Adapted from ThuyUyen et al., 2015:5)

Figure 2.2 shows the drivers of adoption that influence the success of IS implementation within small businesses. ThuyUyen *et al*. (2015) claim that IS expert or IT vendors companies have developed and gain knowledge of technology management from assisting their clients and can be a source of knowledge acquisition for small businesses that are pursuing assistance. .

2.4 The effective application of IS in business

The use of IS in an organisational capacity is usually to assist in improving functions and business processes, therefore organisations are expected to adopt and use IS with adequate capability to support the business activities. According to Peppard *et al*. (2014:5), "there are three levels influencing the IS capability component of businesses: i) the resource level, ii) the organisation level, and iii) the enterprise

level. The resource level represents components that are key ingredients for managing IS competencies. These include skills, knowledge and behavioural attributes of both employees and external providers".

The organisational level is apprehensive with mobilisation and is rationalised through processes, structures, and roles to build IS capability. Yet, the organisation level is the actualisation and manifestation of IS capability which is ultimately visible in the performance of the organisation. The description of IS capability is highlighted in Figure 2.3 which describes Peppard's model of IS capability. Peppard *et al*. (2014) believe that all organisations need sort of an IS ability. For some the capability perhaps less and this strictly have an effect on the organisation aptitude to embrace IS/IT interrelated strategic change. On the other hand, the organisation with a strong IS capability can control IS/IT potential that enables progressive change to acquire competitive advantage and also react to rapid changes in the market environment. Peppard *et al*. (2014) posit that in an organisational perspective, capabilities are rooted in the organisational processes and business practices which are governed by the structure of the organisation. Nenshelele and Pellissier (2014) refer to IS capabilities as organisational attributes that allows a business to perceive and implement strategies. According to Peppard and Ward (2004), the contribution of IS competency towards IS capability rely on the aspects of organisation's approach and investment approvals. Both aspects of competency direct whether information systems are a basis of competitive advantage or simply a source for competitive similarity, or rather is instigating the organisation to remain at a competitive hindrance.

Mohlameane and Ruxwana (2014), state that the expressions of a specific capability in an organisation depend on personnel using their knowledge, work together with others, harmonizing their actions, and performing their roles in the organisational structure and processes. These actions essentially consist of joint knowledge which is frequently tacit and synchronised as well as interdependent of actions to do task that are habitually precise rather than pre-defined. Of particular relevance is an organisation's IS capability and information flow of the business process, where aligning explicit knowledge and skills is significant to facilitate performance effectively. Business can identify and secure an advantage by apprehending an innovative approach based on IT capability. Positively applying such approach depends on the present position of the IT setup as well as the ability of the business to productively deploy applicable resources in order to implement and run new processes and systems to resolve business value (Peppard *et al*., 2014).

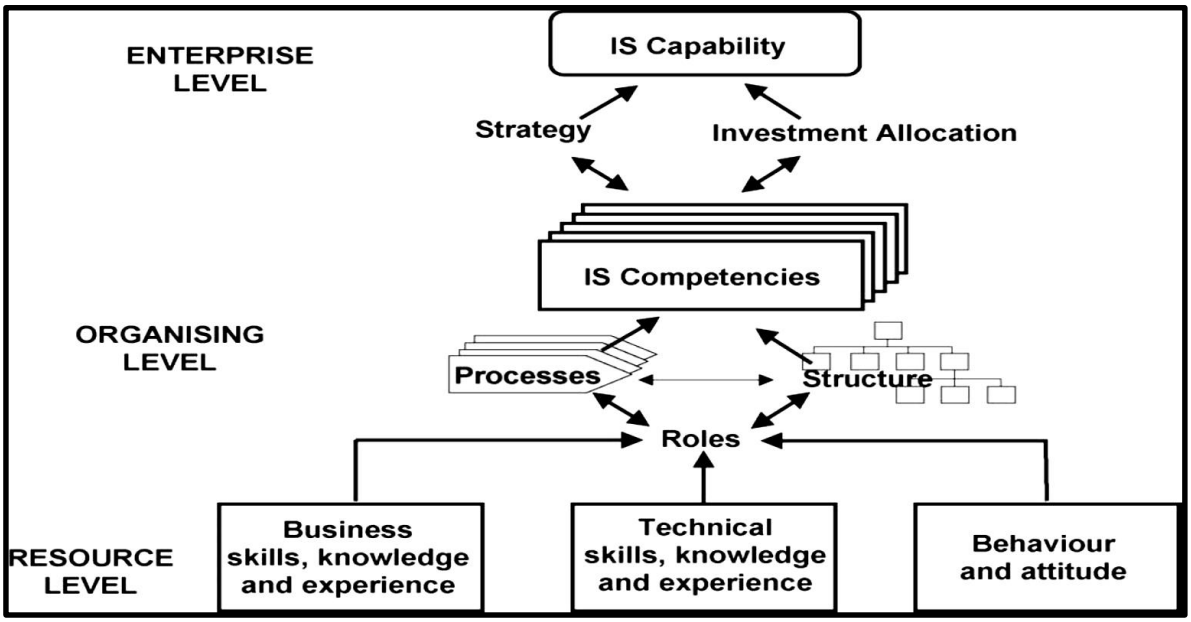

Figure 2.3: A Model of IS competencies
(Source: Peppard & Ward, 2004:13)

2.4.1 Strategic Information Systems (SIS)

The evolution of strategic IS in commerce is widely accepted in modern market environment (Arvidsson, Holmstrom & Lyytinen 2014).To further illustrate this, Zafar, Almaleh, Alshahri, Alqahtani and Alqahtani (2015) point out that SIS shows different characteristics concerning the practice of IS and has different objectives. The objectives of data processing and management of IS aspects are strictly a subset of the SIS objective to improve competitiveness in business". Zafar *et al*. (2015) state that within the aspect of SIS, the formative writing of IS/IT and competitive advantage present mainly descriptive account of businesses that achieve a competitive advantage through the innovative use of technology. According to Orozco, Tarhini, Masa'deh and Tarhini (2015), commercial businesses are gradually looking towards the strategic innovation capability of IS to offer them with a competitive advantage source.

Implementing a suitable IS strategy creates organisational confidence that IS will lucratively deliver strategic goals. A system without adequate planning endangers the business, exposing it to risks not only in terms of financial losses but also in missed opportunities and consumer dissatisfaction (Xesha *et al*., 2014). Managers must be constantly aware of what is happening in their business environment and be conscious of any change that may affect their business (Ciravegna, Lopez & Kundu, 2014). Information systems are highly relevant to SMMEs for information integration to facilitate information exchange among business partners in a timely, accurate and consistent manner which supports business operations (Sook-Ling,

Ismail & Yee-Yen, 2014). The responsibility of SIS lies with different people, depending on the size and type of business. In small businesses, a single owner may be in charge of all planning activities which usually include strategic management (Nenshelele & Pellissier 2014). Peppard *et al*. (2014) point out that a central point of IS/IT application in business should be properly planned for and line up to business approach, and the approach should combine the features in the strategic development.

More businesses need to realise the value of having an IS strategy; the sense of direction it provides allows them to prioritise a set of opportunities to pursue. When organisations start incorporating a set of tools into an overall planning approach, they begin to construct the significant determinants of their success (Cragg *et al*., 2011). A framework is required to enable the organisation to achieve its objectives. According to Urban and Naidoo (2012), the organisational strategic framework should provide a flexible and adaptable way of relating planning objectives to the choice of planning tools. Competitive advantage is gained through the accumulation of strategic assets such as hardware and software capabilities, and this enables a business to gain a competitive advantage within their industry (Cragg *et al*., 2011).

2.4.2 IS capability to improve business performance

IS capability is determined by the way it impacts business performance (Baiyere & Salmela, 2014). Figure 2.4 shows the relationship amongst business strategy, IS/It strategy, IT operation and services, business operations, and organisational performance. The representation shows how organisational performance is derived from business operations such as sales, marketing, logistics, and customer services. The IS capability is connected to the four parts of the model. The underlining IS capabilities show the degree to which IT prospects are integrated into business strategy and the practicality through technology and systems sustenance.

Lin and Wu (2014) indicate that any weakness in IS capability openly influences the business processes and eventually affects business performance. According to Krstajiic *et al*. (2014), IS/IT alignment is unified by how well the businesses improves, nurtures and utilises its information systems competencies in relation to each in the four areas of the IS capability model. Peppard *et al*. (2014) claim that the traditional view of IS capability considers only alignment of business and IS/IT strategies, that is, the structural practices of the IS function and activities in relation to the business organisation. These considerations, Peppard *et al*. (2014) argue, are no longer important; rather, the impetus is now on improving the fundamental abilities to allow better strategic management to succeed dealing with the limitation

inherent to any formal structuring of IS success. “The IS capability model enhances the process model which describes how IT creates business value by understanding the application through which this value is correctly achieved” (Peppard *et al*., 2014). The middle process indicates how the connection between the functions and strategy results in building IS assets and capability with a resultant positive impact through appropriate application and combinations.

Peppard and Ward (2004) suggest that the required practices and sequence leading to success are subject to the organisation’s use of IS/IT and changing degrees of efficiency throughout the management of IS/IT assets to attain improved business quality. The authors elucidate further that if assets are combined with appropriate use, it yields a favourable impact which ultimately affects the competitive process and leads to improved business performance. Peppard *et al*. (2014) state that “describing what establishes suitable and advantageous use and how the usage of IT really affects specific characteristics of business performance, depends on organisational capabilities in using IS/IT and the aptitude to measure the real-time results of IS/IT deployment on business performance”.

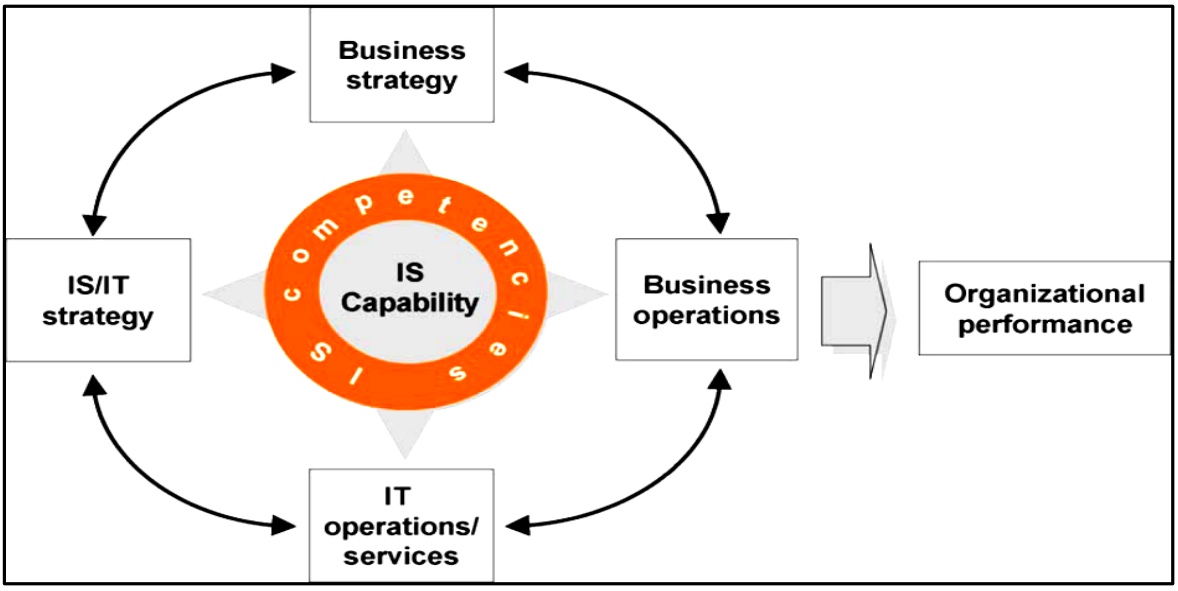

Figure 2.4: A Model of IS capability
(Source: Peppard & Ward, 2004:13)

The strategy is driven by identifying the opportunity to exploit and maximise existing competencies and resources to drive improvement (Ling, Tee & Eze, 2014). This implies how an organisation believes it can best meet the needs of its customer and organise its resources to make strategic decisions (Ciravegna *et al*., 2014). Dutot, Bergeron and Raymond (2014) posit that as business conditions change and new

enablers emerge, the emphasis is on what organisations are able to do as well as its competencies and ability to change, which means organisations must have the mechanism to assess short term options more objectively in the context of its long term strategy. Arvidsson *et al*. (2015) assert that IT is a key resource of today's organisational enabler of change. The way an organisation chooses to deploy technology and the associated resources, depends on the strategies which in turn determine the result the business can achieve. It is proposed by Peppard *et al*. (2014) that the application of IS strategy should be targeted at the way the organisation can implement IS/IT to improve and enable change rather than business objectives. For example, Customer Relationship Management (CRM) software is a resource, and how an organisation decides to deploy the software will change the way it manages customers and relationships, which subsequently determines what it can achieve.

IS strategy defines the organisation's capacity to recognize and deliver effective IS/IT related variations in relation to business demand-side drivers which source the changes the organisation wants to make (Masutha & Rogerson, 2015). The development and acquisition of IS of both demand and supply are subject to change; at the same time it is influenced by the underlying philosophy adopted in strategic decision making (Adeniran & Johnston, 2014). The nature of strategic choice and decision making varies among industries, but strategic change tends to be target driven. This approach assumes that, regardless of the demand made by strategic change, the business will be able to find the necessary ways and means to achieve strategic choice and decision making (Peppard *et al*., 2014).

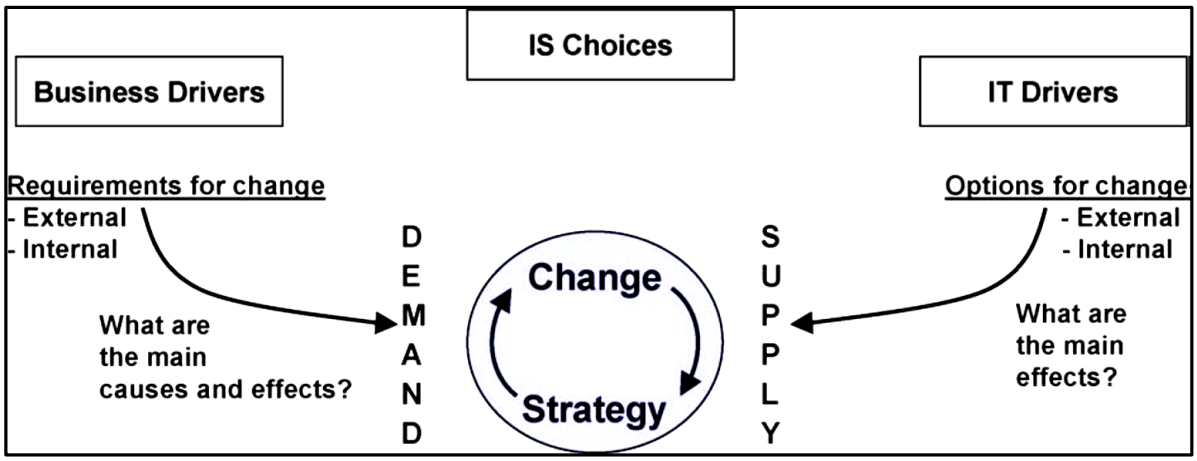

Figure 2.5: IS strategy balances the demands for business change with the supply of IT enablers
(Source: Peppard & Ward, 2004:18)

2.4.3 Information management to support effective IS

Information is a specific type of asset that represents value for the business; it is used for decision making processes and has to be treated with care. Černá (2014) states that information does not lose its value over time, instead, its value rises as time progresses. However, information can represent a source of risk; information risk arises from the possibility of threat to the quality of information, loss of information, and failure to work with information. Černá (2014) further states that these types of risk can be managed using IS tools such as Enterprise Resource Planning (ERP) and Advanced Planning System (APS) which represent the administration and management of all business processes and sources, tangible and intangible. ERP and APS can be viewed as the summary of skills and knowledge of individuals or groups to produce and sell outcomes of their creativity, managed in a controlled environment.

According Xesha *et al.* (2014), information management passes through three development phases which focus on various objectives. The first phase is primarily focused on solving technical problems, the second phase focuses on the efficiency of labour, and the third phase focuses on the effective achievement of organisational objectives using computing and information. The approach to information management is viewed as a discipline, where applications of information systems and information technologies do not represent the goals of managers; instead, managers use these tools to ensure their activities improve using the description of their individual information needs. This view brings together modern management, informatics, system approaches, and other disciplines such as economics.

Objectives of the business associated with the need of new IS implementation

- Optimisation of business processes
- Ensuring effective cooperation of all business partners
- Improving the business image in the eyes of customers
- Improving the business image in the eyes of suppliers

Selection of suitable IS

Information system selection is associated with risk. The risk prone areas need to be detected and preventive actions have to be made, with the main risk burden usually being the failure to work with factual information (Avram, 2014). IS selection and implementation requires a control process that detects and describes positive benefits such as simplification of cooperation between the business and suppliers, improvement of the relationship with customers (transparent price setting, timely goods delivery), easier access to information, a unified integrated system database,

and attractive user interface. This process of selection guarantees fewer misunderstandings resulting from the lack of information, which enables faster and more accurate business processes (Dahlberg, Kivijarvi & Saarinen, 2015).

Information systems are currently imperative for most SMMEs because of the increasing competitive market environment. The selection of suitable IS represents one of the most important decision making processes exposed to high risk. Exposure to information risks means the outcome of such decision making depends on adequate information risk management, and underestimating some of the risk factors can cause the adoption of incorrect decisions, resulting in unsuitable IS for the business (Yeh, Lee & Pai, 2012). The implications of such risk include a negative impact on IS implementation; more time consuming data entry, complicated data corrections, higher demands on employees, final outcomes with no possibility of further processing, and a high additional cost connected to all necessary modifications (Alyahya & Suhaimi, 2013).

2.5 The concept of competitive advantage in business

The concept of competitive advantage, compels a business to gain and hold an advantage over competitors, is fundamental to modern strategic thinking (Wei, Samiee & Lee, 2014). According to Day and Wensley (1988), there is no definite denotation of competitive advantage in practice or marketing strategy; rather the expression is used subjectively with distinctive interpretations implying comparative dominance in skills and resources.

Alternative connotation refers to what is seems as market niche advantage founded on the delivery of quality of customer value or the achievement of lower cost, resultant effect on market share, and profitability performance (Meihami & Meihami, 2014). The shared understanding of competitive advantage is founded on the state of performance dominance being as a result of comparative advantage in skills and resources a business deploys.

The sustainability of competitive advantage requires businesses to shape obstacles that create imitation difficult. As these barriers to imitation are repetitively eroding, the firm must continually invest in new innovation to sustain or improve the advantage (Ahmad, Bosua & Scheepers, 2014). Businesses seeking competitive advantage need to improve individual competencies and achieve for lowest cost of delivery or differentiate through quality customer value (Demirbag, Collings, Tatoglu, Mellahi & Wood, 2014). Mena and Chabowski (2015) state that skills and resources combined represent a talent of a business to deliver extra or do better than its

competitors. Competitive skills are the unique ability distinguishing personnel competing among rival industry. Some of the benefits of competitive skills arise from the capacity to achieve individual functions more successfully than the employees of other businesses, for example, technical skills may lead to greater accuracy or dependability in the finished product. Other competitive skills result from the systems and the structure of the organisation which enables business to adapt quickly and earlier to changes in the market. (Zafar *et al*., 2015). Effective management of resources are tangible requirements to create a positional advantage; it enables a firm to optimally workout its capabilities to outperform its competitors.

The positional advantage of a business is in straight line with competitive flexibility barriers that might prevent a firm from deviating its strategic position. They are best understood with the value chain showing that IS can switch cost for customers, change the balance of power with suppliers, generate new products and services, and change the basis of competition (Kumar, 2015). The value chain classifies activities of the firm into separate steps to design, produce, market, distribute and service a product. An inclusive cost edge is obtained by accomplishing greater tasks at a lesser cost than competitors however proposing similar or the same product. To create these value and support activities are company-wide undertaking ,such as procurement, human resources management, technology improvement, and the infrastructure and management of the systems that tie the value chain together (Shahmansouri, Esfahan & Niki, 2013). According to Demirbag *et al*. (2014), performance outcomes are the most effective indicator of competitive advantage through market share and profitability. The evidence of this measure is that winners can be distinguished from losers by the market shares they have. As market shares mature, the question remains how management can capitalise on the initial strong position, building new skills and resources to keep up-to-date with changes in technology and market environment.

The approach for determining a competitive advantage begins with the alignment of business toward serving its customer's needs; the other is mainly a competitor-centred method (Kumar, 2015). The competitor-centred approach is grounded on management assessment combine with competitor's target; the method is frequently observed in businesses where the focus is on how to drain the competition. The request is to ask by what method our offering of services relates with those of competitors? Under this approach organisation lookout costs carefully, rapidly

counterpart the marketing initiative of rival businesses, and detect their maintainable edge in technology.

Customer-focused assessment begins with full diagnoses of customer advantage within the end-user section working backward from client to the business to classify the actions desired to enhance performance. This market positioning approach is originated in service intensive businesses such as investment banking where new services are easily imitated, cost of funds is the same, and entry is easy. Little attention is given to the capabilities and performance of competitors; the emphasis is on the quality of customer relationship, and the continuing customer satisfaction and loyalty is more meaningful than market share. Managers adopt a customer-focused or competitor-centred perspective to identify their business environment and decide what information is gathered and how it is analysed and interpreted (Tseng, 2014).

According to Du Toit (2016), skills and resources are not instinctively transformed into competitive advantage, neither is there some performance payoff from greater cost or comparative positions, however both are mediated jointly by strategic choices consisting of objectives, entry timing, and the quality of tactics and implementation. Management's use of any of the approaches to assess advantage derive from the identification of accurate skills and resources that have the greater influence on current situation and performance; these are the key success elements that need to be managed to ensure a long term competitive advantage. Table 2.2 below summarises the method for assessing competitive advantage.

Table 2.2: Methods of assessing competitive advantage
(Adapted from Day & Wensley, 1988:9)

Competitor-centred	Customer-focused
A. Assessing sources (Distinctive competencies)	
• Management's judgment of strength and weakness • Comparison of resource commitments and capabilities • Marketing skills audit	
B. Indicators of positional advantage	
• Competitive cost and activity comparisons • Value chain comparisons of relative costs • Cross-section experience curve	• Customer comparison of attributes of firm vs competitors • Choice models • Conjoint analysis • Market maps
C. Identify key success factors	
• Comparison of winning versus losing competitors • Identifying high leverage phenomena • Management estimates of market share elasticity • Drivers of activities in the value chain	
D. Measure of performance	
• Market share • Relative profitability (return on sales and return on assets)	• Customer satisfaction surveys • Loyalty (customer franchise) • Relative share of end-user segments

2.5.1 The competitive advantage of IS implementation

Potgieter, de Jager and van Heerden (2013) contend that although the strategic management discipline has long sought to elicit the source of sustainable competitive advantage, from an IS perspective competitive advantage can be viewed as the business' ability to continually deliver explicit business value from IS investment. The assumption of Resource Based Theory (RBT) is that resources are distributed diversely through organisations and they provide the source of sustainable competitive advantage (Peppard & Ward, 2004; Peppard *et al*., 2014). The implication of RBT for strategic conception and application is that competitive advantage can be sustained by capitalizing in unique and distinctive competencies (Peppard *et al*., 2014).

According to Huang, Wu and Lin (2016), even though SMMEs are small in size, the size of the small businesses does not present an obstacle and can positively impact other aspects such as proximity to market, flexibility, reaction speed, and speed adjustment. Durst, Mention and Poutanen (2015) state that SMMEs should make sure that business strategy design categorizes the best profitable use of IS and include possible new developing technologies in the mission of the business development. Nylen and Holmstrom (2015), support the importance of the strategy for increasing the competitive advantage of any business when changes occur in the business environment. According to Zafar *et al*. (2015), competitive advantage is no longer optional, rather, it is inevitable for small businesses that seek to survive and grow.

Gareeb and Naicker (2015) state that SMMEs should establish appropriate criteria for decision making on investment in IS and technology to choose appropriate systems that will enable growth and survival. Huang *et al.* (2016) assert that in the light of globalisation, there is a need to establish IS strategies that will enable SMMEs meeting challenges and rapid changes in a timely order. According to Garg and Choeu (2015), IS affects the competition level of SMMEs in three ways: IS changes the structure of enterprise and competition rules, IS produces competitive advantage with new methods to distinguish them from their competitors, and IS secure new processes from existing operations. Peppard *et al*. (2014) argue that SMMEs should ensure IS strategic alignment and improvement plans are unified with organisational, strategic plans and business processes. This is done to decide whether IS can provide best practice in functional processes and organisational

activities. Peppard and Ward (2004) developed a framework for positioning IS competencies (Figure 2.6).

Figure 2.6 shows the alignment of business and IT openly keep the idea of manipulation of IT by business to deliver a comprehensive description of IS success. The strategy identifies and evaluates the implication of IT innovative opportunity as an essential portion of business strategy formulation and define the purpose of IS/IT within the organisation. The definition of the contribution ability of IS translates into business strategy and processes, information and systems investments, and changing of plans that match the business priorities. “IT capability is the ability to translate the business strategy into long term information architecture, technology infrastructure, and resourcing plans that enable the implementation of the strategy. Exploitation is the ability to maximise the benefit realised from the implementation of IS/IT investment through effective use of information, applications and IT services. Delivery of solutions deploy resources to develop, implement and operate IS/IT business solutions which exploit the capabilities of the technology” (Peppard & Ward, 2004:10). Supply creates and maintains suitable and flexible information technology, application supply chain, and resource capacity.

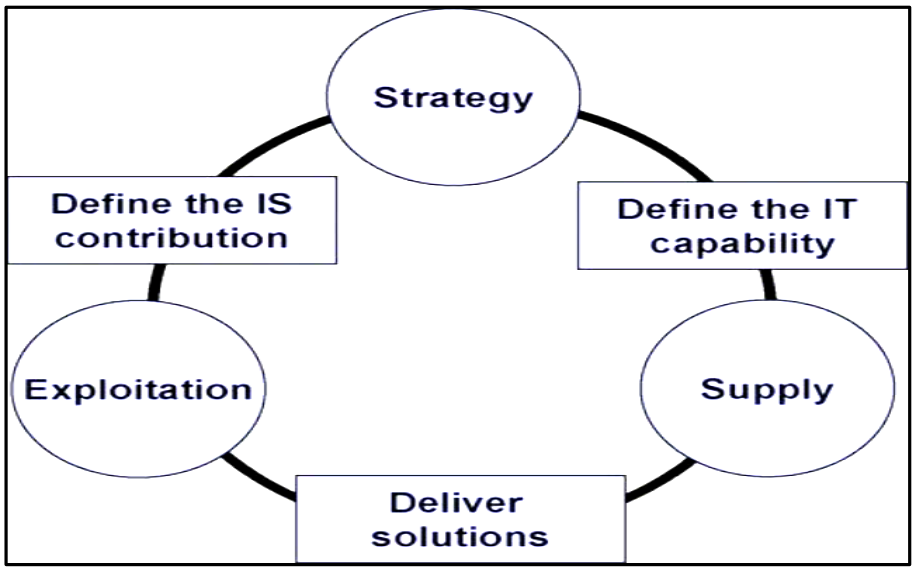

Figure 2.6: Framework for positioning IS competencies
(Source: Peppard & Ward, 2004:11)

2.6 The governance and contribution of FSPs to the Economy

For this section, the focus of the study will be on the primary subject of the research; a sub-section of this is SMMEs trading in the financial sector, referred to as Financial Service Providers (FSPs), also known as financial intermediation. FSPs

operate and trade within the auspices of the financial sector, specifically under the insurance and financial services industry. **Financial service providers** refer to “any person, other than a representative, who as a regular feature of his business furnishes advice, and renders any intermediary services, or only renders an intermediary service to others” (Millard & Botha, 2012:5).

The financial services industry has undergone quite a number of significant legislative changes in the last number of years in South Africa (Adeniran & Johnston, 2012). The main function of this legislation is the regulation of financial advice to enable customers to makes informed decisions with regards to financial products offered. The legislation also ensures that intermediaries, generally referred to as “brokers”, and insurers conduct business decently and justly, and with conscientiousness care (Millard & Botha, 2012). The FAIS Act (37 of 2002) is ultimately aimed at protecting the consumers and ensuring standards as it specifically provides regulation of conduct to providers of financial services and their representatives (Millard & Botha, 2012). It is therefore expected that the regulator requires those who render financial services to have a working knowledge of the legislation impacting on their activities (Stewart & Yemo, 2012). The only practical way to determine whether a particular FSP has such basic knowledge is to require of him or her to sit for an examination (Odeku, 2012). Therefore, the central point of the FAIS Act (37 of 2002) is to control the delivering of financial advisory services to prospective clients. In essence, to have a clear understanding of what is meant by financial services advisory, it is crucial to first define “advice”. The FAIS Act (37 of 2002) as well as the Co-operatives Act of 2005 defines **advice** as: “any recommendation, guidance or proposal of a financial nature furnished, by any means or medium, to any client or group of clients” (Millard & Botha, 2012:5).

The recommendation, guidance or proposal from the advisors is aimed at capitalizing in a financial product, or in decision of a financial contract relate to a financial product (Millard & Botha, 2012). The financial product includes benefits provided by pension fund organisations, medical schemes, and short-term and long-term insurers (Odeku, 2012). For example, should a customer receive advice regarding a life insurance policy, the policy would be considered to be a financial product within the definition of the FAIS Act. The advisor is required to demonstrate a level of fitness and working skill to comply with the accountabilities forced by the FAIS Act (Jacobs, Van Vuuren & Styger, 2012). This responsibility includes the code of conduct which requires an advisor to have suitable processes and systems in place to store and retrieve documentation relating to transactions with clients

(Millard & Botha, 2012). The research focus is therefore on the implementation and use of IS for FSPs to leverage business value that creates profitability/growth and the ability to derive competitive advantage from its usage. For us to understand the dynamics of FSPs in the insurance sector, it is important to understand the landscape and the types of entities operating within this sector.

Studies have shown that the South African insurance landscape takes up an important place in the African continent, contributing nearly three quarters of the total African insurance industry (Paul *et al*., 2012). The industry landscape has shown development at a compound annual growth rate (CAGR) of 11.7% between 2004 and 2008. Similarly, the same authors state that the life insurance sector is assumed to grow at a CAGR of 8.3% between 2009 and 2014. The contribution of the financial services to the provincial GDP of the Western Cape is estimated at 12.3% and is the third highest sector contribution in the Western Cape Province (Menyah, Nazlioglu & Wolde-Rufael, 2014). The Western Cape contributes 21.7% of the financial services industry output nationally (Paul *et al*., 2012). This contribution includes investment in retirement, funeral cover, accidental death insurance, real estate and business services. The sector has dominated gross fixed capital formation (GFCF) in the Western Cape Province, averaging 32.7% of total investment (Ward, Sanders, Leng & Pollock, 2014).

Regional employment has grown at 1.1% per annum, while overall formal sector employment declined (Chitimira, 2015). Since employment growth has been much slower than output growth, labour productivity has risen with capital intensity. Financial services employment in the province is more concentrated towards the insurance sector, constituting 58% of the financial labour force (Ngwenya & Paas, 2012). The Western Cape has one third of the national labour force in the insurance industry alone (Paul *et al*., 2012). The growth in the insurance industry has seen companies expanding into the rest of Africa and globally (Kwenda & Holden, 2013).

2.6.1 The impact of IS on the business process of FSPs

The definition of IS by Laudon and Laudon (2007:7) as it applies to this study is:

> "…a set of interrelated components that collect or retrieve, process, store, and distribute information to support decision making and control in an organisation. In addition to supporting decision making, coordination, and control, information systems may also help managers and workers analyse problems, visualize complex subjects, and create new products*".*

FSPs operate in an uncertain business environment that is changing rapidly; uncertainties such as new technologies and associated risk demand new types of services, and new competition increases and appears daily (Touray *et al*. 2013). For FSPs to survive in such an unstable and unpredictable business environment, availability of accurate information at the right time is a prerequisite for successful business operations (Sharma & Bhagwat, 2006). Relevant Information becomes important for FSP decision making to enable business growth, increased value, knowledge of competitors, and future business initiatives (Cragg, 2008). IS can be used strategically by small business enterprises to exploit the potential of adequate business information and processes in order to gain a competitive advantage (Urban & Naidoo, 2012).

It has been noted that FSPs need to take the best benefit of IS correctly to support actions and enhance value to products and services for a competitive advantage in the market environment (Hicks, 2007). According to Franco, Haase, Magrinho and Silva (2011), the strength of market rivalry is define by businesses are under pressure to work creatively and innovate quickly than the competition. Appropriate use of IS can help businesses generate information, constitute central strategic planning, and improve management control, tactical planning and daily operation for FSPs (Raymond & Croteau, 2011). A positive approach to IS will assist FSP management with information efficiency and effective monitoring of their business to achieve a potential competitive edge over their counterparts (Chao & Chandra, 2012).

The impact of the action taken by competitors has made IS one of the key elements for FSPs to consider from a day to day functional point of view (Kruger & Johnson, 2010; Ghobakhloo, Hong, Sabouri, Mohammad & Zulkifli, 2012). IS can successfully drive business interaction; it provides an understanding of the dynamic evolution of industries and offers insight into the complex interaction among industry actors (Ahlstrom & Bruton, 2010). IS development has been proven to improve managerial efficiency by producing relevant and timely information that can be used to manage and control businesses, hence enabling competitive advantage (Steinfield, Markus & Wigand, 2011). Thus, it is imperative for FSPs to implement and utilise IS as a tool and a strategy to position the business where other businesses have not reached.

IS can be described as interconnected and organised components of people, computer hardware and software, communications networks, and data resources operating together to collect, process and deliver information and knowledge (Zafar *et al*., 2015). IS provides basic information to help FSPs navigate and manage

challenges faced in the business. FSPs are usually saddled with challenging tasks such as operation management, policy administration, policy acquisition, claim management and planning processes for sales and control to improve and advance business products (Cui *et al*., 2015). The effective implementation and application of information systems in FSP business operations improves business value, manages interaction with customers and suppliers, and manages financial accounts and human resources (Nguyen & Warring 2013). From the composition of IS it is clear that one of the major roles information systems play is accepting and converting data into information which is then processed into business knowledge for organisational use (Zafar *et al*., 2015). There is a remarkable relationship between the increase in management efficiency in terms of goal achievement and the use of IS which leads to an increase in managers saving time and gaining productivity (Mu *et al*., 2015).

IS enables FSPs to manage sets of different activities in relation to organisational management which includes risk assessment (underwriting), preparation of invoices and claims, managing customer demands, reporting and resolving management problems, and innovative product development (Krstajiic *et al*., 2014). The effective use of IS in an organisation involves the management of planning, monitoring and coordinating decision making processes. IS also ensures accuracy and speed by improving record keeping and availability on demand, making the information accessible in real time, which in turn decreases the waiting time of obtaining the desired information from users (Fatoki, 2014). Cheung *et al*. (2015) state that the effective application and use of IS improves performance, quality of information, productivity of individuals, and business processes.

According to Fatoki (2014), a number of FSPs are still using traditional paper-based systems that create issues for management, for instance, paper-based records are often lost, resulting in client dissatisfaction. Many businesses are facilitating improved business processes by converting from paper-based to electronic systems (Cui *et al*., 2015). The application of IS in business assists organisations to access and process large amounts of information, thus improving the work quality through coordinating and sharing stored information (Zafar *et al*., 2015). Businesses are implementing specialised IS offering unique solutions for maintaining and managing customer information. IS enables business processes and organisation management is less prone to human errors resulting from unnecessary mistakes in daily business operations (Masutha & Rogerson, 2015). IS enhances FSP communication lines for employees to easily access the information they require; it

also provides online access to clients within the network. The use of IS by FSPs not only improves the quality of services, but also eliminates delays and inaccuracies that are usually associated with telephone or paper-based communications (Mu *et al*., 2015). The role of IS in FSP operations has been widely articulated, showing various benefits and advantages FSPs are exposed to if they effectively apply and use IS within their organisation.

2.7 Description of research theory

A theory, as defined by Pettigrew and McKechnie (2001:1), is "a set of explanatory concepts or a statement or group of statements about how some parts of the world functions". The same authors explain relations among internally connected phenomena and offer logically consistent propositions regarding the relationships of these phenomena. According to Gregor (2002:03), "a number of prominent theoretical models [have been] developed to explain IT usage in behavioral sciences". It is therefore important to consider theory as it forms the foundation of IS adoption by SMMEs before it can be utilised appropriately for the business. The theories are important because many of the constructs are directly and indirectly related to the effective utilisation of IS in business. The Theory of Reasoned Action, Theory of Planned Behavior, Technology of Acceptance Model, and Diffusion of Innovation Theory are described below in relation to FSPs and technology adoption. The theories are only summarised in the context of adoption because the study focuses more on the use and application of IS in a post adoption scenario to create a competitive advantage.

The ***Theory of Reasoned Action*** suggests that an individual's intention to adopt a technology is determined by two basic factors—personal interests and social influence (Davis, 1989). The theory can be applied to this research, considering that the adoption of IS as a technological intervention for the business is determined by the perception and interest of the owners/managers of the FSPs. The intention to adopt is subjected to factors such as potential value of IS, ease of use, cost, degree of usefulness, and many others. Effects of social influence include the influence peer activities in the industry have on FSPs in terms of technology adoption. These influences can take on the nature of sectoral technological advancement and, most importantly, government policies in terms of regulations guiding the use of technologies by FSPs.

The ***Theory of Planned Behaviour*** extends the Theory of Reasoned Action by adding a construct called perceived behavioural control in an effort to account for factors outside an individual's control which may affect intention and behaviour

(Davis, 1989). The perceived behavioural control in this research applies to the extent to which FSP managers/owners feel capable and task confident in their abilities to implement IS in their business. This plays a central role in their intentions and actual behavioural outcomes, and could be likened to the perception of mangers/owners of FSPs having the capabilities to overcome potential barriers and challenges to capitalise on the competitive advantage of IS.

The ***Technology Acceptance Model*** is an adaptation of the Theory of Reasoned Action. The adaptation provides an explanation of the determinants of computer acceptance, generally explaining user behaviour across a broad range of end user computing technologies and user population (Venkatesh & Davis, 2000). The model suggests that when users are presented with new technology, a number of factors influence their decision on how and when they will use it. This can be applied to the research to determine the degree to which FSP managers/owners believe using a particular technology in their workplace would enhance their work performance, depicting how they find IS useful and how well the ease of IS use can be free from considerable effort.

The ***Diffusion of Innovation Theory*** is another prominent line of behavioural research useful to understand IT use and adoption at organisational level. It connotes an idea perceived as new by an individual/organisation and how it diffuses, which is the process by which an innovation spreads (Rogers, 1995). The theory is based on four key levels of decision-making processes of technology adoption. The main elements in the diffusion of new ideas are i) an innovation communicated through certain channels, ii) over time, iii) among the members of a social system. Innovation is defined by Rogers (1983:15), as “an idea, practice, or object perceived as new by an individual or other unit of adoption”. The characteristics of an innovation as perceived by members of a social system determine its rate of adoption. Rogers (1983) further lists five attributes of innovation: i) relative advantage, ii) compatibility, iii) complexity, iv) trialability, and v) observability. The interest and ability of FSPs to adopt IS usually rests on some of these attributes. The *relative advantage* of information systems is the value and edge it offers the business over competitors. *Compatibility* is the degree to which the system is compatible with the existing business processes and employee capacity. *Trialability* is the need to ‘try the system out’ to see how well it fits the business process before fully adopting it. *Observability* describes how well the technology is observed to be in use by other businesses, while *complexity* is the degree to which

other things are required to be in place before IS can become functional within the business.

The theories described above show the considerations and constructs involved in the adoption of IS, which lay the foundation for subsequent effective use and application of FSPs.

2.8 Theories of competitive advantage

This section presents the theoretical framework that underpins the research. Thus, to formulate a relevant theory applicable to the effective application of IS in a complex environment for long term competitive advantage, some theories of competitive advantage are explored and described.

From the description and exploration of the theories of competitive advantage, the theoretical framework underpinning the research study is adopted and presented. The concept of competitive advantage is one of the most ancient concepts of economics. The evolution of competitive advantage has led to the present concept of absolute advantage which means each country exports the commodity they produce with the least cost (Shahmansouri *et al*., 2013). The authors furthermore indicate the division of labour and specialisation as the most important factor in economic growth, with the benefits accruable to the countries being the ability to produce goods and services that cost less than in other countries.

2.8.1 Theory of Industrial Organisation

Given its economic point of view, the Theory of Industrial Organisation has four approaches, namely a microeconomic perspective, view of industry structure, view of firm-level analysis, and view of competitive forces.

The *microeconomic perspective* is mainly influenced by the neoclassical theory of perfect competition, monopoly, and multiple monopolies. The theory postulates that the structure of an industry depends on the number of active vendors in the industry. The business strategy encapsulates pricing as the most important factor in investigating the behaviour of the organisation, and this includes its product marketing performance (Morgan, 2012). The *view of industry structure* indicates that the elements of industry structure focus on industrial development and the organisation. According to Shahmansouri *et al*. (2013), the elements include industry life, buyers and potential suppliers, goods substitutes and balancing, the degree of product differentiation, number of firms and their size, market share key competitors, intensity of barriers to entry, degree of vertical integration, and

diversification of products and services. Other elements comprise government regulations, cultural and social demand, changes in market share over time, changes in market demand over time, the structure of competition type in international markets, investment, opportunity cost, fee structure, and the speed of technological change (Shahmansouri *et al*., 2013). The *view of competitive forces* focuses on reinforcing factors affecting competition and can hence be very useful in understanding competition and competitive strategy. The *firm-level analysis* is considered to be an analysis of the firm's features and strategies such as firm size, advertising costs, cost associated with research and development, and industry structure variables such as determinants of the firm's performance (Morgan, 2012).

Table 2.3: Porter's five competitive forces
(Adapted from Shahmansouri et al., 2013)

Competitive force	How IS/IT can create competitive advantage	Explanation
Threat to new entrants	How can IS/IT build barriers to entry?	IS/IT changes the conditions to be met for a new firm to enter the market place.
Bargaining power of customers	How can IS/IT 'build in' switching costs for customers?	IS/IT can expand the product or service the customer buys so that any move to a rival will result in lower value from the rival's new product or service.
Bargaining power of suppliers	How can IS/IT change the balance of power with its suppliers?	IS/IT can change the relative bargaining positions in the market through suppliers.
Threat of substitute products or services	How can IS/IT generate new products or services?	The information and use of IS/IT can provide new opportunities for new product development.
The industry: jockeying for position among rivals	How can IS/IT change the basis of competition?	IS/IT can be used as part of re-engineering the business. The focus is on greater efficiency and effectiveness.

2.8.2 Resource-Based Theory

The Resource-Based Theory's perspective says that firms can integrate specialised capabilities across business functions such as management, manufacturing and IT usage to form cross-functional capabilities that assist firms in delivering sustainable values and gaining a competitive advantage (Peppard *et al*., 2014). Sustained competitive advantage occurs when implementing a value creation strategy not concurrently being implemented by any current or potential competitors, and other businesses are not able to duplicate the benefits of the strategy (Nilssen, Bertheussen & Dreyer, 2015).

The application of automated IT resources can help firms reduce costs and effects of environmental impact, for example, by using digitised documents and e-filling systems, firms can automate different business activities and subsequently reduce costs of energy and paperwork. It also frees employees from mundane tasks and

allows them time to focus on improving the business process to ensure sustainability and realise organisational objectives. Valuable resources enable organisations to adopt and deploy strategies that empowers organisation to be more efficient and effective. Implement strategies that improve the efficiency and effectiveness of the organisation. Valuable resources can be used to exploit opportunities or neutralise threats, which can in turn reduce costs and increase organisational revenue (Shahmansouri *et al*., 2013). However, some resources are better adapted to particular organisations and the value that these resources create differs for each organisation.

Heterogeneity essential resources are described as being the assets/capabilities of business processes and include business attributes, information, and knowledge controls which enable the business to implement strategies for improving efficiency and effectiveness (Barrutia & Echebarria, 2015).

Essential resources can be classified into three categories: physical capital resources, human capital resources, and organisational capital resources. Physical capital resources include technology used in the business as well as equipment and geographical location, among others. Human capital resources include training, experience, judgment, intelligence, relationship, and the insight individual managers and workers have in the business, while organisational capital resources include formal reporting structure, formal and informal planning, control and coordination of systems, and relationships among groups within the business.

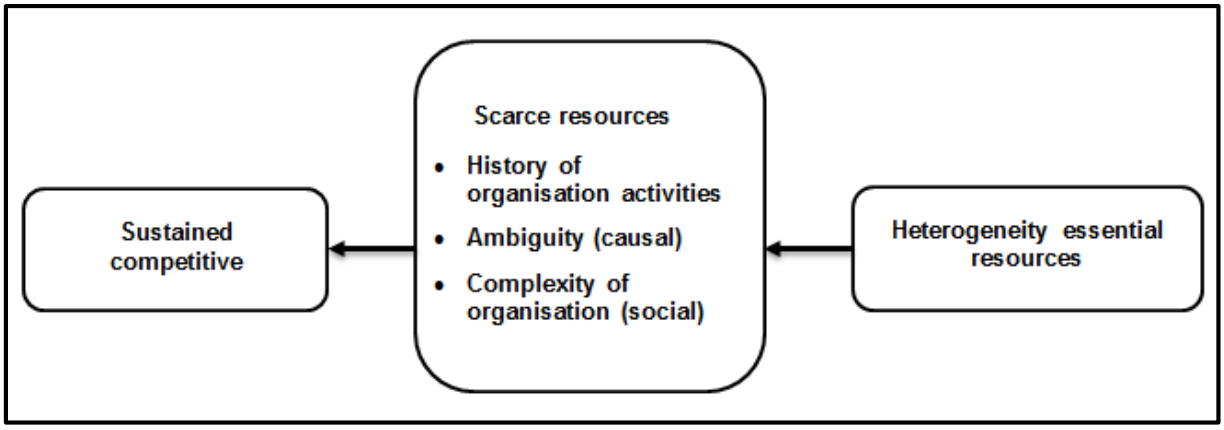

Figure 2.7: Conceptual Model of Resource-Based Theory
(Source: Shahmansouri et al., 2013:3)

2.8.3 Theory of Dynamic Capabilities

The emphasis of the Theory on Dynamic Capabilities is on the process of adapting to environmental conditions and strategy. Through a new combination of resources, organisations make changes within the business environment to achieve present and future needs of the organisation (Mudalige, 2015). This dynamic capability has two aspects; the first refers to the shifting characteristic of the environment and the second to the key role of strategic management. Dynamic capability is concerned with appropriately adapting, integrating and re-configuring internal and external organisational skills, resources and functional competencies towards a changing environment (Lin & Wu, 2014).

An organisational approach is derived from studies in the field of organisational theory. Patterns of organisational behaviour affect the creation and development of new knowledge due to environmental changes.

A strategic approach is based on patterns of dynamic potential causes and distinguishing features which are categorised on three levels: where i) processes, ii) positions, and iii) paths are organised. Capabilities are rooted in organisational processes, but the content of these processes and the opportunities they create for the development of competitive advantage can be formed based on the internal and external assets of the organisation. In other words, competitive advantage of an organisation relies on organisational processes that are formed through operational paths and available resources. The order of organisational processes, methods, routines and current performance involves taking advantage of existing resources such as current technology, intellectual property and networking between the suppliers, customers and partners of organisations.

A technological approach emphasises the ability of individuals within the organisation to use new technologies.

An evolutionary approach is the combination of the three previous approaches; it uses dynamic capability associated with typical methods and modifies existing procedures. Related procedures performed to modify the existing procedures cause differentiation within all the procedures. In other words, this approach of dynamic capabilities initiates possibility in response to the changing strategic environment, which increasingly leads to the effectiveness and promotion of dynamic capabilities.

2.8.4 Knowledge-Based Theory

Knowledge-Based Theory ensures the existence of opportunities to pursue new ideas in the environment. The theory also ensures continued growth as compared with competitors, inspires responses to changes in the organisational environment, and leads to better performance. It is necessary to have control over the reliance on assets and intangible resources such as organisational knowledge, physical resources and finances for sustainable competitive advantage (Shahmansouri *et al*., 2013). Knowledge is considered a key input in the integration and distribution of skills, which leads to sustainable competitive advantage. This approach is illustrated in Figure 2.8 below. The framework shows that organisational assets and capabilities based on knowledge are directly related to the strategy employed by the organisation, which directly and indirectly has a significant impact on the organisation's competitive advantage.

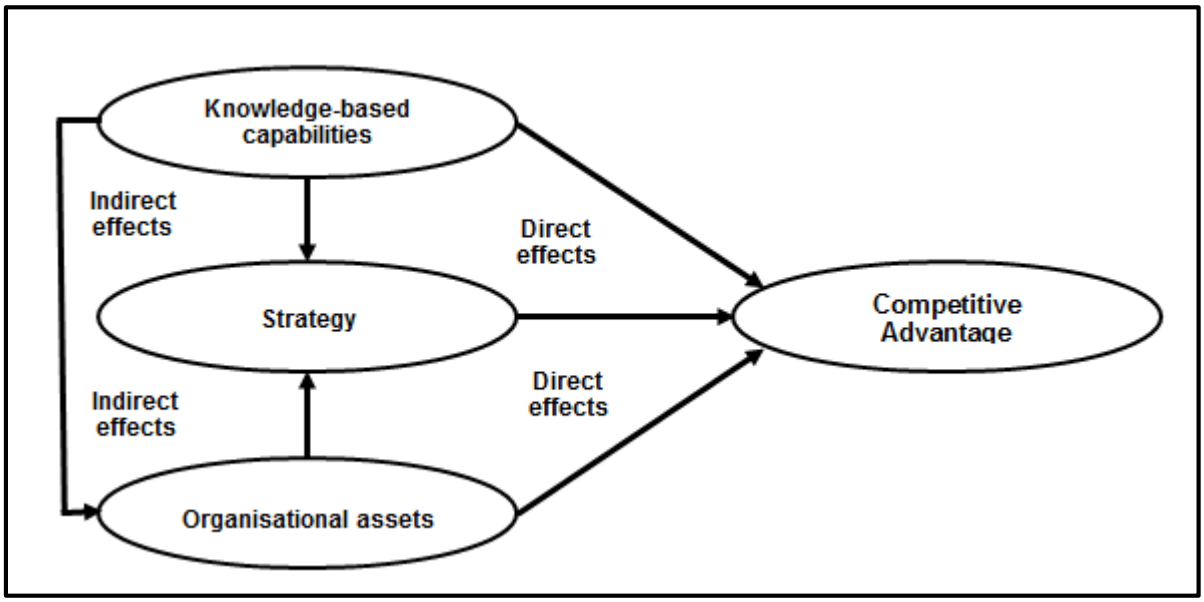

Figure 2.8: Conceptual Framework for Competitive Advantage
(Source: Shahmansouri et al., 2013:5)

Table 2.4: Summary of competitive advantage theories

Technology-based industries		
Competitive advantage	**Features**	**Methods**
The Theory of Industrial Organisation	This microeconomic point of view theory corresponds with the features of the basic elements of industry structure which in turn correspond with market characteristics.	This theory uses a product-centric view which consists of industry structures.
Resource-Based Theory	Resources are seen as key to superior firm performance and enable a firm to gain and sustain a competitive advantage.	This theory uses core competencies of the organisation to find sources of competitive advantage, relying on tangible and intangible resources.
Dynamic Capabilities Theory	This theory is based on the ability of an organisation to adapt adequately to changes which can have an impact on its functionality.	This method is grounded on the ability of a firm to integrate, build and reconfigure internal and external competencies to address a rapid changing environment.
Knowledge-Based Theory	This theory considers knowledge as the most important strategic resource in the organisation.	This theory postulates that organisational capabilities and strategic assets correspond to a product-oriented approach and knowledge-based method.

2.9 Research theoretical framework

According to Shahmansouri *et al*. (2013), the Knowledge-Based Theory relies on assets and intangible resources such as organisational knowledge and physical and financial resources for the sustainable development of competitive capabilities. Knowledge is considered a key input in the integration and distribution of skills and leads to a sustainable competitive advantage. The above statement translates that the knowledge, skills, behaviours and attitudes of FSP managers/owners contribute strongly to the personal effectiveness of IS implementation and use to create a competitive advantage. In this approach, two sources—organisational assets and capabilities based on knowledge—are directly related to the strategy which directly or indirectly has a significant impact on the organisation's competitive advantage. The situation suggests that the expression of a particular competency within FSPs depends on the managers/owners applying and integrating their knowledge to leverage IS/IT potential, which in turn enables progressive change to acquire a business advantage and respond to rapid changes in the business environment.

Organisational assets include unique resources such as the skills set and knowledge of FSPs managers/owners for successful deployment. Appropriate IS management is needed to operate new processes and systems that will unlock business value. These processes lead to the creation or development of a sustainable competitive advantage. Sometimes the performance of resources has a direct effect on organisational strategy, which has an indirect effect on competitive

advantage. The knowledge acquisition, creation, recoding and transmission ability of FSP managers/owners will eventually convert into organisational knowledge. This process leads to modernisation as well as continuous and effective implementation and use of IS to improve the business performance of other organisational assets. The effective exploitation of IS uses results from the direct acquisition of IS knowledge capabilities, strategy and organisation assets, which ultimately leads directly to a competitive advantage in the business.

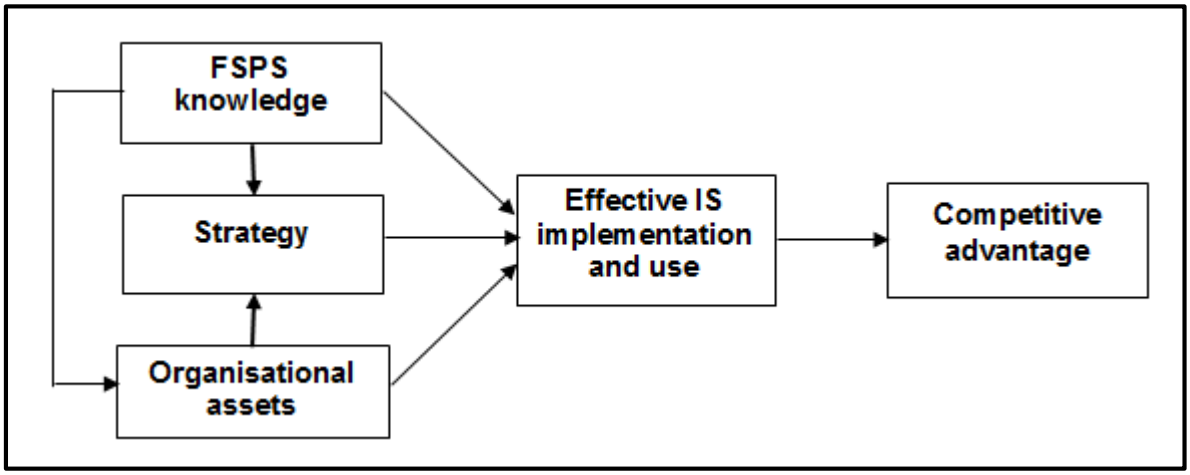

Figure 2.9: Research Conceptual Framework
(Adapted from Shahmansouri et al., 2013:5)

2.10 Summary

This chapter introduced the state of SMMEs in South Africa, their impact on the economy, issues affecting their growth, and the effective application of IS in SMMEs. The impact of IS adoption on the successful implementation and use of IS has been mentioned. The effective application of IS, concepts of competitive advantage in business to create a competitive advantage, governance and contribution of FSPs to the economy, and theories of competitive advantage were also presented. Finally, the research theoretical framework underpinning the research was given.

The next chapter discusses the research design and methodology.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

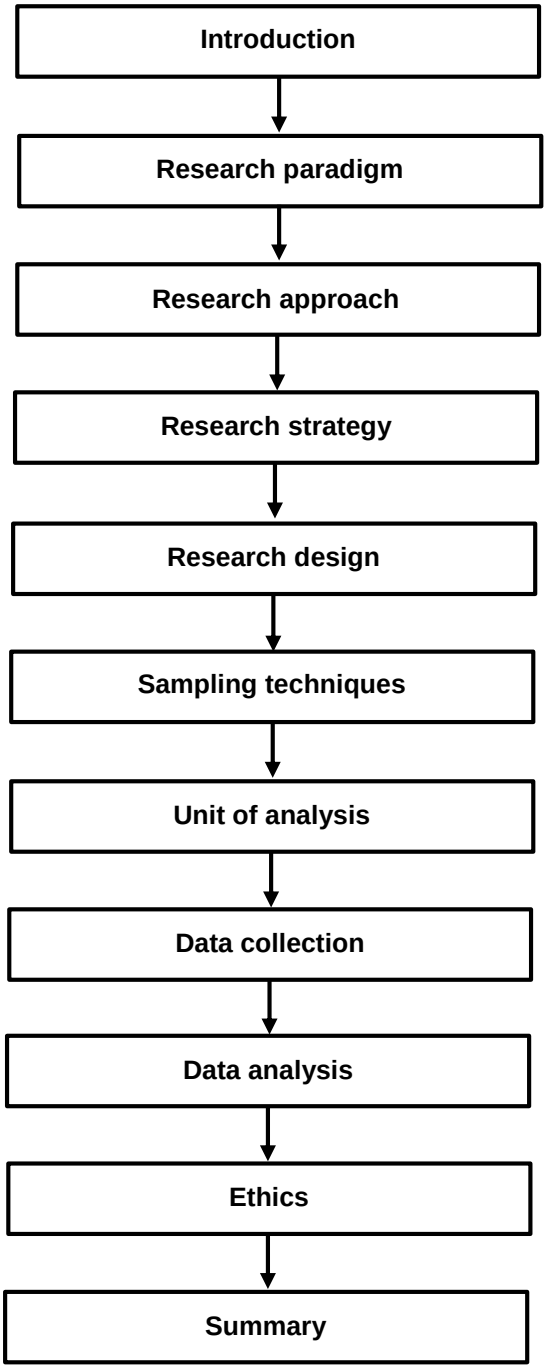

Figure 3.1: Graphical representation of Chapter Three

3.1 Introduction

In this chapter, the research, philosophy, paradigm, approach, design, strategy, methods, unit of analysis, and sampling techniques are presented. This is followed by a description of the data collection, ethical considerations and summary.

Research is an inquiry, examination, investigation or experimentation aimed at discovering and interpreting facts. It enables us to learn new things, find new things, broaden our horizon, and advance our subject matter knowledge (Pettigrew & McKechnie, 2001). The steps involved in the research process start with defining a problem statement, formulating the research question and sub-questions, and establishing the objectives of the enquiry to select an appropriate methodology to carry out the research.

A research methodology, according to Quinlan (2011), is guided by the research focus, research question or statement, and the type of data required for the research. Research design is the logical sequence that connects the empirical data to a study's initial research question and ultimately to its conclusion (Yin, 2003). This research employed a qualitative design using a multiple case study. Multiple case studies are used for research in various circumstances to contribute to the knowledge of individuals, social and political environments, groups, organisations, and related phenomena (Yin, 2003). Rule and John (2011) affirm that a multiple case study can be used for a variety of purposes to develop an understanding of a particular instance by providing a description of similar cases in a particular context. A multiple case study is also used to explore general problems or issues within a limited and focused setting. Simons (2009) elaborates on multiple case studies, describing it as an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, institution, programme or system in a real life context. Therefore, the aim of a case study in research is to create an in-depth understanding of a specific topic, programme, institution or system to create knowledge and inform professional practice and civil or community action. The research design employs a qualitative multiple case study in the course of this research.

3.1.1 Contextual analysis

The aim of the contextual analysis is to provide an understanding of the research context. Information and technology implementation and use in the organisation remains a source of concern within information systems research and practice (Venkatesh & Davis, 2000). Despite the significant advancement in technological innovation in hardware and software capabilities for organisational operations, the disconcerting problems of underutilised systems still continue. Therefore, understanding and creating conditions under which information systems are embraced by employees and used in organisations, remains a high priority research focus. In industries such as the financial services sector where the product is already digitalised—or is being increasingly digitalised—the existence of a business depends essentially on the effective application of IS. Thus, commercial organisations are progressively looking towards the innovative application of technology to provide them with a source of competitive advantage.

3.1.2 Research philosophy

In order to understand the different approaches related to qualitative research, it is necessary to have an understanding of the philosophical debates and views underpinning social research (Joubish, Khurram, Ahmed, Fatima & Haider, 2011). The disparities in worldviews and paradigms underling objectivity and subjectivity are the reflection of the dissimilarity of conception about the nature of reality (ontology) and knowledge (epistemology) (Murthy & Bhojanna, 2010). Quinlan (2011) explains that epistemology relates to our understanding of knowledge, how it is obtained, and the value we ascribe to the knowledge created. The interpretivist paradigm interprets the worldview through an individual's unique interpretation where everyone constructs their own realities (Quinlan, 2011). This research is based on the interpretivist paradigm, which allows the study to explore and understand the challenge SMMEs are faced with. The challenges hindering SMMEs from capitalising on the competitive advantage IS can generate for their business is captured from the view point of the participating managers/owners.

3.1.3 Ontology

To illustrate the concept of reality in research philosophy, Gruber (1995) describes ontology as an explicit specification of conceptualisation; the term 'ontology' emanated from philosophy, where ontology is said to be a systematic account of existence. According to Brewster and O'Hara (2007), ontology is concerned with the nature of reality and what there is to know about the world. The authors explain further that the fundamental question ontology poses is whether or not there is a

social reality that exists independently of human conceptions and interpretations, or whether there is a shared or multiple view of social reality in a specific context.

In essence, Guarino (1995) argues that social science has been shaped by two overarching ontological positions in relation to issues of realism and idealism. Realism is based on the idea that there is an external reality which exists independently of people's beliefs about, or the understanding of, nature. Thus, there is no difference between the way the world is and the meaning and interpretation of the world held by individuals. On the other hand, idealism views reality as fundamentally mind dependent; it is therefore only comprehensible through the human mind and socially constructed meanings, and no reality exists independently of these social constructs.

3.1.4 Epistemology

Myers and Avison (2002) explain that all research, whether quantitative or qualitative, is based on underlying assumptions about what constitutes valid research and which research methods are appropriate. Therefore, in order to conduct or evaluate qualitative research, it is important to know what these assumptions are. Epistemology, according to Myers and Newman (2007), refers to the assumptions about knowledge and how it can be obtained. Richardson (1996) suggests three distinct epistemological categories: positivist, interpretivist and critical realist. Stating further, the author argues that these three research epistemologies are philosophically distinct in the practice of social research. The three philosophical perspectives are described in Figure 3.2 which shows the underlying philosophical assumptions in social research as described by Myers (1997).

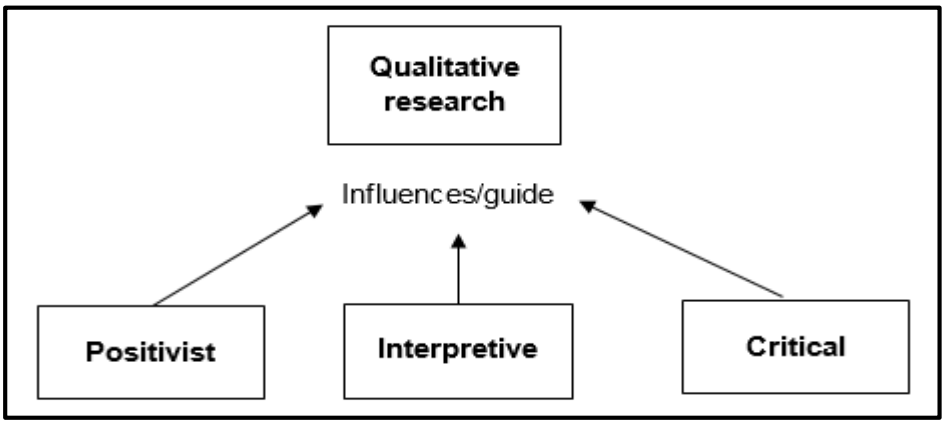

Figure 3.2: Underlying philosophical assumptions
(Source: Myers, 1997:4)

Numerous key issues dominate epistemological debate in social research; the first is related to the way in which knowledge is best acquired. Scheurich and Young (1997) hold the view that knowledge is based on induction known as a “bottom-up” approach through which patterns are derived from observations of the world. The process involves using evidence as the starting point of a conclusion, where evidence is collected first and then knowledge and theories are built from the evidence. In contrast, Truex, Holmström and Keil (2006) argue that knowledge is acquired through a deductive approach and view knowledge acquisition as a “top-bottom” approach whereby logically derived propositions or hypotheses are tested against empirical observations. The deductive approach use evidence to support a conclusion, where hypotheses are developed first and evidence is then collected to confirm or reject it.

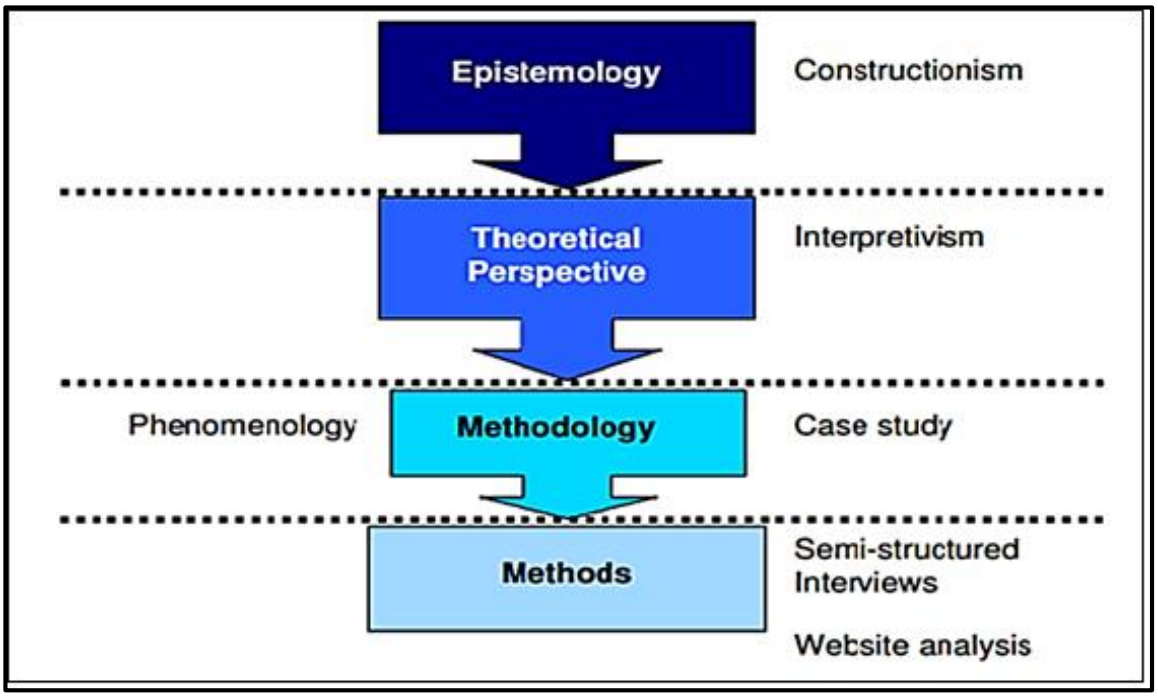

Figure 3.3: Research main Stage
(Source: Crotty, 2007:04)

3.2 Research paradigm

A paradigm is made up of components such as ontology, epistemology, methodology and methods (Joubish *et al.,* 2011). To illustrate further, Scotland (2012) posits that every paradigm is based upon its own ontological and epistemological assumptions. Different paradigms inherently contain differing ontological and epistemological views; therefore, these paradigms have differing assumptions of reality and knowledge underpinning each approach.

Positivism: The positivist perception is that reality is stable and can be observed and described from an objective point of view without interference from the phenomenon under study (Brewster & O'Hara, 2007). The positivists contend that phenomena should be isolated and observations repeatable (Richardson, 1996). This approach often involves the manipulation of reality with variations in only a single independent variable so as to identify regularities and form a relationship between some of the constituent elements of the social world. Predictions can be made on the basis of previously observed and explained realities and their inter-relationships. Gregor (2006) states that some of the difficulties experienced in IS research (i.e. the apparent inconsistency of results) might be attributed to the inappropriateness of the positivist paradigm for the domain, and some variables or constituents of reality might have been previously considered as unmeasurable under the positivist paradigm.

Interpretivism: The interpretivist view of reality is that it does not exist independently; it is based on the interpretation of people, with internalised experience through social interaction and interpretations by actors (Pettigrew & McKechnie, 2001). The interpretivists contend that only through the subjective interpretation of and intervention in reality can that reality be fully understood. The study of phenomena in their natural environment is a key aspect of the interpretivist philosophy, together with the acknowledgement that scientists cannot avoid affecting the phenomena they study (Goldkuhl, 2004). Interpretivists perceive that there may be many realities, but maintain that these interpretations are in themselves a part of the scientific knowledge they are pursuing. IS research can be classified as interpretive if it is assumed that knowledge of reality is gained only through social constructs such as language, consciousness, shared meanings, documents, tools and other artefacts (Klein & Myers, 1999). The authors also state that interpretive research does not predefine dependent and independent variables but focuses on the complexity of human sense making as the situation emerges and attempts to understand phenomena through the meaning people assign to them.

Critical realism: Critical realists believe the world is differentiated and stratified, consisting not only of events but objects—including structures—which have powers and liabilities capable of generating events. These structures may be present everywhere in the social world and to a large extent in the natural world, and they do not generate regular patterns of events (Easton, 2010). The author further states that social phenomena such as actions, texts and institutions are dependent concepts, and we not only have to explain their production and material effects, but

also understand, read and interpret them. The interpretation starts from the researcher's own frame of meaning, but notwithstanding, they exist regardless of the researcher's interpretation of them. Social science must be critical of its social objects. In order to explain and understand social phenomena, we have to evaluate the social order critically (Myers & Klein, 2011).

3.2.1 Interpretive research

Walsham (1993) declares that interpretive researchers start out with the assumption that access to reality (given or socially constructed) occurs only through social constructions such as language, consciousness and shared meanings. Interpretive studies generally attempt to understand phenomena through the meanings people assign to them. An interpretive method of research in information systems is aimed at producing an understanding of the context of IS as well as the process whereby IS influences and is influenced by the context (Pettigrew & McKechnie, 2001). In this study, the context of the research is FSPs' implementation and use of IS capabilities to enhance their competitiveness in the market. Klein and Myers (1999) prescribe six principles in line within interpretive research to guide researchers in their study. Table 3.1 below highlights the summary of principles for interpretive field research.

Table 3.1: Summary of principles for interpretive field research
(Source: Klein & Myers, 1999)

Principles of Interpretive field research	Explanations
The fundamental principle of the hermeneutics circle	This principle suggests that all human understanding is achieved by iterating between the interdependent meaning of parts and the whole that they form.
The principle of contextualisation	Requires critical reflection of the social and historical background of the research setting so that the intended audience can see how the current situation under investigation emerged.
The principle of interaction between researchers and subjects	Requires critical reflection on how the research materials or data were socially constructed through the interaction between the researchers and participants.
The principle of abstraction and generalisation	Requires relating the idiographic details revealed by the data interpretation through the application of principles to the theoretical, general concepts that describe the nature of human understanding and social action.
the principle of dialogical reasoning	Requires sensitivity to possible contradictions between the theoretical perceptions guiding the research design and actual findings ("the story which the data tell") with subsequent cycles of revision.
The principle of multiple interpretations	Requires sensitivity to possible differences in interpretations among the participants as are typically express in multiple narratives or stories of the same sequences of events being studied.

The principles of multiple interpretations require the research to examine the influences social context has on the subject being studied by seeking out and documenting multiple viewpoints along with the reasons (Klein and Myers, 1999). A semi-structured questionnaire allows the exploration and investigation of challenges being faced by FSP managers/owners to enable capitalisation of the competitive advantages of IS utilisation. The analysis of reasons may include seeking to understand conflicts relating to power, economics or values. Furthermore, the researcher should confront the contradictions potentially inherent to multiple viewpoints and revise his/her understanding accordingly (Gregor, 2006).

3.3 Research approach

Saunders *et al*. (2009) state that an inductive approach expands our understanding of the meanings humans attach to events. Inductive reasoning starts with a small observation or question and works its way to a theory by examining the related issues (Zikmund *et al*., 2010). In other words, inductive reasoning is the process of recognising or observing patterns and drawing a conclusion in the process. The researcher is not simply justifying anything that backs the research study, but rather describes the patterns that link to the conclusions (Mitchell, 2007). The author further states that an inductive approach involves the development of a theory from the information required during the study and then a possible theory for further research is proposed.

3.4 Research strategy

3.4.1 Case study research

Case study research is the most common qualitative method used in information systems research (Alavi & Carlson, 1992; Orlikowski & Baroudi, 1991). Even though there are numerous definitions of a case study, Yin (2003:13) defines the scope of a case study as follows:

> "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident".

According to Walsham (1995), a case study research method is particularly well suited for IS research since the object of the discipline is the study of information systems in the organisation, with interest shifted to organisations rather than technical issues. Hartley (2004:332), in its description of case study, states the following:

> *"*Case study research is a heterogeneous activity covering a range of research methods and techniques, (from single case study through carefully matched pairs up to multiple cases), varied levels of analysis (individuals, groups, organisations, organisational fields or social policies), and differing lengths and levels of involvement in organisational functioning".

The research study conducted a multiple case study to address FSP managers/owners' understanding of the individual cases.

3.5 Research design

Research design is the logical sequence that connects the empirical data to a study's initial research question and ultimately to its conclusion (Yin, 2003). The research study adopted a multiple case study design within an exploratory qualitative study as it sought to uncover the challenges faced by FSP managers/ owners when capitalising on the competitive advantages IS can generate for their businesses. The multiple case studies provided a basis for familiarity with the phenomenon by taking an in-depth view into individual cases and generating data that provide insight into the nature of the individual and collective cases (Rule & John, 2011). The units of analysis were FSP managers/owners in managerial positions that have a fair amount of IS knowledge.

Yin (2003:21-28) identifies five components of research design as being specifically important for case study research:

- Research questions
- Its propositions, if any
- Its unit(s) of analysis
- The logical linking of the data to the propositions
- The criteria for interpreting the findings

3.5.1 Qualitative research

Silverman (2005) describes qualitative research as a method covering an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning of natural occurring phenomena in the social world. According Myers (1997), qualitative research involves the use of qualitative data such as interviews, documents and participant observation to understand and explain social phenomena.

Furthermore, the author mentions that as the focus of information systems research shifts from technological to managerial and organisational issues, qualitative research methods become increasingly useful. Qualitative research may or may not

be interpretive, depending on the underlying philosophical assumptions of the researcher. Qualitative research can either follow a positivist, interpretivist or critical paradigm. Qualitative research was developed in the social sciences to enable researchers to study social and cultural phenomena. It is designed to help understand peoples' social cultural contexts within which they live.

3.6 Sampling techniques

Quinlan (2011) states that in a research study, the population of the study is too big to work with and is subsequently beyond the scope of the researcher. For this research, a non-probability purposive sampling selection technique was used to produce a sample that can be considered representative of the population. Zikmund *et al*. (2010) indicate that non-probability sampling does not attempt to select randomly from the population of interest; rather, a subjective method is used to decide which elements are included in the sample.

The criteria for selection were based on a sector and sub-sector of SMMEs operating within the financial services sector. FSPs were chosen using a convenience sampling method. Convenience sampling is the situation whereby elements are drawn from a sub-population according to its accessibility and research interests. FSPs are well organised businesses in South Africa and belong to organisations that are easily accessible and willing to work with universities for research purposes.

3.7 Unit of analysis

Mitchell (2007) explains that the unit of analysis is the major entity under investigation in a research study. The unit of analysis for this study was selected subject to a non-probability sampling approach. According to Yin (2003), the unit of analysis is related to the fundamental problem of defining what the "case" is. The 17 SMMEs selected are all financial service providers (FSPs) who were chosen on the assumption that they make use of some form of ICT in their business. Monette *et al*. (2014) emphasise that an important element in the research process is the decision regarding the unit of analysis to be investigated. The same authors further describe the unit of analysis as specific objects or elements which we wish to describe or explain the characteristics of and collect data from.

According to Monette *et al*. (2014), there are five types of units of analysis commonly used in social science research, namely individuals, groups, organisations, programs and social artefacts. In each case study in this research, the managers/owners were the units of observation being studied from the selected

SMMEs in the city of Cape Town. Information of each relevant case was individually collected and collectively analysed in the multiple case study.

3.8 Data collection

As the research falls under the interpretivist paradigm which is concerned with understanding the meaning participants ascribe to various phenomena, the empirical data will be collected using qualitative data collection tools. An interview is a qualitative data tool providing the opportunity to collect rich quality data and enable the researcher to probe answers from the participants to explain or build their responses. Interviews can help gather valid and reliable data relevant to the research questions and objectives (Saunders *et al*. 2009).

The interview questions were used to explore responses of significance to the research topic. Data were also collected through a literature review to gather as much information as possible from previous research relevant to the case study. The literature review enabled the research to answer the research questions with greater flexibility. The study also used literature to collect relevant information and constructs which formed the theoretical foundation of the research. Semi-structure interviews were conducted to collect data from the different individual cases. The questions were used to investigate and identify the challenges preventing SMMEs from achieving a competitive advantage through their use of IS.

3.8.1 Yin principles of data collection

According to Yin (2009), there are three principles of data collection in case study research which deal with the problems of establishing the validity of constructs and the reliability of case study evidence. Table 3.2 below shows the application of the principles of data collection for this research study.

Table 3.2: Principle of data collection
(Source: Yin, 2009:13)

Principle	Applicability
Use of multiple sources of evidence	Document analysis, interviews and literature analysis are the sources of evidence used in this research.
Create a case study database	Data were captured into databases, interviews were recorded, and literature was captured using a referencing tool.
Maintain a chain of evidence	Data were captured from academic databases with references citing previous research from related studies.

3.8.2 Primary data

Myers (1997) explains that a primary data source is unpublished data collected by the researcher directly from individuals, organisations, communities, or by way of measurement, experiment and other methods. For this research study, an interview was conducted to collect data from 17 financial service advisers in and around the area of the Western Cape Peninsula, extending to the northern and southern suburbs.

3.8.3 Secondary data

This type of data is obtained through a literature review and other forms of historical and published documents. These documents are in the form of archives, reports, publications, research expositions, regulations from industry, and governmental institutions. The secondary data were useful to support the validity of the primary data in clarifying certain information pertinent to the challenges managers/owners faced when capitalising on the IS to create a competitive advantage within their businesses.

3.8.4 Interviews

According to DiGicco-Bloom and Crabtree (2006), interviews are among the most popular methods of collecting qualitative data. The strategy of conducting qualitative interviews emerged from the perspective of diverse disciplines, resulting in a wide variation of interview approaches. A qualitative interview is categorised in many ways, with various contemporary descriptions loosely differentiating qualitative interviews as unstructured, semi-structure and structured. A one-on-one interview was conducted with the selected participants to collect data from 17 SMMEs. The research study used a semi-structure interview which provides the opportunity to probe answers from the interviewees to explain or build on their responses. Zikmund *et al*. (2010) explain that a semi-structure interview is developed in written form to ask respondents for short essay-like responses to specific open-ended questions. The researcher asking the questions is known as the interviewer and has the role of initiating a conversation and prompting and directing the interview, while the participant is the interviewee who responds to the interview questions posed by the interviewer.

A qualitative interview is one of the most important data collecting tools in qualitative research (Myers & Newman, 2007). The author prescribes seven guidelines for qualitative interviewing. The model assumes that the interview is a drama, and therefore interviewers should prepare themselves with that in mind, in other words,

they should aim for an excellent performance. Figure 3.4 represents a guideline for the qualitative research interview followed during this research.

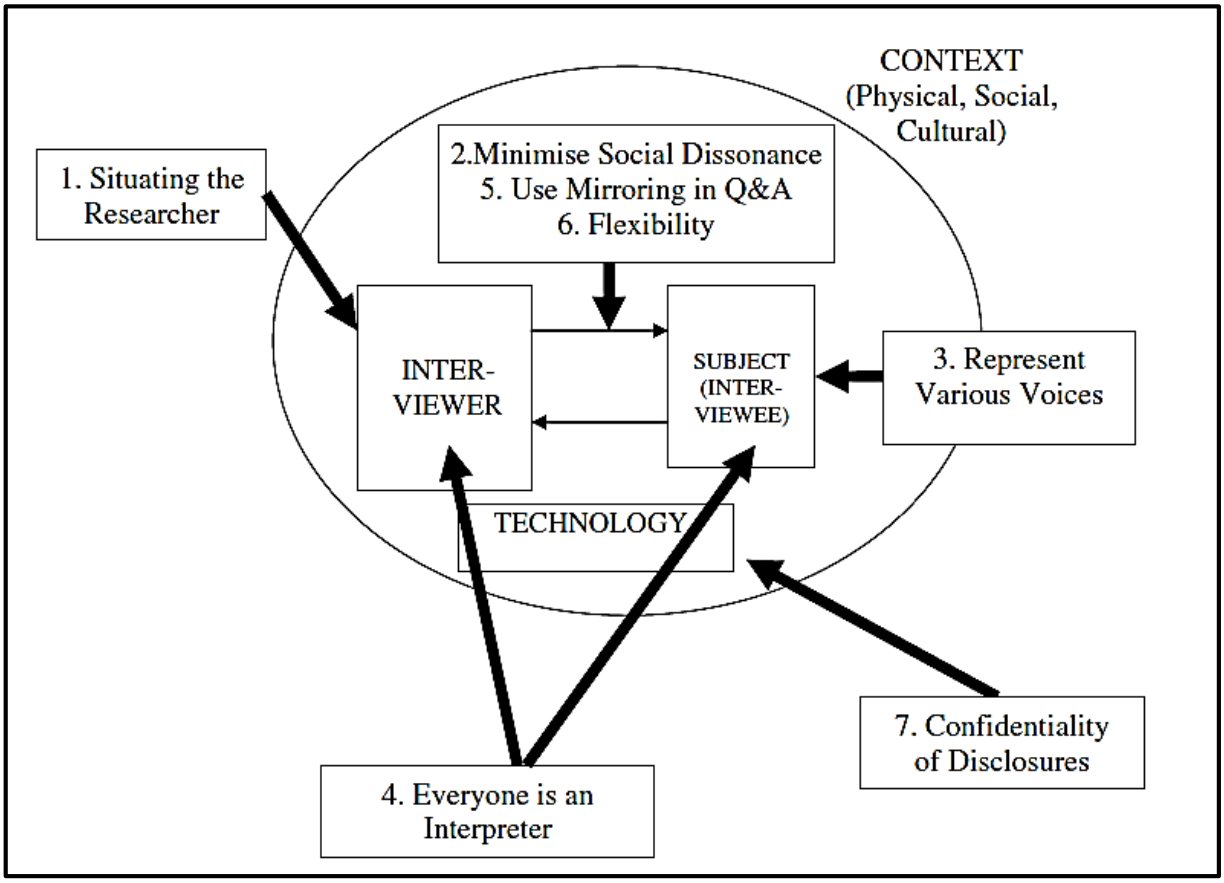

Figure 3.4: Guidelines for a qualitative research Interview
(Source: Myers & Newman, 2007:16)

Situating the researcher as actor: It is important for role players to "situate" themselves before the interview commences. The interview is a social encounter and the data gathered from the interview are idiographic. The interviewer should situate both him/herself as well as the interviewee. This information is useful in the write up so that readers can assess the validity of the findings.

Minimise social dissonance: As the interview is a social encoder, it is important to minimise social dissonance, i.e. anything that may lead to the interviewee feeling uncomfortable. This is generally thought of as a way to improve the quality of disclosure. It also involves trying to manage first impressions, dressing appropriately, and using the appropriate language.

Represent various "voices": In qualitative research it is usually necessary to interview a variety of people within an organisation. This works on the assumption of

multiple voices, where the idea is to attempt not forcing one voice to emerge (because all respondents are not the same).

Everyone is an interpreter: The guideline recognises that subjects are creative interpreters. Interviewing is usually an artificial/rare event for most subjects. This means that the interview leads to creating and reading one or more texts, starting with the transcription of interviews into text format.

Use mirroring in questions and answers: Mirroring is taking the words and phrases the subjects use in constructing a subsequent question or comment. This allows the researcher to focus on the subject's world and use their language rather than imposing yours. The idea is for the interviewees to describe and explain their world in their own words. The role of the interviewer involves listening, prompting, encouraging and directing the conversation.

Flexibility: Semi-structured and unstructured interviews make use of an incomplete script and require improvisation and openness. The interviewer should be prepared to explore interesting lines of research and look for surprises.

Confidentiality of disclosure: it is important for the researchers to keep transcripts, records and the technology used for interviews confidential and secure. It is sometimes advisable to provide early feedback to subjects and organisations and check with them on factual matters if needed.

3.9 Data analysis

Quinlan (2011) describes qualitative data as non-numeric data that can take any form or state to articulate feelings, beliefs, opinions and perspectives. In qualitative data analysis, interviews, transcripts, narratives and other text based data can be analysed in a number of different ways. The method used for data analysis where data are broken down into smaller pieces by working from codes to themes (thematic analysis), is common in case study research (Rule & John, 2011). Coding is a process of selecting labels and assigning them to different parts of data to organise the data into similar groups and categories (Rule & John, 2011). The interview audio recordings were transcribed for each individual case and a code was assigned to label the different keywords and phrases that emerged from each of the cases. Further analysis of the different categories showed patterns of similar meanings emerging (relationships between the patterns has led to the development of themes).

Yin (2009) posits that for a diverse set of evidence, there is need to develop own analytic strategies. One set of analytical manipulation has been comprehensively described and summarised by Miles and Huberman (1994) and includes the following:

- Putting information into different arrays
- Making a matrix of categories and placing the evidence within such categories
- Creating data display—flowcharts and other graphics—to examine the data
- Tabulating the frequency of different events that occurred while collecting data
- Examining the complexity of such tabulations and their relationships by calculating second–order numbers such as means and variances
- Placing information in chronological order or using another temporal scheme

To ascertain rigour in the analysis of the data, the principle of hermeneutics was applied to understand and interpret meanings ascribed to the findings of the participants. According to Klein and Myers (1999), hermeneutics is a major branch of interpretive philosophy. As a philosophical approach to human understanding, hermeneutics provides a philosophical grounding for interpretivism as a mode of analysis; it suggests a way of understanding textual data. Bleicher (1980) explains that hermeneutics can be treated as both an underlying philosophy and a specific mode of analysis. Hermeneutics is primarily concerned with the meaning of text or text-analogue. (An example: text-analogue is a configuration the researcher comes to understand through oral or written text.)

Hermeneutics is primarily concerned with the meaning of text. To illustrate further, Taylor and Bogdan (1984) argue that interpretation in hermeneutics is an attempt to make clear and to make sense of an object of study. This object must therefore be a text or a text-analogue, which in some way is confusing, incomplete, cloudy, unclear and seemingly contradictory in one way or another. The interpretation aims to bring to light an underlying coherence or sense. The idea of hermeneutic circles refers to the dialectic between the understanding of text as a whole and the interpretation of its parts in which descriptions are guided by anticipated explanations (Gadamer, 1976); therefore, in interpretive research in IS, one of the key tasks becomes one of seeking meaning in context.

3.10 Ethics

Ethical considerations were duly observed; a letter of consent was presented to participants, and their signature was obtained before data were collected. The relevant ethical clearance was obtained from the Research Ethics Committee at the Cape Peninsula University of Technology (CPUT) before conducting the research. The autonomy and self-respect of the human dignity of all respondents during the data collection process was observed. A 'permission of informed consent' form was signed by both researcher and participants before interviews were conducted. The consent letter informed and assured participants that no harm would come to them by participating in the study. Participants were also informed of their right to confidentiality as well as their right not to respond to any questions if they choose to. The research opened new avenues for the participants to obtain knowledge on the competitive advantage IS can offer their business through reduced cost and increased productivity of business operations. All participants who were selected as respondents participated voluntarily and out of their own free will; all were informed of their right to withdraw at any time during the research.

3.11 Summary

A subjective view was taken to better understand and make sense of the environment the participants operate in so that a meaningful conclusion can be drawn. The research study adopted an inductive approach which involves the development of a theory from the information gathered during the study and then proposing this as a possible theory for further research.

The case study was adopted as a strategy for the research study. The units of analysis were the managers/owners of the different selected financial service providers in the Cape Town Metropolitan of South Africa. In depth semi-structured interviews and literature analysis were used to collect data.

The data analysis data was done breaking down the data into smaller related pieces and working from coding to categorise similar relationships into themes using thematic analysis. Codes were assigned to label the different parts of the data organised into similar group and categories while using hermeneutics to interpret and determine the meaning of the data analysed. Ethical considerations were observed before data collection commenced.

The next chapter introduces the analysis and findings of the research study.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

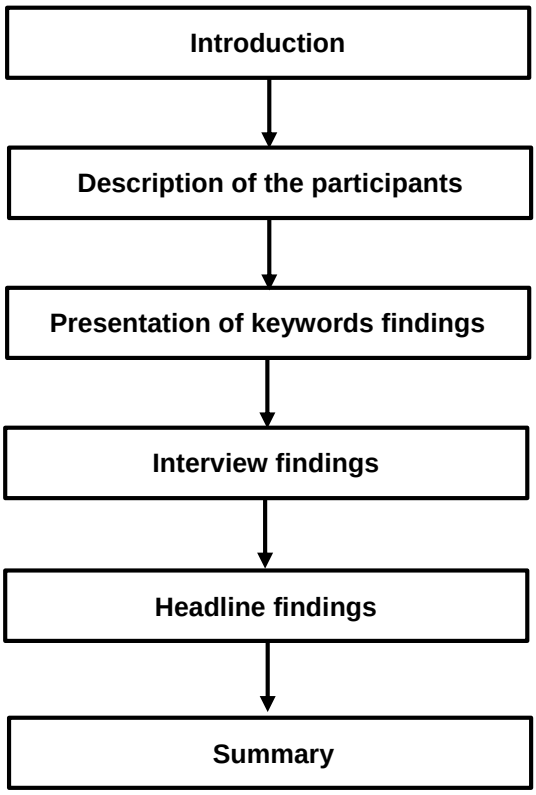

Figure 6.1: Graphical presentation of Chapter Four

4.1 Introduction

This chapter presents the data collected from the interviews and the description of the participants followed by the presentation of keyword findings developed during the data analysis using thematic analysis. From the keywords there emerged seven categories linked to the research questions and sub-questions.

The aim of the research is to explore the factors preventing SMMEs from utilising information systems to create a competitive advantage for their business. The potential of FSPs creating sustainable growth within their industry and eventually leveraging the usage of IS to create a competitive advantage, is investigated. The study was conducted to propose guidelines that may assist SMME managers/owners in making informed decisions on the implementation and use of IS in their business. The research problem are stated as follows: SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy. In an attempt to answer the research problem, the following research questions were asked:

RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?

RQ2: How can SMMEs use IS to create a competitive advantage in their business?

Figure 4.2 shows the geographic area of the study where the interviews were conducted—Durbanville, Kraaifontein, Pinelands, Cape Town CBD, Athlone, Bellville, Century City, Tygerberg, Newlands and Milnerton.

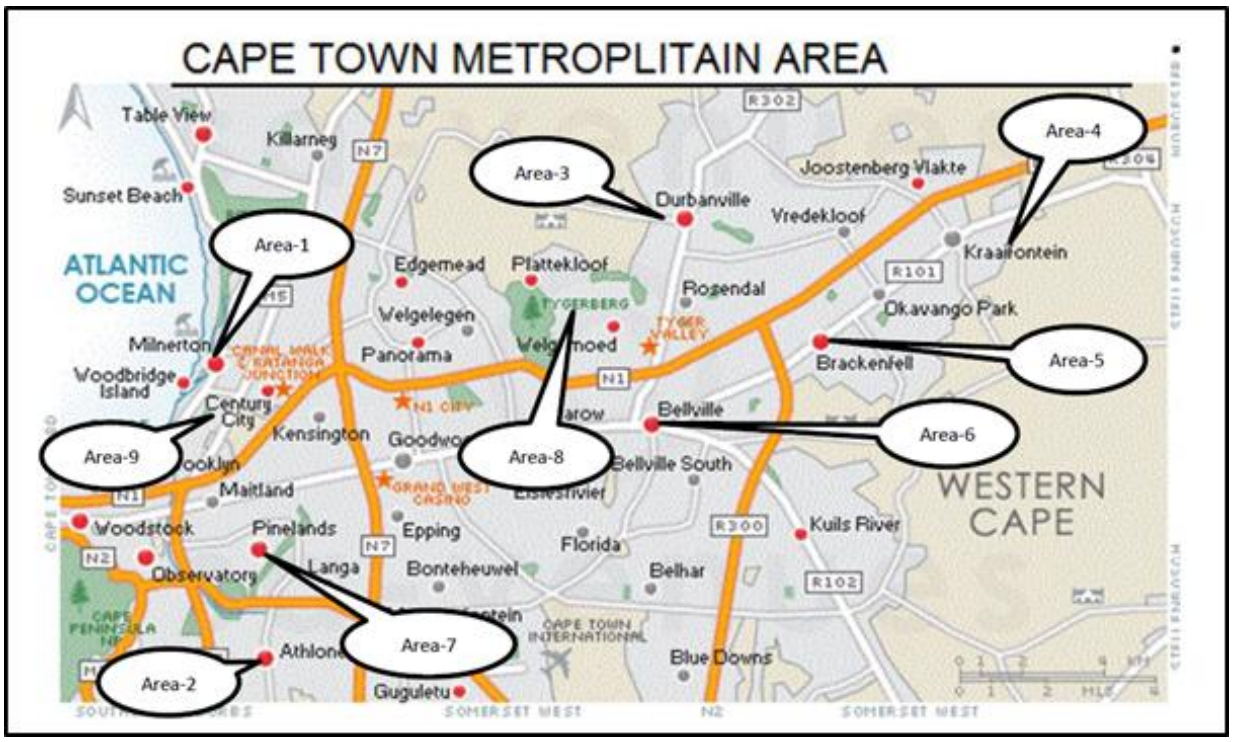

Figure 6.2: The geographical areas within the Cape Peninsula and surrounding areas where interviews were conducted

4.2 Description of the participants

The cases investigated in the research study are SMMEs in the financial services industry. The sample cases under investigation are constituted of 17 independent financial service providers (FSPs) in the insurance industry. The selection of the study cases was subject to non-probability sampling using the convenience technique. The units of observation within the research case studies are made up of individuals—business owners and managers which include IT and IS managers. An interview guide in a semi-structured format was used to conduct the interviews.

Table 6.1: Units of analysis used in the research study

Cases	Industry	Scope of business operations	Number of employees
1	Financial Services Provider	South Africa	60 to 80
2	Financial Services Provider	Cape Town	05 to 10
3	Financial Services Provider	Cape Town	05 to 10
4	Financial Services Provider	Cape Town	05 to 10
5	Financial Services Provider	Western Cape	10 to 25
6	Financial Services Provider	Cape Town	05 to 10
7	Financial Services Provider	Cape Town	05 to 10
8	Financial Services Provider	Cape Town	05 to 10
9	Financial Services Provider	Cape Town	05 to 10
10	Financial Services Provider	Western Cape	10 to 25
11	Financial Services Provider	Western Cape	10 to 25
12	Financial Services Provider	Western Cape	10 to 25
13	Financial Services Provider	Western Cape	10 to 25
14	Financial Services Provider	Western Cape	10 to 25
15	Financial Services Provider	Western Cape	10 to 25
16	Financial Services Provider	Cape Town	5 to 10
17	Financial Services Provider	Western Cape	10 to 25

Case 1: Provides advice and guidance to financial advisors and specialises in compliance services, licensing, information refining and training. The company employs 60 to 80 people.

Case 2: Provides advice to individuals with short term personal life insurance and commercial insurance. They have a portfolio with Sanlam, one of South Africa's largest insurance companies, and also offer their own insurance policies. The company operates in the northern suburbs of Cape Town with 5 to 10 employees.

Case 3: Is a financial and intermediary service provider that delivers advice mostly to individual clients regarding insurance risk management and investment. The key focus is on small and medium businesses and the financial needs of these businesses in terms of investment. The company operates in the northern suburbs of Cape Town and employs 10 to 25 persons.

Case 4: The Company is a financial service provider that has been independent since 2009. The owner has 35 years of experience in the industry. He has contracts with all financial institutions and offers investment advice to individuals. The

company operates in the central metropolitan area of Cape Town and employs 5 to 10 persons.

Cases 5 and 6: These two companies are financial service providers, specialising in financial planning advice. The businesses concentrate on individuals with the aim to provide investment, retirement, savings, provident fund and disability cover. The companies operate in the northern suburbs of Cape Town and employ 5 to 10 persons each.

Cases 7 and 8: These financial service providers offer financial planning, investment, and short and long term insurance. The businesses operate within the Cape Peninsula and its immediate environment. The two companies both employ 5 to10 persons each.

Case 9: Specialises in insurance, tax, state planning, investment, retirement, short term insurance and medical aid. Most of the clients are medical doctors. The company operates within the Cape Town surrounding areas and northern suburbs. The FSP employs 5 to 10 persons.

Case 10: Is a financial generalist providing services in life insurance, disability insurance, medical aid, pension funds, provident funds, and investments. Other services provided include retirement planning, voluntary investment, and very importantly, income protection. The owner has been in the business for over 30 years. The company operates in the central business district of the Cape Town area and employs 10 to 25 persons.

Cases 11 and 12: The two financial planning companies address personal financial needs with emphasis on investment, short term insurance, medical aid, group benefits, life disability and retirement advice. The companies operate in the southern suburbs of Cape Town and employ 10 to 25 persons each.

Cases 13, 14 and 15: These three financial planning companies focus on portfolio management, investment, short term insurance, medical aid and life cover rescue. The companies operate in the central business district of Cape Town with each employing 10 to 25 persons.

Case 16: Focuses on portfolio analysis which includes risk analysis for life, death, disability and dreaded disease as well as retirement planning, state planning and the investment market. The company operates in the Stellenbosch area and its

immediate surroundings of the Western Cape Peninsula. The company employs 5 to 10 persons.

Case 17: Deals with funds management, loans, and educational funds for clients. The company also develops software solutions for the investment retail market. It operates in the northern suburbs of Cape Town and employs 10 to 25 persons.

4.3 Presentation of keywords findings

Semi-structured interview questionnaire guidelines were used to determine the interviewees' understanding of the benefit, advantage and implication of IS implementation and use to create a competitive advantage in their business. All the interviews were conducted at the workplace of the participants. The interview sessions were all recorded using software called *Audacity* and which runs on a laptop. A written letter of consent as well as verbal permission was granted before the interviews took place. A total of 10 questions were asked and the average time duration of each interview was about 45 minutes to 1 hour following the interview guide.

The phrases were summarised, keywords were identified from these summaries, and relevant data were ascertained to provide answers to the research questions. A total of 12 keywords were identified from the phrases and used to summarise the data. The emerged keywords and categories from the different organisations interviewed are presented Table 4.2 and Table 4.3 respectively.

Table 6.2: Keyword summary - number of companies and frequency of keywords using specific keywords

Keywords	Number of companies using keywords	Frequency of keywords used
Customers referral	17	97
Capability to deploy IS	10	89
Technology change	14	87
Complexity of administration structure	10	85
Adaptability to legislation	16	72
Knowledge and skills	10	70
Communication	14	53
Cost of compliance	13	36
Change management	9	12
Internet availability	5	10
Cost of ICT	7	8
Resistance to new technology change	3	5

Table 6.3: Categories

Categories	Number of companies using keywords	Frequency of keywords used
Clients referral	17	97
Lack of skills and capability	10	89
Technology change	14	87
Change management	09	45
Resistance to change	13	55
Cost of compliance	13	85
Complex administrative structure	10	85

4.4 Interview findings

The answers of the interviews are presented in this section within the context of the research problem and in relation to the research questions and sub-questions.

RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?

RSQ1.1: What competitive advantages can IS create for SMMEs?

RSQ1.2: What are the current factors preventing SMMEs from creating a competitive advantage through IS?

RQ2: How can SMMEs use IS to create a competitive advantage in their business?

RSQ2.1: What frameworks and guidelines exist to assist SMMEs in utilising IS to create a competitive advantage?

RSQ2.2: How can SMMEs deploy IS strategies in their business to gain a competitive advantage?

The interview questions (see Appendix C) and corresponding answers in relation to RQ1, RSQ1.1 and RSQ1.2 are discussed next.

4.4.1 Research Question 1

RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?

4.4.1.1 Research sub-question 1.1

RSQ1.1: What competitive advantages can IS create for SMMEs?

Interview question 1 (S.Q.1.1.1): What is your definition of IS?

Interviewees were asked to define their views of IS. Their responses revealed the following description of IS which is presented below:

- Systems providing information about the business
- Intelligent data to obtain information

From the responses of the interviewees it is evident that there are no definite definitions of IS. Two thirds of the FSPs view IS as any system in the form of software or hardware that enables them to access relevant information instantaneously and has the ability to understand and communicate with clients. Their views are represented by the definition of Interviewee 2 who said: "IS is a software or hardware tool that allows us to gather information, store information and communicate with clients*"* (Appendix D: 121). The interviewees explained that IS allows them to make decisions, in other words, it enables them to manipulate data to obtain information for decision making. IS further allows them to navigate certain avenues to obtain specific goals and warns them about particular areas of the business that is not doing well; it also detects other salient aspects in the business process.

Three (3) out of 17 interviewees confirmed that they have little knowledge of what IS means and therefore obtain support from peers in terms of technical issues. Interviewee 4's statement summarises this view of IS: "I'm not that IT literate; I relied a lot on others, I have an outside support in terms of technical issues" (Appendix D: 121).

The majority of the interviewees (11 out of 17) have sufficient knowledge on IS and could define IS. Three of the interviewees however stated they do not understand what IS means—they are not knowledgeable on IS and cannot give a concise definition of IS.

Finding 1: FSPs have different understandings and definitions of IS, while some cannot define IS or its use

Finding 2: Some FSPs are not computer literate and often rely on outsourcing IT systems

Interview question 2 (S.Q.1.1.2): What is your definition of competitive advantage?

Interviewees were asked to define competitive advantage. Their responses imply that competitive advantage has the following features:

- To be a first mover in the market
- Being one step ahead of somebody else in the market
- The fact that we are doing something different from most of our peers

The majority of the interviewees (12 out of 17) have a fair knowledgeable of the concept of competitive advantage. FSP managers/owners who have knowledge on this concept share the view with Interviewee 7 who define competitive advantage as "to be one of the first movers in the market at the price my competitors typically can't compete [with]" (Appendix D: 122). Some particularly knowledgeable interviewees see competitive advantage as being one step ahead of competitors or offering something different than their peers. They also perceive competitive advantage as something that gives them an edge, whether through sales or quality products.

Five (5) of the responses however suggest that the definition of competitive advantage holds different meanings for different interviewees. For example, Interviewee 1 defines competitive advantage as "knowledge, brains, reasonable hard work and integrity" (Appendix D: 121). Some of the interviewees believe experience can be a competitive advantage in their business sector as showing honesty and integrity leads to customer trust (interviewees 2, 4, 6 and 10). On the other hand, both Interviewee 3 and Interviewee 5 claim they do not have knowledge of competitive advantage and what it means for their business.

Finding 3: The majority of FSPs are knowledgeable on what competitive advantage means and the value it can create for their business

Finding 4: Some FSPs have a different understanding of what competitive advantage is and what it can do for a business

Interview question 3 (S.Q.1.1.3): Do you need competitive advantage in your business?

Interview question 2 shows that two (2) of the interviewees do not know or understand the concept of competitive advantage and what it can do for their business. After explaining the concept to them, the interviewees were further probed on the need FSP have for competitive advantage in their business.

The responses were as follows: Out of seventeen (17) interviewees, fourteen (14) said they definitely need some sort of competitive advantage in their business. Interviewee 12 is quoted as saying: “You always need competitive advantage; you need to find ways to be more competitive than your competitors” (Appendix D: 122). But the burden of compliance and the changing financial world erode the competitive advantage differences some FSPs may have. Interviewee 9 made the claim that “we are not looking at where the world is going from [a] financial planning point of view, but from [a] compliance point of view” (Appendix D: 122). This view leads to a notion of reluctance and not having the zeal to create a competitive advantage in order to expand their business.

Interviewee 3 acknowledges the notion of the statement above, but he sees competitive advantage as part of the business owner’s personality, implying honesty and integrity when dealing with clients. Interviewee 3 indicated that “…I was brought up with integrity and honesty, and I think that is a big competitive advantage in FSPs” (Appendix D: 122). Interviewee 6 is convinced that to become better, more effective, and more efficient in their business, they need to use technology optimally: “My competitive advantage is that I don’t have a secretary and I have the technology” (Appendix D: 122).

For Interviewee 3 the use of technology brings reduced cost that would otherwise have been spent on employing a secretary. According to Interviewee 6, their business is not necessarily in a competitive space with other brokers. His view is shared with Interviewee 1: “I think in FSPs there is less competition so if you compared to a corporate where they fighting over a market segment”. Interviewee 17 needs a competitive advantage but is afraid to change the way he is conducting business: “I do need competitive advantage but the initial process which is a referral system that is the way we conduct our business within the industry” (Appendix D: 123).

Finding 5: Some FSPs managers/owners view themselves as not necessarily in a competitive environment with other FSPs, therefore the use or implementation of technology is optional

Finding 6: The impression of trust and honesty through referral when dealing with customers is highly regarded by FSPs as a competitive advantage

Finding 7: The burden of time spent on compliance introduced by the governing body reduces the competitive advantage FSPs can have

Interview question 4 (S.Q.1.1.4): What is the competitive advantage of your competitors?

Interviewees were asked about the competitive advantage of their competitors and responded as follows: Interviewee1 indicated that the competitive advantage of their competitors is the way they set up their practices in terms of administrative structure. The advantages include the way their competitors communicate with clients and how often the communication takes place. Interviewee 2 shares a similar opinion, saying: “It could be the way my competitors communicate with clients and the regularity of communication to clients that could be a competitive advantage” (Appendix D: 134). Interviewees 16 and 17 opined that the competitive advantage of their competitors is based on existing business with their clients and therefore they can get referrals from their existing client base. This view is represented by Interviewee 17, saying that “the competitive advantage of my competitor can be their large client base and their relations or referral connection into the market” (Appendix D: 135).

Interviewees 4, 5, 6 and 7 hold views based on cost and resources other competitors might have, and what they cannot afford. Their view is shared by Interviewee 13: “They might have things that we can't afford and don't have” (Appendix D: 135). Interviewee 10 identified the competitive advantage of his competitors as legislation change, price, speed to market, and how competitors provide service to their customers. FSPs with good CRM systems have an advantage over FSPs with limited or no ability to analyse the needs of their customers. Interviewee 9 stated that *“*I think it is someone that got a better CRM system than what we have” *(*Appendix D: 134). Interviewees 11, 13, 14 and 15 found the question challenging to answer due to a lack of knowledge on the competitive advantage of their competitors and could therefore not comment.

Finding 8: FSPs view referrals and relations with existing clients as a competitive advantage over their competitors

Finding 9: FSPs believe having good administrative structures coupled with affordable IS cost can be a competitive advantage over competitors

Finding 10: The ability to regularly communicate with the client base and using a good CRM system gives a competitive advantage over competitors

Finding 11: The adaptability to react to legislation changes, price and speed to market provides a competitive advantage over competitors

Interview question 5 (S.Q.1.2.1): What type of IS do you make use of to run your business?

From the answers provided by the participants it is clear that the information systems used by FSPs to run their business are basic application programs which include Microsoft Excel and specialised applications such as Spotlight and Workpool. The responses are presented as follows: The majority of interviewees (14 out of 17) use application programs such as Spotlight, Workpool, Astute, Xplain, Pastel and atWORK as CRM database to run the operations of their business. These applications are important and used as operational tool to run the businesses processes of FSPs. Microsoft Outlook is used particularly to communicate via email with clients. The views of the interviewees are represented by Interviewee 3 stating that “we can't operate without applications such as Workpool, Spotlight and the internet, because everything is there” (Appendix D: 123). The interviewees also mentioned that they use the application programs indicated above to manage their clients’ details, policy information, drawing up of quotes, and for financial planning.

Some FSPs—including Case 5—develop their own in-house client management applications and make use of applications such as Pastel for financial planning. Interviewee 6 indicated that they use web-based programs provided by the governing body to store information and communicate with clients. Interviewee 7 stated that their applications are used to run queries on client policies and client details: “We use FSPs web-based program[s] to store information to communicate with clients” (Appendix D: 124). Interviewee 14 uses advance applications such as atWORK and Astute; these are cloud-based solutions for the financial services industry focusing on CRM solutions, practice management, compliance management and financial planning tools. Interviewee 13 declared that despite having the required applications, the business is still using paper-based processes:

"We have Workpool and also Spotlight, but up till now we are a paper-based process" (Appendix D: 124).

Finding 12: FSPs use specialised industry developed applications such as Workpool, Spotlight, Astute, atWORK, Pastel and Spreadsheet for business administration

Finding 13: FSPs make use of off-the-shelf industry developed applications to support business activities such as communicating with clients

Finding 14: Despite having standard applications and tools, some FSPs still use paper-based processes

Interview question 6 (S.Q.1.2.2): What is the purpose of your IS in terms of running your business?

FSPs indicated that there are various reasons and purposes for using information systems in terms of how their businesses operate. The responses to interview question 6 are presented as follows: It is clear that cases 2, 5, 6, 7, 8, 9, 16 and 17 use IS for record keeping, administration, communication with clients, and especially conducting queries on clients for marketing purposes. Their reasons for using information systems are shared by Interviewee 6: "We segment our clients so that we can pull out and search on certain clients and communicate to them" (Appendix D: 124). FSPs also make use of IS to present proposals to clients, analysing portfolios, and plan and manage the expectations of clients.

Cases 13 and 15 use information systems particularly to bring awareness to business practices and uncover areas in need of improvement. Their view is presented by this statement of Interviewee 11: "IS tells me which areas need development; if I get complaints in a particular environment I need to look at working around that" (Appendix D: 125). The purpose of IS also extends to the administration of compliance imposed by the governing body and for contacting clients. This enables FSPs to set up processes and tasks which are repeatable and reliable. Interviewee 1 shares a similar view but with a different application in mind: "We use IS for other reasons; see our client[s] who have problem[s] with claims—we use it a lot for productivity" (Appendix D: 124). This enables the business to capitalise on IS to improve productivity and solve problems with claims arising from the business practice. Most importantly, the impressions of seven interviewees (10, 12, 14, 3, 16 and 17) indicate that FSPs are seeking software that can integrate their business processes and assist them in being compliant to legislation.

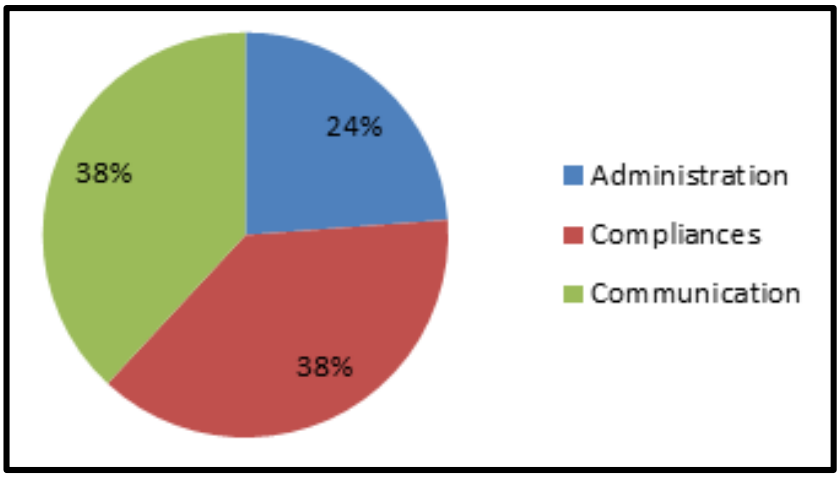

Figure 6.3: The purpose of IS within FSPs

Finding 15: FSPs use IS for administration purposes, record keeping, communication and claims management

Finding 16: FSPs utilise IS to conduct queries for marketing and search for clients to communicate with

Finding 17: The aim of FSP IS extends to the administration of financial services products, and more importantly, the need for a system that can be more cost effective and assist with being more productive

Interview question 7 (S.Q.1.2.3): Does the regulator's role influence the competitive advantage of your business?

The regulatory body—called the Financial Services Board (FSB)—is the most important governance body in the financial industry. This Board implements and polices all financial industry acts passed by the South African parliament. The interviewees were asked if the FSB impacts on the competitive advantage of their businesses. Their responses are indicated below:

Interviewees 7, 9, 10 and 14 pointed out that the regulator is not appropriately applying the law within the industry to create an environment for competitive advantage. Interviewee 7: "Regulation is a good thing to have but not all brokers apply fully to the regulation, allowing competitors who are not supposed to be in the market" (Appendix D: 125). Cases 2, 3 and 8 are of the opinion that the regulator enforces documentation which does not assist financial service advisers but only adding cost to their already high cost structure. Interviewee 5 declared that "unfortunately there are also some regulative requirements that increase the cost to

your business fees" (Appendix D: 125). Interviewee 6 also thinks that some of the legislation may force smaller companies to merge with big companies.

Five Interviewees (9, 12, 15, 16 and 17) do not see compliance playing a role in creating a competitive advantage; rather, it adds to the workload through time consuming tasks which prevent them from focusing on business growth. Interviewee 9's view is representative of the above opinions: "The regulation obligation thrown upon us is one of our biggest drawbacks" (Appendix D: 125). Interviewee 13 believes that regulation has reduced the amount of time allocated to client services in order to create a competitive advantage: "The regulator actually compels the amount of people that I can give advice to" (Appendix D: 125).

Finding 18: The regulator enforces too many documentation and administration rules on FSPs, which constitutes a challenge to advisors in terms of creating a competitive advantage

Finding 19: Requirements enforced by the regulator increase administrative costs of FSP business processes

Finding 20: FSPs feel the compliance requirements will force their business to be merged with big corporate entities

Finding 21: FSPs believe the business in their industry should be properly regulated by the FSB in order to create a competitive advantage environment

4.4.1.2 Research sub-question 1.2

RSQ1.2: What are the current factors preventing SMMEs from creating a competitive advantage through IS?

Interview question 8 (S.Q.1.2.4): What hinders your business from creating a competitive advantage?

The interviewees were asked to state what hinders their businesses from creating competitive advantage. Their responses to the interview question are presented below:

Interviewees 1 and 8 stated that the legislation requirements enforced by the governing body have increased workload and the amount of time FSPs can attend to their clients. Their views are represented by this statement of Interviewee 9: "The

amount of time the customer has to sign something, to go through one piece of paper for me to deliver one service reduces our productivity because of more paper work*"* (Appendix D: 127). *C*ompliance to this regulation has made achieving competitive advantage difficult for certain FSPs. Interviewee 16 stated: "One has to do with time for legislative requirement so that is a prohibition". Interviewee 6 agrees that there is very little they can do in terms of a creating competitive advantage due to the fact that they are heavily regulated with more of their time going into compliance issues. Interviewee 2 said: "I don't want to expand my business, I still battle to see some clients on a regular basis, which is a big problem" (Appendix D: 127). Interviewee 3 shares a similar view: "The regulator I think is taking away your actual time reducing your productivity because of more paperwork".

Interviewees 11 and 12 believe that developing an IT system for financial services advisory might cost them a huge amount of money and they cannot afford it. They also believe the ease of use of IT solutions coupled with affordable cost will enable them to be innovative in terms of achieving competitive advantage. This view is shared by Interviewee 13: "If I can have my business processes integrated with technology software to assist me to be able to adopt documents stuff and interact with clients—just that as a start—then the second step will be looking at our product*"*. (Appendix D: 127). Interviewees 5, 7, 10, 14 and 15 also assert that IT is a crucial aspect in the financial services sector, but advisors who do not realise this can give them an advantage in business. Interviewee 17 commented that *"*I need a system that can analyse our client needs and can manage all the application form[s] for each process in the office*"* (Appendix D: 127). FSPs having access to technology and software that support documentation and interacting with clients to create a better understanding of these clients could create a competitive advantage. Interviewee 4 is of the same view as Interviewees 10 and 15: "It is unthinkable for me [in] our industry to work without technology". Interviewee 8 claims that it is difficult to find an IS system suitable for their business practice type which can enhance their creativity in terms of strategy development in the current market and being compliant with regulation.

Finding 22: FSPs are concerned with the compliance requirement which is time consuming and impacts on their service delivery, thus making competitive advantage difficult for advisors

Finding 23: Some FSPs do not want to expand on the idea of a competitive advantage because they are struggling to cope effectively with compliance issues

Finding 24: FSPs lack effective ICT solutions which could enable them creating a competitive advantage in their business

Finding 25: Some FSPs exclude the idea of creating a competitive advantage due to the compliance requirement and paper work involved in the process

Finding 26: FSPs believe an easy to use IS solution coupled with affordability can enable them creating a competitive advantage

Finding 27: FSPs are struggling to find the right affordable IT solution for their business in order to be competitive

Interview question 9 (S.Q.1.2.5): Do you make use of social media in your business?

Interviewee 11 believes social media is something they are trying to develop interest in. Examples of social media include Facebook, Twitter, LinkedIn, Instagram and other forms of social media platforms. Interviewee 11 acknowledges that the use of social media can develop into competitive advantage, but it largely depends on the target market. Interviewee 17 said that “we are expanding on developing social media platform[s], but it depends on the market you are focused on” (Appendix D: 127). Interviewee 15 is of the opinion that social media is important to their business, but, due to stringent regulatory requirements, they do not have the time resources to explore these platforms. Their concern is captured by the view of Interviewee 10: “I am on Facebook, I am on Twitter and I have very little time to visit the site because of satisfying the regulator” (Appendix D: 127). FSPs do realise the potential of social media in their business but lack knowledge on how to capitalise on these tools to complement their business. Interviewee 1 however capitalises on the existence of social media platforms to create awareness and sending information: “We use social media primarily because we believe it is a very inexpensive way to create market awareness and passing information”.

Some of the interviewees (including 2, 3, 4, 6 and 7) do not make use of social media in their businesses; they view the platform as unsuitable for the age of clients. Their opinion is voiced by Interviewee 12 who said that “social media is interesting, but it's for the younger generation” (Appendix D: 127). The interviewees pointed out that their clients are between the ages of 55 and 85, and this group of people are not interested in social media. In terms of sharing information on investment portfolios, the older generation of clients make use of websites but still prefer face-

to-face communication. Interviewee 5 is investigating ways in which to employ a person who can administer and actively manage social media platforms, but lacks capital and the knowhow to carry it out.

Finding 28: FSPs do not have the resources and time to manage social media as a tool for their business or to create a competitive advantage

Finding 29: FSP managers/owners lack adequate knowledge on how social media can be of competitive advantage in their businesses

Finding 30: FSPs acknowledge that the use of social media can be a source of competitive advantage but lack funding for human capital to administer the platform

Interview question 10 (S.Q.1.2.6): How does your IS strategy allow your business to achieve optimum business objectives in the market?

Interviewees 7, 10 and 14 are of the opinion that it is not necessary for them to penetrate the market because their business is of a different type and their target market and strategy consist of a different type of approach. This view is shared by Interviewee 15: “I suppose it has got to do with the design of our network which is the referral system” (Appendix D: 127). Interviewee 13 is not certain about how to implement IS strategy within the business and stated that “I’m not sure but I do not have an IS implementation strategy but I carry a lot of information on paper”. Interviewee 8 perceives this as a personal ability issue where individuals are capable of deploying IS capability within the business and reap the benefits of a competitive advantage. Interviewee 8 further mentioned that “it is a knowledge ability issue of how much you should and can actually get out of the IS implementing and use in the business”. Interviewee 17 is interested in pursuing the idea of using a CRM system in their business as technology is becoming central to business: “CRM is important but you need to know how to use it and you need to actively use it” (Appendix D: 128). This view is shared by Interviewee 4: “There is lot of software that you can use but it's not always compatible with the way we run our business” (Appendix D: 129). Interviewee 5 acknowledges that although they are slowly moving away from the paper-based system, they are not serious about developing an IS strategy for the business: “We are definitely moving away from the paper base environment, but never really take it to the next level”.

Interviewees 9 and 16 indicated that they are striving to get an IT system or perform more activities using cloud computing in the future to make them more effective and

efficient, and enable them to become more innovative. They share the same view point as Interviewee 3 who stated: “We are seeking [an] IT system and looking at using cloud computing. We want to extend but I would like to pursue that more and more in the future” (Appendix D: 128). Interviewees 2 and 11 indicated that they do not have formalised business operations; whatever idea comes up and is viewed as useful, is implemented. As a result of operating the business arbitrarily, they do not have a market or research strategy and still depend solely on referrals from the existing client base.

Finding 31: FSPs do not have a formalised IS strategy that will enable them to adequately manage their business processes in order to create a competitive advantage

Finding 32: The strategy adopted by FSPs is to keep FSPs compliant and operational but not to create a competitive advantage

Finding 33: FSPs are seeking IT systems that will assist them in remaining compliant and enable them to create a competitive advantage

Finding 34: FSP managers/owners lack the necessary skills capability to strategically deploy IS and enhance their business

Interview question 11 (S.Q.1.2.7): Do you face challenges when deploying IS strategy in your business?

From the answers provided by the interviewees, there is no clear IS strategy which allows FSPs to develop in the market and become more effective and efficient within a competitive environment. FSPs face a number of challenged in terms of deploying IS strategy in their business. The common characteristics found are as follows:

- Lack of aligning business strategy and IS strategy
- The biggest challenge is the legislation and the changing environment
- Resistance to IT systems by employees
- Lack of knowledge and capability to deploy IS strategy

According to Interviewee 16, their business is no longer independent and their biggest challenge is the changing nature of the legislation which affects their competitiveness. Interviewee 16 claims that “the biggest challenge at this point is the legislation and the changing environment” (Appendix D: 129). As a result of legislation requirements and compliance, there is an increase in the cost of maintaining the business to remain compliant. The number of regulations has

increased and it is time consuming for FSPs to adhere to these regulations. Interviewees 13, 15 and 17 are of the view that the main challenge in deploying IS strategy is the cost involved.

Interviewee 1 opines that they do not have an IS deployment strategy embedded in their management processes within the business: “We don’t have a specific IS deployment strategy; we [are] still heavily relying on the data stored in files”. Contact with their clients is important to FSPs because they believe clients need to experience personal touch. For them, technology is to a certain extent quite limited. Interviewee 7 insists that their biggest problem is time. This time limitation is the reason they are unable to market themselves. “We are not really in the process, you must first comply and is time consuming otherwise you can't do business” (Interviewee 7). Interviewee 11 confirms the view of Interviewees 1 and 7, agreeing that FSPs understand the traditional process of doing business—the referral process—and they are comfortable with it. Interviewee 11 stated that “we operate the referral system where I get to see my clients in meeting[s] face-to-face and offer my services to them”. FSPs feel the referral system can create more credibility and an in-depth relationship with their customers, and they are more comfortable with this than using technological tools to interact with clients.

Interviewee 4 stated that “the lack of capability and technology is changing and developing all the time” (Appendix D: 128). There is also a lack of capability on the part of FSPs, and this, coupled with technology changes, causes challenges to the deployment of IS in FSPs’ businesses. Interviewee 12 revealed that their challenge is how people adapt to change. Sometimes it is difficult to implement new technology as a result of peoples’ attitude toward a new system. “The resistance to change, it took us about 8 to 11 month to convince that specific person to make use of IT system” (Interviewee 12; Appendix D: 129). Interviewee 12 also mentioned FSPs’ heavily reliance on internet usage and how slow connectivity impacts on their service delivery and productivity. This view is shared by Interviewee 10: “The challenge for all of FSPs is still the slow internet; its take time to upload documents” (Appendix D: 128). FSPs often find it difficult to scan and upload a few megabytes of documents and for customers it is wasting time.

Finding 35: FSPs are faced with the challenge of change management in terms of capability to deploy IS strategy and employees’ acceptance and use of the IT system

Finding 36: Technology changes and evolving development cause a challenge to deploy an IS strategy in FSPs

Finding 37: Slow internet connectivity is a challenge as it affects the operations and ability to interconnect the business processes

Finding 38: FSP managers/owners do not have a guideline or framework to assist them in deploying an IS strategy within their business and creating a competitive advantage

Table 6.4: Summary of findings, linked to the research questions, sub-questions and categories

Research Questions	Findings	Categories
RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?	**Finding 8:** FSPs view referrals and relations with existing clients as a competitive advantage over their competitors	Clients referral
	Finding 6: The impression of trust and honesty through referral when dealing with customers is highly regarded by FSPs as a competitive advantage	
	Finding 34: FSP managers/owners lack the necessary skills capability to strategically deploy IS and enhance their business	Lack of skills and capability
	Finding 33: FSPs are seeking IT systems that will assist them in remaining compliant and enable them to create a competitive advantage	
	Finding 31: FSPs do not have a formalised IS strategy that will enable them to adequately manage their business processes in order to create a competitive advantage	
	Finding 3: The majority of FSPs are knowledgeable on what competitive advantage means and the value it can create for their businesses	
	Finding 29: FSP managers/owners lack adequate knowledge on how social media can be of competitive advantage in their businesses	
	Finding 16: FSPs utilise IS to conduct queries for marketing and search for clients to communicate with	
	Finding 4: Some FSPs have a different understanding of what competitive advantage is and what it can do for a business	
	Finding 1: FSPs have different understandings and definitions of IS, while some cannot define IS or its use	
	Finding 2: Some FSPs are not computer literate and often rely on outsourcing IT systems	
	Finding 24: FSPs lack effective ICT solutions which could enable them creating a competitive advantage in their business	Technology change and Management
	Finding 36: Technology changes and evolving development cause a challenge to deploy an IS strategy in FSPs	
	Finding 38: FSP managers/owners do not have a guideline or framework to assist them in deploying an IS strategy within their business and creating a competitive advantage	

Research Questions	Findings	Categories
	Finding 37: Slow internet connectivity is a challenge as it affects the operations and ability to interconnect the business processes	
	Finding 28: FSPs do not have the resources and time to manage social media as a tool for their business or to create a competitive advantage	
	Finding 11: The adaptability to react to legislation changes, price and speed to market provides a competitive advantage over competitors	Change management
	Finding 32: The strategy adopted by FSPs is to keep FSPs compliant and operational but not to create a competitive advantage	
	Finding 35: FSPs are faced with the challenge of change management in terms of capability to deploy IS strategy and employees' acceptance and use of the IT system	Resistance to change
	Finding 5: Some FSPs managers/owners view themselves as not necessarily in a competitive environment with other FSPs, therefore the use or implementation of technology is optional	
	Finding 19: Requirements enforced by the regulator increase administrative costs of FSP business processes	Cost of regulatory requirement
	Finding 20: FSPs feel the compliance requirements will force their business to be merged with big corporate entities	
	Finding 23: Some FSPs do not want to expand on the idea of a competitive advantage because they are struggling to cope effectively with compliance issues	
	Finding 22: FSPs are concerned with the compliance requirement which is time consuming and impacts on their service delivery, thus making competitive advantage difficult for advisors	
	Finding 25: Some FSPs exclude the idea of creating a competitive advantage due to the compliance requirement and paper work involved in the process	
	Finding 21: FSPs believe the business in their industry should be properly regulated by the FSB in order to create a competitive advantage environment	
	Finding 30: FSPs acknowledge that the use of social media can be a source of competitive advantage but lack funding for human capital to administer the platform	
	Finding 7: The burden of time spent on compliance introduced by the governing body reduces the competitive advantage FSPs can have	
	Finding 26: FSPs believe an easy to use IS solution coupled with affordability can enable them creating a competitive advantage	Cost of ICT Solutions
	Finding 27: FSPs are struggling to find the right affordable IT solution for their business in order to be competitive	
	Finding 12: FSPs use specialised industry developed applications such as Workpool, Spotlight, Astute, atWORK, Pastel and Spreadsheet for business administration	
	Finding 9: FSPs believe having good administrative structures coupled with affordable IS cost can be a competitive advantage over competitors	Complex administrative structure

Research Questions	Findings	Categories
	Finding 10: The ability to regularly communicate with the client base and using a good CRM system gives a competitive advantage over competitors	
	Finding 17: The aim of FSP IS extends to the administration of financial services products, and more importantly, the need for a system that can be more cost effective and assist with being more productive	
	Finding 18: The regulator enforces too many documentation and administration rules on FSPs, which constitutes a challenge to advisors in terms of creating a competitive advantage	
	Finding 13: FSPs make use of off-the-shelf industry developed applications to support business activities such as communicating with clients	
	Finding 14: Despite having standard applications and tools, some FSPs still use paper-based processes	
	Finding 15: FSPs use IS for administration purposes, record keeping, communication and claims management	

4.5 Headline findings

Headline findings were developed from the findings identified during the course of the data analysis. Headlines findings make it easier to classify emerging patterns and relationships that exist between the deduced findings. It represents the summary of the findings based on the similarities of the interpretation of their meanings. Furthermore, headline findings are used to identify themes based on the similarity of inferred meanings identified through patterns observed between the findings. The headline findings for this study are indicated below.

Headline finding: The increased cost of administration and regulatory requirements imposed by the governing body

- From the responses of the interviewees it seems that many FSP managers/owners seek information systems which will best suit their business processes, enhance administrative operations, and comply with legislation. The biggest challenge faced by FSPs is the *cost of compliance.* FSP managers/owners acknowledge that regulation is a good initiative which contributes to cleaning the industry, but it is also regarded as a challenge, especially the cost of compliance within their business. This cost implication is seen as a huge drawback in terms of legislation change and time consumption, which ultimately affects competitiveness. As a result of the compliance requirement, cost is added to keeping the business compliant at the expense of marketing the business. Consequently, FSPs feel compliance

has significantly increased cost and limited time for advisors to render their services to clients, and for this reason some of the FSPs do not explore or consider the idea of implementing IS in their business to create a competitive advantage. Interviewees further indicated that the regulations imposed upon their industry take away their independence and thus constitute a barrier to the deployment of IS strategy. Some managers/owners think that being proactive in terms of implementing IS to enhance their business processes might deter them from fulfilling the legislative requirements, which might become detrimental and negatively impact their business. From a compliance point of view, there is no guidance or strategy that seeks to educate or train advisors in terms of procedures to implement IS strategy in order to enhance their customer service and product delivery.

Headline finding: Lack of personal ability coupled with technology changes and the cost of IT solutions create major challenges for FSPs managers/owners

- It is noted that a number of interviewees regard IS as software or hardware that can enable them to communicate and access information, while some interviewees confirmed they are less knowledgeable on IS and rely on peers in terms of technical issues. Findings unveiled a “lack of skills and knowledge” regarding the effective application of IS in a complex environment to maintain a long term competitive advantage. The lack of required capability on the part FSP managers/owners coupled with technology changes causes challenges for the deployment of IS in FSP businesses. Interviewees further admitted to the existence of a challenge with people adapting to change—it is sometimes difficult to implement new technology as a result of people’s attitude of towards a new system.
- This resistance might have to do with personal ability issues which could affect the capability of individuals deploying an IS strategy within the business in order to gain a competitive advantage. Notwithstanding a lack of skills and knowledge, manager/owners are focused on the idea of using CRM systems in their business because technology is becoming central to business. Interviewees indicated that *communication* is a very important aspect of their business; some show interest in social media platforms such as Facebook, Twitter, Instagram and LinkedIn. They also acknowledged that the use of social media as tool can be a source of competitive advantage, but it largely depends on the target market.

- However, the challenge is a lack capital to fund new technology software as well as a lack of knowledge and resources to manage and capitalise on ICT tools to complement their business. The development of ICT tools over a period of time to enhance business processes causes anxiety among FSP managers/owners. Findings also revealed that FSPs consider the ease of using IT solutions as important for their business with affordable IS cost making their business processes more effective and efficient. The themes below emerged from the headline findings under Theme 2.

Headline finding: Referral practice as a marketing strategy mode creates a trusted relationship system between FSPs and clients

- The responses of the interviewees show that *referral strategy* is a common marketing practice among FSP managers/owners. It creates an in-depth relationship between advisors and their clients, and interviewees feel more comfortable than using a technological tool for interaction with clients. The interviewees further indicated that being in contact with clients is important to them because they sense the need of clients to experience physical presence. Thus, for interviewees, technology is to a certain extent quite limited. The interviewees believe their target market is relatively old, ages between 70 and 85; in such an environment technology is not a major concern.

From the synthesis of data collected, data were broken down into smaller pieces through coding, labelling and assigning parts of data into similar categories and headline findings. From the summary of findings, different phrase patterns with similar meanings emerged and headline findings were identified; this has led to the development of the following themes:

- **Theme 1**: Cost of compliance
- **Theme 2**: Change management
- **Theme 3**: Skills and knowledge
- **Theme 4**: Technology change
- **Theme 5**: Cost of ICT solution
- **Theme 6**: Referral strategy

4.6 Summary

This chapter presented the interviewee responses and findings of the research study. Keywords findings and categories were identified from the findings developed. These findings were then linked to the research questions and categories in a tabulated form. Research questions and sub-questions were used as points of reference for the findings. The findings of the research study indicate that FSP managers/owners have different understandings of what IS can do for their business. However, there are some managers/owners who are not computer literate and rely on outsourcing.

FSPs indicated that they are faced with a variety of challenges, including the cost of compliance which adds to the cost of their business, change management, resistance of employees to use ICT solutions, and the development of ICT technology over time. Interviews were mostly conducted at the workplace of the interviewees. Permission was obtained to record the conversations with the interviewees.

The next chapter discusses the findings and themes where major points will be elaborated on in line with the literature.

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CHAPTER FIVE: DISCUSSION

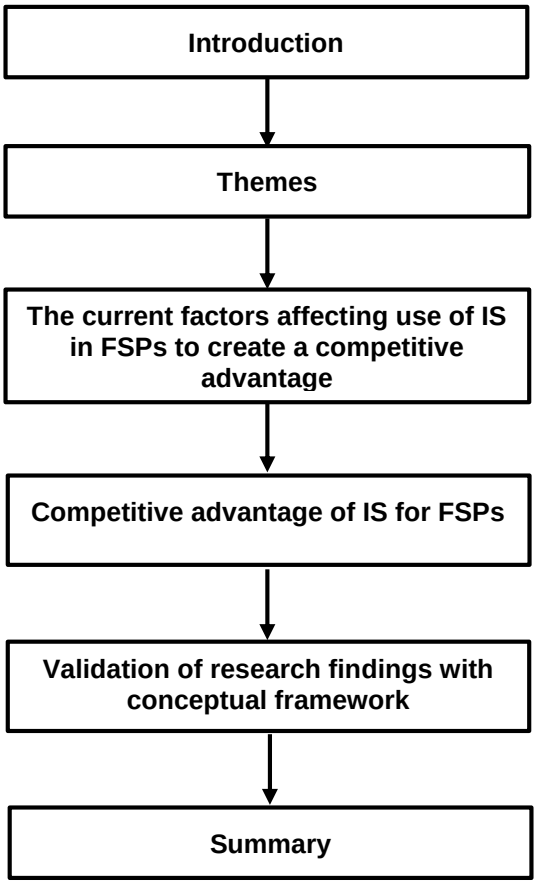

Figure 7.1: Graphical representation of Chapter Five

5.1 Introduction

The aim of the research study is to explore the challenges faced by SMMEs (financial service advisers) hindering them to capitalise on the competitive advantage IS offers the business. The study also aims to propose guidelines to assist SMMEs to capitalise on the competitive advantage IS can generate for the business.

The research problem and emergent themes are presented first. The second part discusses the findings related to the research questions. Finally, the validation of the research findings with the adopted framework is provided.

Today's business environment is becoming more uncertain than ever before due to the rapid change in products and technologies (Wang & Lee, 2014). The traditional way of handling the business environment may not be adequate for managers and owners to make successful decisions in response to today's uncertain settings (Li & Mao, 2015). Studies by Revest and Sapio (2012), Kwenda and Holden (2013), Krstajiic *et al*. (2014), and Varanasi and Prasad (2015) suggest that in order to respond to such an uncertain business environment, managers may require the implementation and use of strategic IS to control uncertain situations within their business. According to Kyobe and Namirembe (2015), the concept of competitive advantage focuses on improving product quality and features or developing new products to meet the needs and expectations of customers as well as offering products that are superior to or differ from the products of competitors. Managers therefore require a good understanding of customer needs/expectations and actions of competitors. Appropriate implementation and use of IS can support strategic actions and increase the ability to achieve a competitive advantage. By strategically utilising IS, managers/owners could gain a better understanding of their business environment and make more appropriate decisions in response to their competitors' product features, quality, technology, marketing strategies and promotions (Varanasi & Prasad, 2015). Information systems can assist business managers having a greater focus on the differentiation aspects of strategy to provide high value products that meet the needs and expectations of customers.

The research problem addressed in this study is that SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy.

RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?

RSQ1.1: What competitive advantages can IS create for SMMEs?

RSQ1.2: What are the current factors preventing SMMEs from creating a competitive advantage through IS?

RQ2: How can SMMEs use IS to create a competitive advantage in their business?

RSQ2.1: What frameworks and guidelines exist to assist SMMEs in utilising IS to create a competitive advantage?

RSQ2.2: How can SMMEs deploy IS strategies in their business to gain a competitive advantage?

5.2 Themes

Six themes are presented in the next section. These themes are: i) skills and knowledge; ii) cost of compliance; ii) cost of IT solutions; iii) referral strategies; iv) technology changes; and vi) change management.

5.2.1 Skills and knowledge

There are various factors influencing the implementation and use of IS to create a competitive advantage in FSPs. Some managers/owners acknowledge they are not computer literate and are therefore seeking advice from external consultants. The lack of required skills and knowledge coupled with technology changes is a challenge for the deployment of IS. It is also noted that the adaptation of employees to change causes challenges in implementing new technology because of peoples' attitude towards a new system. This resistance to change is often associated with the level of knowledge and skills SMME managers/owners have. This influences the ability of SMME managers/owners to deploy IS strategies within their business to gain a competitive advantage. The lack of experience (skills and knowledge) as well as not having an IS deployment strategy is deemed by the participants as a challenge and not a fact.

Makoza and Chigona (2012) emphasise that the IT knowledge capacity of SMME managers/owners is a vital component of business-IT strategy in the organisation. The authors further explain that the knowledge of managers/owners plays a key role in the implementation and use of IT innovation, therefore the adoption and use of IT is usually influenced by these business managers/owners. Mohlameane and Ruxwana (2014) confirm that the challenges related to the lack of ICT skills and knowledge of SMME managers/owners, affect the deployment of a successful IS strategy to support business activity. The challenges in terms of ICT knowledge and skills ultimately result in a negative attitude and resistance to implement new technology that can create a competitive advantage.

ICT skills and knowledge are articulated as key components necessary for people to identify and secure an advantage by conceiving an innovative strategy based on IT capability. The success of implementing such a strategy depends largely on the status of IT infrastructure and the ability of SMME managers/owners to successfully deploy appropriate resources to implement, operate and manage new processes and systems to unlock business value (Peppard *et al*., 2014). The most important objective of IS implementation and use according to ThuyUyen *et al*. (2015) is to enhance organisational survival or growth and create innovative capacity to remain competitive in business. IS implementation success is directly influenced by organisational factors, particularly top management (ThuyUyen *et al*., 2015).

5.2.2 Cost of compliance

FSP managers/owners acknowledge the role regulation plays in terms of maintaining the credibility of industry. However, the majority is of the opinion that the cost of compliance has increased astronomically and poses a major challenge to their business. Respondents also stated that the industry is over-regulated by the governing body and conditions keep on changing which decreases productivity time. It is believed that the value of competitiveness depends especially on the cost of compliance. FSPs indicate that the cost of compliance increases the cost of maintaining the business. Compliance also limits the time advisors need to render service to their clients. The perceived over-regulation and compliance lead to the notion that FSP managers/owners perceive the industry as no longer independent. Losing independence implies that FSPs cannot capitalise on IS to create a competitive advantage. These sentiments of the FSPs are echoed by Tai and Ku (2014) who state that government's over-regulation and poor allocation of resources continue to threaten the success of the small business sector. A main area of concern, as mentioned by Tai and Ku (2014), includes legislation on taxation, labour

and IT, which is supported by this research. Cant *et al*. (2014) reflect on SMMEs' unmistakable struggle to be compliant with regulation on the use of IT resources. Little assistance or guidance is available for SMMEs on how to address challenges; they consequently struggle with compliance which creates a high regulatory burden for SMME businesses (Michael, 2015).

5.2.3 Cost of ICT solutions

FSPs view cost as a driver within their business due to their small size and number of people. FSPs therefore need cost effective systems able to integrate business processes such as task management, client databases and communication systems into one software package. For FSPs to create a competitive advantage, compliance with the software product needs to be more streamlined and user friendly. FSP managers/owners consider the cost of ICT solutions as a major challenge and the evolving nature of technology makes IS strategic decisions difficult to implement in their business. FSP managers/owners face challenges in terms of aligning IT services with business need in order to deliver quality services to clients. Furthermore, FSPs opine that the type of ICT solutions available on the market at the moment does not specifically address their business needs and is costly to purchase and maintain.

5.2.4 Referral strategy

FSPs are dependent on referrals from their existing client base to obtain new clients. The creation of an intimate relationship and trust between clients and FSPs is seen by the managers/owners as a key marketing strategy. The marketing strategy adopted by FSPs makes them feel more comfortable with clients being referred by friends or business associates. FSPs believe the strategy of face-to-face marketing gives them an edge over clients; consequently, FSP managers/owners prefer a referral strategy over technology within their business.

5.2.5 Technology change

Findings revealed that the rapid change in technology is a challenge to FSPs. They find it difficult to prepare, anticipate and adapt to the changes. FSPs operate in an uncertain business environment. New technologies and associated risks demand new types of services, while new competition is on the increase (Touray *et al*., 2013). For FSPs to survive in such an unpredictable business environment, the availability of accurate information at the right time is a prerequisite for successful business operations (Sharma & Bhagwat, 2006). Relevant Information becomes important for FSP decision making to enable business growth, increase business

value, and gain knowledge on competitors and future business initiatives (Cragg, 2008).

5.2.6 Change management

Another key finding revealed by interviewees is the challenge of resistance to change which specifically relates to the use of new technology by—among others—the employees of FSPs. It can take up to eight or nine month for managers/owners to convince employees of the benefits and use of a new system within the business (Interviewee 12, Appendix D: 135). The inability of FSPs to manage resistance to change within the workforce is a challenge linked to the inability of managers/owners to manage issues affecting the capability and capacity of employees to work under new circumstances. Subsequently, this inadvertently affects the ability of FSPs to deploy IS strategies in their business. The effective implementation and application of IS in the business operations of FSPs improve business value, manages interaction with customers and suppliers, and manages financial accounts and human resources effectively (Nguyen & Warring, 2013). FSPs need to take advantage of IS in order to support business operations and add value to products and services to place them in the position to gain a competitive advantage in the market environment (Hicks, 2007). The respondents also articulated that due to the age bracket of their clientele—which ranges between 70 and 85 years—the use of technology in such an environment is not a major concern at the moment.

5.3 Current factors affecting use of IS in FSPs to create a competitive advantage

Sub-question 1.1: What are the current factors preventing SMMEs from creating a competitive advantage through IS?

Although FSPs contribute significantly to the economic development of South Africa, emphasis should be directed to the awareness of available technologies that can be implemented and utilised to improve business processes (Cassin, Soni & Karodia, 2014). FSP managers/owners are faced with a broad number of challenges including cost of ICT solution, cost of compliance, technology change, referral strategy, change management, and skills and knowledge that affect their ability to capitalise on the competitive advantage IS offers their business. Makoza and Chigona (2012) identify IT skills, knowledge and the competency of managers/owners as vital components of business and IT strategy within the business. The authors further emphasise that issues concerning the competency of managers/owners emanate from the lack of IT skills and knowledge needed for the

application of new technology in order to improve business activities. This leads to challenges in terms of the ability to implement and utilise IS in the business and realise benefits from IS usage. According to Makoza and Chigona (2012), research shows that the knowledge of SMME owners plays a key role in the implementation process of information technology innovation, thus, IT decisions are usually influenced by the business owner's skills and knowledge of IT.

The importance of IT skills and knowledge is reflected in the statement of interviewee 8: "I think it is a knowledge ability issue of how much you should and can actually get out of the IS implementing and use in the business" (Appendix D: 130). In support of this statement, Rogerson (2014) asserts that in order to respond to the challenges of IS competitiveness, business needs effective strategies that will improve the skills and knowledge levels of managers/owners, particular regarding the implementation and use of IT solutions. The lack of evidence of IT knowledge and skills prevalent among SMMEs is recognised by the DTI which admits that the absence of adequate education and training is a major stumbling block to the development of the SMME sector (Mago & Toro, 2013). Interviewee 3 stated: "I'm not that IT literate; I relied a lot on others, I have an outside support in terms of technical issues" (Appendix D: 123). Paul *et al*. (2012) and Masutha and Rogerson (2015) stress that the bulk of the challenges of small and medium businesses are created by limited resources, lack of formal mechanisms and practices, and a shortage of educated, trained and experienced managers, owners and staff. South African SMMEs are often found with very limited skills, which necessitate the importance of training and the acquisition of skills for SMME development (Fatoki 2014). The research findings support these views as in many cases FSPs admit to a low level of IT skills and knowledge. This in turn hinders FSPs to capitalise on the IS available to them to create a competitive advantage.

While striving to please their customers, FSPs must meet the regulatory requirements and remain profitable. Challenges arose as a consequence of the legislation requirements enforced by the regulatory body. These requirements have increased workload and cost, and reduced the consultation time FSPs can offer to clients. Interviewee 9 made the claim that "we are not looking at where the world is going from [a] financial planning point of view, but from [a] compliance point of view" (Appendix D: 124). This statement encapsulates the notion of reluctance and not having the zeal to create a competitive advantage in order to expand their business. The compliance of regulations makes achieving a competitive advantage difficult for

FSPs as a whole; the business environment is heavily regulated with more of their time going into compliances issues.

The influence of the regulator's requirements is represented by the statement of Interviewee 5: "The regulator is taking away your actual time, reducing our productivity because of more paper works" (Appendix D: 136). Interviewee 9 stated that "the amount of time the customer has to sign something; to go through one piece of paper for me to deliver one service reduces our productivity because of more paper work" (Appendix D: 128). In sustenance of the above notions of the interviewees, Michael (2015), states that SMMEs in South Africa operate in a unique regulatory environment characterised by over-regulation, poor resource allocation, high illiteracy levels, and lack of capital. It is evident that FSP managers/owners are struggling in particular reference to compliance with regulations on the use of IT resources (Cant *et al*., 2014). Government's over-regulation and poor allocation of resources continue to threaten the success of the small business sector, with some of the main areas of concern being legislation on taxation, labour and IT (Tai & Ku, 2014). Interviewee 5 declared that "unfortunately there are also some regulative requirements that increase the cost to your business fees" (Appendix D: 127). Interviewees also believe some of the legislation may force smaller business like them to merge with big companies.

FSPs feel that the regulator is not appropriately applying the law within the industry to create an environment for competitive advantage. Their views are shared by Interviewee 7 stating that "regulation is a good thing to have but not all brokers apply fully to the regulation, allowing competitors who are not supposed to be in the market" (Appendix D: 127). Michael (2015) reports similar findings on SMMEs, stating that there is little assistance or guidance available to FSP managers/owners on how to address these issues, and as a result FSPs struggle with the cost of compliance which places a high regulatory burden on SMME businesses. Interviewee 9's view is representative of the above statements: "The regulation obligation thrown upon us is one of our biggest drawbacks" (Appendix D: 127).

Change management challenges are usually caused by employees' resistance to change and adapting to new technology. It becomes difficult for FSPs to implement technology due to the attitude of people toward new systems. Interviewee 12 explained the experience they have, saying: "The resistance to change, it took us about 8 to 11 month[s] to convince that specific person to make use of [an] IT system" (Appendix D: 131). The involvement of management in the change process

is important. Cohen *et al*. (2014) found that the support of top management has the strongest direct effect on new technology adoption.

Findings indicate that FSP managers/owners do not have a formalised IT strategy that seeks to align IT with their business operations. Consequently, the fast innovation and development of ICT solutions on the market causes confusion and challenges among FSP managers/owners.

From the perspective of an IS strategy deployment, it is evident that FSPs do not have a framework or guideline that can assist them in capitalising on the competitive advantage of IS. An investigation made into strategic planning by Chao and Chandra (2012) reveals that lack of time, lack of specialised expertise, inadequate knowledge of the planning processes, reluctance to involve employees, and limited external consultations in strategic plans compromise strategic planning in SMMEs. An example of a lack of strategic planning of IS implementation by SMMEs is provided in the statement made by Interviewee 1: “We don’t have a specific IS deployment strategy; we are still heavily relying on the data stored in files” (Appendix D: 130). Paul *et al*. (2012) emphasise that the concentration of ownership among the top management of the business often leads to risk aversion and lack of willingness to engage in strategic planning and change activities such as enterprise diversification, product innovation, and diversifying into new international markets. The response of Interviewee 13 highlights the evidence of little or no formal IS planning by SMMEs: “I’m not sure but I do not have an IS implementation strategy but I carry a lot of information on paper”.

The uncertainty of IS as deployment strategy is directly related to the skills and knowledge of FSP managers/owners. Peppard *et al*. (2014) state that there are three levels influencing the IS capability component in businesses: i) the resource level; ii) the organisational level; and iii) the enterprise level. The resource level represents components that are key ingredients for managing IS competencies. These are skills, knowledge and behavioural attributes of both employees and external providers. Mohlameane and Ruxwana (2014) state that the expression of a particular competence in an organisation depends on people applying knowledge, integrating their knowledge, interacting with others, coordinating their actions, and performing their roles in the organisational structure and processes. Phillips *et al.* (2014) point out that in South Africa, the lack of education and training reduces management capacity in SMMEs and leads to a low level of entrepreneurial activities and high failure rate among SMMEs.

In summary, there are various factors influencing the implementation and use of IS within FSPs. Challenges include skills and knowledge of managers/owners, cost of compliance imposed by the governing body and over-regulation of the industry. These cause major challenges in the implementation of IS and creating a competitive advantage. Further challenges include cost of ICT solutions and the type of system that can streamline FSPs' business processes in a single software package. The marketing strategy adopted by FSP managers/owners posits as one of the challenges to utilise IS strategically to innovate and market their business. Findings also revealed that the rapid change in technology causes challenges to anticipate and adapt to as well as resistance to change specifically related to new technology and the inability to manage employees working under new circumstances; as a result, this affects the creation of a competitive advantage for FSPs.

5.4 Competitive advantage of IS for FSPs

Sub-question 1.2: What competitive advantages can IS create for SMMEs?

The competitive advantage of IS is evident in the way it impacts business performance from business operations such as sales, marketing, logistics and customer services (Baiyere & Salmela, 2014). Interviewee 6 is convinced that to become better and more competitive in their business, they need to use technology: "My competitive advantage is that I don't have a secretary and I have the technology" (Appendix D: 133). Modern businesses are faced with a broad number of challenges. Investing in IT has become a necessary condition to stay competitive and remain in business. Many businesses are showing interest in applying technology to automate, optimise and adopt their business processes (Kyobe & Namirembe, 2015). The effective implementation and application of IS in the business operations of FSPs can improve business value, manage interaction with customers and suppliers, and further manage financial accounts and human resources (Nguyen & Warring 2013). The potential effect of IS on the business of FSPs is indicated by Interviewee13's statement: "if I can have my business processes integrated with technology software to assist me to be able to adopt documents stuff and interact with clients—just that as a start—then the second step will be looking at our product*"* (Appendix D: 136).

Organisations operating in a regulated industry such as financial services and governed by a large number of regulatory requirements need to implement IT control systems which can enable them to respond to the challenges they are facing

(Nylen & Holmstrom, 2015). The prospect of an IS competitive advantage is quoted by interviewee 12, saying: “You always need competitive advantage; you need to find ways to be more competitive than your competitors” (Appendix D: 133). IS can enable FSPs to manage sets of different activities in relation to business management; activities include risk assessment (underwriting), preparations of invoice and claims, managing customer demands, reporting and resolving management problems, and innovative product development (Krstajiic *et al*., 2014). IS also ensures accuracy and speed through improved record keeping and availability on demand. Making information accessible in real time decreases the waiting time of users to obtain the desired information (Fatoki, 2014). The impact IS can have on the business is highlighted by Interviewee17: *“*I need a system that can analyse our client needs and can manage all the application form[s] for each process in the office*”* (Appendix D: 136). Such systems can improve communication lines for managers/owners to access the information they require and provide online access to clients within the network. This can further extend to improve the quality of services or products they offer as well as reduce delays and inaccuracies usually associated with telephone or paper-based communications. Interviewee 9 stated that *“*I think it’s someone that got a better CRM system than what we have*” (*Appendix D: 134). IS development has been proven to improve managerial efficiency by producing relevant and timely information that can be used to manage and control businesses, hence enabling competitive advantage (Steinfield *et al*., 2011). Thus, it is imperative for FSPs to implement and utilise IS as a tool and also as a strategy to position the business where other businesses have not yet reached.

The literature review suggests that IS deployment is a process whereby decisions are made on the adoption of specific hardware or software technology (ThuyUyen *et al*., 2015). The process involves aspects such as managerial, professional, technical, and staff decision-making in both internal and external environments of the business, all of which must be considered before the given technology can have a physical presence in the business (Cheung *et al*., 2015). The accountability and responsibility of deploying IS strategy lie with different people, depending on the size and type of business. In small businesses, a single owner may be in charge of all planning activities which usually include strategic management (Nenshelele & Pellissier 2014).

Literature further explains that the expression of a particular competence in an organisation depends on people applying knowledge, integrating their knowledge, interacting with others, coordinating their actions, and performing their roles in the

organisational structure and processes (Mohlameane & Ruxwana, 2014). The important activities sometimes include collective knowledge that can be tacit, synchronised and interdependent of behaviours to address tasks that are often context specific rather than predefined. Of particular relevance is an organisation's IS capability and information flow in the business process, where bringing together specific knowledge and skills is critical to the ability to perform effectively.

In addition, literature shows that IS deployment should be driven by identifying opportunities to exploit and maximise existing competencies and resources to drive improvement (Ling *et al*., 2014). This implies how an organisation believes it can best meet customer needs and organise resources to make strategic decisions (Ciravegna *et al*., 2014). According to Dutot *et al.* (2014), as business conditions change and new enablers emerge, the emphasis is on what organisations are able to do as well as its competencies and ability to change, which means it must have the mechanism to assess short term options more objectively in the context of its long term strategy. The way organisations choose to deploy technology and the associated resources depends on the strategies which in turn determine the result the business can achieve.

5.5 Validation of research findings with conceptual framework

The research of this study takes an inductive approach; therefore the findings of the research are inferred from previously identified frameworks in the literature. These theories are used to describe the underlying considerations and constructs involved in the implementation of IS within organisations. These considerations and constructs are important as they lay the foundation for subsequent effective application and use in FSPs.

5.5.1 The association of findings on the implemented conceptual framework

There are various factors creating challenges with regard to the ability of FSPs in Cape Town to capitalise on the potential of IS to create a competitive advantage. These factors are recognised by the theory of knowledge based within an organisation which relies on assets and intangible resources such as organisational knowledge as well as physical and financial resources for sustainable development of competitive capabilities. The conceptual framework adopted for this study (Shahmansouri *et al*., 2013:05) (Figure 5.2) is used to provide support for certain emergent factors affecting IS implementation and use within organisations. Within the model, knowledge is considered a key input in the integration and distribution of skills, which leads to a sustainable competitive advantage. This approach is shown in Figure 5.2 below. The model shows that organisational assets and capabilities

based on knowledge are directly related to the strategy employed by the organisation, which directly and indirectly has a significant impact on the organisation's competitive advantage. The research model uncovered findings identified as knowledge-based capabilities, strategy, and organisational assets as factors challenging the ability of FSP managers/owners to capitalise on information systems in order to create a competitive advantage for their business. The sections below describe the factors and challenges in relation to the adopted theoretical model to establish their validity.

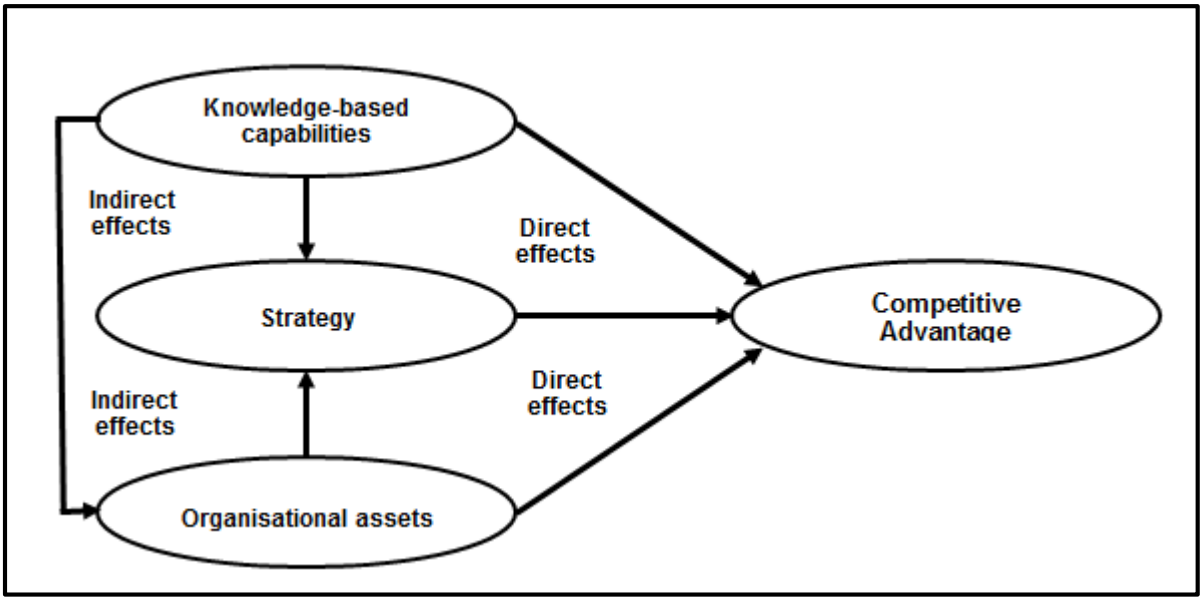

Figure 7.2: Model to create a competitive advantage
(Source: Shahmansouri et al., 2013:5)

5.5.1.1 Factors and challenges for effective implementation of IS established from the theoretical model

According to Shahmansouri *et al*. (2013), Knowledge-Based Theory deals with factors in the form of assets and intangible resources, including organisational knowledge as well as physical and financial resources to ensure sustainable development of competitive capabilities.

Knowledge-based capabilities

Knowledge of managers/owners: the ability to absorb, transform and effectively disseminate new knowledge is a key concept for the IS implementation process in FSPs. Hence, effective communication between management and employees regarding change within an organisation is essential. Failure to properly

communicate new changes in operational modules leads to doubt in employees about the usefulness of new technology, which might result in a negative attitude towards the change, which in turn triggers fear of job security. In addition, employees must understand the purpose behind IS implementation and their role in the effective application and integration within business processes. Knowledge is considered as a key input in the integration of IS and acquisition of a skills set to create a sustainable competitive advantage.

Strategy

The lack of time and specialised expertise, inadequate knowledge of planning processes, and the reluctance to seek professional advice from external consultants in strategic planning compromise the ability of FSP managers/owners to devise strategic plans for the organisation. In addition, the concentration of major decision making solely rests on the managers/owners of the business, which sometimes leads to risk aversion and sparks unwillingness to engage in strategic planning. The disposition of key decision makers in FSPs—such as managers/owners—on change activities such as enterprise diversification and product innovation, will largely be influenced by the presence of strategic planning.

Organisational assets

Organisational assets are distinctive resources—such as skills and knowledge of FSP managers/owners—that can enable successful deployment and appropriate management of IS to operate new processes and systems to unlock business value. Lack of knowledge, skills, behaviours and attitudes contribute negatively to the effectiveness of IS implementation and use to create a competitive advantage. This suggests that the lack of a particular competency within FSPs affects managers/ owners applying and integrating knowledge to leverage IS/IT potential which can enables progressive change to acquire a business advantage and respond to rapid changes in their business environment.

5.5.1.2 Factors affecting the effective application of IS from research findings

Cost of compliance

The cost of regulatory requirements imposed by legislation governing FSP business activities has increased the cost of maintaining the business in terms of required compliance, which had adversely limited consultation time advisors render to their clients as part of their service.

Skills and knowledge

A factor affecting the effective application of information systems is a lack of the necessary skills and knowledge among FSPs which enable successful deployment and appropriate application of IS to manage and operate new processes and systems to unlock business value. A number of studies disclosed the lack of skills, knowledge and training as one of the most prevalent causes of general business failure among SMMEs in South Africa in research conducted by Masutha and Rogerson (2015).

Technology change

Constant and evolving change in technology trends has FSPs confused as to the use and relevance of the technology adopted in the long run. Organisations are concerned that IS technology costing a fortune to invested in, might become obsolete or in adequate in a few years' time, thus causing a loss within the business.

Cost of ICT solution

The rising cost of ICT solutions as well as the need for the development of specialised technology is a challenge for FSPs, making IS strategy difficult to successfully implement in the business to create a competitive advantage. Access to finance is also highlighted as a major problem for the South African entrepreneur; lack of adequate financial support mostly contributes to small business failure.

Change management

Lack of awareness and communication between managers/owners and external IT consultants regarding change as well as the usefulness of IS in their business results in a negative attitude toward change, fear in terms of job security, and low levels of support. Change related to the use of new technology is not easily accepted among employees within FSPs; it sometimes takes up to eight or nine month for managers/owners to convince a particular employee to use new systems in their business.

Referral strategy

The communication and marketing strategy adopted by most FSP managers/ owners using their existing clients base for referral to market their products creates a challenge to implement IS strategy and use among financial advisors.

The above factors summarised from the research findings influence the effective application of IS in a complex environment for long term competitive advantage. The

factors are considered to be cost of compliance, skills and knowledge, technology change, cost of ICT solution change management, and referral strategy.

5.6 Summary

This chapter presented and discussed the themes developed from the headline findings with expositions from the literature to provide answers to the research sub-questions. Factors challenging FSP managers/owners to capitalise on the IS competitive advantage are summarised from the themes developed and categorised as i) skills and knowledge, ii) cost of compliance, iii) cost of ICT solutions, iv) referral strategy, v) technology change, and vi) change management. These themes are found to be the current factors causing challenges for FSP managers/owners to capitalise on IS and create a competitive advantage in their business. The competitive advantage of IS for FSPs is briefly discussed, followed by the deployment of IS strategy, and ending with the validation of the research findings.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

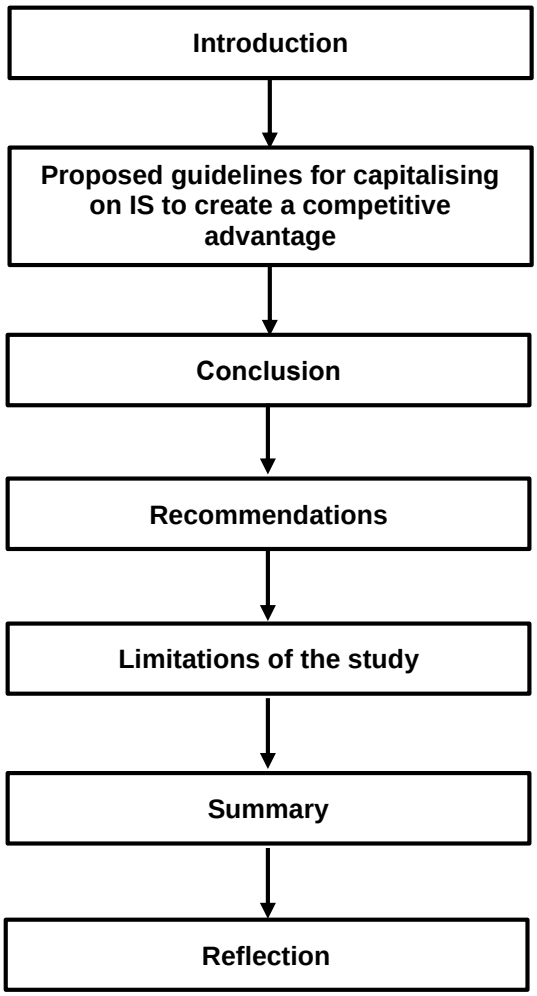

Figure 0.1: Graphical representation of Chapter Six

6.1 Introduction

Despite the significant importance and contribution of SMMEs to the economic growth, these businesses are still faced with numerous challenges inhibiting innovation through technology. A study conducted by Abor and Quartey (2014) notes that South African SMMEs suffer from poor management skills due to inadequate training and education—one of the main reasons for the high rate of SMME failures.

The research reveals a number of challenges preventing FSPs from implementing and deploying IS strategies to capitalise on competitive advantages. FSPs operate in a business environment which is dynamic but heavily regulated by compliance requirements as introduced by government. As such, almost all of their time and effort is directed towards the compliance of business operations rather than implementing ICT technology to facilitate business operations and add value to customer service.

Many of the IT systems used by FSPs are not specifically designed to cater for the business needs of FSPs. As a result, FSPs can lose the opportunity to create specific competitive advantages. IT solutions used by FSPs and a lack of skills and knowledge of IT solutions together with the highly regulated industry pose serious challenges to FSPs. The high tempo of technology changes and the lack of change management by FSPs create setbacks for FSPs.

The challenges faced by FSP managers/owners when implement and utilising IS in the creation of a competitive advantage resonate throughout the research findings and literature reviewed. The ability of individuals to apply their IT knowledge competency is an important component to improve business activities. Furthermore, factors such as the cost of ICT solutions, the cost of compliance, change management, technology change and referral strategies are among those highlighted by interviewees as challenges preventing the successful strategic implementation and use of IS in their business.

This chapter presents the conclusions and recommendations of the research study. A guideline to assist FSPs in using technology to create a competitive advantage in SMMEs is proposed. The study explores the challenges of capitalising on the competitive advantage of IS within SMMEs. A set of guidelines is developed for implementation and use to address the challenges faced by FSP managers/owners.

Recommendations are proposed for the implementation and use of IS in business. Further research possibilities are discussed.

6.2 Proposed guidelines for capitalising on IS to create a competitive advantage

The implementation or deployment strategy of IS is the phase in which a decision is made to embrace a particular hardware or software technology, and it involves various activities. FSP managers/owners need to strategically plan and evaluate the appropriateness of each new technology. Research conducted by ThuyUyen, Newby and Macaulay (2015) reveals that factors related to the successful implementation and use of IS in small businesses include cost benefits, management innovativeness, perception, knowledge and skills, and employee attitudes. Moghavvemi and Salleh (2014) suggest that success in the implementation and use of IS is directly influenced by organisational factors, particularly top management, and by IS external expertise.

The effective implementation and use of IS should be planned strategically and involves FSP managers/owners, professionals and technical staff during decision-making in both internal and external environments of the organisation before the given technology can have a physical presence in the business. The guidelines proposed below are to assist FSPs throughout the implementation process.

6.2.1 IS implementation guidelines

a) FSP managers/owners need to commit themselves to the evaluation of possible IS solutions. Commitment is shown by becoming involved in determining the specifications of the system under investigation.

b) Commitment is shown by developing an ICT business strategy which links closely to the overall business strategy.

c) Commitment is shown through leading by example, which includes creating open discussions of the new system. This includes explaining the need for a new system to employees.

d) Commitment is shown by involving all the employees in the specification phase.

e) Commitment is shown through knowledge, skills, behaviour and attitude of FSP owners/managers towards the evaluation and implementation of IS.

f) Create an environment conducive to support the use of IS within the business in terms of technical infrastructure. Clearly articulate the need for infrastructure and the optimum use of the infrastructure.

g) Start the change management process as soon as a decision has been reached to investigate the possibility of IS change. Follow change management protocols throughout the entire process.

h) Obtain the buy in from all employees on the chosen system or system changes before implementation. This can be done by involving the employees in the specification and sign-off of the requirements.

i) Involve employees in the project management of the new system or system changes. Do this by establishing steering committees, as an example.

j) Be on the lookout for resistance to the new system or changes being made. Depending on the size of the company, an anonymous hotline can be installed where employees can air their views.

k) During the implementation process, continuous communication is essential.

l) Employees must be part of the testing phase.

m) Employees need to provide regular feedback of the new system (on a monthly basis at the beginning of the implementation)

n) After implementation, employees and management must be encouraged to identify opportunities that could benefit the business and create a competitive advantage.

6.3 Conclusion

This research explored the challenges preventing FSPs them from capitalising on the advantages IS offers the business. Challenges preventing FSP managers/ owners to capitalise on the competitive advantage of IS in their business, were discussed. The policies, regulations and compliance affecting the implementation and use of IT systems by FSPs, were elaborated on. The objectives of the research study have been identified as follows:

To investigate the challenges SMMEs are facing when creating a competitive advantage through IS: FSP managers/owners consider challenges such as IT skills and knowledge, cost of compliance, cost of ICT solutions, technology change, change management and customer referral strategy as factors affecting the implementation and use of IS solutions in their business. The challenges faced by FSPs can be addressed through training and educating managers/owners to understand the role and value of IS within their business.

To evaluate the advantages IS offers SMMEs to create a competitive advantage in their business: To address this issue, FSP managers/owners need

to understand that the performance of business and IT strategy is firmly connected and that the business cannot be competitive if their business and IT strategies are not aligned. To enable a competitive advantage, the knowledge of managers/owners on the application of strategic alignment is necessary to coordinate the supporting IS activities and processes.

To identify possible IS strategies for SMMEs to use in order to gain a competitive advantage: Managers/owners of FSP strategies should identify opportunities within their industry to exploit and maximise existing competencies and resources to drive improvement. The ability to identify and deliver successful IS/IT related changes to enhance business processes, needs to be utilised.

To identify available IS frameworks or guidelines that can be used by SMMEs to create a competitive advantage: Managers/owners need to pursue and identify ICT frameworks or guidelines for best practices to provide guidance on the evaluation, implementation and use of IS. Managers/owners should seek assistance from IT professionals or consultants for advice on framework and guidelines that can support the effective implementation and use of information systems to improve their business processes and render quality service.

In conclusion:

In response to the problem addressed by the research that **SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy, t**wo main questions were asked:

RQ1: What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?

RQ2: How can SMMEs use IS to create a competitive advantage in their business?

The answers to these research questions are summarised as follows:

1) FSPs are faced with challenges such as IT skills and knowledge on available new technology, high cost of compliance, cost of ICT solutions, technology changes and change management, which in turn cause challenges for FSP managers/owners to successfully implement and effectively use IS as solution in their business to create a competitive advantage.

2) The implementation and use of IS solutions require of FSP managers/owners to better understand new technology implementation processes. Training and skills transfer to empower individual knowledge and learning opportunities are needed for sound decision making to implement and use new technology in order to create a competitive advantage within their business. The evaluation of current business processes and systems are needed. Once completed, the new 'to be' processes are specified in order to evaluate the applicability of the proposed system(s). Data captured or the increased effectiveness and efficiency of the new system can be used to improve communication to customers, lower expenses and/or grow new markets.

6.4 Recommendations

To address the issues challenging FSPs to capitalise on the competitive advantage IS offers their business, a number of factors has to be taken into consideration. The recommendations are based on the regulatory requirements imposed by the governing body within the industry. Further research is also proposed. The recommendations cover training and skills, IS strategic planning, and government agencies.

6.4.1 Training and skills

To respond to the challenges of IS competitiveness, the role of training and skills development as well as an effective strategy to improve individual levels of knowledge and skills is essential for FSP managers/owners learning how to grow and move up the value chain.

Studies have shown patterns which indicate that the most successful, adaptive and innovative FSPs have managers/owners with high levels of education, technical/managerial skills and training (Urban & Mothusiwa, 2014). The government programmes of training support (SETA) for SMME development need to be evaluated to encourage more training and skills development. Several research gaps have been identified in terms of skills training for FSPs. One of particular importance is the lack of trained and skilled FSPs managers/owners in the strategic implementation and use of IS. FSPs managers/owners lack the skills required to evaluate the impact of IS competitive advantage within their business as well as the role of government agency training support for FSPs.

6.4.2 IS strategic planning

FSP managers/owners need to have an IS strategic plan for long term IS development and implementation to achieve their business goals—which include creating a competitive advantage. It is recommended that FSP managers/owners strategically plan IS deployment and use. FSP managers/owners need to engage more in the IS strategic planning process to be more innovative, employ new process and achieve long term business success.

6.4.3 Government agency

Government agencies can also assist FSP managers/owners by providing training. Government interventions should focus on providing training and courses on IS deployment strategies that will improve FSP manager/owner competencies in this regards. Various programmes and support should be provided to the sector through SETA awareness and uptake of these programmes. Government should be providing an enabling environment and act as a catalyst to enable market participants to interact productively and minimise the over-regulation of the industry. This includes:

- Establish a clear requirement for change on behalf of the regulated entities
- Develop an accessible information support and relationship environment within the industry
- Identify existing challenges faced with the current IS system in practice
- Positively influence behaviours and attitudes towards the application of new technology
- Determine which support programmes—in terms of IS implementation and use and where the gaps lie—are readily available for FSPs
- Provide finance directly to the FSP sector either through existing programmes and institutions or through the establishment of more institutions
- Ensure continuous support and training of available new technology

6.4.4 Future research studies

Further research with emphasis on the challenges of an IS deployment strategy to create a competitive advantage could be conducted to explore and understand the uncertain business environment and how it rapidly changes because of the needs of industry.

Knowledge and skills: FSPs need to be provided—through training—with knowledge, skills and behavioural attitude to contribute to the personal effectiveness

of individuals within the organisation and leverage the IS/IT potential which enables progressive change to acquire business advantage by responding to the rapid changes in the business environment.

Expanding the research study: This study focused mainly on FSPs. Not all categories within the financial services sector were included. As a result, the research results pose only a partial view of the challenges and factors hindering the capitalisation of competitive advantages offered by information systems to the financial services industry. Further research using quantitative and qualitative methods to ensure the generalisation of results for other regions, could be significant. The impact of the changing regulatory environment for FSP sector-specific research on regulations as well as the analysis of appropriate provincial government and municipality regulations for FSP development, are other key research areas for future investigation.

Regulatory requirement: The governing body policies on FSPs and their support of education and training, IS strategic planning, and government agencies should be reconsidered to include reliable systems for collecting, storing and analysing recorded data. The compliance requirements imposed by the governing body pose a serious challenge to FSP managers/owners in developing information systems strategies and placing the survival of FSPs at risk in the market. The regulator needs to revise the relatively high setup cost for compliance to the rules and regulations and on-going monitoring. Issues of regulations are significant for long-term development of FSPs. Reducing the burden of compliance is likely to result in a dramatic development of the FSP market. A continuous review of the appropriateness of existing regulatory environments, training, skills and finance for supporting the FSP industry is of critical importance.

6.5 Limitations of the study

The number of participant in this research study posed a limitation; the validity of the results could have been strengthened with more participants. Interviews were conducted for an in-depth analysis of data collected, but a larger number of participants would have been preferred. The limitation has been cause by the difficulty of finding financial advisors who could afford giving some of their time for the interviews in between their busy schedules and commitments to clients and business partners. The distance travelled to FSPs was also a limiting factor.

The research focused on a multiple case study within the bigger Cape Town Metropolitan area. Therefore, the results of the research may not be generalised to

be representative for the entire South African financial advisory industry. There is a need for more research in the financial advisory areas to reach a general conclusion.

6.6 Summary

Problem statement

SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy.

Aim

The aim of the research study was to explore the challenges faced by SMMEs (financial service advisers) hindering them to capitalise on the competitive advantage IS offers the business. The study also aimed to propose guidelines that will assist SMMEs in capitalising on the competitive advantage IS can generate for their business. The results of the findings were used to suggest a set of IS implementation and use guidelines to create a competitive advantage.

The study was conducted using multiple case study design, interviews and a literature review to form the source of the data collection. Data were analysed using thematic analysis. Findings were abstracted to extend existing theory from literature and the basis of proposing a set of guidelines to assist FSPs in utilising IS to create a competitive advantage.

In summary, there are many factors affecting the implementation and use of IS in FSPs. The challenges faced by FSP managers/owners to capitalise on the competitive advantage of IS in SMMEs are summarised as skills and knowledge, cost of compliance, cost of ICT solutions, referral strategy, technology change, and change management, among others.

The main recommendation is that the governing body needs to put in place support systems for the neediest FSPs and enhance support through training and education, for example, participating in conferences on digital marketing strategy and planning, and setting up a more informed and constructive framework or guideline to evaluate the implementation of IS in FSPs.

6.7 Reflection

The research originated with the aim of exploring the effective application of information systems in a complex SMME environment, in particular FSPs, for a long term competitive advantage. The intention was to investigate the challenges of capitalising on information systems within FSPs to create a competitive advantage. Data were collected from 17 FSPs to uncover the application of IS within SMMEs and the challenges of managers/owners to capitalise on IS competitive advantage.

Analysis of the data collected revealed that FSP managers/owners are faced with a number of challenges hindering the effective application of IS to create a competitive advantage. Challenges from knowledge, skills, cost of compliance, cost of ICT solutions, change management, and referral strategy. Most software technologies used by FSP companies are for administration purposes and keeping records of clients, for example, birthdays and contact details to communicate with customers. The types of systems used by FSPs are not strategic, meaning it does not enhance business processes to create a competitive advantage.

The literature has showed that IS improves the efficiency and effectiveness of SMMEs, and there is a remarkable relationship between increased management efficiency in terms of goal achievement and time saving. FSPs tend not to capitalise on the competitive advantage of IS due to lack of knowledge and skills as well as ignoring the importance of IS.

More manager/owner commitment and involvement are needed for successful implementation and use of IS to create a competitive advantage. The regulatory body needs to create an environment and infrastructure which enable easy implementation and use. Users need to be educated on systems and become involved in using these systems. Managers/owners should obtain advice from ICT professionals or consultants on the evaluation and implementation of new technology within their business.

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APPENDIX A: Letter of Agreement with Cape Chamber of Commerce and Industry

CAPE CHAMBER
OF COMMERCE AND INDUSTRY

14 November 2012

Student Name: A. Madina Ahmat

Agreement between Cape Chamber of Commerce and Industry

and Cape Peninsula University of Technology

Research by Master's Student in collaboration with the Cape Chamber of Commerce and Industry

1. A signed document in place that the information cannot be used by third parties out of the research.
2. The Chamber will be informing its members of the partnership and inform them that they will be contacted by the specific researcher (s).
3. The Student will supply the Chamber with a 50 words on the research and the Chamber will send out an email introducing the research project.
4. On completion, the findings will be shared with the Chamber.

A. Madina Ahmat
Student

.....

A de la Harpe (Dr)
Supervisor

.....

M J Thomas-Johnson
Cape Chamber of Commerce and Industry

Founded in 1804 and incorporated by an Act of Parliament - Act 21 of 1891

P O Box 204, Cape Town, 8000
Cape Chamber House
19 Louis Gradner Street
Foreshore, 8001, South Africa

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APPENDIX B: Statement of Consent

Cape Peninsula University of Technology

STATEMENT OF CONSENT

My name is Abd-al Malik Madina Ahmat; I am currently studying my Master's degree at Cape Peninsula University of Technology. You are being invited to take part in a research study looking at **the challenges of capitalising on IS to create a competitive advantage in small businesses.** The purpose of this letter is to provide you with the information required to make an informed decision on participating in this research.

I have read the information presented in the information letter about a research study being conducted by **Abd-al Malik Madina Ahmat**. I have reviewed the questionnaire and had the opportunity to ask questions relating to this study, to receive satisfactory answers to my questions, and any additional details required. I understand that my participation is voluntary and that I can withdraw from the research at any time without prejudice.

By signing below, you are indicating that this letter has been explained to you, that you understand it, and any questions you have about the research have been answered. You are indicating that you understand the ways in which the data may be used and how your privacy will be protected. You are agreeing to participate in the research at this time only.

I acknowledge that I have read the above explanation of this evaluation and with full knowledge of all foregoing, I agree, of my own free will, to participate in this research study.

_____
Signature of interviewer

_____ Date _____
Printed name of interviewer

_____
Signature of interviewee

_____ Date _____
Printed name of interviewee

Signature of interviewer

A. Madina Ahmat

Printed name of interviewer

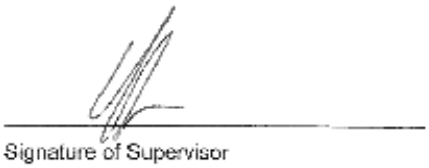
Date 23/07/2013

Signature of interviewee

John William Radloff

Printed name of interviewee

Date 23.07.2013



Signature of Supervisor

Dr Andre de la harpe

Printed name of Supervisor

Date 23/7/13

APPENDIX C: Interview Guide

Problem Statement:		SMMEs are not capitalising on the competitive advantage IS can create for their business, resulting in failure to optimise the potential of SMMEs, which in turn impacts on the sustainability and growth of SMMEs and their contribution to the economy
Research Question 1 (RQ1):		What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?
RSQ1.1	**What competitive advantages can IS create for SMMEs?**	
S.Q.1.1.1	*What is your definition of IS?*	
	Answer	
	Comment	
S.Q.1.1.2	*What is your definition of competitive advantage?*	
	Answer	
	Comment	
S.Q.1.1.3	*Do you need competitive advantage in your business? If yes, how, if no, why not?*	
	Answer	
	Comment	
S.Q.1.1.4	*What is the competitive advantage of your competitors?*	
	Answer	
	Comment	
RSQ1.2	**What are the factors that prevent SMMEs in creating competitive advantages through IS?**	
S.Q.1.2.1	*What type of IS do you make use of to run your business?*	
	Answer	
	Comment	
S.Q.1.2.2	*What is the purpose of your IS in terms of running your business?*	
	Answer	
	Comment	
S.Q.1.2.3	*Does the regulator's role influence the competitive advantage of your business?*	
	Answer	
	Comment	

S.Q.1.2.4	*What hinders your business from creating a competitive advantage?*	
	Answer	
	Comment	
S.Q.1.2.5	*Do you make use of social media in your business?*	
	Answer	
	Comment	
S.Q.1.2.6	*How does your IS strategy allow your business to achieve optimum business objectives in the market?*	
	Answer	
	Comment	
S.Q.1.2.7	*Do you face challenges when deploying IS strategy in your business?*	
	Answer	
	Comment	

APPENDIX D: Interviewee question and response

RQ1	What are the challenges faced by SMMEs when capitalising on the competitive advantage IS can offer?
RSQ1.1	**What competitive advantages can IS create for SMMEs?**
Interview question 1	**What is your definition of IS?**
Interviewee	**Response**
1	System that gives me information about my business and the ability to understand the market
2	IS is a software or hardware tool that allows us to gather information, store information and communicate with clients
3	Technology software and process I use to interact and save client information
4	I'm not that IT literate; I relied a lot on others, I have an outside support in terms of technical issues
5	Software we use to store information also to communicate with insurance companies
6	I have no idea
7	A way to communicate and gather information, store information, communicate with clients
8	I think would be computer related on how to store things
9	IS is the ability to access information, data stored in a database
10	Software tools, I am able to use and the recollection of information
11	Did not define the term information systems
12	Computer base that you use to gather or record information
13	System that effectively would help you or assist you in communicating most effectively
14	Did not define the term information systems
15	Software tools, to be able to use and the recollection of information
16	System that effectively would help you or assist you in communicating most effectively the information
17	A system that allows me to collect information
Interview question 2	**What is your definition of competitive advantage?**
Interviewee	**Response**
1	Knowledge, brains, reasonable hard work and integrity
2	A competitive advantage would be something having something that the other players don't have or pursuit don't even realise yet or see the opportunity
3	Did not define the term competitive advantage
4	We doing something different than most, like peers—people similar to us in terms of size, in our core value
5	Did not define the term competitive advantage
6	Is something if you want to be ahead of people
7	To be one of the first movers in the market at the price my competitors typically can't compete [with]
8	Is being one step ahead of somebody else
9	If you [are] strict to telling the truth and that is an important aspect
10	Competitive advantage is something that gives me an edge whether it would be through sales, my products

11	Reasonable hard work and integrity, that is a given advantage
12	Competitive advantage is an aspect that you are able to put forward in the minds of my customers [which] distinguishes you from a competitive offering
13	Competitive advantage is how you project yourself, and how you offer solutions in a very effective way
14	I really don't have an idea about the concept
15	I see competitive advantage as something that differentiates from something that are market offers
16	Did not define the term competitive advantage
17	If you do something that you know other people can't do that easily
Interview question 3	**Do you need competitive advantage in your business? If yes, how, if no, why?**
Interviewee	**Response**
1	I think less so if you compared to a corporate where they fighting over a market segment
2	Yes, always find ways to be more competitive than your competitors
3	I was brought up with integrity and honesty, and I think that is a big competitive advantage in FSPs
4	Certainly is a big plus, you got have some sort of distinction
5	I do need competitive advantage, I was brought up with integrity and honesty, I think that is the big competitive advantage
6	My competitive advantage is that I don't have a secretary and I have the technology
7	Yes, we look at where the world is going from [a] financial planning point of view, from [a] compliance point of view
8	Yes, I think we do too much; we mother our clients, is that kind of closeness
9	We are not looking at where the world is going from [a] financial planning point of view, but from [a] compliance point of view
10	Yes, it's quite fine what I'm doing
11	Yes, I need a system that can analyse our client needs
12	You always need competitive advantage; you need to find ways to be more competitive than your competitors
13	Yes, indeed, your honesty and your integrity not only in word but in deed
14	We are one of the industries where you definitely need it
15	Before I want business from you I will first put myself on the table and then give you service
16	Definitely yes, otherwise you're not going to give market share out
17	I do need competitive advantage but the initial process which is a referral system that is the way we conduct our business within the industry
Interview question 4	**What is the competitive advantage of your competitors?**
Interviewee	**Response**
1	Competitive advantage of my competitors can be price, speed to market, legislation, and service they offer
2	It could be the way my competitors communicate with clients and the regularity of communication to clients that could be a competitive advantage
3	They might have things that we can't afford and don't have
4	They have more staff; I can't get through a lot of work because I have one assistant
5	We get through clients obviously, and the market rate
6	We believe the way we structure our business and cost involvement

7	I don’t know, I don’t lose client[s] so I wouldn’t know
8	I think perhaps if they have an office, more offices then you have a slight advantage
9	I think it’s someone that got a better CRM system than what we have
10	How they set up their practice and in terms of administration structures
11	Cannot identify the competitive advantage of his competitors
12	My competitors is [a] large client base and their relations or referral connection into the market
13	They might have things that we can't afford and don't have
14	The regularity of communication to clients, that could be a competitive advantage
15	The moment you have more than 10 employees, you can handle so much more
16	I don’t know what their infrastructure looks [like] in the business so I cannot comment on that
17	The competitive advantage of my competitor can be their large client base and their relations or referral connection into the market
Interview question 5	**What type of IS do you make use of to run your business?**
Interviewee	**Response**
1	We develop in-house systems for client management, we use Pastel for financial
2	We linked to Sanlam network, we use our own IS which is a very rough spreadsheet
3	We can't operate without applications such as Workpool, Spotlight and the internet, because everything is there
4	PC and usually Outlook, Spotlight, if I have a query or a problem then I will go to the supplier, Team viewer
5	Excel, we use the programs which are available on the internet, we don’t use sophisticated IT programs
6	Spotlight, I normally use via the internet
7	We use FSP web-based programs to store information to communicate with clients
8	Internet, Workpool, compliance system
9	atWORK application program; its build for financial advisors
10	We predominantly use spotlight, CRM Financial service Hub, web-based programs to store information
11	We are using Spotlight and Stud
12	We have atWORK/Excel and Internet
13	We have Workpool and also Spotlight, but up till now we are a paper-based process
14	We use atWORK and Astute solution cloud based solution
15	Spotlight which is a data system
16	Spotlight, build in house tools/Serion system
17	We mostly use internet a lot and Xplain (software) as well as Excel for financial
Interview question 6	**What is the purpose of your IS in terms of running your business?**
Interviewee	**Response**
1	We use IS for other reasons, see our clients who have problems with claims, we use it a lot for productivity
2	To make how financial decisions which reflect the profit of the company, in other words, to minimise risk
3	To have integrated systems that can recognise emails coming in to create work flow
4	To keep clients up to date with financial statements, their particular position with the PPS

5	Maintain contacts and communication with clients
6	We segment our clients so then we can pull out and search on certain clients and communicate to them
7	It's really to keep record for what we do with clients and it's about managing the expectation of the clients
8	It help[s] because we can't actually miss anything, record everything and set up task
9	if you can use that information to give a pet competitive advantage by wishing your clients happy new year
10	I can seek various reminder[s] and make use of notes
11	IS tells me which areas need development, if I get complaints in a particular environment I need to look at working around that
12	They allow you to structure service, so that it become[s] a bit more repeatable and reliable
13	It gives us more time to focus on what we do as a conform to business
14	Two reasons that I have just giving it makes us efficient because we record everything
15	I think that information system allows us to give the clients what they expect
16	Helping in the planning itself for the clients, it's the daily process that we use that for
17	The ability to speak to the clients to send an email, we noticed that it's their birthday
Interview question 7	**Does the regulator's role influence the competitive advantage of your business?**
Interviewee	**Response**
1	The regulator is not applying law unless in my environment the regulators actually apply it law
2	The regulator enforced a lot documentation, I think or not it help us so add cost to small business and definitely you have to invest in IS to enable to comply completely
3	We think is a good thing, but it been a huge cost to small FSPs like ourselves to build and carry, always trying to develop and growth the systems
4	The regulation obligation thrown upon us is one of our biggest drawbacks
5	Unfortunately there are also some regulative requirements that increase the cost to your business, fees
6	Where we are in now is good
7	Regulation is a good thing to have but not all brokers apply fully to the regulation, allowing competitors who are not supposed to be in the market
8	if you don't do compliances so do they play role, I mean the work load in our businesses has double[d] and triple[d]
9	The regulation obligation thrown upon us is one of our biggest drawbacks
10	The governing body does not apply it law correctly in the industry
11	The regulator is good
12	The bureaucracy, the amount of time the customer has to sign something
13	The regulator actually compel[s] the amount of people that I can give advice
14	There are also regulative requirement[s] that increase the cost to your business
15	For the regulator
16	I think legislation is good to be there but it's tough because it's really time consuming
17	It's the unnecessarily financial obligation that regulation
Interview question 8	**What hinders your business from creating a competitive advantage?**
Interviewee	**Response**
1	Unless in my environment the regulators actually apply it law

2	I don't want to expand my business, I still battle to see some clients on a regular basis, which is a big problem
3	The regulator I think is taking away your actual time, reducing your productivity because of more paper works
4	Is unthinkable for me our industry to work without technology
5	the regulator is taking away your actual time, reducing our productivity because of more paper works
6	The regulation has actually compel[led] the amount of people that I can give advice
7	The challenge is access to appropriate IS solution[s] to manage clients and frequency of contact
8	it is difficult to find an IS system that suits the type of business practice that we have and enables us to be more creative and compete in the market
9	The amount of time the customer has to sign something, to go through one piece of paper for me to deliver one service reduces our productivity because of more paper work
10	If I can get to the point where all my business process is computerised for the future
11	The use of technology that will give that advantage
12	Having an IS solution that can allow us to structure services
13	If I can have my business processes integrated with technology software to assist me to be able to adopt documents stuff and interact with clients—just that as a start—then the second step will be looking at our product
14	I think that information systems allow us to give the clients what they expect
15	it is unthinkable for me our industry to work without technology
16	One has to do with time for legislative requirement so that is a prohibition
17	I need a system that can analyse our client needs and can manage all the application form[s] for each process in the office
Interview question 9	**Do you make use of social media in your business?**
Interviewee	**Response**
1	We use social media primarily because we believe is very inexpensive way to create market awareness and passing information
2	We don't use social media, we have a regular website, we don't go for the market
3	I don't use social media, because the majority of our clients are between the age 55 and 85, those people don't go on Facebook
4	None, well I don't see the need for a Facebook or twitter
5	None, I think is very dangerous, to go and use social media
6	I'm an old school; I haven't got the intellect to where social media can be an advantage
7	Not at all, I don't have time for things like social media
8	We don't use social media, our clients [are] old age and social media has not that big issue in that type of market
9	None, I think Facebook is for youngster[s]
10	I'm on Facebook, I'm not in Twitter and I have very little time even to visit the site like Facebook
11	Well I have a website, I am on Facebook, twitter and LinkedIn, but I don't quite know how to use it properly
12	Social media is interesting but it's for the younger generation
13	I use only LinkedIn, I am on there with my experience
14	At the moment we are not utilising, let's call it the old type of social media

15	We use LinkedIn, we don't use Facebook page because we don't have the resource to manage the comments and stuff
16	I use Skype, I never really apply my mind to and then the first skype it was like wow this is great for me
17	We are expanding on developing on social media platform, but it depends on the market that you are focused on
Interview question 10	**How does your IS strategy allow your business to achieve optimum business objectives in the market?**
Interviewee	**Response**
1	I think more in our environment the ability to anticipate the future and that it's been define[d] by the regulators ability to provide new law
2	I am not sure about the strategy yet, but I would like to do, then find people to implement
3	We are seeking IT system and looking at using cloud computing. We want to extend
4	There is lot of software that you can use but it's not always compatible with the way we run our business
5	We are definitely moving away from the paper-based environment, but never really take it to the next level
6	It's very difficult, our systems are mostly aligned to trying to keep us compliant
7	I don't use IS to generate more business or anything. I like to have this personal interaction with my clients
8	I think is a personal ability issue of how much you should and can actually get out of the IS in the business
9	We suppose we will do that when we have big business/is definitely going to be an important focus
10	We know it's not ideal but again our size and resource just counting again at the moment
11	I think systematically we will go over to process of computerising everything
12	The system that we have in place only a tool to make us more efficient
13	I'm not sure but I do not have an IS implementation strategy
14	We are not really in the process, you must first comply, you can't do business
15	It suppose it's got to do with the design of our network which is the referral system
16	In 10 and 15 years from now it got a lot to do with that we have to create IS solutions
17	CRM is important but you need to know how to use it and you need to actively use it
Interview question 11	**Do you face challenges when deploying IS strategy in your business?**
Interviewee	**Response**
1	We don't have a specific IS deployment strategy; we [are] still heavily relying on the data stored in files
2	I think the regulator did not help us so add cost to small business
3	Our challenges is the dynamic of the legislation within the industry and people don't like need change sometimes
4	The lack of capability and technology is changing and developing all the time
5	We are not really in the process, you must first comply and is time consuming otherwise you can't do business
6	I don't use IS to generate more business or anything
7	We are not really in the process, you must first comply and is time consuming otherwise you can't do business
8	The bigger challenge for all of us is still slow internet

9	I think new thing always scare one, it is skills too is just about new things
10	The challenge for all of FSPs is still the slow internet, its take time to upload documents
11	You can't do business and they busy we must write this exam to comply and have your door open
12	The resistance to change, it took us about 8 to 11 month[s] to convince that specific person to make use of IT system
13	Well I don't market, I don't research, they have to come to me and then seat down, is referral
14	The business is not independent anymore they are being controlled by regulators
15	Yes, its cost, our operating expenses, the cost just keep[s] escalating
16	The biggest challenge at this point is the legislation and the changing environment
17	Obviously the cost is a big thing