Small Hospitality Enterprises and the Internet: an IT Governance model for conducting business online.

by

Bukelwa Ngoqo

Dissertation

submitted in fulfilment of the requirements for the degree

Masters of Commerce

in

Information Systems

in the

Faculty of Management and Commerce

of the

University of Fort Hare
Together in Excellence

Supervisor: Prof S.V. Flowerday
Co-supervisor: Prof M.E. Herselman

December 2010

ABSTRACT

The Internet has made a considerable impact on how business is conducted. Empowered by technology consumers are using the Internet as a tool to communicate and transact online. E-commerce (electronic commerce) presents opportunities for business to gain a competitive advantage, however it also posses certain challenges. Small and Medium Hospitality Enterprises (SMHEs) sector within the tourism industry, is one of the sectors which stands to benefit from using the Internet for business. Researchers agree that the contribution made by the tourism sector in developing economies is substantial. However, SMHEs are noted for their failure to derive optimal benefits from using the Internet for business to improve their competitiveness. This study which seeks to develop a model for use by SMHEs as a guide when making the decision to adopt technology was necessitated by the importance of SMHE's contribution in the economy of developing countries. This model is based on the examination of existing theories and models such as; the Delone and McLean IS success model (2004), and the ITGI's (2007) IT governance focus areas model. To elicit the desired outcomes, additional data was collected using questionnaires, interviews, and observations. The collected data was analysed and resulted in the development of a model that can be used by SMHEs in order to derive value from IT and to gain a competitive advantage.

Keywords: IT Governance, SMEs, ICT Tourism, Hospitality Enterprises, E-commerce.

DECLARATION

I _____ hereby declare that:

• The work in this dissertation is my own work.

• All sources used or referred to have been documented and recognised.

• This dissertation has not previously been submitted in full or partial fulfilment of the requirements for an equivalent or higher qualification at any other recognised institution.

Signature   : _____

Date   : _____

ACKNOWLEDGEMENTS

'God will not take you where, He cannot keep you!'

I would like to express my sincere gratitude and appreciation to the following people for their assistance and support, without which the completion of this research project would not have been possible:

- My husband and son, for their support and encouragement.
- My mother, who planted the first seed that set me on the path I am on, and showed me how it all is possible to achieve.
- Prof. Stephen Flowerday and Prof. Marlien Herselman, my supervisors, for their support, patience, encouragement and professional guidance. The process of writing a dissertation is an experience that could have been very challenging, were it not for your prompt responses to my emails, countless edits, additional reading resources, and timely messages of encouragement.
- Mrs Sheila Hartwanger, who painstakingly proofread every page.

Table of Contents

List of Figures

List of Tables

CHAPTER 1: Introduction

1.1 Background

1.2 Statement of the problem
- 1.2.1 Research Question

1.3 Objective of the Study

1.4 Significance of the Study

1.5 Initial Literature review
- 1.5.1 E-commerce Success Model(s)
- 1.5.2 IT Governance Model(s)

1.6 Research design
- 1.6.1 Research Paradigm
- 1.6.2 Research Methodology
  - 1.6.2.1 Data collection
  - 1.6.2.2 Data analysis

1.7 Delimination of the Study

1.8 Outline of Chapters

1.9 Summary

1.1   Background

According to Kim, Chung, and Lee (2010, p1) "Currently there are 1.46 billion Internet users in the world; this figure has increased by over 305.5% from the Internet World figures released in 2000". With these dramatic developments in the usage of the Internet by individuals and businesses, no business can afford to overlook the Internet as a tool than can be used to help businesses meet their objectives. Schmidt, Cantallops, and Dos Santos (2008) identify three possible uses for the Internet in business, namely: promotion of business services, provision of information, and processing of business transactions. Martin (2004) states that by using technology, the small business sector stands to gain unprecedented new opportunities for business development and competitive advantage; this is still relevant today.

The problem identified in this research project is emphasised by Schmidt *et al* (2008) when they argue that despite the increasing popularity of the Internet, hospitality enterprises are not taking the opportunity of using the Internet as a business tool to gain a competitive advantage. This problem is of particular interest when one considers that the hospitality sector, within the tourism industry, is ideally suited to using the Internet (Law, Qi and Buhalis, 2010; Kim *et al*, 2010).

However, "Internet technologies alone cannot create value in a firm whose strategy does not match expectations" (Schlenker and Crocker, 2003, p7). More than five years ago Schlenker and Crocker suggested that Internet technologies have a definite impact on the value added to the business. They imply that if a businesses' strategy is aligned to client expectations and Internet technologies, this should result in added value to the business.

This research project examined the challenges and current uses of Internet technologies by Small and Medium Hospitality Enterprises (SMHEs), and also focused on the alignment of Internet technologies and business strategy.

1.2   Statement of the Problem

The problem identified is that SMHEs do not derive the full benefit from using the Internet as a business tool which could improve their competitiveness. Despite the increased promotion of the Internet, hospitality enterprises do not utilise the Web as an effective business tool (Schmidt *et al,* 2008; Kyobe, 2008; Murphy and Kielgast, 2008).

1.2.1 Research Question

How can SMHEs take full advantage of the opportunities to improve business efficiency and effectiveness available through the use of Internet technologies?

In order to address the research problem, the main research question has been sub-divided into three sub-questions. Once each uniquely themed sub-question has been answered, collectively they would have addressed the main research question.

This study addresses the following sub-questions:

- **How do SMHEs currently use the Internet to support their trade activities?**

The hospitality sector remains one of the few sectors where the services offered have not evolved much over the years. Although technology has not yet been developed that will change the manner in which the core services are offered, technology does exist which can help SMHEs manage their businesses more effectively. The suggested solution developed is based on an analysis of the electronic commerce (e-commerce) challenges experienced by SMHEs, as well as their current information systems (focusing on Internet technologies).

- **How can SMHEs use Internet technologies to gain a competitive advantage?**

Information and Communication Technologies (ICTs) have radically changed the efficiency and effectiveness of tourism businesses, the manner in which business is conducted, as well as how consumers interact with the business (Buhalis and Law, 2008). The Internet can be used as an alternative method of offering business services to the customer.

- **What components must be considered in developing a model that will support SMHEs to gain advantage from using Internet technologies?**

In the hospitality industry context, e-commerce is highly information intensive (Kim *et al*, 2010). The SMHEs' owner/managers need to clearly understand that e-commerce can provide the business with an opportunity to exchange information and transact with customers and/or suppliers. The model acts as an aid in the decision making process of SMHE owner/managers to ensure that the information provided online matches the information needs of travellers or suppliers. In developing this model two key components are considered:

- ➢ **E-commerce models** that can be applied to SMHEs.
- ➢ **IT Governance models** that can be applied to SMHEs.

1.3 Objective of the Study

The purpose of the study is to develop an appropriate IT Governance model for SMHEs so that they benefit from using the Internet. This study attempts to establish that a positive link exists between the use of Internet technologies by SMHEs and their competitive advantage. Recommendations culminate in the development of a model that acts as a guide for SMHEs when aligning Internet technologies with business strategy in order to gain this competitive advantage.

1.4 Significance of the Study

The hospitality sector within the tourism industry is an important component in the economy of developing countries. Any tool or model which gives SMHEs in a developing country a competitive advantage will not only benefit the SMHEs' owner, but also indirectly affect the entire economy.

1.5 Initial Literature Review

Internet technologies have the potential to help SMHEs enhance service quality, reduce costs, improve productivity, gain competitive advantage, and increase profitability. In the right conditions with the right partners the deployment of Internet technologies can help re-enforce the competitive position of small businesses (Schlenker *et al*, 2003; Karadag, Cobanoglu, and Dickinson, 2009). In the case of this research project the small and medium businesses considered are in the hospitality sector of the tourism industry, referred to in this study as SMHEs. For the purposes of this research project a Small Hospitality Enterprise (SMHE) is defined as a commercial accommodation establishment offering between 4-16 bedrooms and which has as its primary source of business the supply of tourist or business accommodation. Breakfast can be made available to guests, and the owner/manager may live on the property. The contributions made by SMEs towards job-creation, reduction of poverty, and the wider distribution of wealth opportunities make the SMEs in developing countries vital contributors to the economy (Diaz, 2001; Okello-Obura, Minishi-Majanja, Cloete and Ikoja-Odongo, 2008; Frempong, 2009). Tiessen, Wright, and Turner (2001) and Singh, Pathak, and Naz (2010) acknowledge, that the use of Internet technologies and globilisation have brought new challenges as well as new competitive opportunities for SMEs.

Ignoring or under-utilising Internet technologies creates a competitive disadvantage that may lead to an accelerated decline of the busines (Buhalis, 1998; Murphy and Kielgast, 2008). It is increasingly evident that even SMHEs can no longer continue to

ignore technological advancements that directly affect the tourism sector as a whole. According to Karanasios and Burgess (2006) the Internet provides a platform to share information, communicate (bi-directionally), and transact.

E-commerce solutions are suggested as an alternative ICT strategy for SMHEs. For the purposes of this study e-commerce is defined as an inclusive term which refers to a wide range of online business activities for products and services and includes any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact (Andam, 2003). The deployment of any technological solution must be linked to the overall strategic objectives of the business. Kyobe (2008) deems the attainment of this alignment as crucial to the success of a business.

1.5.1 E-commerce Success Model(s)

Delone and McLean (2004), advocate that although market drivers have changed, basic business principles have not. Businesses still have the long-term vision or goal of making a profit. They argue that the fundamental role of ICT in facilitating business transactions and communicating relevant information to decision makers, also has not changed. Additionally they suggest that the methodology of measuring IS success should not change.

The Delone and McLean 2004 model provides a framework for measuring the performance of information systems. This model offers some of the more important IS success factors.
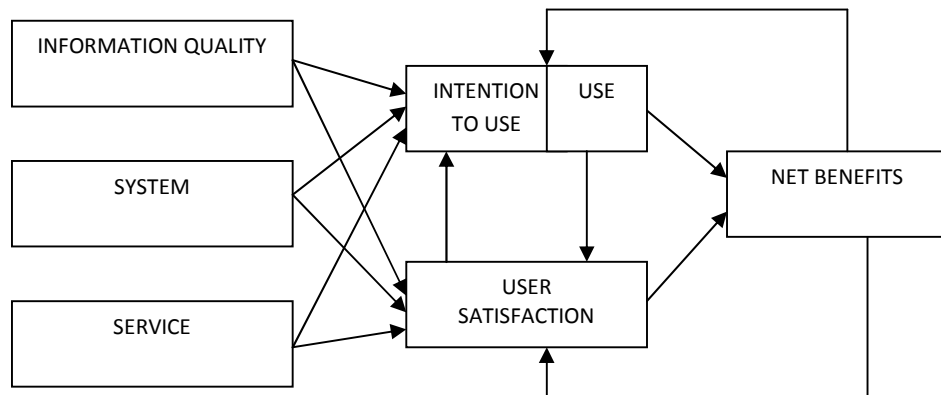
Figure 1-1: Updated Delone and McLean IS Success Model (2004)

1.5.2 IT Governance Model(s)

Buhalis and Law (2008) emphasise that ICTs should be used for both operational and strategic management purposes. This IT Governance model will provide a structure to follow in an attempt to align ICT for both operational and strategic purposes. The IT Governance Institute (ITGI, 2007) defines IT Governance as the presence of processes which ensure the effective and efficient use of IT in enabling an organisation to achieve its goals. Taking a closer look at the concepts mentioned in this definition, ITGI (2007) notes the following:

1. IT Governance is made up of processes with inputs, outputs, roles and responsibilities that are inherent in the definition of a process. It is important for SMHEs to consider that any ICT solution implemented will help support existing business processes.

2. IT Governance is identified as having an ensuring as opposed to executing role. The concept of IT Governance is one that can easily be adopted by SMHEs to ensure that they establish processes that help the owner/managers to monitor how Internet technologies are used within the enterprise. These

processes do not deal with executing various Internet related tasks, but are rather for control and monitoring purposes.

3. The goal of IT Governance is defined as a business goal – not just ICT related. The SMHEs need to see these governance processes as part of an initiative to ensure that Internet technologies support business objectives.

4. Key performance measures are identified as effectiveness and efficiency, together representing business value. The owner/managers need to have a good understanding of how any proposed investment in Internet technologies will help the business to meet its objectives.

Different authors have derived different models to try and put IT Governance in context. The IT Governance model that will be analysed in this research project is from the Information Technology Governance Institute **(ITGI)**. The ITGI model identifies five IT Governance focus areas (Figure 1-2).
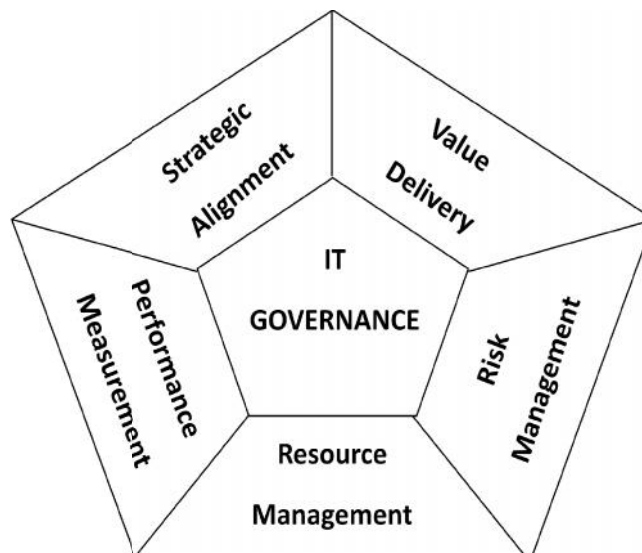
Figure 1-2: Five focus areas of IT Governance (ITGI, 2007)

1.6   Research Design

According to Cooper and Schindler (2006) the research design is the blueprint for how data is collected, measured and analysed. The research study started with an investigation into ICT adoption challenges experienced by SMHEs. The literature review was undertaken in three parts, and was conducted by using electronic documentation, journals, books, articles and reports. The initial literature survey defined the research question answered by this study. The plan and structure of investigation to obtain answers to the research questions, is illustrated and discussed in more detail in Chapter 5

1.6.1 Research Paradigm

Voce (2004) describes a paradigm as a framework within which theories are built, that fundamentally influences how you see the world, determines your perspective, and shapes your understanding of how things are connected. Mainly interprevist principles will be applied in this study. According to Voce 2004 interprevism focuses on generating knowledge based not only on observations, but also on subjective beliefs, values, reasons and understandings. Although this study takes a primarily interpretivist approach, both qualitative and quantitative research methods were used.

1.6.2 Research Methodology

Leedy (1997) defines research as a systematic method of gathering and analysing information or data in order to enhance our understanding of the facts that we are concerned or interested in. The methodology describes the means/methods that will be used to gain knowledge. These can be both qualitative and quantitative. When comparing qualitative and quantitative data De Luca and Kock (2007) highlight that: qualitative data is generally text based, and quantitative data is generally numeric. A

combination of these methods was used in this study which is known as triangulation. Cohen and Manion (1994, p233) define triangulation as "the use of two or more methods of data collection in the study of some aspect of human behaviour". The literature study forms the third part of the triangulation in this study.
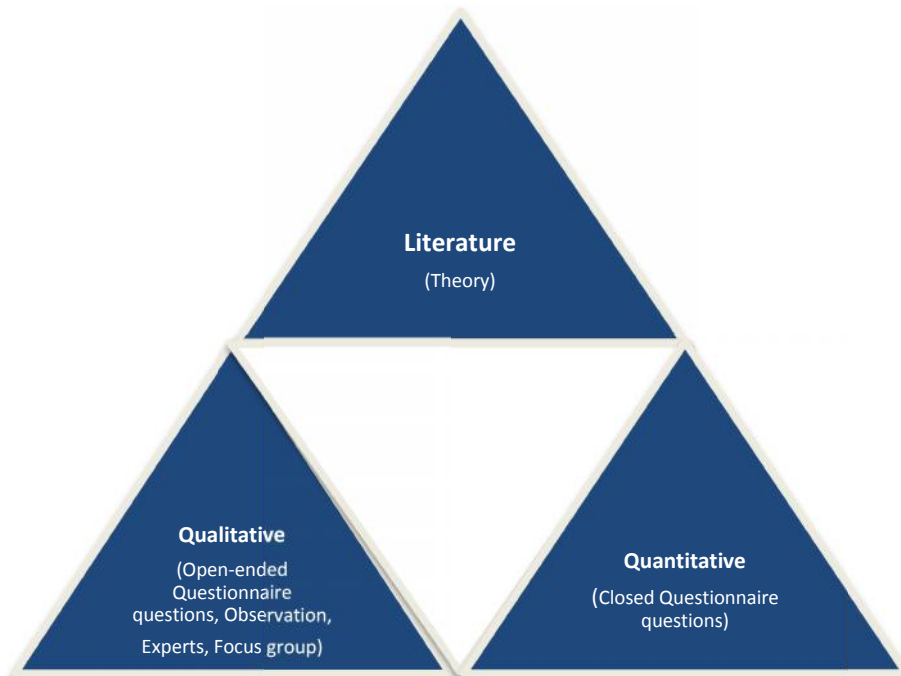
Figure 1-3: Research methodology summary

1.6.2.1   Data Collection

A non-probability sampling technique called quota sampling was used for this study. Using quota sampling, the units included in the sample are based on pre-specified characteristics (Babbie, 2005). The sample group comprised a list of SMHEs registered on the Buffalo City Tourism Board website. These registered members were invited to attend a workshop during which they were asked to complete a

research questionnaire. An audit (by observation) of the websites of the respondents who have websites was conducted. Lastly, a panel of experts was identified for the purpose of validating and refining the model. The research design is summarised in Figure 1-4 below. Steps 1 to 3 of the steps summarised in Figure 1-4 are discussed further in section 5.4.1.

Figure 1-4: Research design process

1.6.2.2 Data Analysis

Step 4: An in-depth **analysis** and comparison of the data collected from questionnaires and observations, was made to identify and categorise the responses according to the themes derived in the literature.

Step 5: Qualitative and Quantitative data gathered from Step 1 to Step 3 (through literature survey, questionnaires, focus group interviews and the websites observations) was grouped according to the various research questions. Analysis of the SMHEs owner/managers' responses were discussed and the findings influenced the development of the proposed **model**.

Step 6: To evaluate the model (**validate** relevance), a group of five experts from the hospitality sector reviewed it. The group of experts included members from the Buffalo City Tourism Board. Their comments were noted and the final model was adjusted accordingly.

1.7 Delimitation of the study

The target group for this research project is identified as SMHEs. This study is limited to only those SMHEs located in the Buffalo City Municipality of the Eastern Cape province in South Africa, and registered with the Buffalo City Tourism Board. The sample group was obtained by contacting (via fax or email) SMHEs registered on the Buffalo City Tourism Board website. SMHEs listed under the Bed & Breakfast and Guest House category on this website were included in the sample. SMHEs, which had less than four rooms or more than sixteen rooms, were excluded from the sample.

1.8 Outline of Chapters

The first chapter is an introductory chapter which provides an overview of the study. A brief background, the definition of the problem, research objective, research design, and delimitation of the study are all discussed in this chapter.

Chapters 2 to 4 contain the initial literature survey in which various theories and philosophies that influence the problem are discussed. Chapter 2 discusses current applications of e-commerce used by SMHEs and the e-commerce challenges faced by the SMHE. In Chapter 3 Internet technologies relevant to e-commerce adoption by SMHEs are analysed. The Internet provides a wide spectrum of technologies but not all of them may be suitable for adoption in the context of the SMHE. Chapter 4 directs the discussions of this study towards a solution by investigating e-commerce success models that can be applied to SMHEs. Additionally, this chapter also analyses the IT Governance framework and how it can be adapted to the SMHE context.

Chapter 5 presents the research design and methodology including data collection and analysis techniques. This leads to Chapter 6 where an analysis of collected data occurs, empirical findings are presented, and recommendations are made. In Chapter

7, a proposed solution to the research question and problem is presented in the form of an Internet technologies governance model for SMHEs.

Chapter 8 is a summative conclusion, which evaluates the study to determine whether the objective has been achieved. Areas for future studies are also briefly discussed.

1.9   Summary

The undertaking of this study was to develop a model that can be used by SMHEs when making Internet investment decisions to ensure that they benefit from using the Internet. The research problem identified is that SMHEs do not take full advantage of the Internet. The research question and sub-questions raised are aimed at discovering how SMHEs can take full advantage of Internet possibilities in order to improve business efficiency and effectiveness. This chapter has included discussions on the objective of this study, research design, as well as the delineations and assumptions.

Chapter 2 is the first part of a literature review that spans across three chapters and pays specific attention to understanding the ICT adoption challenges facing SMHEs.

CHAPTER 2: ICT Adoption (Literature Review – Part 1)

2.1 Introduction

2.2 Factors Influencing ICT Adoption by SMHEs
- 2.2.1 Technological, Organisational, and Environmental Model
  - 2.2.1.1 Technological Context
  - 2.2.1.2 Organisational Context
  - 2.2.1.3 Environmental Context
- 2.2.2 Technology Acceptance Model

2.3 Information vs Technology needs

2.4 E-commerce and the SMHE
- 2.4.1 Common E-commerce Application in SMHEs

2.5 ICT Adoption Challenges for SMHEs
- 2.5.1 Enterprise Attitudes
- 2.5.2 Perceived Risk
- 2.5.3 Time
- 2.5.4 Size and Limited Resources
- 2.5.5 Overreliance on Intermediaries
- 2.5.6 Lifestyle Choice of Owner/Manager
- 2.5.7 Security

2.6 Conclusion

2.1 Introduction

Having identified the problem that Small and Medium Hospitality Enterprises (SMHEs) do not make full use of the Internet as a business tool, this chapter focuses on understanding the ICT adoption challenges that SMHEs encounter.

ICT has redefined how business is conducted in many industries, and the hospitality sector of the tourism industry is no exception. Wu, Wei and Chen (2008) stipulate that information technologies and web based advertising have changed how products are delivered to end consumers within this sector. Buhalis and Law (2008) argue further that ICTs have radically changed the efficiency and effectiveness of business organisations, the way that business is conducted, as well as how consumers interact with the business. Chen and Tsou (2007, p6) highlight the following effects of adopting ICTs:

- positive impact on internal operational processes, as well as external cross-enterprise processes that integrate other organisational supply chain processes;
- enhances company's response to customer demands with shorter delivery times;
- enables customer to monitor their deliveries; and
- ICTs can be used to design and modify new service processes.

According to Salwani, Marthandan, Norzaidi and Chong (2009), within ICTs the Internet is the most cost-effective tool that can help small and medium enterprises to access larger markets and gain a better competitive advantage. Although hospitality service providers will continue to invest in IT to enhance service quality, reduce costs, improve productivity, gain competitive advantage, and increase bottom line profitability (Karadag, Cobanoglu and Dickinson, 2009), the Internet has opened a communication and trade portal that allows businesses and consumers to interact (Internet marketing) and trade (e-commerce). Customer oriented and information intensive tourism enterprises are increasingly adopting technology to achieve their

business goals (Law, Qi, and Buhalis, 2010). Wu *et al* (2008) are of the opinion that the tourism sector has the potential to adopt e-commerce and Internet advertising as its main communicative tool.

Internet advertising is commonly used as a marketing tool and is changing marketing practice (Schmidt, Cantallops and Dos Santos, 2008). The rapid growth in the number of online users and the increasing rate of online transactions demonstrate that the Internet is becoming more popular (Law *et al* 2010). Wu *et al* (2008) further note compared to other media the Internet is instantaneous, low-cost and global, and as a result, it is growing in popularity.

Conversely e-commerce use in SMHEs is not so widespread. Salwani *et al* (2009) conclude that generally e-commerce is not fully utilised by businesses, irrespective of business size. SMHEs function in a sector that is service based, therefore Salwani *et al* (2009) suggest that e-commerce can serve as a unique tool to improve services, which could enhance their value creations and business performance.

This chapter identifies factors that influence ICT adoption by SMHEs. The theoretical frameworks under which these influencing factors will be discussed are the Technology, Organisational, and Environmental (TOE) model, as well as the Technology Acceptance Model (TAM). The discussions will extend to include the information and technology needs of SMHEs and E-commerce applications, and finally ICT adoption challenges relevant to SMHEs. The next section explores factors which influence ICT adoption by SMHEs.

2.2   Factors Influencing ICT Adoption by SMHEs

The Internet plays a sizeable role in influencing the purchasing decisions of hospitality sector consumers. Buhalis and Law (2008) define the role of the Internet on traveller's behaviour as one of the most influential technologies. SMHE owners/managers are pressurised to adopt Internet technologies for business because consumers of

hospitality products rely on the Internet prior to making the decision to buy, while processing the purchase transaction, as well as for post sale support. The next section introduces the Technological, Organisational, and Environmental model and its application to analysing ICT adoption in SMHEs.

2.2.1 Technological, Organisational, and Environmental Model

While consumers may play a crucial role in influencing SMHE owners/managers to consider Internet technologies as an option, Tornatzky and Fleischer's (1990) Technological, Organisational and Environmental (TOE) model highlights three aspects, which influence the process of adopting, implementing, and using technology: *Technological, Organisational, and Environmental context*. Other factors influencing the adoption of technology by SMHEs will also be discussed and categorised according to the (TOE model) framework. All these factors are also relevant in the case of Internet adoption (Brown and Kaewkitipong, 2009).
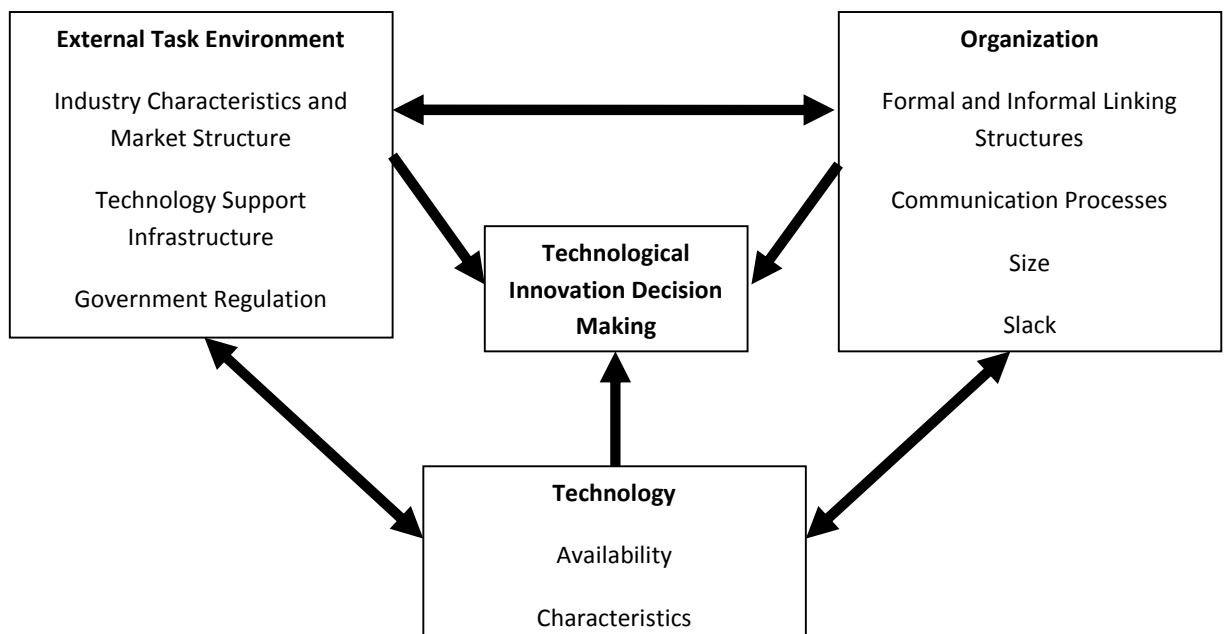
Figure 2-1 : TOE Model (Tornatzky and Fleischer, 1990)

The next sections (2.2.1.1 – 2.2.1.3) will provide a detailed explanation of the model (*cf.* Figure 2-1) above, starting with the Technological context.

2.2.1.1   Technological Context

In the above model Technology considerations include availability and characteristics. Perceived Usefulness (Brown and Kaewkitipong, 2009; Kollmann, Kuckertz and Breugst, 2009) and Perceived Ease of Use are technology related factors that SMHEs should consider and they will now be outlined.

Availability: "The decision to adopt a technology depends not only on what is available on the market, but also on how such technologies fit with the technologies that a firm already possesses" (Scupola 2009, p155).

Perceived Ease of Use: This implies the amount of effort invested in continuous use of the adopted technologies Kollman *et al* (2009). The decision to adopt ICTs has to be coupled with a commitment to use said technologies. The characteristics (Tornatzky and Fleischer, 1990) or features of the ICTs will influence the decision making process. The importance of using ICT lies not only in the availability of a computing device or the Internet line, but rather in people's ability to use them (Minghetti and Buhalis, 2010).

Perceived Usefulness: To what degree are the adopted ICTs perceived to add value and enhance business performance (Kollman *et al,* 2009). The selected ICTs must aid the SMHEs' to meet their business objectives. The Organisational context is discussed below.

2.2.1.2   Organisational Context

Salwani *et al* (2009) indicate that the organisational context refers to descriptive measures related to the organisation such as organisational scope, size and managerial beliefs. Kollmann *et al* (2009) highlight four factors linked to the organisational context of the model: *organisational readiness, strategic decision aids, managerial productivity,* and *organisational support*. The most important organisational factors to consider according to Scupola (2009) are *top management support*, *CEO characteristics*, *employees' IS knowledge and attitude*, and resource constraints such as *financial and human resources* of the firm. The discussion below outlines some of these factors as they relate to the SMHE organisational context.

Organisational readiness: SMHEs have by their nature limited resources (Rufaro, Chiware and Dick, 2008). The availability of existing technological tools or funds required to purchase the required technological tools will influence the decision by management to adopt ICTs. Ramdani, Kawalek and Lorenzo (2009) associate the availability of IS resources and financial resources with organisational readiness. Organisational structure and the communication processes within an organisation have an impact on the organisation's readiness to adopt ICTs. Chen and Tsou (2007) interpret organisational structure as a term referring to the formal line of communication which helps to control, integrate and coordinate work activities and defines the allocation of work roles.

Top Management Characteristics and Support: Most management decisions within SMHEs are made by the owner/managers, whose management style and personality significantly affects the decision making process (Moriarty, Jones, Rowley and Kupiec-Teahan, 2008). Kollmann *et al (*2009*)* discuss three factors that can influence the decision to adopt ICTs; *strategic decision aids* (will the ICTs support the owner/manager's strategic decision making processes), *managerial productivity* (the extent to which the ICTs will help improve productivity, internal communication, or provide better access to information) and the *communication processes* (how

information relating to the ICTs is communicated). How the organisation is structured is important.

Employee's IS knowledge: Previous exposure to similar applications or relevant training influences the employees' confidence in using the implemented technology. Scupola (2009) discusses the influence of employees' IS knowledge and attitude, which includes employees' attitude towards e-commerce, employees' experience with e-commerce and employees' formal and informal e-commerce training. The attitude of employees, who will be the key users of any adopted ICT, is important.

Size: Compared to smaller organisations, larger businesses have more resources, skills and experience, a greater need, and a better ability to survive failures (Ramdani, Kawalek and Lorenzo, 2009; Brown and Kaewkitipong, 2009). Murphy and Kielgast (2008), state that SMHEs are definitely influenced by their size, and sometimes the effect is negative. The last component of the TOE model (Environmental context) is explained in the next section.

2.2.1.3   Environmental Context

"Environment context includes both the direct and indirect roles of competitors, industry associations, and the governments" (Riyadh, Akter and Islam; 2009, p215). In the environmental context Ramdani, Kawalek and Lorenzo (2009) consider four factors: *industry, market scope, competitive pressure* and *external IS support*. Whilst Brown and Kaewkitipong (2009) identify three external environment factors: *industry characteristics, competitive pressure,* and *the influence of the technology providers*. Brown and Kaewkitipong (2009) suggest external environment factors that are in agreement with Ramdani, Kawalek and Lorenzo (2009), with the exception that Ramdani, Kawalek and Lorenzo have included one additional factor namely, *market scope*. All four factors are discussed below.

Industry: Businesses are continuously subjected to external pressures. For the SMHE these pressures may come from customers, competitors, industry regulatory bodies (for example the Tourism Grading Council South Africa), government and the contracts that regulate them. Ramdani, Kawalek and Lorenzo (2009) are of the belief that service industries like the tourism industry, which rely on processing information, are dependent on IS innovations.

Market scope: Market scope refers to the geographic extent of the businesses' operations (Salwani *et al,* 2009). The geographic reach of the businesses' operations will influence the decision for SMHEs to adopt technology. The Internet creates an electronic market place which will assist SMHEs to reach clients beyond their physical geographic boundaries. Ramdani, Kawalek and Lorenzo (2009) discuss *increased costs*, *internal coordination* (increased administration complexity and information processing) as well as *search costs* (searching for customers, trading partners, and distributors) as strong scope related motivators which could encourage SMHEs to adopt ICTs.

Competitive pressure: Salwani *et al* (2009) suggest that the decision to adopt ICTs can also be inspired by SMHE owner/manager's mimicking the actions of their competitors, based on the perceived number of others that have already acquired the ICTs. According to Ramdani, Kawalek and Lorenzo (2009), competitive pressure can possibly be the best predictor of organisational adoption of ICTs.

External IS support: SMHEs can access external support (for example IS service providers, intermediaries) when implementing and using ICTs. External support is an important determinant of ICT adoption by SMHEs (Ramdani, Kawalek and Lorenzo, 2009). Although the Internet usage has primarily positive benefits (Brown and Kaewkitipong, 2009) SMHEs usually lack technology expertise and cannot offer competitive products.

In summary, it is therefore evident that the TOE model provides a well structured framework against which the ICT adoption enablers or inhibitors can be grouped by SMHEs. The TOE model can also help SMHEs gain a better understanding of the environment they operate in. Briefly discussed above in the organisational context of the TOE model is the level of ICT knowledge possessed by either the owner/manager or the employees. The TAM discussed in the next section, focuses on the factors that will influence the attitude these two parties have towards ICTs. The next section reviews the relevance of the Technology Acceptance Model in understanding the behavior of the SMHE owner/managers and their staff.

2.2.2   Technology Acceptance Model

Kaplanidou and Vogt's (2006) adaptation of the Technology Acceptance Model (TAM) compactly summarises key aspects for the adoption of technology by SMHEs. Potential users of the ICTs within the business are a vital component for the successful implementation of ICTs within SMHEs. SMHE websites involve interaction between three different user groups; these three groups are the owner/manager(s), employees and travellers. The TAM highlights two key aspects considered by the owner/manager before a decision is taken to adopt ICTs, **ease of use** and **usefulness**. Kaplanidou and Vogt (2006) suggest perceived usefulness as a major determinant of people's intentions to use computers, closely followed by ease of use.

The Kaplanidou and Vogt (2006) adaptation (*cf.* Figure 2-2) of the TAM is adjusted to allow for its application to travel websites, in order to test how useful websites are in providing information for trip planning to online travellers and how this usefulness influences intentions to travel to the destination.
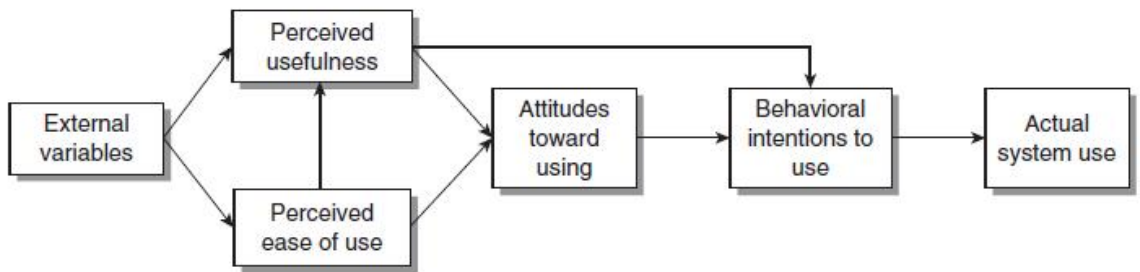
Figure 2-2: Technology Acceptance Model (Kaplanidou and Vogt (2006) Adaptation)

From analysing this model one can deduce that the owner/managers, employees or travellers' use of ICTs is profoundly influenced by how easy the ICT is to use and also how useful (Does it make the task they are performing easier?) it is perceived to be, and this changes their attitude and intention towards using ICT. This also links to the TOE model above (*cf.* Figure 2-1), as perceived ease of use under the Technological component is also stressed by Kollman *et al* (2009). Castaneda, Frias and Rodriguez (2007) propose that information obtained from the Internet influences customer satisfaction with the destination. The information needs of customers are compared to the technology needs of the business in the next section.

2.3 Information vs Technology Needs

The rapid growth in popularity of the Internet in tourism has been widely documented (Law and Bai, 2008). Tourism e-commerce is a highly intensive area (Kim *et al*, 2010 and Xiang, Gretzel and Fesenmaier, 2009) and raises a key question, which they claim to be of the utmost importance for businesses when implementing Internet technologies. Does the information currently available online match the information needs of customers? Jayawardena, Patterson, Choi and Brain (2008) state that to be economically viable, hospitality businesses must meet the needs of customers. The challenge of providing information that will satisfy the needs of customers is made more complex by the subjective manner in which information users make sense of the

information provided. Okello-Obura *et al* (2008) postulates that information users process information in relation to their world, time, place and problems.

Stakeholders in the travel and accommodation sector of the tourism industry include suppliers, intermediaries such as wholesalers, retail travel agencies, technology providers, and customers or travellers (Brown and Kaewkitipong, 2009). These stakeholders are also potential users of information provided by SMHEs. The relationships between the various stakeholders is summarised in the figure below:
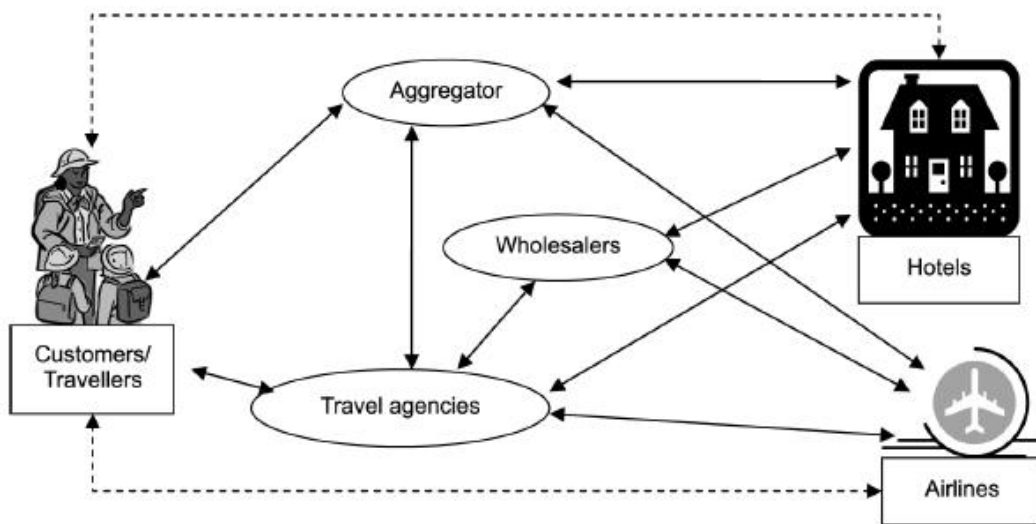
Figure 2-3: Relationship amongst stakeholders of the travel industry (Brown and Kaewkitipong, 2009)

The scope of this study will be limited to only considering the information needs and Internet technologies relevant to SMHE customers. As Internet usage among travellers increases, frequent travellers have a higher likelihood of using the Internet for travel planning purposes (Kaplanidou and Vogt, 2006). Empowered by the Internet, the new traveller has become more knowledgeable and is seeking value for money and time (Buhalis and Law, 2008). Understanding why and how organisations adopt Internet technologies is equally important (Power, 2009). SMHEs are in a service-sensitive industry that is dependent on the quality of customer service and

experience and their consequent assessments of satisfaction or dissatisfaction (Zehrer, 2009) therefore, understanding not only why but also how Internet technologies are selected and implemented is important in an effort to improve operations performance and manage service quality. Minghetti and Buhalis (2010) caution that discrepancies in processing, controlling, communicating and distributing information have a greater impact on tourism production and consumption than in any other sector. They presume that these disparities are a result of the availability of technological tools and the ability to use these tools effectively. This study supports the notion presented by Formica and Kothari (2008) which states that the businesses' ability to survive competition in an information-intensive environment is influenced by their ability/capacity to collect, process, analyse and interpret information. Business transacting activities performed over the Internet form part of e-commerce. The following section provides definitions of e-commerce and discussions on how e-commerce is relevant to SMHEs.

2.4   E-commerce and the SMHE

This study will consider e-commerce solutions as part of the SMHE's ICT strategy. A simplified yet effective definition of e-commerce was provided by Cloete (2001, p2) and is still relevant; it is defined as "the exchange of electronic information between parties, normally followed by the exchange of goods and payment transactions." E-commerce is an important component to explore in meeting the objective of this study (developing an IT Governance model for application by SMHEs in order to ensure they benefit from using the Internet for business). E-commerce applications, which can be used in SMHEs, are identified in the next section.

2.4.1 Common E-commerce Applications in SMHEs

SMHEs make limited usage of Internet technologies according to Schmidt, Cantallops and Dos Santos (2008). They venture that SMHEs use their websites primarily for two reasons; promotion and point-of-sale. According to Wu, Wei and Chen (2008) promotion or web based advertising has refined how hospitality products are delivered. However Fesenmaier (2007) challenges this view and suggests that tourism advertising should move beyond the provision of information to stimulating the potential customer mentally with likely events that will engage the customer in the destination. Despite the limited usage of the Internet as a business tool by SMHEs, listed below are some of the most popular (Law, Qi and Buhalis, 2010; Buhalis and Law, 2008) attributes of accommodation provider websites:

- reservations;
- contact information;
- promotions; and
- information on products and services.

The Internet has opened a door for SMHEs to improve their service offering to travel customers and gain access to international markets. Certain challenges hamper SMHEs from fully realising the advantages that can be gained from using the Internet (Singh, Pathak and Naz, 2010; Irvine and Anderson, 2008). In the case of SMHEs most of the challenges experienced are not directly linked to the Internet as a technological tool, but are linked to those environmental factors discussed in section 2.2.1.3 above. The next section introduces ICT adoption challenges facing SMHEs.

2.5 ICT Adoption Challenges for SMHEs

The table below summarises ICT adoption challenges faced by SMEs derived from an informal content analysis of key authors. The table below is not entirely exhaustive

of the possible challenges that may be experienced by SMEs but focuses more on those that are most applicable to SMHEs.

Table 2-1: ICT adoption challenges commonly experienced by SMEs and supporting authors

	Researchers	Enterprise Attitudes	Perceived Risk	Time	Size and limited resources	Overreliance on intermediaries	Lifestyle of Owner/Manager	Security
1.	Salwani *et al* (2008)	X						
2.	Murphy and Kielgast, 2008	X			X		X	
3.	Vrana and Zafiropoulos (2006)	X						
4.	Karadag, Cobanoglu and Dickinson (2009)		X					
5.	Irvine and Anderson (2008)			X	X	X	X	
6.	Buhalis and Law (2008)	X		X				X
7.	Shalhoub, (2006)		X					X
8.	Minghetti and Buhalis (2010)	X				X		
9.	Moriarty, Jones, Rowley, Kupiec-Teahan (2008)				X		X	
10.	Niininen, Buhalis and March (2010)				X			
11.	Schmallegger and Carson (2008)				X			
12.	Rufaro, Chiware and Dick (2010)				X			
13.	Kim *et al* (2010)							X

Each of the challenges mentioned in the table above will now be outlined to show their relevance to SMHEs.

2.5.1   Enterprise Attitudes

The accommodation provision sector of the tourism industry is characterised by below-average company size, low growth rates, weak internalisation, relatively low market entry barriers, and relatively poor qualification levels (Zehrer, 2009). Due to the negative characteristics against which these businesses are established (*cf* Table

2-1), it can then be anticipated that SMHEs will experience diverse challenges when it comes to ICT adoption. SMHEs are different from larger hotel establishments in terms of their small numbers, and the subsequent influence of a single person, the owner/manager (Loi, 2005; Zeher, 2009). Vrana and Zafiropoulos (2006) and Buhalis and Law (2008) agree that the characteristics of the organisation (which cannot be separated from those of the owner) sometimes have a negative influence on the ICT adoption decision. These characteristics may include:

- Level of marketing expertise (Murphy and Kielgast, 2008),
- Occupational background (Buhalis and Law, 2008),
- Innovativeness (Vrana and Zafiropoulos, 2006; Loi, 2005); and
- ICT knowledge (Loi, 2005).

As many businesses tend to be followers rather than leaders in e-commerce adoption, Salwani *et al* (2009) state that attitude is the most significant hindrance to e-commerce involvement in developing countries. Discussed in the following section perceived risk can also be added as a challenge for SMHEs when adopting ICTs in their business.

2.5.2 Perceived Risk

SMHEs are classified as small businesses, and are characterised by a scarcity of capital (Murphy and Kielgast, 2008; Zehrer, 2009). The SMHE owner/manager who has limited ICT knowledge, is faced with the decision of making an investment in IT from a very limited budget. Karadag, Cobanoglu and Dickinson (2009) include perceived risk as another challenge. Will the investment in IT yield the desired results? They also link the inability to accurately measure the benefits of IT investments as a possible aggravator of this perceived risk. Law and Bai (2008) simply state that the ultimate goal of setting up a business website is to make a profit. In the case of SMHEs using websites as an ICT solution, it is difficult to measure the

direct impact the website will have on business profit. Time is also an important challenge for SMHEs. The next section explores *Time* as a possible challenge.

2.5.3   Time

Owner/managers consider implementing ICT in small organisations to be time consuming (Buhalis and Law, 2008; Irvine and Anderson, 2008) because SMHEs have a few staff members performing all necessary business activities (strategic planning, daily operation management, administrative tasks, and finance tasks). Moriarty *et* al (2008) describe these owner/managers as generalists who undertake a wide range of business activities. The SMHE owner/manager(s) is also involved in daily operational activities and will be challenged to find time to understand new technology applications. SMHEs tend to focus on short-term goals rather than long-term objectives due to time constraints (Moriarty *et al*, 2008). The size of the business often dictates its resource capacity. The next section discusses size and availability of resources and how they pose a challenge for SMHEs' adoption of ICTs.

2.5.4   Size and Limited Resources

Small businesses are different from large organisations, in terms of their small number of employees as well as their limited financial resources (Loi, 2005 and Frempong, 2009). Small businesses are reluctant to adopt ICTs unless there is a specific request from their trading partners and/or customers to do so, as noted by Loi (2005). Based on an informal content analysis (*cf* Table 2-1), a number of authors (Irvine and Anderson, 2008; Moriarty *et al*, 2008; Niininen, Buhalis and March, 2007; Schmallegger and Carson, 2008; and Rufaro, Chiware and Dick, 2008) are in agreement, that size and limited resources are possibly the most challenging factors to ICT adoption by SMHEs. The dependency of SMHEs on intermediaries is discussed in the next section.

2.5.5 Overreliance on Intermediaries

Intermediaries in the travel and accommodation sector are those who facilitate the matching of travel service buyers and sellers, and subsequently support the exchange process including issuing tickets/vouchers and forwarding money (Brown and Kaewkitipong, 2009). These intermediaries pose as a challenge as SMHEs have less bargaining power and may have to accommodate the dictates of intermediaries. Irvine and Anderson (2008) concur that overreliance on intermediaries for product marketing, online booking, and procurement can be problematic. The next section looks at the negative effects of the lifestyle choices of the owner/managers.

2.5.6 Lifestyle Choice of the Owner/Manager

SMHEs are in many cases family owned, small businesses with a motive for involvement that relates more to lifestyle, location, and leisure preferences more than a desire for profit or financial security (Brooker and Burgess, 2008; Zehrer, 2009; and Murphy and Kielgast, 2008). The managerial deficiencies as a result of this make it difficult for SMHEs to take advantage of the potential benefits from the use of ICTs and the Internet in particular (Murphy and Kielgast, 2008). Security concerns, discussed in the following section, also ranked highly in the informal content analysis performed.

2.5.7 Security

Despite the increased usage of the Internet people are still reluctant to release their private details to a website as they do not trust e-commerce security (Kim *et al* 2010, Buhalis and Law 2008). Kim *et al* 2010 goes further and emphasise that perceived security is one of the most challenging issues faced by Internet users who want to conclude purchasing transactions online. This perceived lack of security which emulating from website vulnerabilities, will lead to a lack of trust by SMHE website users. Shalhoub (2006) attributes the relatively low e-commerce adoption to lack of

trust and ventures that trust will be the decisive factor for success of failure of e-commerce.

The identified challenges are ICTs adoption challenges which are also relevant for e-commerce adoption by SMHEs. The informal content analysis performed showed that the three most prominent challenges are: *Size and limited resources*, *Enterprise attitudes*, and *Security*.

2.6   Conclusion

Technological advancements have evolved and have through this process changed the way business is conducted, especially in the tourism hospitality sector. With new developments in the use of the Internet, that have seen more users retrieving information and transacting online, SMHE owner/managers can no longer ignore the Internet as a business tool. Understandably SMHE owner/manager's hesitancy to adopt ICTs stems from the inherent challenges that these businesses experience which are primarily associated with their size and the subsequent influence of one person (owner/manager). In this chapter it has been shown that the deficiencies inherent in many small enterprises also have an impact on the SMHEs' adoption of ICT and e-commerce more specifically. In analsing the factor which influence ICT adoption, the TOE (*cf* 2.2.1) and TAM (*cf* 2.2.2) model were used as frameworks. An informal content analysis (*cf* Table 2-1) was performed which revealed specific ICT adoption challenges experienced by SMHEs. Owner/manager(s) characteristics such as ICT knowledge, marketing skills, innovativeness, occupational background, and even lifestyle aspirations play a crucial role in all aspects of the SHME including ICT adoption.

While Chapter 2 provided a broad understanding of ICT adoption influencing factors and challenges, Chapter 3 will conduct an in-depth review of Internet technologies that can be used by SMHE to gain competitive advantage.

CHAPTER 3: Internet Technologies for Competitive Advantage (Literature Review – Part 2)

```
┌─────────────────────────┐         ┌─────────────────────────────────────┐
│                         │         │ 3.2 Customer Decision-Making Process│
│                         │         │                                     │
│                         │         │ •3.2.1 Pre-Consumption Stage        │
│   3.1 Introduction      │────────▶│ •3.2.2 Product Consumption          │
│                         │         │ •3.2.3 Post-Experience Engagement   │
│                         │         │                                     │
└─────────────────────────┘         └─────────────────────────────────────┘

┌─────────────────────────┐         ┌─────────────────────────────────────┐
│                         │         │ 3.4 Relevant Internet Technologies  │
│                         │         │                                     │
│                         │         │ •3.4.1 Search Engine Marketing      │
│                         │         │ •3.4.2 Electronic Word-Of-Mouth(Blogs)│
│                         │         │ •3.4.3 Online Bookings              │
│ 3.3 Internet as a       │────────▶│ •3.4.4 Internet for Communication   │
│     Marketing Tool      │         │        (Online Queries)             │
│                         │         │ •3.4.5 Social Netwrorking           │
│                         │         │ •3.4.6 Media and Content Syndication│
│                         │         │        (RSS)                        │
│                         │         │ •3.4.7 Internet-Based Services      │
└─────────────────────────┘         └─────────────────────────────────────┘

┌─────────────────────────┐         ┌─────────────────────────────────────┐
│ 3.5 Competitive Advantage│        │                                     │
│                         │         │                                     │
│ •3.5.1 Targeted Consumers│        │                                     │
│ •3.5.2 Product           │────────▶│      3.6 Conclusion                │
│        Differentiation   │        │                                     │
│ •3.5.3 SMHE's Brand      │        │                                     │
│                         │         │                                     │
└─────────────────────────┘         └─────────────────────────────────────┘
```

3.1 Introduction

In Chapter 2 SMHE adoption of ICT was discussed as well as their ICT adoption challenges. In order to help SMHEs gain a better understanding of available Internet technologies, this chapter will focus on the actual technologies that can be used by SMHEs to extend their services online. This chapter also explores the concept of competitive advantage.

The Internet is changing the tourism industry structure by altering barriers to entry, minimising switching costs, revolutionising distribution channels, and facilitating price transparency, while enhancing efficiency (Buhalis and Law, 2008; Xiang, Wober, Fesenmaier, 2008). SMHEs that want to compete in the current tourism market must embrace ICTs, specifically websites as a tool for conducting business. The Internet has opened doors for SMHEs not only in local but also in international markets. Irvine and Anderson (2008) suggest that the Internet is well suited for small businesses as it allows them to keep their doors open 24 hours a day to customers all over the world at reasonably low costs. Murphy and Kielgast (2008) take a prudent view to the adoption of the Internet by SMHEs as they acknowledge that because of their size these enterprises may be at a disadvantage, seeing that their opportunistic use of the Internet may accelerate their decline. Schmidt *et* al (2008) recognise that most accommodation sector websites have a limited range of functions. The SMHEs have been slow to fully embrace the Internet wave, and therefore have to understand and select from a wide range of Internet technologies currently available. Schmallegger and Carson (2008) make the recommendation that in order to benefit from Internet usage, businesses need to learn about the various applications available. The SMHE owner/manager has to carefully select website tools and features that will captivate and entice prospective customers and lead them to a purchasing decision. The following section looks at how SMHE customers make decisions prior to purchasing travel/hospitality products.

3.2   Customer Decision-Making Process

The Internet landscape has changed dramatically for SMHEs; using websites to provide lists of information about various aspects of a destination is not effective in helping customers plan their trips (Xiang, Wober and Fesenmaier, 2008). In order to provide relevant services online, the SMHE owner needs to understand the decision making process of the customer, something that has already been indicated in Chapter 2 (*cf.* 2.2.1.1, under perceived ease of use). The Internet plays a crucial role during the planning stages of a customer's trip. Schmallegger and Carson (2008) offer five possible uses or key functions of websites, which coincide with those identified by other authors, namely Promotion (Schmidt *et al,* 2008; Irvine and Anderson, 2008; Law, Qi and Buhalis, 2010), Product distribution, Communication (Irvine and Anderson, 2008), Management and Research.

Within the tourism sector the Internet is commonly used as a communication and distribution channel for customers and suppliers of travel services and products (Castaneda, Frias and Rodriguez, 2007). In addition to using the Internet for communication, SMHEs owner/managers need to consider the following developmental aspects of a website (Irvine and Anderson, 2008): informational (basic level of website providing the same information available through traditional marketing media); transactional (enables communication with the customer); and relational (allows interactivity with the customer enabling the development of a continuous relationship). The informational and transactional aspects are easily acceptable and understood by business owners/managers; however the relational aspect is sometimes overlooked. The website offers an alternative way of offering services to the customer, and by forming an online relationship with the customer, feedback from the customer which can be used to assist in meeting the needs of the client, can also be obtained via the website. Various authors (Buhalis and Law, 2008; Xiang, Wober and Fesenmaier, 2008; Minghetti and Buhalis, 2010) identify three phases that a SMHE customer considers while planning for a trip:

- Information search;

- Product consumption; and
- Post experience engagement.

Each of these phases will now be discussed below.

3.2.1   Pre-Consumption Stage

The Internet has drastically transformed the information search stage, which is a significant part of the tourism product purchase decision making process (Buhalis and Law, 2008; D'Ambra and Mistilis, 2010). The information search phase sees the customer's quest to access and retrieve information that will be used in the planning, decision making, transacting, formation of expectations, and anticipation of the trip (Xiang, Wober and Fesenmaier, 2008; Schmidt *et al*, 2008). The task of providing information is not as clearly defined and simple for SMHE owner/managers. Brooker and Burgess (2008) state that a tourism destination's end-product is not a single entity, but is rather a composite of services and goods including accommodation, food and beverages, attractions, arts, entertainment, cultural venues and the natural environment. The information that customers are interested in when planning to travel is to focus on product attributes such as location, price, and availability (Xiang, Gretzel and Fesenmaier, 2009). SMHEs therefore have to consider the new pre-consumption challenge presented by the Internet, where customers now have to analyse volumes of information before making the decision to purchase, and also focus on the product consumption phase of the customer's decision-making process. The product consumption stage is discussed in the next section.

3.2.2   Product Consumption

The information sought during this phase is used to establish contact with people, facilitate en-route and on-site navigation, assist in short-term decision making and conduct on-site transactions (Xiang, Wober and Fesenmaier, 2008). They speculate

that customers may engage in activities to coordinate their movements to the destination, their on-site experience and activities. Apart from product consumption the customer also considers the post-experience engagement which is discussed in the following section.

3.2.3   Post-Experience Engagement

Information gathered from and about the trip is documented and shared with other people and an attachment to the destination or establishment should be developed; it would influence potential future visits (Xiang, Wober and Fesenmaier, 2008). How customers make decisions can be a good guide for SMHE to prioritise what information should be on the website, in addition to providing information to customers the website; also creates a platform where businesses can market their products and services. The following section explores the possibility of using the Internet for marketing.

3.3   Marketing Tool

The focus of hospitality product marketing is complex, due to the shift in focus from conventional tourism marketing; it is no longer only associated with conveying an image of a place, but with attempting to sell an experience that is related to the lifestyle experience of the customer (Williams, 2006). The failure of SMHE marketing initiatives can be attributed to the misguided focus on the destination or outlet rather than the potential customer. Moriarty *et al* (2008) suggest that the success and survival of the entire business depends on the SMHEs marketing efficiency. The Internet is ideally suited for the marketing and sales of SMHE products, and is now an important advertising medium (Wu, Wei and Chen, 2008). According to Schmidt *et al* (2008) only a few SMHEs are exploring other potential uses of the Internet, such as a

support tool for customer relationship management. SMHEs owner/managers need to understand two key concepts that can assist in their online marketing initiatives:

- o *Consumer Centric Marketing (CCM)*: The aim of CCM is for companies to gain insight into the general characteristics (motivations, habits, attitudes and values that shape the consumer's opinion) of their clients (Niininen, Buhalis and March, 2007).
- o *Relationship Marketing (RM):* The focus of RM is on identifying and establishing, maintaining and enhancing, and where necessary terminating relationships with customers through mutual exchange and fulfilment of promises (Hu, Han, Jang and Bai, 2005).

The Internet offers better facilities for relationship building compared to conventional marketing means (Niininen, Buhalis and March, 2007). The Internet offers a wide variety of technologies that can be used to accomplish various tasks. Some technologies relevant to SMHEs are discussed in the next section.

3.4   Relevant Internet Technologies

The SHME owner/manager will be faced with a difficult decision when selecting which Internet technologies are best suited to their business. Technologies which can be applied to the SMHEs context are discussed below. The technologies mentioned in the discussion below are not entirely exhaustive of all Internet technologies that can be applied to SMHEs; nonetheless a few were identified based on the most commonly discussed in the literature reviewed.

3.4.1   Search Engine Marketing

According to Xiang, Wober and Fesenmaier (2008) search engines are an important part not only for general use of the Internet, but also in a travel information search. A

description of how search engines work is summarised below (Xiang, Wober and Fesenmaier, 2008):
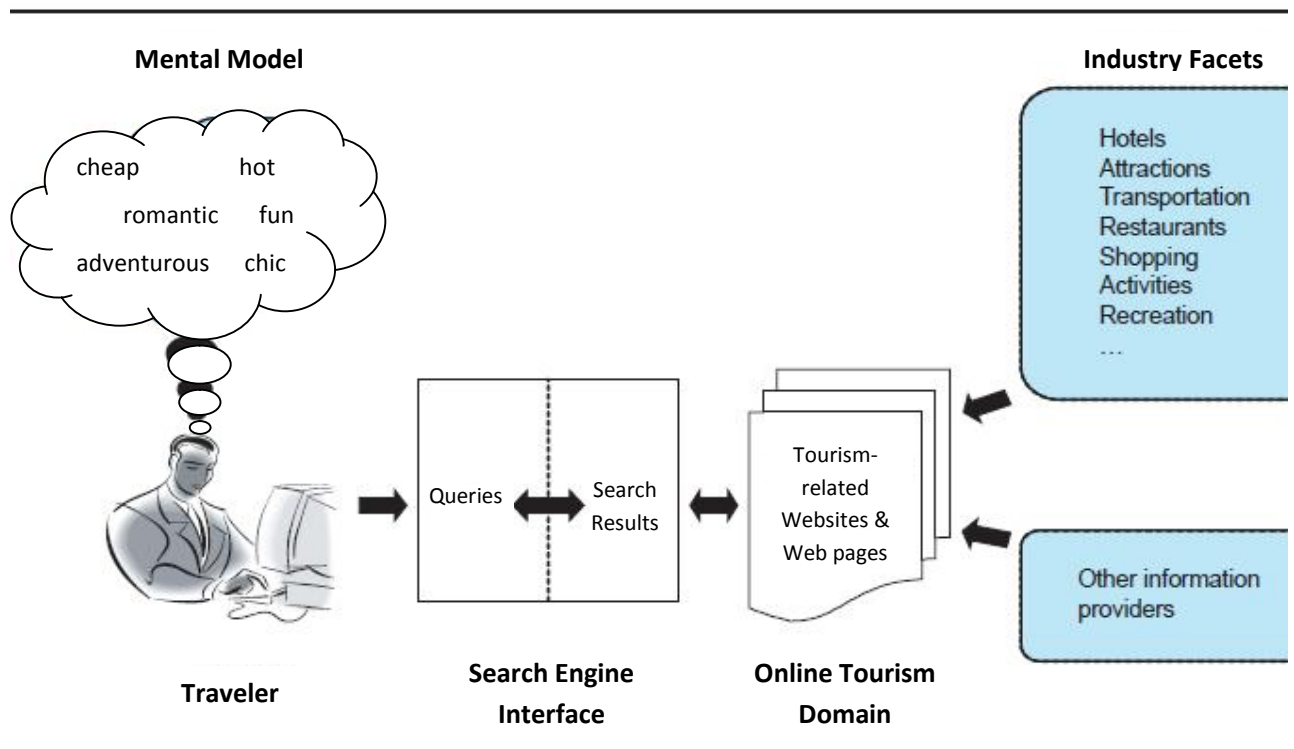
Figure 3-1: Traveler's Use of Search Engine for Planning (Xiang, Wober and Fesenmaier, 2008)

Murphy and Kielgast (2008) note that many customers tend to search online for their hotel rooms, and it is critical that SMHEs maximise visibility on the Internet through Search Engine Marketing (SEM). The increase in the number of customers using SEM can be attributed to the improvement in search engine carrying capacity and speed of networks (Buhalis and Law, 2008). Murphy and Kielgast (2008) state that the SEM can be divided into two categories: Pay for Performance (PFP) where the website pays for visibility (using links, advertising banners, sponsored links or buying 'words) and Search Engine Optimisation (SEO) where the website's visibility is optimised by making technical adjustments (using keywords, meta-tags). The challenge with SEM is ensuring that the customer receives value from the service paid for, otherwise the owner/manager may lose confidence in the technology. The

Internet has communities of people who interact on a daily basis; from these interactions Word-of-Mouth also surfaces on the Internet. The next section looks at electronic Word-of-Mouth.

3.4.2   Electronic Word-of-Mouth (Blogs)

The increase in popularity of user generated content (UGC) and peer-to-peer applications collectively known as Web 2.0 or Travel 2.0 in the tourism context (Schmallegger and Carson, 2008), makes Electronic Word-of-Mouth (E-Word of Mouth) possible. They elaborate further on the Travel 2.0 definition and state that it includes new technologies such as: Media and content syndication (RSS-feeds), Mash-ups, AJAX, Tagging, Wikis, Web forums and message boards, Customer ratings and evaluation systems, Virtual community games, Podcasts, Blogs, and Online Videos (Vlogs). Due to the difference that exists between how SMHEs would like to represent themselves online and how customers conceptualise and describe their experiences, online communities, blogs, and social bookmarks (tags) provide a platform through which the customer's perceptions, images, and stories of their touristic experiences can be translated and shared (Xiang, Wober and Fesenmaier, 2008). Schmallegger and Carson (2008) argue that due to the perceived independence of the source of the message, travel blogs have become the most important source of information for travel planning.

Carson (2008) defines blogs as the practice of maintaining online journals, and the person who writes the blog is called a blogger. Blogs contain primarily textual content and graphics (pictures) but videos can also be found in some. The customer records experiences (positive and negative) related to the trip on this online journal, and other internet users have a chance to engage in an online conversation with the blogger whilst responding to the blogger's messages. When these conversations have gone on for a long period of time relationships are formed in cyberspace, Chalkiti and Sigala (2008) recognise this phenomenon as the inception of Virtual Tourism

Communities. SMHEs invest in technologies anticipating a positive end result culminating in a booking from a prospective customer. The next section discussed how these bookings can also be initialised and concluded online.

3.4.3   Online Bookings

The Internet has created a platform which can be used by SMHEs not only to provide information but also to initiate sales online. The majority of hospitality providers use the Internet as an information center and a reservation medium (Hu, Han, Jang and Bai, 2005). Law (2009) contends that the ability to make accommodation bookings online has made a distinctive impact on travel and tourism. He also anticipates that the Internet will become a significant distribution channel for hospitality enterprise products. The following section looks at using the Internet as a communication tool.

3.4.4   Internet for Communication (Online Queries)

Irvine and Anderson (2008) advocate the importance of the Internet as a medium of communication which allows for relationship building with customers. The Internet supports both synchronous and asynchronous communication (Chalkiti and Sigala, 2008).

Niininen, Buhalis and March (2007) suggest two ways which can help to stimulate communication with consumers:

User Accounts – By registering on the SMHE's website, and logging on to a personalised account customers can store their details and preferences, and their purchasing patterns or activities whilst using this account, can be tracked.

Online Surveys – Incentives like discounts, loyalty points/rewards and prizes can be used to entice the consumers to complete an online survey.

Buhalis and Law (2008) state the Internet can also be used for:

Customer Profiling - Allows for personalisation, customisation, and interaction between SMHEs and customers.

Customer Complaints - It is an effective mechanism for consumers to air their complaints. SMHEs have to be very careful about how this communication is managed because it can have both positive and negative consequences.

In order to achieve synchronous communication the customer has to be willing to part with some personal information. The current use of the Internet is already educating consumers that they can exchange information in return for better service, discounts, offer alerts, newsletters, and ease of service customisation (Niininen, Buhalis and March, 2007). Thus it is evident that using the Internet for communication offers a variety of methods and this communication can be extended to include the social networking platform. The next section explores the use of Social Networking.

3.4.5   Social Networking
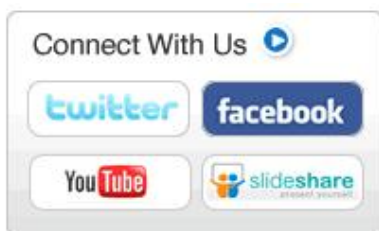
With social networking the site exists only to create and serve those contributions and the user-generated content results in 'collective intelligence' (Warr, 2008). Stolley (2009) refers to the online application that allows for social networking as Social Media Applications (SMA). He further recommends that integrating these SMAs can occur not only by using SMAs (Delicious, Flickr, Facebook, Twitter) directly at their respective URLs on the Web but by building the functionality and user submitted content of SMAs into SMHEs' websites. Examples of tourism specific SMAs are social guides such as WikiTravel and TripAdvisor (Warr, 2008). The SMA allows for customer to customer; customer to business and business to customer communication. Another Internet technology (discussed in the next

section) which can be used by an SMHE is Media and Content Syndication which allows for website to website linking and transfer of information.

3.4.6 Media and Content Syndication (RSS)

Warr (2008) describes an RSS (Really Simple Syndication or Rich Site Summary) document, which is called a 'feed', 'web feed' or 'channel', as a web page that contains either a summary of content from an associated website or the full text. RSS feeds can be used in SMHE websites to link or display information which is frequently updated such as blog entries and news headlines from the websites that offer complementary services (e.g. Tour operators, Restaurants). This can be helpful to SMHEs as they can keep their websites current by linking to other websites via RSS. For the SMHEs who would rather take a prudent approach when implementing Internet technologies, there are basic Internet based services which can be used to their advantage. The next section looks at these Internet-based services.

3.4.7 Internet-Based Services

"Web 2.0 is an umbrella term for a number of new Internet services that are not necessarily closely related" (Warr, 2008, p591). Warr (2008) notes that the web page has evolved since the days it was constructed using only HTML markup and now embodies 'full software experiences' that enable interaction and immersion in innovative new ways.

Chalkiti and Sigala (2008) note the importance of the Internet as a tool that allows for interaction and communication irrespective of location, and mention the following services that can also be performed online:

- E-mail,
- Texts (Short Messaging Services),
- Chats,
- Forums, and

- ▪ Fax to e-mail.

The Internet technologies discussed above can be combined and made available through one website; alternatively SMHEs can choose those which will add the most value for their business. The section below explores how use of the Internet can translate to business competitive advantage.

3.5   Competitive Advantage

An improvement in quality of available information or the ability to process or employ information (Service and Madduxx, 1999) can influence productivity and competitive position. However, Vrana and Zafiropoulos (2006) caution that building a website and advertising it does not guarantee an audience, nor an effective revenue stream, or a competitive advantage. By providing an affordable platform to differentiate their product from that of competitors, Buhalis and Law (2008) are of the opinion that ICTs play a critical role in the competitiveness of tourism organisations and destinations. This was alluded to/supported in a previous section (*cf.* 2.1).

With all these recommended strategies as a source of competitive advantage, one fundamental principle will always lead to a competing advantage; if a destination website is perceived as useful, it may influence the customer to visit the destination (Kaplanidou and Vogt, 2006). Three website features have a positive impact on perceived usefulness (Kaplanidou and Vogt, 2006); *Navigation* (ease of accessing information), *Content* (text and visuals contained in the website) and *Accessibility* (time taken to download the website features and web pages).

In contrast, Jayawardena *et al* (2008) recommend three strategies (not dependent on the user) that can be implemented by SMHEs to improve their competitiveness:

- ✓ Clearly define targeted consumers,

✓ Distinguish the benefits of their product, and

✓ Establish a strong brand.

These three strategies are discussed in detail in the following sections.

3.5.1 Targeted Consumers

The consumer is a critical component and can positively or negatively influence the success of Internet interventions devised by SMHEs. Castaneda *et al* (2007) provide three consumer oriented keys for Internet success: swift identification of customer needs; establishing direct contact with consumers; and offering consumers comprehensive, personalised and up-to-date information. When this direct contact has been established SMHE owner/managers have to take cognisance of the fact that the reaction to online inquiries can influence not only customer satisfaction but also their booking behaviour (Buhalis and Law, 2008).

Law (2009) acknowledges that people's online experiences can affect their purchasing behaviour. He further recognises the empowering element of the Internet on consumers, who are now able to:

- Make informed purchases as they have access to independent reports; and
- Exchange experiences and opinions with other customers.

Schmallegger and Carson (2008) aptly summarise customer related activities (when using the Internet) that businesses can capitalise on: customer acquisition, customer engagement, customer service and customer profiling. With targeted customers clearly identified, SMHEs need to consider differentiating their product from those of their competitors on the Internet. Product differentiation is discussed in the following section.

3.5.2 Product Differentiation

According to Schmallegger and Carson (2008) the main issue in marketing is the lack of direct experience with a tourism product, therefore its quality and benefits cannot be evaluated before consumption. The Internet creates a platform through which SMHE customers have access to information (from website content, blogs, and search engines) that will assist them to obtain an overall impression of a destination prior to purchase. Using technology to access individual customers is becoming easier, and increasingly innovators will be able to maintain sustainable competitive advantage (Niininen, Buhalis and March, 2007). The Internet creates an opportunity for SMHEs to create innovative ways to present and distribute their product. Irvine and Anderson (2008) state that the Internet creates a fair environment and allows companies of different sizes to compete on more equal terms.

An alternative manner, through which SMHEs can differentiate their products from those of competitors using the Internet, would be through paying particular attention to the content contained in their websites. Paying particular attention to Kaplanidou and Vogt's (2006) key website features that contribute to the satisfactory use of an SMHE's website (*cf.* 3.5) during the information gathering (pre-consumption) stage of the customer's decision making process (navigation, content and accessibility), will help SMHEs to differentiate their product. Xiang, Wober and Fesenmaier (2008) propose that the language used when developing website content is important as vocabulary used on destination websites differs substantially from those of customers. An effective way of differentiating businesses is by developing an organisational brand. This brand as discussed in the next section can also be a source of competitive advantage.

3.5.3   SMHE's Brand

Hosany, Ekinci and Uysal (2006) state that a destination personality (brand) is defined as the set of characteristics associated with a destination, marketing initiatives are increasingly seen to embrace branding initiatives such as the use of taglines and logos. Murphy, Benckendorff and Moscardo (2007) are of the opinion that a destination brand provides potential tourists with pre-trip information that allows them to identify a destination, differentiate it from its competitors, and build expectations about the likely holiday experience, thus enhancing destination marketing.

Travel 2.0 has created opportunities for brand awareness and reinforcement, reputation monitoring and management (Schmallegger and Carson, 2008).

3.6   Conclusion

This chapter discussed the customer's decision making phases, introduced the Internet technologies relevant to the SMHE and, finally, explained the strategies that can be implemented by SMHEs in order to gain competitive advantage. These discussions emphasised the importance of using the Internet and its related technologies as a tool to provide services and support SMHE customers. Based on the identified required outcomes, relevant technologies can then be selected to support business activities. The last section showed that the key to successfully using the Internet in business to gain a competitive advantage is to know your target market, differentiate your product, and establish a strong brand. This chapter established baseline characteristics that SMHE owners/managers can use to identify opportunities for competitive advantage or relevant Internet technologies. The next chapter reviews e-commerce success and IT Governance models on which the proposed model is based.

CHAPTER 4: Aligning Internet Technologies to Business Objectives (Literature Review – Part 3)

4.1 Introduction	4.2 Aligning Business and IT Strategies

4.3 E-commerce Success •4.3.1 E-commerce Success Model(s) •4.3.2 E-commerce Success (Measurement)	**4.4 What is IT Governance?** •4.4.1 Strategic Alignment •4.4.2 Value Delivery (Value creation) •4.4.3 Risk Management (Value preservation) •4.4.4 Resource Management •4.4.5 Performance Measurement

4.5 Conclusion
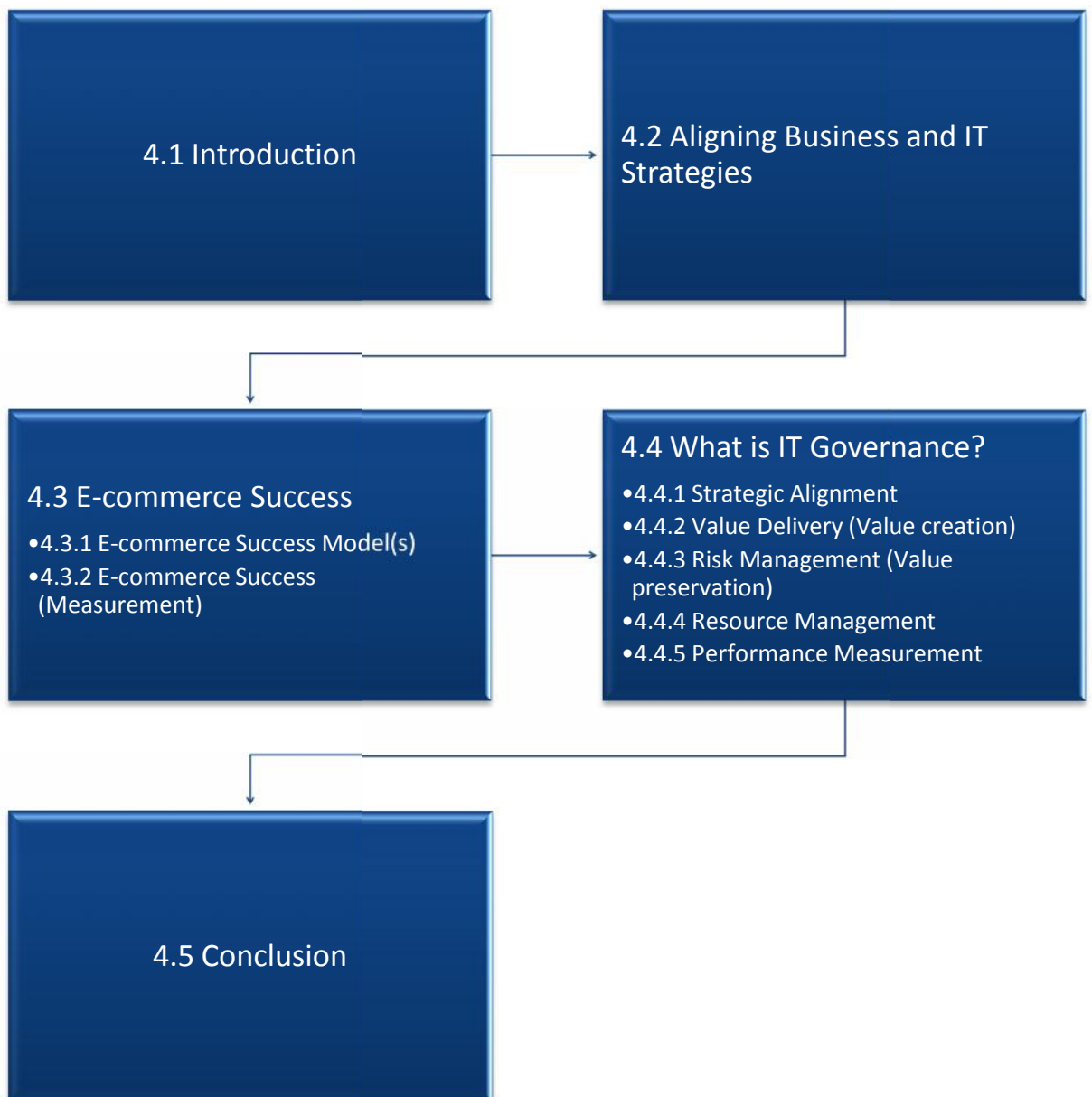
4.1 Introduction

SMHEs also exhibit the common characteristics of small and medium enterprises (SMEs) found across any business sector because they are classified as small enterprises. Zehrer (2009) acknowledges that SMHEs exhibit some positive business practices such as continuity, good employee relationships, familiarity with customers and prompt decision making; however they often lack expertise in strategic management. Moriarty *et al* (2008) emphasise the importance of planning as it provides a sense of direction and clarifies management thinking. However, time for planning in SMHEs is not always prioritised. Kyobe (2008) goes further and proposes that business strategic planning is not practised in SMHEs due to poor skills, limited resources, and manager/owner's short term focus.

Businesses are formed with goals/objectives that the owner is hoping to meet when delivering certain goods or services. Business objectives are grouped into three categories: *strategic* (Buhalis and Law, 2008; Quaddas and Achjari, 2005)*, tactical* (Dube, Liu, Wynter and Xia, 2007), and *operational* (Chiware and Dick, 2008; Buhalis and Law, 2008). Developing a business strategy is important as it allows the owner/manager an opportunity to create a coordinated plan that ensures the efficient allocation of resources, provides direction for business operations, creates a shared understanding of challenges and goals and provides a clearly defined means of identifying and evaluating resources (Kyobe, 2008).

De Haes and Van Grembergen (2009) state that IT plays a crucial role in business support, sustainability and growth. The Internet is a key factor in the management of a SMHE (Irvine and Anderson, 2008; Chiware and Dick, 2008).

This chapter will identify and discuss various models applied to SMHEs and relevant for ICT adoption:

- ➢ **E-commerce model(s)**; and
- ➢ **IT Governance model(s)**.

However, an alignment between business and IT strategy is essential for the successful implementation of ICT in SMHEs and will be discussed in the following section.

4.2   Aligning Business and IT Strategies

IT usage in business has become an accepted and some may argue, an essential component of business. However, the role IT is supposed to play is not well defined within SMHEs. IT should be used as a tool to support certain activities to help the business meet its objectives. Buhalis and Law (2008) propose that ICTs not be used to simply automate certain tasks, but rather to re-engineer all business functions and processes towards supporting the business on a whole.

De Haes and Van Grembergen (2009) interpret Business/IT alignment as the process of developing and sustaining a symbiotic relationship between business and IT in order to gain a competitive advantage. Kyobe (2008) defines this process as ensuring that the choices made (acquiring and deploying ITs) are consistent with business goals, organisational factors, and the external environment.

Ward and Peppard (2002) provide the following (see Figure 4-1) framework that summarises the different factors required to ensure that business goals, organisational factors and the external environment are aligned to the decisions made in IT investment. In this model Ward and Peppard (2002) put the relationship and interaction between Business strategy and IS/IT strategy into a compact framework. This type of model can help SMHEs to create and capture value by linking IS/IT environments to business strategies.

Ward and Peppard (2002) introduce a distinction between IS strategy and IT strategy. IS strategy focuses on the following business aspects: What information is required to ensure that business strategic objectives are met; or which information yielding processes within the business can be enhanced by using technology. On the other hand, IT strategy is concerned about identifying and planning for the acquisition and implementation of technological tools and the infrastructure needed to deliver on the outcomes stipulated in the IS strategy.
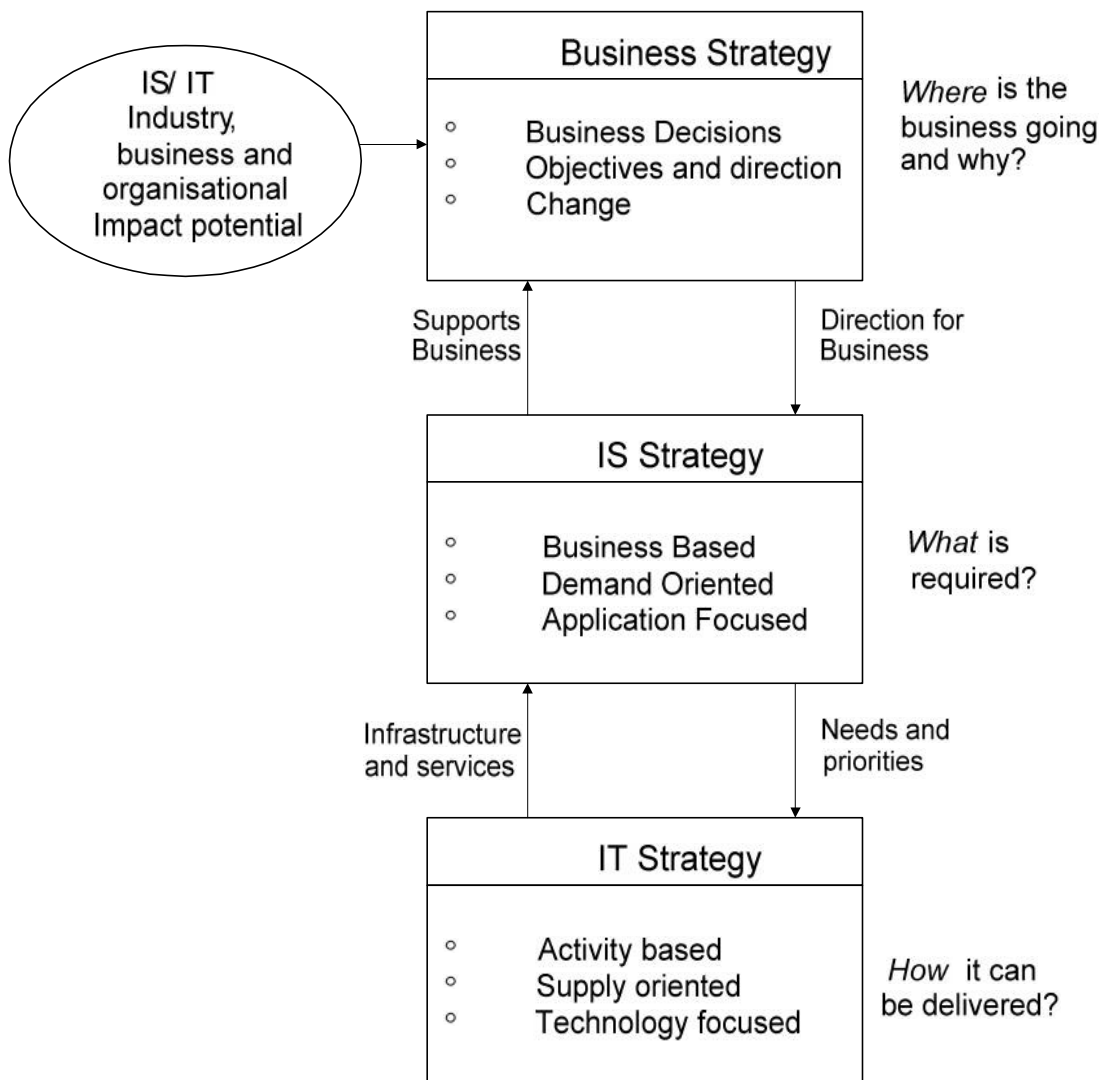
Figure 4-1: The relationship between business, IS and IT strategies (Ward and Peppard, 2002)

Within SMHEs technological tools are often acquired with very little consideration paid to how they will add value to the overall organisational goals, or even how they will add value to the business. Summarising the Ward and Peppard (2002) model, SMHE owner/managers need to:

1. Clearly define the business objectives and direction.
2. Know what information is required from which processes, in order to enable delivery of the business strategy.
3. Identify which technological tools will help to deliver the desired information.

In agreement with the distinction between IS/IT strategy made by Ward and Peppard (2002), this study will continue using the commonly used collective term 'IT' to refer to IS, IT and ICT.

This alignment is also a fundamental pillar of the IT Governance model discussed later in this chapter. The next section reviews e-commerce success and the relevant models.

4.3   E-commerce Success

The use of e-commerce presents an opportunity for SMHE owners/managers to improve their business processes, and indirectly their profits. However, due to the intangible nature of services offered online, measuring the impact of e-commerce poses a difficult challenge (Quaddus and Achjari, 2005). Various authors recommend differing approaches in attempts to provide solutions to the problem of measuring e-commerce success.

In 2004 Molla ventured that e-commerce success must be measured in terms of: the success of the development process; benefits from e-commerce implementation; and overall satisfaction with e-commerce implementation. These success measurement criteria are not ideal for the SMHE environment which is characterised by little interest or owner/manager knowledge. SMHE owner/managers rely on the advice of external

IT experts to acquire the type of feedback suggested by Molla. Success criteria which can be translated or linked to business objectives, would be suitable for the SMHE context. E-commerce success frameworks/models are discussed in the next section.

4.3.1 E-commerce Success Model(s)

Lee, Lee and Park (2007) emphatically state that it is necessary to determine not only the factors which facilitate or inhibit e-commerce adoption, but also the right conditions for adopting e-commerce. Quaddus and Achjari (2005) state that the success or failure of e-commerce is determined by the organisation's ability to minimise the impediments (e-commerce inhibiting factors) and maximise the drivers (e-commerce facilitating factors).

Table 4-1: High level framework of electronic commerce success (Quaddus and Achjari, 2005)

Contribution to success	Locus of impact	
	Internal	External
Driver	1. Cost leadership	1. Product pricing
	2. Reputation	2. Time spent
	3. Market	3. Convenience
	4. Business entry	4. External relationship
Impediment	1. Financial	1. Customer's expense
	2. Risks	2. Delivery time
	3. Expertise	3. Transaction risk
		4. Access

E-commerce success models can be used as a guiding tool in mapping these factors and how they interact.

Molla (2004) Model

Molla's (2004) proposed framework of e-Readiness and e-Commerce Success (see Figure 4-2) goes beyond the suggested method of measuring e-commerce success in terms of the success of the development process (i.e. was the project completed on time and within budget), the identified limited benefits (cost saving, communication, market place) and the vaguely defined overall benefits. With all the identified limitations of the Molla model there is one key component of the model that is not only crucial for e-commerce success but is also very relevant to the SMHE context, namely *e-Readiness*. Implementing e-commerce solutions in an organisational environment that does not understand and can therefore not support them, could prove disastrous.
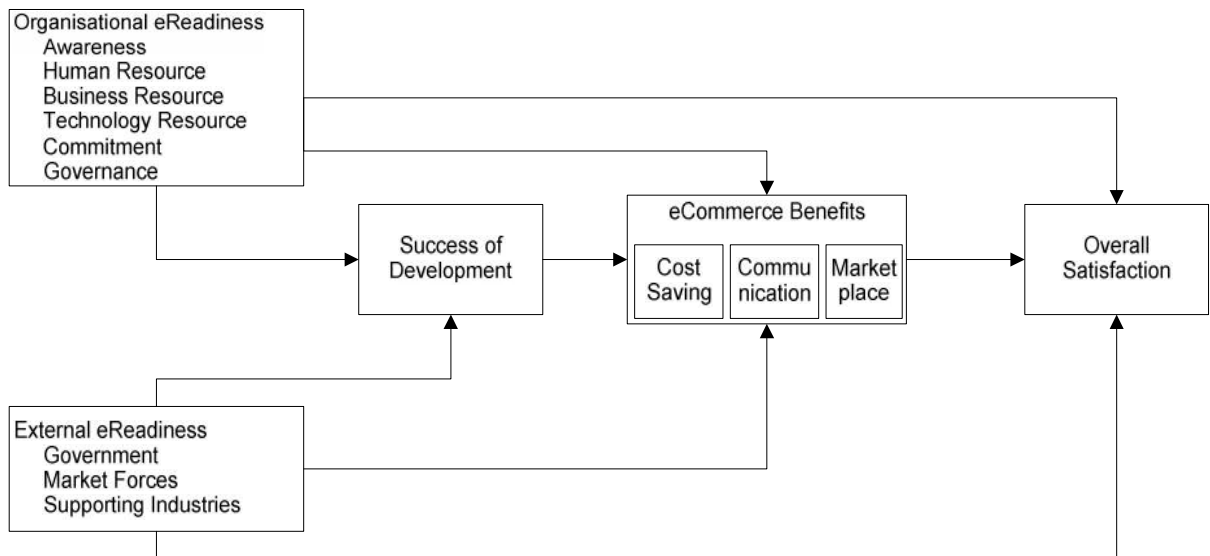
Figure 4-2: A framework of e-Readiness and e-Commerce success (Molla, 2004)

Molla's e-Readiness framework and e-Commerce success model proposed (2004) implies that for e-commerce to be successful businesses need to ensure that they are ready internally, with enough human resource, business resources, technology resources, and are aware and committed with adequate governance processes to supporting e-commerce. Secondly, they must enlist external factors such as government, market forces and supporting industries which influence their e-readiness.

Delone and McLean (2004) Model

The Delone and McLean (2004) model has been discussed, critiqued and reviewed by various authors. The most contested component of the Delone and McLean model is *Use*. Opposing authors suggest that while *Use* does impact on benefits, it does not cause them (Adeyinka and Mutula, 2010; Garrity, Glassberg, Kim, Sanders and Shin, 2005).   The model first presented by Delone and McLean in 1992 was later updated by the authors in 2003 taking into consideration some of the critique. Despite all the identified weaknesses of the Delone and McLean model, there is a general consensus that the model has made a profound contribution to the evolution of Information Systems research. This study will attempt to adapt the framework of the updated (2004) Delone and McLean Information Systems Success Model, and customise it to the context of SMHEs.

This model is made up of the following interrelated dimensions of Information Systems success (Delone and McLean, 2004): *Systems quality, Information quality, Service quality, Intention to use, Use, User satisfaction,* and *Net benefits.*
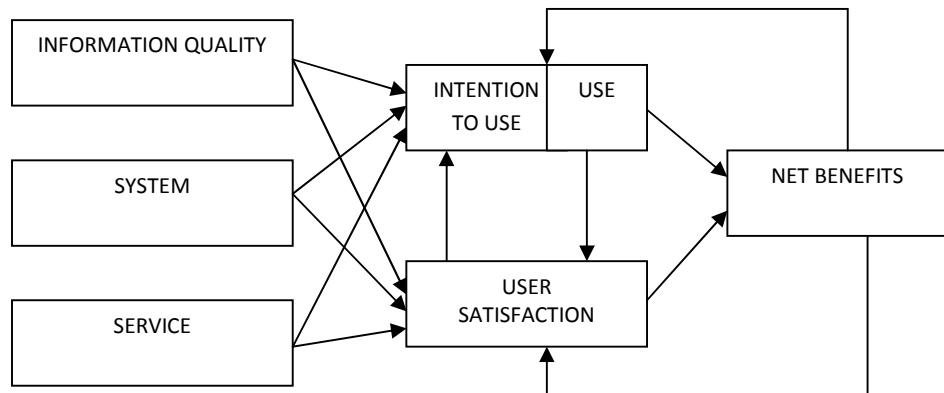
Figure 4-3: Updated Delone and McLean IS Success Model (2004)

These interrelated dimensions are discussed and applied to a practical e-commerce context (where a business uses the Internet) in the following manner:

➢ **Systems quality**

The Internet has become an extension of the SMHE's service offering. An SMHE owner/manager must ensure that the quality of services offered via the Internet is of a high standard. The model implies that system quality has an influence on the traveller's purchase intention. Delone and McLean (2004) note the following examples of qualities that e-commerce users value:

- **Usability** – The online environment created must be 'user-friendly'. If the customer has difficulty navigating or accessing required information, they might lose interest in the website. Law and Bai (2008) highlight five dimensions for usability of SMHE websites namely: *Language, Layout and graphics, Information architecture, and User interface and Navigation*.
- **Reliability** – The continuity of the website is important. How the website behaves will also influence customers' acceptability of the e-commerce solution.

- **Adaptability** – This is one of the more challenging qualities. This may include broad features such as changing language depending on customer location, or just providing the customer with options to view the e-commerce website on their web-browser.
- **Response time** – This is a crucial quality to note, as customers may navigate to other websites if the website response time is too slow.

Wen (2009), challenges that currently there is no convergence of website systems quality theories in tourism or hospitality literature. Law and Bai (2007) suggest that design and content are two of the most essential factors that contribute to website success.

➤ **Information quality**

Information provided to the customer must be accurate (e.g. accommodation rates posted online must not differ from those given to 'walk-in' customers). The e-commerce website must be regularly updated to ensure that information is accurate and up-to-date. Delone and McLean (2004) state that, customers will use the website if content is personalised, complete, relevant, easy to understand, and secure. Law and Bai (2008) group four types of information that will improve the functionality of a website: *facilities information, customer information, surrounding area information, and management of website*. Wen (2009), cautions that if travellers perceive information as inadequate or inaccurate, they will reduce their usage or avoid the website completely.

➤ **Service quality**

Wen (2009) accepts a definition of service quality as the difference between what the customers feel should be offered and what is actually provided. He further makes reference to five dimensions (derived from an instrument derived by Parasuraman,

Zeithaml and Berry (1988)) of service quality: *tangibles, reliability, responsiveness, assurance* and *assurance.*

"Poor user support will translate into lost customers and lost sales" (Delone and McLean, 2004, p34). Whether this support (e.g. user feedback received through the website must be logged and responded to) is provided internally or is outsourced to an external service provider is a crucial component of the website.

> ➢ **Intention to Use**

High intention to use is likely to result in high systems use (Adeyinka and Mutula, 2010). They further highlight that intention to use is not only affected by attitudinal influencers related to technology acceptance (e.g. perceived system usefulness), but ease of use, ease of learning, convenience of access, support, motivation for use (voluntary and mandatory), and availability are other influencers.

> ➢ **Use**

This includes everything from measuring how many people visit the website and which pages they view most frequently, to which transactions customers perform whilst online. Customer's behavior can be predicted through their intention (Law and Bai, 2008).

> ➢ **User satisfaction**

This is the degree to which an individual user is satisfied with his or her overall use of the website (Adeyinka and Mutula, 2010). E-satisfaction is defined as the contentment of the customer with respect to his or her prior purchase experience with the organisation (Wen, 2009). This is an important means of measuring customer opinion of an e-commerce solution. This should cover the entire customer experience cycle from information retrieval through purchase, payment, receipt, and service.

Customer satisfaction has a substantial influence on the traveller's purchase intention.

➢ Net Benefits

Delone and McLean (2004) view this as the most important success measure, because it measures the balance of the positive and negative impacts of e-commerce on customers, suppliers, employees, the organisation, markets, industries, economies, and even society as a whole. The next section looks at measuring e-commerce success.

4.3.2 E-commerce Success (Measurement)

Quaddas and Achjari (2005) group these approaches into two categories: *Technical Measures* (e.g. using page hit/view to measure success) and *Strategic Assessments* (e.g. attainment of organisational goals or competitive advantage). Quaddas and Achjari speculate that a model accommodating multiple criteria for e-commerce success measurement would be ideal; however for SMHEs this might complicate technology even further. For the purposes of this research a model that addresses e-commerce success in line with the strategic objectives of the business would be most relevant.

Sung (2006) refers to Huff *et al's (*2000*)* nine strategy related critical success factors against which e-commerce success is measured:

- ✓ Add Value (i.t.o. convenience, information value, disintermediation, reinter mediation, price and choice)
- ✓ Focus on a niche market and then expand
- ✓ Maintain flexibility
- ✓ Segment geographically

- ✓ Get the technology right
- ✓ Manage critical perceptions
- ✓ Provide exceptional customer service
- ✓ Create effective connectedness
- ✓ Understand the Internet culture.

A simpler measurement tool for e-commerce success is what Quaddus and Achjari (2005) term 'fatal-attraction'. Fatal-attraction is the baseline indicator of failure of an e-commerce solution. A good measure of e-commerce success specifically for Internet technologies, is the website's ability to *Attract* visitors, *Convert* visitors, and *Retain* visitors.

This section discussed e-commerce success factors from various models. These factors and how they interact need to be carefully considered when planning for e-commerce success. Factors from the Delone and Mclean (2004) model are used as the main indication of factors which SMHEs can use as a baseline measure when evaluating e-commerce success in their businesses. The next section introduces IT Governance, and discusses IT Governance related model(s).

4.4   What is IT Governance?

The increased use of technology has created a critical dependency on IT, which according to De Haes and Van Grembergen (2009) necessitates that businesses pay specific attention to IT Governance. Molla's 2004 (p4) definition adequately defines IT Governance as "the strategic, tactical, and operational model organisations put in place to govern their business activities and e-commerce initiatives."

ITGI (2007) provides a definition although differing from other authors in its simplicity, is quite relevant for application to the SMHE context: IT Governance are the processes which ensure effective and efficient use of IT in enabling the organisation

to achieve its goals. This definition is applicable to all IT Governance references made in this study. Taking a closer look at this definition the following is noted:

1. IT Governance is made up of processes with inputs, outputs, roles and responsibilities (ITGI, 2007). In order to understand how ICTs can help make these processes more efficient by effectively using ICTs, the owner/managers need to have a good understanding of the processes that exist within the enterprise and how they relate to each other. Not all processes within the enterprise need augmentation with the use of technology; priority must be given to those that directly contribute to the value-chain of the enterprise.

2. The term ITGI (2007) uses to describe the role of IT Governance is 'ensuring' as opposed to having an 'executing' role. The concept of IT Governance can easily be adopted by the SMHE to help the owner/managers monitor how ICTs are used within the enterprise. These processes do not deal with executing various ICT related tasks, but are rather for control and monitoring purposes.

3. The goal of IT Governance is not just IT-related but is defined as a business goal (ITGI, 2007). The SMHE needs to see these governance processes as part of an initiative to ensure that ICT supports business objectives.

4. Key performance measures are identified as effectiveness and efficiency, together representing overall business value (ITGI, 2007). The owner/managers need to have a good understanding of how any proposed ICT investment will help the business to meet its objectives.

Different authors have derived different models to try and put IT Governance in context. The IT Governance model this research study will analyse is from the Information Technology Governance Institute **(ITGI, 2007)**. The ITGI model identifies five IT Governance domains:
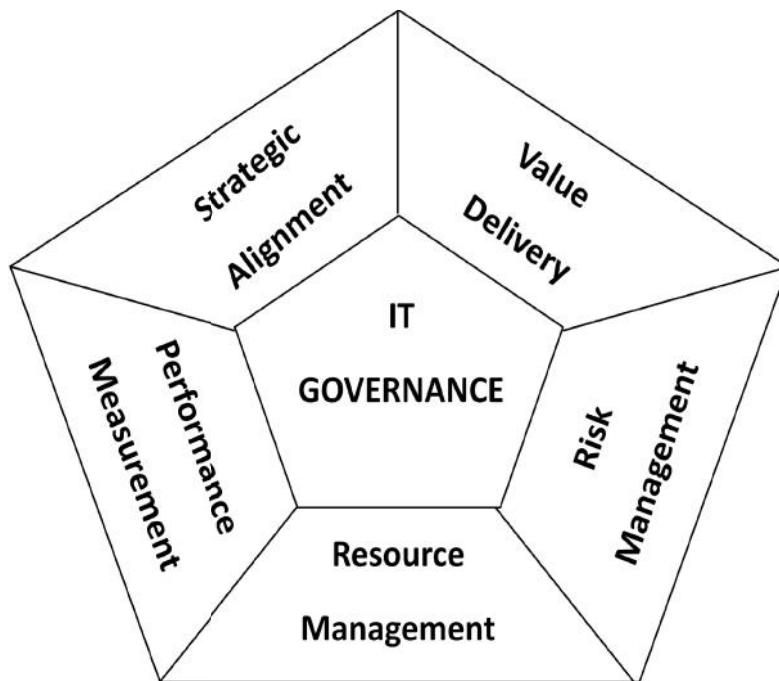
Figure 4-4: Five domains of IT Governance (ITGI, 2007)

These IT Governance domains are discussed in detail in sections 4.4.1 to 4.4.5 below.

4.4.1 Strategic Alignment

"Strategic alignment focuses on ensuring the linkage of business and IT plans; on defining, maintaining and validating the IT value propositions; and on aligning IT operations." (ITGI, 2005, p7)

The alignment of Information Technology (IT) and business gaols is crucial to the success of organisations (Kyobe, 2008). As with SMHEs, Kyobe (2008) comments that many organisations experience challenges when it comes to aligning IT initiatives with organisational strategies. The informal nature in which SMHEs are developed and managed leaves very little room for proper use of business management principles. Planning is imperative for SMHEs. Moriarty *et al* (2008) propose that planning helps SMEs to clarify management thinking, and provides a sense of

direction for the business. When the business strategy moves away from addressing the external forces that influence business, Dwyer, Edwards, Mistilis, Roman and Scott (2009) call this phenomenon *strategic drift*. SMHEs that make decisions that do not match changing customer needs will experience strategic drift (Dwyer *et al* 2009).

4.4.2   Value Delivery (Value Creation)

"Value delivery is about executing the value proposition throughout the delivery cycle, ensuring that IT delivers the promised benefits against the strategy, concentrating on optimising costs and proving the intrinsic value of IT." (ITGI, 2005, p7)

Slywotzky[1] (cited in Lee and Connolly, 2010) states that, value is derived from a company's business design and includes the entire system of delivering a service to customers and earning a profit from that activity. In the IT Governance context, technology is used to support the activities that create value for the business. Hwang and Lockwood (2006, p340) suggest that "it is important for all SMEs to have a clear vision of who their customers are, what their requirements are and how the business will fulfil those needs."

Yilmaz and Bititci (2006) propose that tourism related products are interrelated and interdependent. The Tourism value chain they propose can be adapted slightly to act as a general guide for the SMHE sector's Value chain (see Figure 4-5).

---

[1] Slywotzky, A.J., 1996. Value Migration: How to think Several Moves Ahead of the Competition. Harvard Business School Press, Boston.
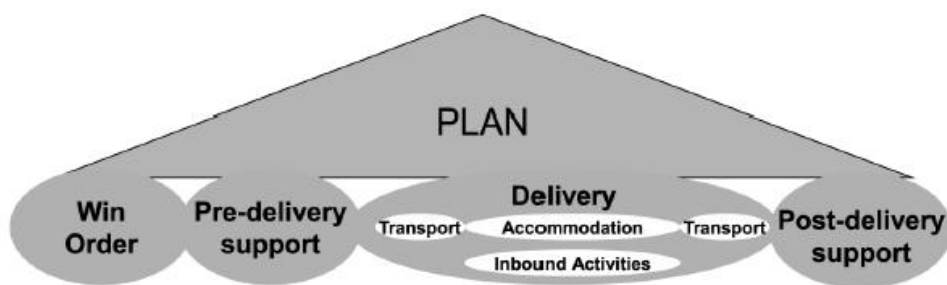
Figure 4-5: Adaptation of the Tourism Value Chain (Yilmaz and Bitici, 2006)

4.4.3   Risk Management (Value Preservation)

"Risk Management requires risk awareness by senior corporate officers, a clear understanding of the enterprise's appetite for risk, transparency about the significant risks to the enterprise and embedding of risk management responsibilities into the organisation." (ITGI, 2005, p7)

The Internet is a fairly under-utilised arena for SMHE. The Internet creates major opportunities for SMHEs, but it can also present considerable challenges. Some of the challenges can be anticipated and immediately addressed; however, risks are those challenges/problems that are unforeseen, although some can be anticipated and planned for. The implementation of risk management strategies is a major challenge for tourism firms identified by Dwyer *et al* (2009); these can include providing training for staff so that they are prepared for any incident and can respond swiftly, confidently and appropriately. Breukel and Go (2009) concur that SMHEs tend to make decisions in isolation and this renders them unprepared to interpret risks and respond to potential threats effectively. Massingham (2010) infers that organisational risk management is based on classical decision theories; one such approach involves:

1. Identifying the risk.
2. Predicting the consequences and outcomes of the risk.
3. Deciding what path to take to either avoid the risk or take the risk.
4. Developing and implement strategies to respond to the risk.

4.4.4 Resource Management

"Resource management is about the optional investment in, and the proper management of, critical IT resources: processes, people, applications, infrastructure and information. Key issues relate to the optimisation of knowledge and infrastructure." (ITGI, 2005, p7)

The definition of resource management adopted by this study is leveraging and understanding resources and competencies within the organisation (Eikebrokk and Olsen, 2007). Resource Management is a crucial component of strategic management. Technological investments often consume a sizeable portion of organisational budgets, SMHE owner/managers have to carefully consider not only the resources (technological) required but also the resources they have (including human capital).

Fitsimmons (2009) tackles the issue of resource management from two angles: *physical resource* and *human resource* management. He argues that if physical resources are managed well then the organisation's employees (human resources) should be more productive and feel more supported in their work. However, with IT physical resources employees may require appropriate training which would allow them to use the technological resources confidently.

4.4.5 Performance Measurement

"Performance measurement tracks and monitors strategy implementation, project completion, resource usage, process performance and service delivery, using, for example, balanced scorecards that translate strategy into action to achieve goals measurable beyond conventional accounting." (ITGI, 2005, p7)

It is more desirable to measure system benefits in terms of numeric costs (Wu and Wang, 2006), as applied also to Internet usage benefits. However, due to the intangible nature of Internet services as well as intervening environmental variables (Wu and Wang, 2006) it is not possible to put a monetary value on Internet usage benefits. Lee and Connolly (2010) comment on the challenges experienced when trying to determine how much value IT contributes to an organisation as the few tools that exist tend to be imprecise or difficult to apply in the hospitality sector due to its unique attributes (i.e., intangibility, perishability, heterogeneity, etc.).

SMHEs characteristically have poor planning and strategic management skills (*cf.* 4.1). This section introduces five domains (strategic alignment, value delivery, risk management, resource management, and performance measurement) that can guide SMHEs in their planning.

4.5   Conclusion

This chapter emphasised the importance of aligning Business and IT strategies. SMHEs can optimise the value derived from investing in ICTs by ensuring that these investments are driven by organisational strategy. E-commerce success models were also analysed in this chapter. In discussing e-commerce success Molla's (2004) e-Readiness and e-Commerce success model highlights the importance of ensuring that SMHEs consider both internal and external factors which can influence their e-Readiness. The Delone and McLean (2004) IS success model provided key IS success components included in the proposed model. The IT Governance model introduced governance factors for consideration. The e-commerce models centered on e-readiness, and the IT Governance model reiterated the importance of strategic alignment between business and IS/IT strategy. The next chapter focuses on the research methodology used in this study.

CHAPTER 5: Research Design and Methodology

5.1 Introduction	**5.2 Research Paradigm**

5.3 Research Design	**5.4 Research Method** • 5.4.1 Data Collection •5.4.1.1 Questionnaires •5.4.1.2 Semi-Structured Interviews •5.4.1.3 Observation •5.4.1.4 Expert Opinion

5.5 Population and Sampling	**5.6 Data Analysis**

5.7 Measures to Ensure Trustworthiness	**5.8 Conclusion**
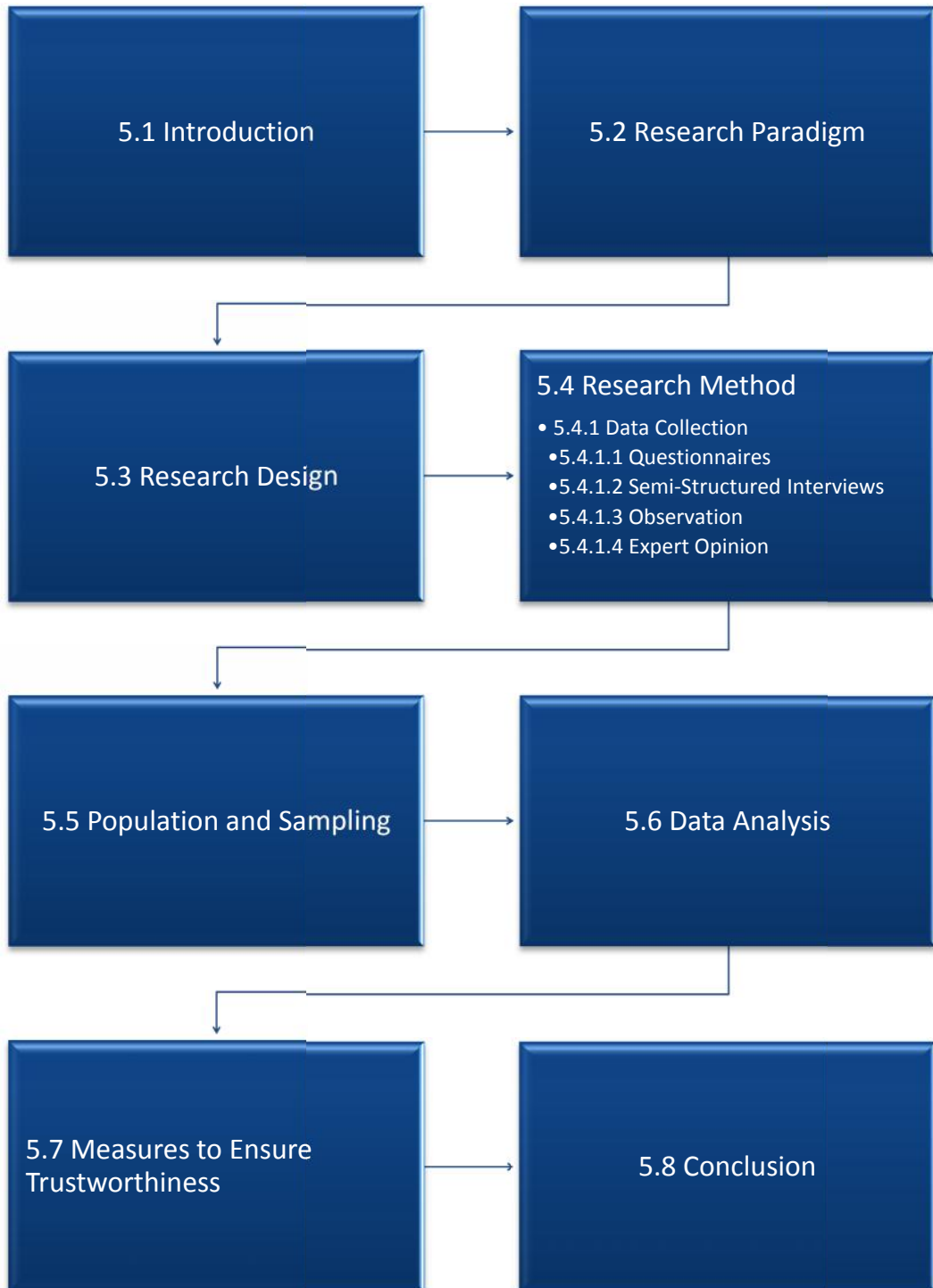
5.1   Introduction

This chapter outlines the processes involved in collecting, measuring and analysing data for this study. To achieve the objective of this study, careful consideration went into selecting the appropriate research methodology. Both qualitative and quantitative methods were reviewed and the final choice applies both methods as well as triangulation (*cf* Chapter 1, Figure 1-3) to collect data from multiple sources, including a questionnaire with open-ended and closed questions, focus group interviews and observation in order to improve validity of the study.   The use of more than two methods when collecting data is known as triangulation.

The manner in which the investigation was conducted to obtain answers to the research problems or questions (*i.e. How will we go about answering the research questions?*) is outlined in the summarised research design. On the other hand, the research method describes the means, methods and tools that will be used in the process of acquiring knowledge. But firstly, the Research Paradigm will be discussed, followed by the Research Design.

5.2   Research Paradigm

"A paradigm may be viewed as a set of basic beliefs… that deals with ultimates or first principles. It represents a worldview that defines for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts… The beliefs are basic in the sense that they must be accepted simply on faith (however well argued); there is no way to establish their ultimate truthfulness. If there were, the philosophical debates… would have been resolved millennia ago." (Guba and Lincoln, 1994, p107-108)

This study is based on underlying theoretical paradigms which influence the reasoning and approach taken in this study. Different philosophical paradigms have differing views about the nature of the world and the way in which unique knowledge

about it can be acquired (Oates, 2006). The research paradigm also gives an indication of which principles (school of thought) the study is aligned to. A wide variety of philosophical paradigms exist; however, for the purposes of this study the philosophical framework was narrowed down to *Positivism* and *Interprevism*.

Positivism: Positivists tend to adhere to what they can observe and measure (Krauss, 2005). With this research paradigm accurate quantifiable knowledge is collected using a systematic approach in which the researcher remains independent (objective) from the subject.

Interprevism: According to Krauss (2005) qualitative researchers are of the opinion that the best way to understand any phenomenon is to view it in its context. Interprevists believe that knowledge is not based only on observations, but also on subjective beliefs, values, reasons and understandings (Voce, 2004). By bringing subjective experiences to the research, the researcher becomes a co-creator of meaning (Voce, 2004).

Although a combination of methods (quantitative and qualitative) associated with both paradigms were used in this study, interpretive research is the more dominant paradigm. In order to attain a more in-depth understanding of the contextual situation of ICT adoption (or lack thereof) by SHMEs, qualitative methods were used to gain knowledge. Technology is an area that most people have a limited understanding of, and SMHEs are highly influenced by the owner/manager(s), therefore these qualitative methods become crucial.

Although triangulation is used, the study does tend to lean more towards the qualitative than the quantitative. The quantitative will only be provided through descriptive statistics. These will be validated by the focus group interviews, observation and the open-ended questions of the questionnaire. The research design is discussed in the next section.

5.3 Research Design

CLARIFY THE RESEARCH QUESTION

Discover the SMHE owner/manager's dilemma
Define the management question
Define the research question

LITERATURE REVIEW:

Part 1: Adoption Challenges
Part 2: Relevant Technologies
Part 3: Models (IS Success/IT Governance)
(phase 1)

Research Proposal

RESEARCH APPROACH AND DESIGN

Data collection design *(phase 3)*

Sample identification & selection *(phase 2)*

- Document analysis
- Questionnaire
- Observation

- Select population
- Identify sample size
- Participants' workshops

Discussion, development & pre-testing

Data collection & preparation — — — → Phase 3

- Questionnaire
- Follow-on questions

Interpretation of data — — — → Phase 4

- Questionnaire results
- Interview results

Develop Model — — — → Phase 5

- IT Governance/Success

Validation of Model — — — → Phase 6

- Industry Experts

RESEARCH REPORTING

APPROVAL

LEGEND:

Data gathering through research

Document submission

Fieldwork to obtain information for evaluation

Completion of research study

Figure 5-1: Detailed research design

In response to the identified research questions the aim of this study is to develop a model which will enable SMHEs to gain a competitive advantage from adopting Internet technologies. This model is derived from a review and combination of existing theories and models, discussed in the literature review phase of this study, and adapted to the SMHE context. The research design which maps out the planned approach for this study is illustrated in Figure 5-1 above.

Overall this study was executed in six phases (see Figure 5-1 above). In the first phase theories and opinions from authors in the identified research area, were detailed and discussed. From the review of current literature, the existence of the identified problem is validated, fundamental principles which contribute towards the development of a proposed hypotheses or model are discussed, and benchmarks for Internet technologies that may contribute towards the improved performance or success of SMHEs are discovered. The literature review was structured in three parts: *part 1* looked at the possible ICT adoption challenges faced by SMHE owner/managers; *part 2* identified relevant Internet technologies that can be used by SMHEs; and *part 3* reviewed models that can be applied to help solve the identified problem.

Once the review of related literature was completed, phase 2 identified SMHEs in the Buffalo City Municipality. Once identified, the possible participants voluntarily participated in the study (see Appendix A).

Phase 3 focused on the development and deployment of data collection tools that were used to answer the research question and to address the purpose of this study. This study used a multiple case study approach to collecting data. Cooper and Schindler (2006) state that several means can be applied for this purpose including: interviews, surveys, document analysis, observation, focus groups, and questionnaires. For the purposes of this study four of these were used namely:

questionnaires, observation, document analysis, and *semi-structured interviews.* The data collection instruments will be discussed further in section 5.4.1.

The final three phases take the study closer to the answers of the identified questions and the proposed model in the following manner: the fourth phase involved interpreting and evaluating the information and documented findings; the fifth phase, a model was designed to help the SMHE make informed ICT adoption decisions; the final phase (6) evaluates the relevance of the model developed in phase 5 against a panel of industry experts.

The phases highlighted in this research design (see Figure 5-1) can be summarised into six steps, see Figure 5-2 below.

| 1 Literature Survey | 2 Questionnaires | 3 Observation | 4 Data Analysis | 5 Model | 6 Validation |

| Phase 1 | Phase 3 | Phase 3 | Phase 4 | Phase 5 | Phase 6 |
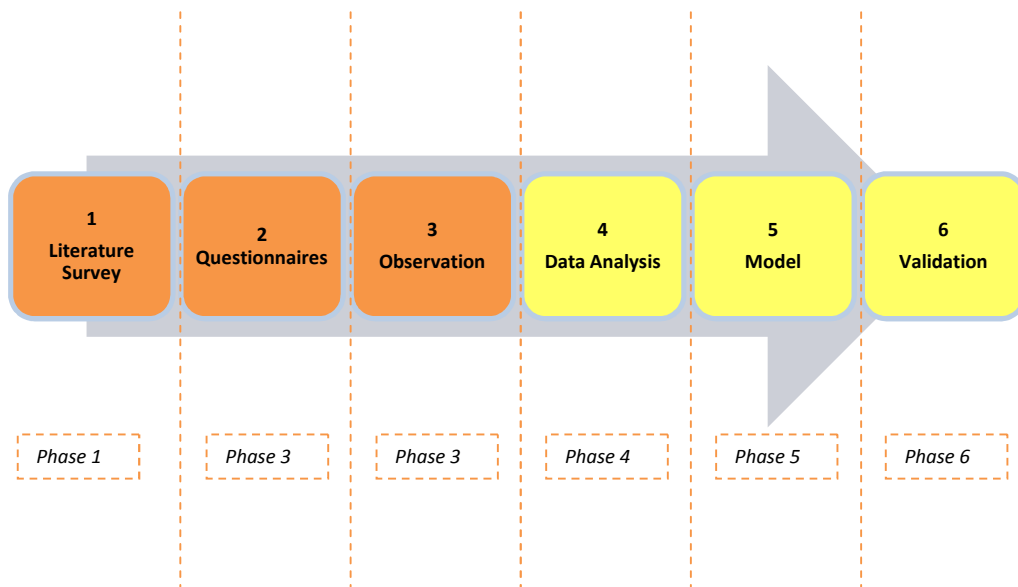
Figure 5-2: Research methodology summary

The research methodology used is discussed in the next section.

5.4   Research Methodology

Leedy (1997) succinctly defines research as a systematic method of gathering and analysing information or data in order to better our understanding of the facts we are concerned about or interested in. De Luca and Kock (2007) summarises methodology as a means of gaining knowledge, which can either be *Quantitative* or *Qualitative*.

According to Collis and Hussey (2003) *quantitative* research is objective in nature and looks at what can be quantified. In 2003 Collis and Hussey described qualitative research as being more subjective in nature and involved examining and reflecting on perceptions in order to gain an understanding of social and human activities.

Symonds and Gorard (2010) stipulate that using a combination of methods is a social science research approach that encourages the integration of qualitative and quantitative methodological approaches. For the purposes of this study a combination of quantitative and qualitative methods were used. As in the case of this study the use of three methods for collecting data is known as triangulation (*cf* Chapter 1, Figure 1-3). Triangulation can be generally described as the use of two or more research methods. Denzin (1970) identifies five different types of triangulation:

1. **Data triangulation** entails gathering data through several sampling strategies, so that slices of data at different times and social situations, as well as on a variety of people, are gathered.
2. **Investigator triangulation** refers to the use of more than one researcher in the field to gather and interpret data.
3. **Theoretical triangulation** refers to the use of more than one theoretical position in interpreting data.
4. **Methodological triangulation** refers to the use of more than one method for gathering data.

This study will be using both methodological and *data triangulation* as both quantitative, qualitative and literature methods and data collection instruments will be

applied to validate the results. Where the methods overlap application of triangulation is found. Figure 5-3 below indicates how the qualitative and quantitative methods overlap.
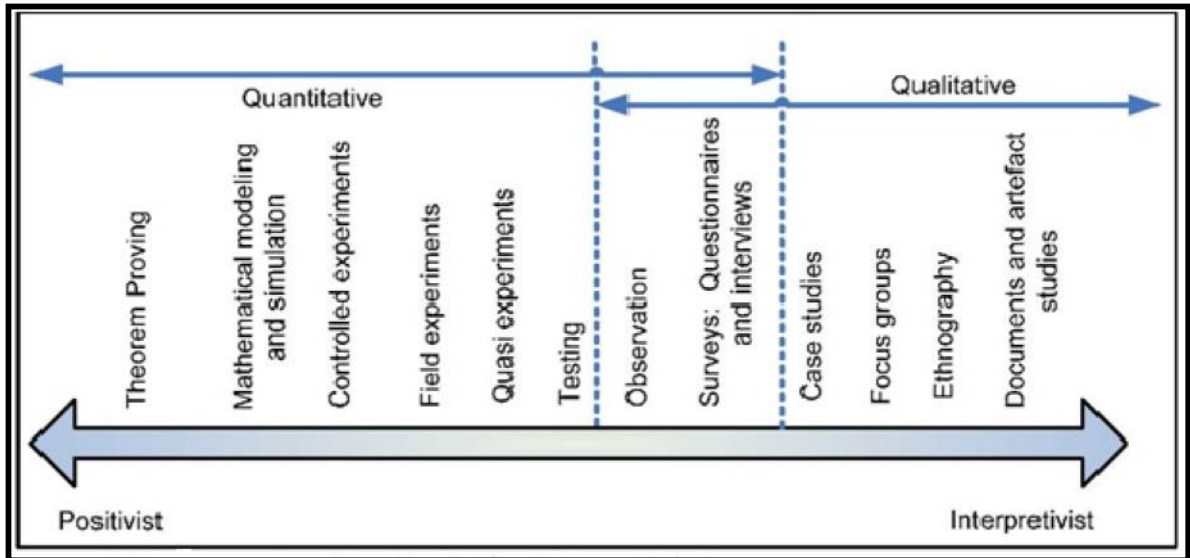
Figure 5-3: Qualitative and quantitative approach (Source: De Villiers, 2005)

This study thus applies triangulation but follows an Interpretivist's worldview as most data will represent the qualitative side of the figure above. The following section indicates how the data collection instruments in this study were applied.

5.4.1 Data Collection

Depending on the source of data, research data can be grouped into two categories, *primary* or *secondary* data. Primary data is original data, collected from the source (Collis and Hussey, 2003), whereas secondary data is derived from previously published material such as books, journals, and articles (Meyers, 1997). In order to answer the research question and meet the objective of this study, data from both primary and secondary data sources was used.

This study identified both quantitative and qualitative data collection methods (*cf* Figure 5-1). The quantitative approach involved the use of closed questions in the questionnaire. The questionnaire acted as a foundational source of quantitative information while the qualitative data collection methods were also used. The qualitative approaches include semi-structured interviews and observation of respondents' websites.

The following data collection strategies (Leech and Onwuegbuzie, 2010) were used in this study:

- ✓ Mixture of open- and closed-ended items in a questionnaire
- ✓ Mixture of in-depth semi-structured interviews
- ✓ Mixture of confirmatory and less structured/exploratory observation, alternating between participatory and non-participatory research roles.

The data collection phase of this study (*cf* Figure 5-2) is discussed below:

Literature survey: a review of journals, electronic documents, books, articles, and reports was conducted to validate that the problem identified posed a real challenge for SMHEs, to determine benchmarks for relevant Internet technologies, and to identify possible success measures.

Questionnaire: After careful consideration and analysis of the information retrieved in literature, a questionnaire was developed. In order to arrive at the sample an invitation to attend a survey workshop/website information session was sent to 225 members registered on the Buffalo City Tourism Board website. An acceptable sample size for this study was a minimum of 20 percent of the contacted members. Although all 225 members were invited to attend the workshop, this study will only focus on those SMHEs which met the criteria (*cf* 1.5). The main focus of this step was to understand the e-commerce challenges and what information systems were currently in place in SMHEs. To address any irregularities arising in understanding

the concepts of the questionnaire (with closed and open-ended questions), a focus group interview was organised.

Observation: A difference may exist between the perceptions of the owner/managers about the capabilities of their websites and the actual website capabilities. For some of the respondents that have websites an online survey was performed by observation. The maximum amount of websites observed was 10 percent of the respondents that met the quota criteria. This observation also assisted the researcher in the process of identifying success criteria for SMHE websites. Anecdotal records were used to capture the results of the observations.

Validation: To test the relevance of the model (**evaluate**), it was given to a group of five experts from the hospitality sector for review purposes. The group of experts included members from the Buffalo City Tourism Board. Their comments were noted and the final model was adjusted accordingly.

This section contains discussions on the research techniques, sampling methods used, and the data analysis methods used to examine and validate the results of the research.

5.4.1.1   Questionnaires

The research instrument used to collect data was a questionnaire. A questionnaire is a pre-defined set of questions assembled in a pre-determined order, which respondents must then answer, thereby providing the researcher with data that can be analysed and interpreted (Oates, 2006). Since the literature survey played a pivotal role in the formulation of the research instrument, the questions included in the questionnaire were grouped according to the three categories/contexts provided by the theoretical framework know as the TOE (Technological, Organisational, and Environmental) model (*cf* Figure 2-1).

A combination of closed and open-ended questions were included in the questionnaire. However, primarily closed-ended question were deemed more suitable for the identified sample. The number of questions dedicated to a particular topic in the questionnaire, cannot be used as an indication of the level of importance placed on the potential contribution which can be derived from the analysis of responses to these questions.

Once the structure of the questionnaire was identified the next step was to develop specific questions which included: What has influenced the investment in ICT? Which Internet related technologies are currently being used by your business? Is ICT part of the business strategy? Do staff members understand and know how to use ICT? Has the business ever experienced any problems with prior ICT use? Providing answers to these questions revealed a background to the attitude, understanding and adoption of ICT by SMHEs. The completed draft of the questionnaire was then tested/piloted with 3 participants from the tourism sectors. The feedback and comments from the pilot study participants were used as a basis for refining the questionnaire.

A SATSA (South Africa Tourism Services Association) workshop was organised during which the questionnaire was distributed to the respondents. Participants in this workshop included business owner/managers from various sectors within the tourism industry including tour operators, accommodation providers, activities, events. A detailed summary of the workshop participants who completed the questionnaire can be found in the next chapter (*cf T*able 6-1).

5.4.1.2   Semi-Structured Interviews

In order to gain more detail and insight into the SMHE environment, semi structured interviews were used to collect additional data. These informal interviews were conducted with several respondents at sampled organisations where the answer to

question 34 (*Has the business ever experienced any problems with prior ICT use?*) of the questionnaire was affirmative. Because they render more control to the interviewer, less structured interviews encourage the exploration of topics of greatest interest to the interviewer rather than the preset questions of the structured interview (Elliott, 1991).

These provide in-depth information which helps to enrich the respondents' responses provided in the questionnaire. Noted in Roland and Wicks (2009) Wurman[2] states that conversations reflect how we think, hence the importance of including semi-structured interviews in this study.

5.4.1.3   Observation

In order to validate the accuracy of the information provided by the respondents when responding to the technology related questions in the questionnaire, an observation of websites of the respondents was undertaken. This online survey focuses on 10 percent of the websites of the respondents that meet the quota criteria. This observation forms the third part of our data triangulation methodology. These records not only verify the details provided by the respondents, they also help with the identification of popular trends and success criteria. Anecdotal records are used to capture the results of the observations. The results of the observation yield both quantitative and qualitative data.

5.4.1.4   Expert Opinion

Adomavicius, Bockstedt, Gupta, and Kauffman (2008) state that experts typically possess detailed knowledge of subject matter and this can produce high-quality forecasts in research. In this study experts in the field of the hospitality sector provided their input into the final model to evaluate its significance and value. The

---

[2] Wurman, R.S. (2000). Information Anxiety 2. (2nd Edn) Indianapolis: IN Que.

number of experts was five and the criteria used for profiling them was that they had to currently be working within the tourism sector and be in contact with SMHEs in the course of their duties.

From the above data collection instruments the following figure indicates how all the results from were used to provide triangulation of data sources:
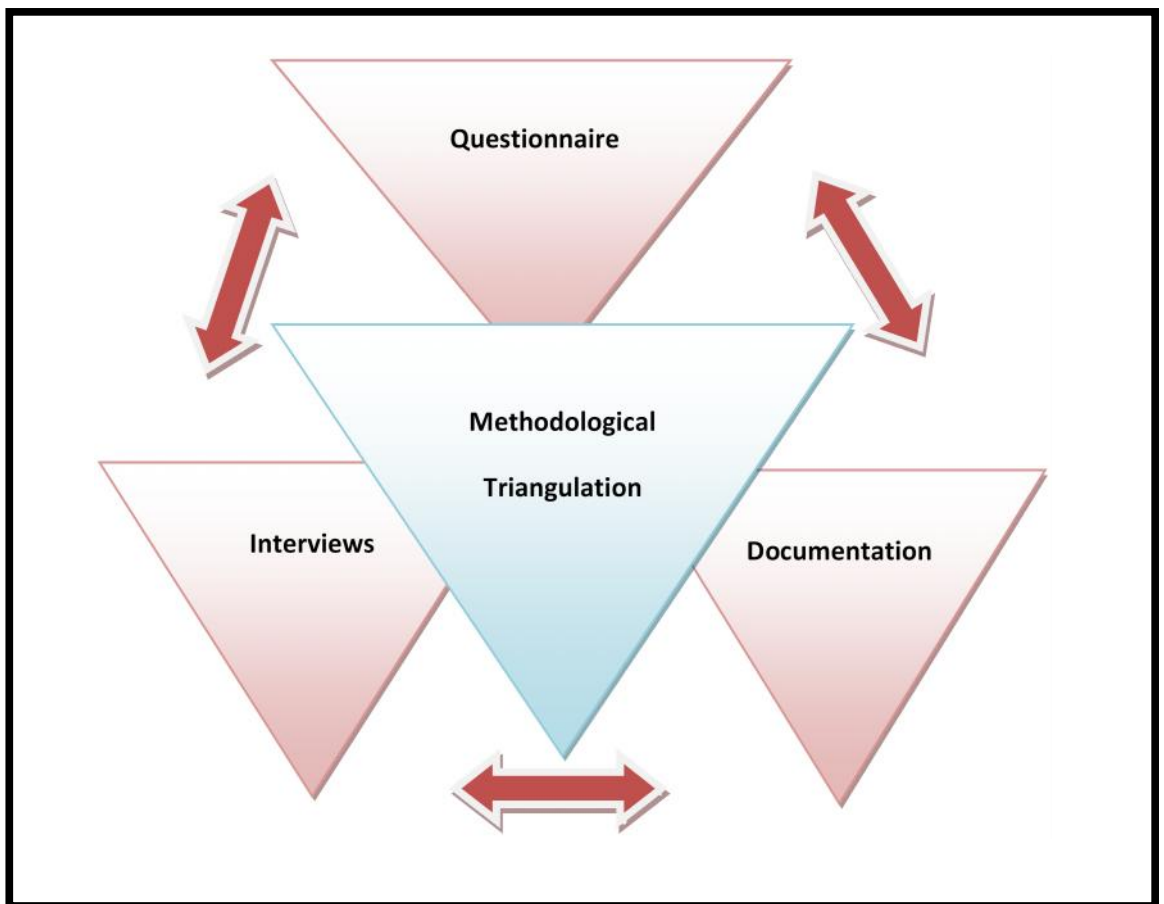
Figure 5-4: Triangulation process (Source: Fitzsimmons et al, 1997)

The next section provides information on the sampling of participants.

5.5   Population and Sampling

Two types of sampling methods which are discussed below (Babbie, 2005, p188):

- **Non-probability sampling:** This is any technique in which samples are selected in some way not suggested by probability theory. Examples include reliance on available subjects as well as purposive (judgemental), snowball and quota sampling. These types of non-probability sampling can be defined as follows:
  - o **Reliance on available subjects:** This is an extremely risky sampling method, which does not permit any control over the representativeness of a sample. It is only justified if the researcher wants to study the characteristics of people passing the sampling point at specified times, and should only be used if less risky sampling methods are not feasible.
  - o **Purposive or judgemental sampling:** This is a type of sampling in which units to be observed are selected based on the researcher's own judgement about which ones will be the most useful or representative.
  - o **Snowball:** This sampling method is often employed in field research, whereby each person interviewed may be asked to suggest additional people for interviewing.
  - o **Quota sampling:** This sampling method selects which units are included in the sample based on pre-specified characteristics, so that the total sample will have the same distribution of characteristics assumed to exist in the population being studied.

- **Probability sampling:** This is the general term for samples selected in accordance with probability theory, typically involving some random-selection mechanism. Specific types of probability sampling include simple random sampling and systematic sampling. These types of probability sampling can be defined as follows:

- Simple random sampling: With this sampling method, each element has an equal chance of selection independent of any other event in the selection process.
- Systematic sampling: With this sampling method, every k^{th} unit in a list is selected for inclusion in the sample.

A non-probability sampling technique called quota sampling was used for this study. Using the quota sampling method predefined characteristics namely: size (4-16 rooms) and area of operation (Buffalo City municipal area, Eastern Cape, South Africa) were identified. In order to arrive at the sample an invitation to attend a tourism workshop/information session was sent to 225 members registered on the Buffalo City Tourism Board website. The invitation was sent via email and sms to the registered members; of the invited members 59 confirmed attendance. An acceptable sample size for this study was a minimum of 20 percent of the contacted members. The final sample for this study was 40 SMHEs. This sample represents 18 percent of the members registered with the Buffalo City Tourism Board, and 68 percent of the members who attended the workshop. The table below summarises the composition of the population for this study:

Data Collection Technique			No
Observation	Questionnaire/Interview	Experts	
4	40	5	N=49

The following section discusses how the collected data was analysed.

5.6 Data Analysis

All research leads to the analysis and interpretation of data collected during the study. The analysis stage involves the breaking up of data into manageable themes, trends and relationships (Mouton, 2005). The data collected was analysed in order to identify trends, and to identify and categorise the responses according to the themes derived in the literature.

The qualitative and quantitative data gathered from the literature survey, questionnaires, and websites observations was grouped according to the various research questions. A Matrix was used to assess the questions from the questionnaire as well as the anecdotal recording of the website observations. A coding system was developed to help indentify patterns from the questions which provided a list of options to choose from. This system allows for the effortless identification of patterns which can be easily interpreted. Responses to the semi structured questions were grouped according to a visible pattern of common themes. An Excel spreadsheet was used to document all responses from both the questionnaire and the interviews. Responses to closed questions were provided through the application of descriptive statistics only; no Chi-square or t-tests were conducted. Responses to the open-ended questions were shown on tables to reflect direct responses. Results from the focus group interviews were also shown on tables as direct responses. Observations are reflected through anecdotal records and expert opinions are provided in tables in the following chapter. The results from the analysis of the data will be discussed in the next chapter and the findings will influence the development of the proposed model.

According to Creswell (2003, p191-195), there are common steps involved in the analysis and interpretation of qualitative research data. These steps are highlighted in Table 5-1 below.

Table 5-1: The common data analysis steps (Creswell, 2003)

Organise and prepare the data for analysis	This involves transcribing interviews, typing up field notes, or sorting and arranging the data into different types depending on the source of information.
Read through all the data	This involves making sense of the information and understanding the meaning of the data as a whole.
Use the coding process to generate a description of the setting or people, as well as categories or themes for analysis	This involves detailed background information about people, places or events within a specific setting.
Use the coding to generate a small number of themes or categories	Themes appear as major findings in qualitative studies and are stated under separate headings in the finding sections of the study.
Advance an example of how the description and theme should be represented in the qualitative narrative	The most popular approach is to use a narrative passage to convey the findings of the analysis.
Interpretation	This explains the meaning of the data.

This study therefore adopted the above-mentioned process in order to present a qualitative analysis of the collected data.

To evaluate the relevance of the model, the model was given to a group of five experts from the hospitality sector for review purposes. The group of experts included members from the Buffalo City Tourism Board. Their comments were noted and the final model was adjusted accordingly. Discussed in the following section are factors which can impact the trustworthiness of this study.

5.7   Measures to Ensure Trustworthiness

Oates (2008) indicates that trustworthiness is about how much trust one can place in a research output. According to Holloway and Wheeler (2002) a study is authentic when the strategies used are appropriate for the true reporting of the participants' ideas, when the study is fair and when it helps participants and similar groups to understand their world and to improve it. Authenticity is thus achieved by the researcher's fairness to all participants as well as gaining their acceptance throughout the study. Continued informed consent was obtained in this research. According to Holloway and Wheeler (2002) trustworthiness in qualitative research means methodological soundness and adequacy. The researcher makes judgments of trustworthiness possible through developing the following:

➢ **Credibility**

Credibility corresponds to the notion of internal validity (Oates, 2008). This means that the participants must be able to recognise the meaning that they themselves give to a situation and the truth of the findings in their own social context. The researcher must ensure that the findings are compatible with the perceptions of the participants (Holloway and Wheeler, 2002). Credibility will be ensured through using prolonged and varied field experience, interviewing process, peer review, reflexivity and triangulation.

The researcher ensured prolonged and varied field experience by spending time in establishing a rapport with the participants before commencing with the interview so that the participants became accustomed to the researcher. The researcher also remained for a while after the interviews because the participants continued talking after the conclusion of the interviews. This is important because as rapport increases, participants volunteer new information.

Credibility is also enhanced in the interviewing process as the researcher reframes questions, repeats or expands questions on different occasions during the course of the interview process. Peer review was also ensured by discussing the research process and findings with impartial colleagues such as the two promoters who were both experienced in qualitative research methods.

Triangulation is a powerful strategy for enhancing the quality of research (Krefting, 1991). Triangulation of data gathering methods and sources was utilised to ensure trustworthiness. The data obtained was analysed twice, that is by an independent coder and the researcher.

> ➢ **Transferability**

Transferability means that the findings of this research can be transferred to similar situations or participants (Oates, 2008). The knowledge acquired in this study will be relevant in other situations, and those who will carry out the research in another context will be able to apply certain concepts originally developed in this research study (Holloway and Wheeler, 2002).

A dense description of the background information is provided about the participants and the research context and setting in order to allow others to assess how transferable the findings will be. According to Lincoln and Guba[3] (1985) in Krefting (1991, p12) it is not the researcher's job to provide an index of transferability; but it is his or her responsibility to provide an adequate database to allow transferability judgments that will be made by others.

---

[3] Lincoln, Y.S. & Guba, E.A. (1985). Naturalistic inquiry. Beverly Hills, CA: SAGE.

➢ **Dependability**

Oates (2008) refers to dependability as how well the research process is recorded and the data documented. If the findings of a study are to be dependable, they should be consistent and accurate. In this study the strategies used to ensure trustworthiness included a detailed description, triangulation and peer review. An independent coder was utilised to increase dependability.

➢ **Confirmability**

Oates (2008) further states that confirmability answers the question: Have we been told enough about the study to judge whether the findings do indeed flow from the data and the experiences in the setting? Does the research show how the researcher arrived at the constructs, themes and their interpretations? Thus, Holloway and Wheeler (2002) maintain that the details of the research, the background and the feelings of the researcher need to be open to public scrutiny. Triangulation of methods and sources and reflexivity were used to ensure trustworthiness in this research.

5.8   Conclusion

The research paradigm, design and methodology were clearly outlined in this chapter. This study leans towards an Interpretivist paradigm which relied on qualitative rather than quantitative research methods despite the use of triangulation as a means of collecting data. The research design provided a succinct summary of how this research study was executed, and the research method section provided details on how information was gathered using questionnaires, semi-structured interviews, document analysis and observation. To evaluate the relevance of the model for SMHEs, experts from the Buffalo City Tourism Board were asked to review the model. The approach taken for analysing data was also discussed in this chapter, as

well as the factors taken into consideration to ensure that the findings of this research were trustworthy. The next chapter discusses the findings of this study.

CHAPTER 6: Empirical Findings and Discussion

```
┌─────────────────────────┐        ┌─────────────────────────┐
│                         │        │                         │
│                         │───────▶│ 6.2 Background of        │
│    6.1 Introduction     │        │ Participating            │
│                         │        │ Organisations           │
│                         │        │                         │
└─────────────────────────┘        └─────────────────────────┘

┌─────────────────────────┐        ┌─────────────────────────┐
│ 6.3 Research instrument │        │                         │
│ design                  │        │                         │
│ •6.3.1 Pilot Study      │───────▶│ 6.4 Addressing the       │
│ •6.3.2 The Questionnaire│        │ research Questions       │
│ •6.3.3 Observation      │        │                         │
│                         │        │                         │
└─────────────────────────┘        └─────────────────────────┘

┌─────────────────────────┐
│ 6.5 Interpretation of   │
│ the Collected Data      │
│                         │
│ •6.5.1 First Research   │
│   Sub-question          │
│   •6.5.1.1 Literature   │
│    Findings             │
│   •6.5.1.2 Questionnaire│
│    Findings             │
│   •6.5.1.3 Interview    │
│    Findings             │        ┌─────────────────────────┐
│   •6.5.1.4 Observation  │        │                         │
│    Findings             │        │                         │
│                         │        │                         │
│ •6.5.2 Second Research  │        │                         │
│   Sub-question          │───────▶│   6.6 Conclusion        │
│   •6.5.2.1 Literature   │        │                         │
│    Findings             │        │                         │
│   •6.5.2.2 Questionnaire│        │                         │
│    Findings             │        └─────────────────────────┘
│   •6.5.2.3 Interview    │
│    Findings             │
│   •6.5.2.4 Observation  │
│    Findings             │
│                         │
│ •6.5.3 Third Research   │
│   Sub-question          │
│   •6.5.3.1 Literature   │
│    Findings             │
│   •6.5.3.2 Questionnaire│
│    Findings             │
│                         │
└─────────────────────────┘
```

6.1   Introduction

In order to compete effectively in the global marketplace SMHEs have to make ICTs an integral part of their businesses. Different authors provide differing explanations for how ICTs are utilised in SMHEs and why these businesses are slow to adopt Internet technologies. While the secondary data used in this study provides an insight into the different theories and strategies in this field, the questions asked from the participants of this study are aimed at gaining an understanding into the ICT adoption challenges experienced, and current technologies used by SMHEs within the Buffalo City Municipality.

The data collected in this study was analysed in order to draw meaning from it. By comparing, evaluating and identifying trends from the primary data collected together with the secondary data, illustrations were made that are used to meet the objective of this study. The objective of this study is to develop an IT Governance model that can be used by SMHEs prior to making ICT investment decisions or when trying to align existing ICT resources to business objectives.

 In the process of analysing the data collected, careful consideration was given to identifying questions from the primary data collections (questionnaire, observation, experts) that would make the most/least contribution in meeting the objective of this study. This will ensure that the findings and recommendations made are based on the most relevant data collected. All contributions made by the participants were given equal value during analysis. The ensuing sections provide details of the criteria used for comparing data, and an in-depth discussion of the findings from the analysis of data. The next section introduces the participating organisations.

6.2   Background of Participating Organisations

Forty SMHEs from the Buffalo City Municipality region of the Eastern Cape voluntarily participated in the study. Although the invitation to participate in the study was

communicated to SMHEs in all areas of the Buffalo City Municipality, a high concentration of responses was received from two areas namely, King Williams Town and East London. This could be accredited to the travelling logistics or difficulties for some SMHEs to the workshop venue. However, East London was an ideal central location for all SMHEs concerned. The researcher assured the participants that the information they provided would be kept anonymous during the analysis stage of the study, therefore business names have been substituted with letters from A to AN. Specific questions providing a general background of the participating businesses were asked in the questionnaire. The questions below (extracted from the questionnaire) are explained and the responses are summarised in Table 6-1.

- **Has the business been graded by the Tourism Grading Council of South Africa (TGSA)?**

The TGSA is a national quality regulator for tourism products in South Africa. The quality assurance services offered are provided specifically for the accommodation and conference venue sector.

"*The Tourism Grading Council ensures that a process of quality assurance is continuously sought across tourism facilities and services offered to the consumer*" (TGCSA, 2010).

- **If the business has been graded how many stars was it allocated?**

Graded establishments are awarded stars reflecting an establishment's quality. Five stars are the highest grading evaluation and one star is the lowest ranking. If an SMHE has been graded by the TGCSA it is a possible indication of the following:

- ✓ The owner/manager responds to industry trends/standards
- ✓ The owner is willing to invest financial resources in an attempt to improve the status of the business.

- **How many years has the business been operational?**

With sixty three percent of participating SMHEs having been operational for five or less years, it can be said that the majority of the participating businesses are fairly young.

- **How many people are employed in the business?**
- **How many rooms does the business have?**

The number of people employed in the business and the number of rooms each establishment has, provides a good indication of the size of the business. The greater number of participating SMHEs had a staff complement and a number of rooms ranging from 4 to 13 confirming that these SMHEs were small or medium businesses which met the criteria stipulated in Chapter 1 (4 to 16 bedrooms) of this study. The table below summarises general business details from the participating SMHEs.

Table 6-1 : General Organisational Information for questionnaire participants

Organisation Name		Tourism Grading	Grading Stars	No of years in operation	No of employees	No of Rooms	Location
1	A	1	3	2	3	5	King Williams Town
2	B	1	3	1	2	10	King Williams Town
3	C	1	3	8	4	8	King Williams Town
4	D	1	3	1	3	4	King Williams Town
5	E	1	3	11	5	10	King Williams Town
6	F	1	3	2	4	4	East London
7	G	1	3	4	3	6	East London
8	H	1	3	3	4	7	East London
9	I	0	0	10	4	8	East London
10	J	1	3	9	5	7	East London
11	K	1	4	8	4	5	King Williams Town

12	L	0	0	2	2	8	King Williams Town
13	M	1	3	3	4	10	King Williams Town
14	N	1	3	8	6	9	East London
15	O	0	0	2	5	5	East London
16	P	1	4	15	9	12	King Williams Town
17	Q	0	0	1	2	5	King Williams Town
18	R	1	4	6	3	6	East London
19	S	1	3	3	3	7	East London
20	T	0	0	13	3	4	East London
21	U	1	3	10	3	12	Kenton on Sea
22	V	1	4	5	7	10	Somerset East
23	W	1	1	3	3	5	East London
24	X	1	2	2	2	4	East London
25	Y	1	3	6	3	13	East London
26	Z	1	2	2	2	4	East London
27	AA	1	3	3	4	4	East London
28	AB	1	2	12	2	4	East London
29	AC	1	3	4	2	8	East London
30	AD	1	3	2	2	7	East London
31	AE	1	3	5	5	5	Bhisho
32	AF	1	3	6	3	9	King Williams Town
33	AG	1	4	1	8	9	King Williams Town
34	AH	1	4	7	4	10	King Williams Town
35	AI	1	3	1	4	7	East London
36	AJ	1	2	1	6	9	East London
37	AK	0	0	3	3	6	East London
38	AL	0	0	4	4	11	King Williams Town
39	AM	1	3	3	5	6	East London
40	AN	0	0	6	3	6	East London

6.3   Research Instrument Design

6.3.1   Pilot Study

During the questionnaire design stage of the study a pilot study was conducted in order to refine the questionnaire. Three participants were involved in the pilot study. Comments received from this pilot study helped to refine the questions and exclude those which the respondents considered ambiguous, or irrelevant to the SMHE context.

6.3.2   The Questionnaire

Forty of the 59 SMHE representatives invited to the workshop completed the questionnaire. The questionnaire (cf. Appendix B) which served as the main primary data collection instrument for this study, was structured into four main sections namely: *General Information, Technology, Organisational, and Environment* related ICT questions. The data collected was grouped according to the information needed to address the research questions; this allowed for a more structured approach during the data analysis phase of the study. Open-ended and closed questions were used in the questionnaire. These sections can be summarised as follows:

Section 1: General background information about the business.

Section 2: Provides information on the current use of technology within the business as well as the technological background and understanding of the respondents.

Section 3: All other internal organisational factors which impact on the business's ICTs adoption.

Section 4: The external factors which influence the decision of SMHE to adopt ICTs, were addressed. This section contained the open-ended questions. These open-ended questions also acted as a discussion starting point for the semi-structured

interviews. Though some respondents provided no new information in response to the open-ended questions, all respondents were given an opportunity to comment during the workshop.

Combinations of table summaries and graphs have been applied to provide a graphic representation of participants' responses. The data collected and recorded in an Excel spreadsheet (cf. Appendix C) serves as the source of information from which the graphs and table summaries were generated.

Table 6-2 shows an Excel spreadsheet extract of how the questionnaire responses were recorded for analysis. The first and second rows show how the organisation name was represented by a letter of the alphabet as the respondents were assured anonymity prior to taking part in the study. Variables to be noted from the table are as follows:

- o Columns labelled *1, 2, 3... 40* display the responses from the 40 SMHEs which completed the questionnaire. These responses are denoted with the number 1 next to the corresponding question contained in the rows of this table. The 1 represents the actual responses selected by the respondents on the questionnaire, whilst the blank spaces in the columns show the options that were not selected.
- o The row labelled *Weighting* displays the percentage contribution of a response from each organisation towards the total result of that particular question.
- o The first column on the table represents the questions from the questionnaire (*cf.* Appendix C).
- o The column labelled *Results* displays the total count of all the responses from all 40 SMHEs to each question. As each organisation carried a weighting of 2.5% the following formula was applied to calculate the cumulative result:

Results = ((A + B + C ..... + AM + AN) ÷ 40) x 100

Table 6-2: Analysis of questionnaire responses (extract)

Organisation name	1 A	2 B	3 C	38 AL	39 AM	40 AN	Results AO
Weighting	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	**100%**
Technological Context							
20.1 Heard about ICT from a friend	1		1		1		**13%**
20.2 Own experience		1		1		1	**73%**
20.3 Industry recommendation							**8%**
20.4 Referral from another business							**3%**
20.5 Other							**3%**
21.1 Customer needs (pressure)			1				**28%**
21.2 Trends in industry							**25%**
21.3 Owner's judgment		1		1	1		**55%**
21.4 Tourism industry associations	1					1	**25%**
21.5 Other							**0%**
22.1 A Computer		1	1			1	**75%**
22.2 Access to the Internet		1				1	**68%**
22.3 Accounting software (e.g. Pastel or Quickbooks)		1					**30%**
22.4 Reservation system						1	**30%**
22.5 Fax		1	1		1	1	**90%**
22.6 Antivirus		1	1			1	**58%**
22.7 Cellphone banking			1				**15%**
22.8 DSTV	1	1	1			1	**83%**
22.9 Other				1			**3%**

23.1	Website						1	**65%**

6.3.3 Observation

This study acknowledges that the information received from the participants is subjective; however, the responses in the Technological context section of the questionnaire relating specifically to the business's website can be verified by observing some of the respondent's business websites. This verification is done in order to improve the reliability of the findings of this study. Both qualitative and quantitative results can be obtained when using observation as a data collection method. An extract was taken from the questionnaire and used during the observation of the respondent's business website and recording the results. The qualitative data collected is recorded in anecdotal form (brief narrative summaries) of what was observed whilst the quantitative data is obtained by responding to the questions extracted from the questionnaire (see extract below, Figure 6-1).

A sampling technique called systematic sampling was used to obtain the required sample for observation (4 SMHEs). Using systematic sampling "...after the required sample size (4) has been calculated, the nth (4th) record is selected from a list of population members" (StatPac, 2010). Counting the 4th SMHE with a website from the General Organisational information list (*cf.* 6.2), the observation sample was drawn as **L, P, T, AF**. The observation was based on question 23 (see Figure 6-1 below) from the questionnaire and adhoc comments noted by the researcher.

☐ Website   ☐ Email

☐ Online bookings   ☐ Internet banking

☐ Online payments (e.g. PayPal)   ☐ Search engine listings

☐ Fax to Email   ☐ Online database registration

☐ Bulk SMS   ☐ Blogs

☐ Other (Specify)_____

If your business has a website please answer questions **(24 to 28)** below:

24. Can enquiries be made via the website? **Yes** ☐   **No** ☐

25. If answer is **Yes**, how are enquiries made via the website?

☐ **Email**   ☐ **Interactive Website**

26. Can bookings/reservations be made via the website? **Yes** ☐   **No** ☐

27. If answer is **Yes**, how are bookings made via the website?

☐ **Email**   ☐ **Interactive Website**

28. Can payments be made via the website? **Yes** ☐   **No** ☐

Figure 6-1: Questionnaire (extract)

The review of relevant literature conducted in Chapter 2 and 3 provided a baseline against which the findings of this study were compared. The literature review also acted as a guide to provide direction for this study. The discussions contained in this chapter will revolve around what was discovered in the review of literature phase

compared to what was revealed by the primary data collection process (questionnaire and observation) of this study.

6.4   Addressing the Research Questions

Meeting the objective of this study entails providing answers to the research questions raised. Mixed methods were used to gather data in order to ensure that a broad understanding of the SMHE sector was acquired during the literature review phase, and comprehensive primary data was collected to ensure the validity of the findings and recommendations made in this study.

The main research question addressed during this study is:

> *How can SMHEs take full advantage of the opportunities to improve business efficiency and effectiveness available through the use of Internet technologies?*

This research question was broken down into three sub-questions and different data collection instruments were used to provide answers to these sub-questions. The table below provides a summary of the sub-questions and the data collection instruments used to study them:

Table 6-3: Data collection plan

SUB-QUESTIONS		LITERATURE	QUESTIONNAIRE	INTERVIEW	OBSERVATION
1.	How do SMHEs currently use the Internet to support their trade activities?	✓	✓	✓	✓
2.	How can SMHEs use Internet technologies to gain a competitive advantage?	✓	✓	✓	✓
3.	What components must be considered in developing a model that will support SMHEs to gain advantage from using Internet technologies?	✓	✓		

6.5   Interpretation of the Collected Data

Having discussed the main research question and its sub-questions (*cf.* 6.4) the ensuing sub-sections contain discussions of the findings of this study grouped according to each research sub-question.

6.5.1   First Research Sub-question

> ***How do SMHEs currently use the Internet to support their trade activities?***

The purpose of this research sub-question is to investigate the ICT adoption challenges faced by SMHEs as well as the Internet technologies that are currently applied. The literature review, questionnaire, interviews, and observation were the methods used to collect data (*cf.* Table 6-3) required to answer this sub-question. A detailed discussion of the findings to the first research sub-question is provided below.

6.5.1.1   Literature Findings

During the literature study undertaken in Chapter 2 and 3, it was found that SMHEs are faced with unique challenges which often hinder them from effectively investing in and deploying ICTs.

In the reviewed literature potential benefits (improving internal processes, responses to customer demands, modifying service processes) are identified. Despite the potential benefits the literature reviewed generally concured that SMHEs do not fully utilise e-commerce. Factors which influence ICT adoption implementation and use of technology in SMHEs were grouped into three categories using Tornatzky and Fleischer's (1990) TOE model: *Technological*, *Organisational*, and *Environmental* contexts.

In the Technological context three factors were mentioned namely; Availability, Perceived ease of use, and Perceived usefulness. The perceptions of the owner/managers based on their experiences using technology and how much value will be added to the business if technology is used, plays a vital role in the adoption of ICTs. Lack of availability or accessibility also has the potential to negatively influence the decision to invest in ICTs.

In the organisational context the influencing factors, which can sometimes be overlooked include firm scope, size, and managerial beliefs. The most influential factor in the case of SMHEs is managerial beliefs. However, giving equal importance to the other factors within the organisational context such as organisational readiness, employees' IS knowledge could also prove beneficial to SMHEs in the long term (*cf* 2.2.1.2). In the case of organisational readiness, careful consideration must be given to the type of resources already existing within the organisation, as well as, additional resources required. Employees' IS knowledge can help to create a supportive

environment or alternatively a frustrating workplace environment if employees have limited IS knowledge and no training is made available.

In the environmental context two key factors were considered, *Competitive pressure* and *External IS support* (*cf* 2.2.1.3). The problem identified in this study relates specifically to the poor/lack of adoption of Internet technologies. The adoption of Internet technologies by SMHEs is hampered by concerns which include: Security, Lifestyle of owner/manager, Overreliance on intermediaries, Size, Limited resources, Time, Perceived risk, and Enterprise attitudes (*cf* Table 2.1).

SMHEs identified in the literature review use Internet technologies which focus on the following technologies: *Search engine marketing, Social networking, Media and content syndication (RSS),* and *Internet based services* which include email, sms, chats, forums, fax to email (*cf* 3.4). The next section will discuss the questionnaire findings which addressed the first research sub-question (*cf* 6.5.1).

6.5.1.2   Questionnaire Findings

The questionnaire was completed by 40 of the 59 SMHE representatives invited to the workshop. The questionnaire was divided into 4 sections (*cf.* 6.3).

Feedback from the specific questionnaire sections which addresses the answers to the first research sub-question is discussed below. An analytical summary of the detailed responses to these questions can be viewed in Appendix C.

Section 1: General business background

The following information gives a partial view of the broad ICT scenario within the participating SMHEs. The response results relating to broad ICT usage by SMHEs showed that 85% had faxes, 60% had websites, and 95 % had email addresses used for business purposes. These results exhibit interesting ICT adoption behaviour on

the part of the SMHEs. The fax can be considered as a technological tool that is so commonly accepted by both private and business users and similar to other technological tools (e.g. telephone, television), that it is hardly considered an ICT device. It is therefore not surprising that such a high percentage (85%) of SMHEs use faxes. However, a noteworthy finding is that the use of email surpasses that of other technological tools that have been around for decades, like the fax machine. Ninety five percent of the respondents indicated that they had email addresses. Unsurprisingly, 60% of the responses indicated that they had a website. This figure serves to confirm the identified problem of this study that SHMEs do not take full advantage of the opportunities Internet technologies present for businesses.
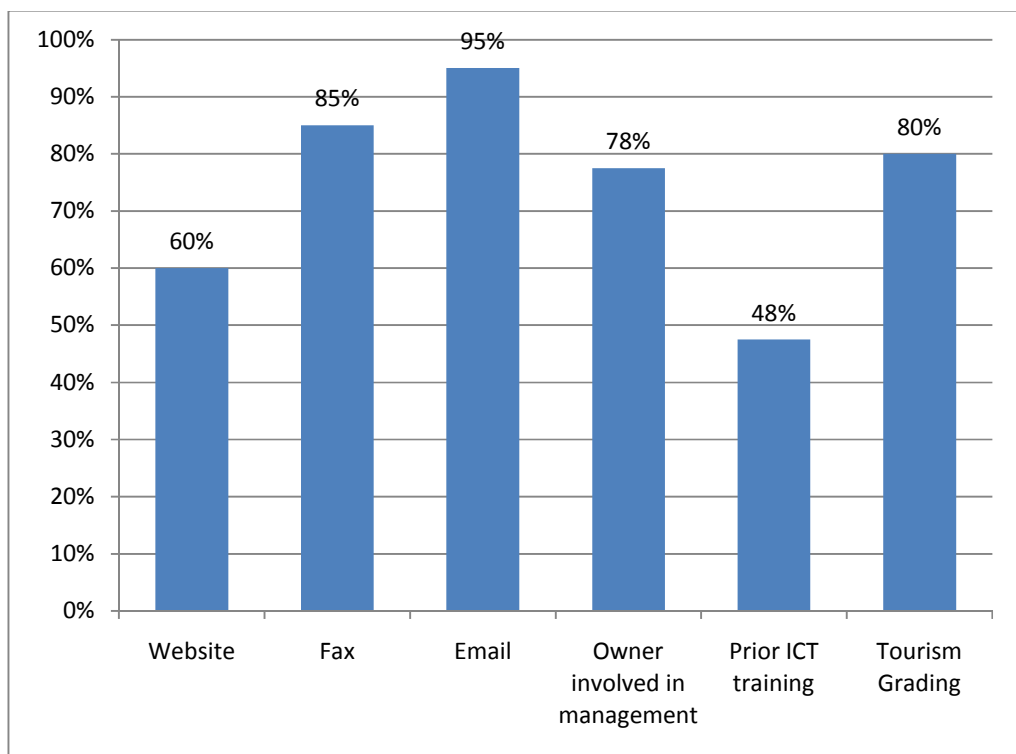
Figure 6-2: Questionnaire results (General business Background)

Why the identified research problem exists can be attributed to certain factors that influence ICT adoption. From this section of the questionnaire three possible factors

can influence ICT adoption namely O*wner involvement*, *Owner/manager prior ICT training*, and the *Tourism Grading Council* (*cf.* 6.2)*.* The responses indicated that in 78% of the businesses the owner was also the manager, only 48% of the owner/managers had prior training (whether through short or long term courses), and 80% of the SMHEs were graded by the TGCSA. Therefore the following deductions can be made;

- o SMHE owner/managers with limited formal (training) exposure make the decision to invest in ICTs,
- o The responsibility of making an ICT investment in the majority of SMHEs, still lies with the owners who are also managers of these businesses, and
- o Industry regulators like the TGCSA can influence the investment decisions made by SMHEs. Eighty percent of participating SMHEs have been graded by the TGCSA because to operate in the hospitality sector, a star grading by the TGCSA, albeit voluntary, is the minimum acceptable standard.

Section 2: Technological context

Factors influencing the decision to invest in technology have been grouped into three categories in the questionnaire namely; *Technological context*, *Organisational context* and *Environmental context*. In this section only those factors related to technology will be discussed. Details on the Internet technologies applied on the SMHEs websites will also be analysed and discussed.

What has influenced the investment in ICT for SMHEs?

With the majority of SMHE owners involved in the management of their businesses, they play a significant role in all decisions made. When asked what the main influencing factor is before ICT investment decisions are made, the responses show (*cf.* Figure 6-3) that 73% of ICT investment decisions were based on the

owner/manager's own experiences. Some businesses consider other factors such as referrals, or industry recommendations.
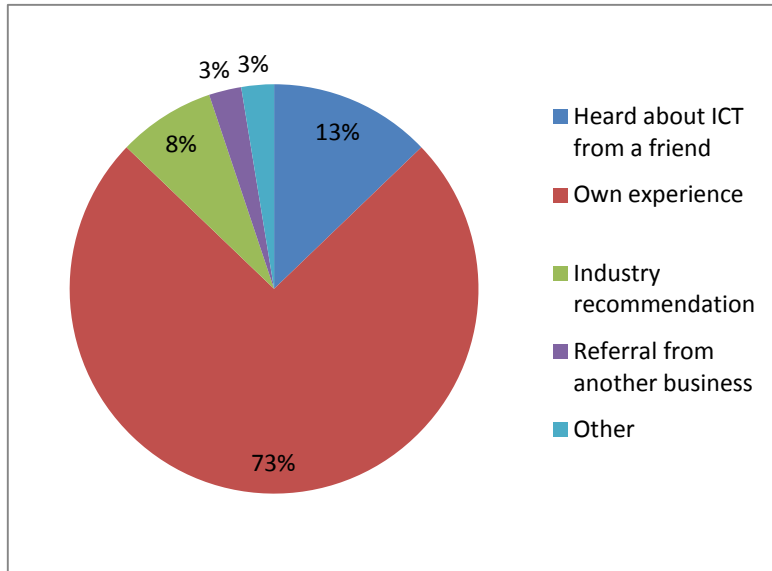
Figure 6-3: Influences of ICT investments in SMHEs.

What initiates the investment in ICT for the business?

Certain triggers will force a commitment from SMHE owner/managers to invest in ICTs. From the options presented to the respondents in the questionnaire the influence of the owner (owner's judgement – 55%) once more took precedence over all other options (*cf* Figure 6-2). However, in this instance C*ustomer needs* (28%), *trends industry* (25%), and the influence of *tourism industry associations* (25%) were also given fair consideration.
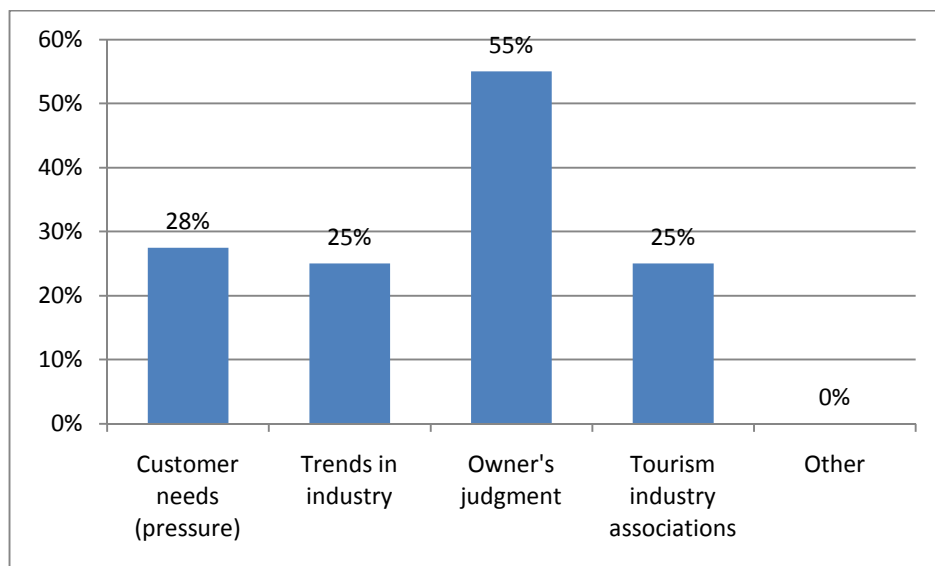
Figure 6-4: Initiators of ICT investment in SMHEs.

Undeniably the owner/managers exert the greatest influence on decisions taken within SMHEs. The owner/manager's perceptions about technology will therefore directly influence whether the business adopts ICTs or not. Two questions providing insight into the owner/manager's perceptions of ICT related to *Perceived ease of use* and *Perceived usefulness*. The findings are displayed in the figure below:

Perceived Ease of Use:
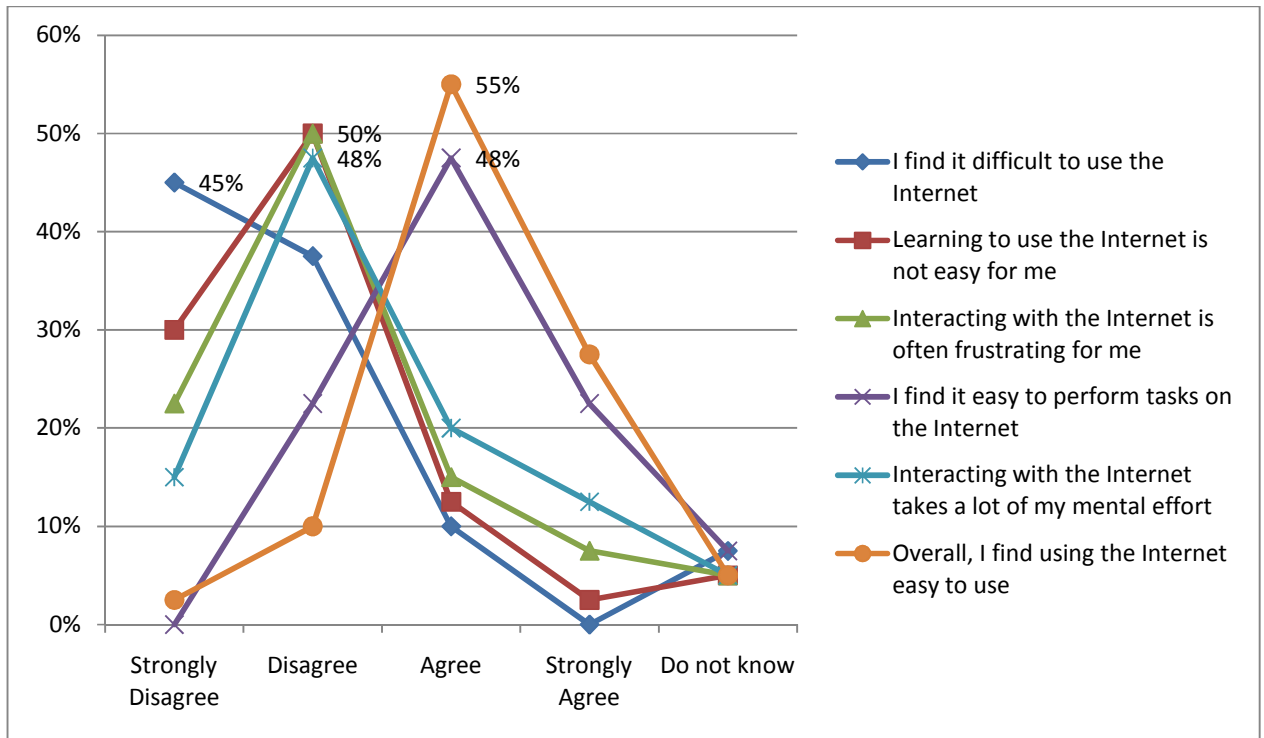
Figure 6-5: SMHE perceptions on ease of using the Internet

Though some respondents find learning to use the Internet and actually using the Internet difficult, they represent less than 20%. The overall impression is that from the respondents' feedback nearly 50% find it easy to perform tasks on the Internet and at least 55% think that overall, the Internet is easy to use. If the decision to invest in IT was based purely on whether the owner/managers found it easy to use the Internet, only 55% of the respondents would invest in Internet technologies.

Perceived Usefulness:
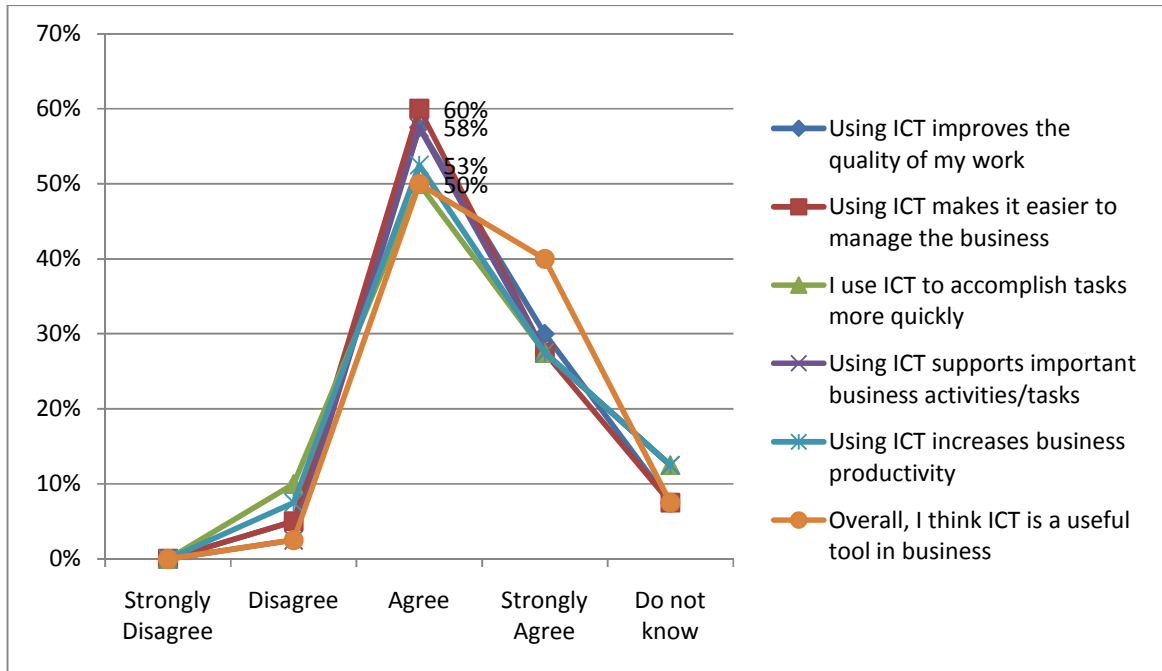
Figure 6-6: SMHE perceptions on the usefulness of the Internet

An overwhelming trend indicates that a greater number of respondents are of the opinion that ICT generally has a positive impact on business tasks, activities, efficiency, and quality of work. The perceived usefulness of a product (Internet technologies) has a direct bearing on whether it will add value to the business. If the owner/manager is convinced that the product will add value (to any agreeable scale) to the business, then the purchase or investment in the product improves considerably. Overall 50% of the respondents think that ICT is a useful business tool.

Which ICT tools has your business invested in?

All questionnaire responses indicated that all participating SMHEs have a telephone either a fixed telephone line or a mobile phone. Besides the telephone, the fax

machine (90%), and DSTV satellite television (83%) are the two most popular technological tools. At least 75% of the participating SMHEs had a computer and 68% access to the Internet demonstrating that at its own pace, the SMHE sector has gradually embraced some newer technological tools. However, the difference that exists between the percentage of SMHEs that have a computer and the percentage of SMHEs that have an Antivirus on those computers (58%) is a symptom of limited ICT information/awareness. The purchasing of an Antivirus system is crucial for any business that wants to protect business information stored on computers. A slightly smaller percentage used computerised Accounting (30%) or Reservation (30%) software systems. Fifteen percent used cellphone banking, and only 3% used other (e.g. Debit or Credit card payment systems) ICT tools.
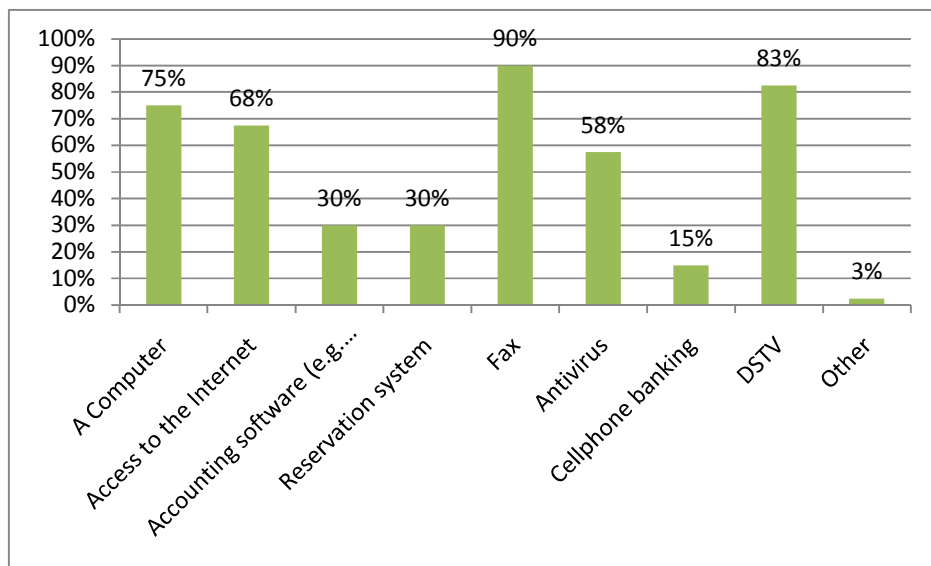
Figure 6-7: ICT tools used by SMHEs.

Which Internet technologies has the business invested in?

The Internet has revolutionised how business is conducted. The responses received from the Technological context of the questionnaire show a slight difference exists between the number of confirmations that the business has a website and the count

of URL's provided. In the general business information section 60% of the respondents provided the business website address (URL). In the Technological context section the respondents were asked if they had a website and 65% answered yes to the question. The slight difference in these figures is because some respondents are listed on destination portals or third party websites and they view the webpage dedicated to their business on these third party websites as their own website. This is however is not accurate; for the purpose of this study the business website must be registered in its own unique domain. The email use percentage decreased slightly (93%); however 95% obtained in the General business background information section is more accurate as actual email addresses provided, were counted.

Other Internet related technologies receive lower rankings than the business website and email, the difference was marginal in the cases of *Internet banking* and the use of *Fax to email* which both measured 58% of the respondents. Internet banking and Fax to email have been adopted by SMHEs at a faster rate than the use of websites for business. The potential to use the Internet for business has been there for as long as the Internet has been around; meanwhile consumer use of the Internet has gradually increased over time. Lower Internet connectivity costs, costs of hardware and faster accessibility of the Internet have spurred on the use of the Internet by individuals. According to Internet World Stats (2009) figures (quoted in Kim *et al* (2010)), there are currently 1.46 billion Internet users in the world, and this figure shows an increase of 305,5% from the year 2000's statistics. By the year 2009 there were 1.46 billion potential customers for SMHEs but only 65% of these businesses have a website. Considering only the past nine years during which SMHEs could have used the Internet for business, only 65% of them currently have websites. However compared to business websites, Internet banking and Fax to email which have been commonly accepted in the past couple of years, have been well adopted by the SMHEs sector.

Those Internet technologies directly related to the promotion of, or enhancement of services offered by a website: *Online bookings* (38%), *Online payments* (28%), *Online database registration* (25%), and *Search engine listing* (23%) have not been prioritised by SMHEs.
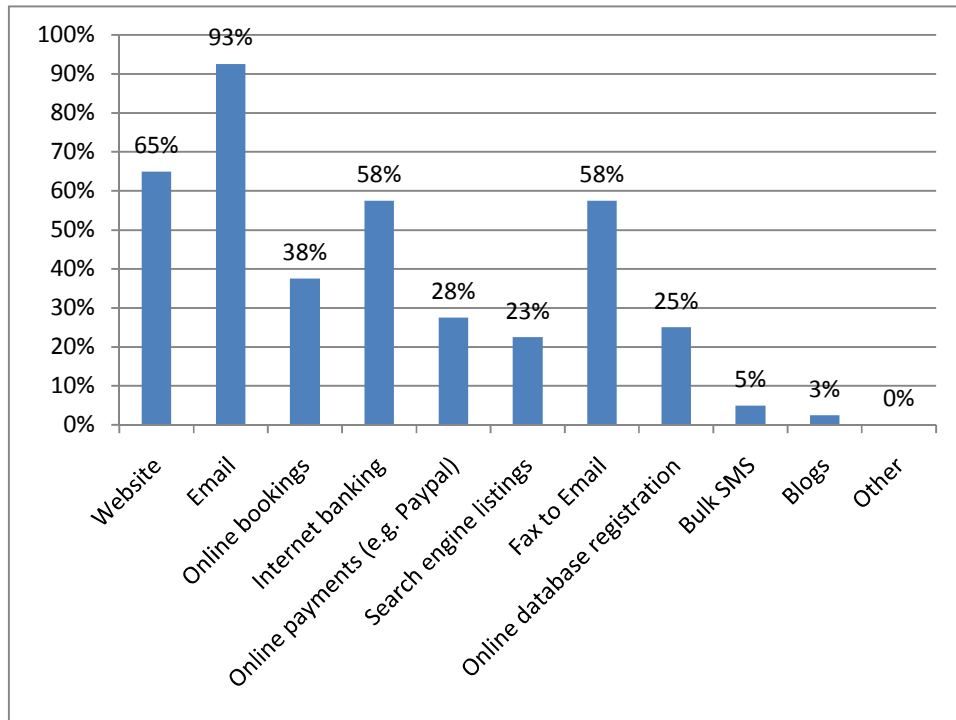
Figure 6-8: Internet technologies used by SMHEs

6.5.1.3   Interview Findings

Semi structured interviews (see Appendix B) focused on discussing problems experienced with prior or current ICT use and how these problems may influence current ICT investment decisions. In response to the question "*Has the business ever experienced problems with prior ICT use?*"*,* the following responses were noted:
  o General faults e.g. fax or copier not working,
  o Connectivity issues when trying to connect to the Internet, and poor service responses when problems occur from the service providers,

- o Poor Satellite Television signal,
- o Viruses, and
- o Sluggish dial up connections.

Fifty percent of the participants of the study stated that they had experienced the problems summarised above. However, all the above mentioned problems have no influence on the SMHEs' decision to invest in ICT. From the problems identified the most common is *connectivity*. A small percentage (10%) of the respondents referred to viruses as another ICT problem. Fifty percent of the respondents who cited viruses as a problem had no antivirus programs installed on their computers.

When asked to suggest other challenges not directly related to problems experienced, the following responses were provided:
- o Finances,
- o Security,
- o Limited ICT knowledge,
- o Time,
- o Staff literacy, and
- o No full time staff member to support ICT initiatives.

Thirty percent of the respondents mentioned *Finances*, as a possible hindrance to ICT adoption. While a smaller percentage (15%) mentioned security concerns whilst performing online banking activities. Although less than 10% of the responses mentioned *Lack of knowledge* by the owner/managers, *Staff literacy* (the educational capabilities of staff members will influence how quickly they understand any technology related training), *Limited number of staff* to manage ICT resources (e.g. online reservations), they are worth noting.

6.5.1.4 Observation Findings

Table 6-4: Observation findings (summary)

		(n = 4)	
		n	%
1	Website handles enquiries		
	Yes	4	100%
	No	0	0%
2	How are enquiries made via the website?		
	Interactive website	2	50%
	Email	2	50%
3	Can bookings be made via the website?		
	Yes	1	25%
	No	3	75%
4	How are booking made via the website?		
	Interactive website	1	25%
	Email	3	75%
5	Can payments be made via the website?		
	Yes	0	0%
	No	4	100%
6	How are payments made via the website?		
	Interactive website	0	0%
	Email	4	100%

Observing the identified websites it is evident that the majority of SMHEs that have websites have not fully explored the various technologies implemented on their respective websites. Since the owner/managers took the initiative and made the financial commitment to purchase a website, perhaps the lack of more current technologies on the SMHEs' websites is influenced by the service provider (intermediaries) who designed the website? Having very limited knowledge on the

workings of the Internet, the SMHE owner or managers are dependent on the service provider to give guidance on available technologies. A random Google search 'bed and breakfasts in Scotland', was conducted and the third bed and breakfast on the results list was selected. The website of this Scottish SMHE highlights at least three glaring differences which were absent on the websites of our observation sample:

- o Although the SMHE did not have a booking or payment system on their website, their online booking request was linked *to a third party booking customised webpage*.
- o A *Guest Book* page was available; however, creating a blog for this section of their website would have been more effective. This section displayed undated extracts from the SMHE's guest book.
- o A clear notice for prospective guests to read the *booking procedures and cancellation policy* prior to making a booking was prominently displayed on their website.

These differences indicate that SMHEs do utilise the website as an alternative way of offering some services to their clients.

In this section it was discovered that SMHE are currently supporting their trade activities primarily via; fax to email, email, Internet banking, and to a lesser extent online bookings, online payments, online database registration and search engine listing. The literature findings identified Internet technologies such as search engine marketing, social networking, media and content syndication, and internet based services (*cf* 6.5.1.1). The findings from the survey showed that respondents used the Internet extensively for the Internet based services (e.g. fax to email, email) but the newer Internet technologies (e.g. Social Networking) were not used. On the other hand, the interviews revealed that although an SMHE's owner/manager experienced some technology related challenges, these challenges did not impact on their ICT investment decision(s). Finally the observation introduced two interesting aspects that SMHEs could include in their websites namely, a guest book, and organisational

policies relevant to the customer such as the bookings or cancellations policy. The next section will address the second research sub-question.

6.5.2   Second Research Sub-question

> ***How can SMHEs use Internet technologies to gain a competitive advantage?***

This research sub-question focused on understanding what competitive advantage means to the SMHE, and the Internet technologies available to gain this competitive advantage. The literature review, questionnaire, interviews, and observations were the methods used to collect data (*cf.* Table 6-3) required to answer this sub-question. A summary of the findings to the second research sub-question is provided below.

6.5.2.1   Literature Findings

In Chapter 3 of the literature study discussion focused on the improvement of certain business aspects such as; quality of available information and the ability to process information in order to gain a competitive advantage. In Chapter 4 however, emphasis was made on the alignment of Internet technologies to business objectives as a key to ensuring that competitive advantage is gained from using Internet technologies. The approaches suggested in both Chapters 3 and 4 are not necessarily mutually exclusive.

The primary business objective for many businesses is the provision of goods/services to customers in exchange for payment. All activities, including any investment made in Internet technologies, are intended to help the business generate a profit. Improving the quality of information available on the Internet about the business as well as the ability of both existing and potential customers to process information using Internet technologies will give SMHEs advantage over their

competitors. Jayawardena *et al* (2008) (*cf.* 3.5) mention three strategies which can be applied to Internet technologies;

- ✓ clearly define who the website is targeted at (analysis of customer profile),
- ✓ communicate what differentiates the service you offer from your competitors, and
- ✓ establish a strong brand on the Internet.

All strategies implemented must be in line with the SMHE's business objectives.

6.5.2.2   Questionnaire Findings

The literature review examined a number of strategies (*cf.* 6.5.2.1); the questionnaire addresses Environmental and Organisational context questions relating only to the alignment of ICTs and business objectives. Forty respondents completed the questionnaire and their responses relating to the second research question (*cf* 6.5.2) above are summarised in this section.

Section 3: Environmental context

How important are the following when making decisions to invest in ICT?

External factors to some extent have an influence on the decisions made by the SMHE owner/managers. This question addresses some of the common considerations identified by the authors of the literature reviewed. Owner's own experience again is determined to be the most influential factor, with 95% of the respondents finding the owner's experience as important/very important when making ICT investment decisions. At least 78% of the respondents also found recommendations made by ICT companies as important/very important. Eighty three percent classified Laws and Government as important/very important, and what their competitors were doing as important/very important to 76% of the respondents. Customer needs are important/very important in the case of 90% of the SMHEs.

Eighty eight percent of the responses showed that it was important to consider the staff's ICT capabilities, as well as affordability prior to investing in ICT.
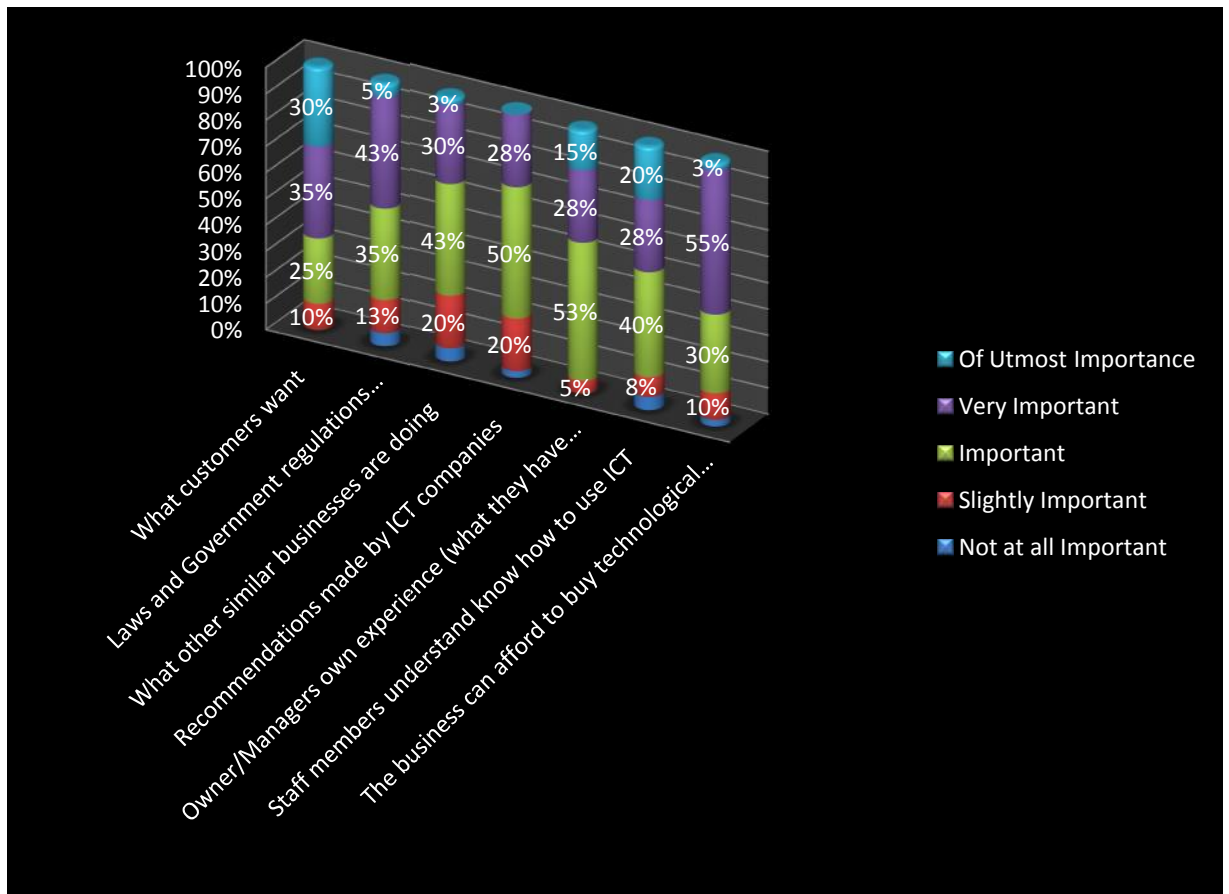
Figure 6-9: Environmental External influencing factors

Section 4: Organisational context

Indicate the extent to which you agree or disagree with the following statements?

Figure 6-10 below shows a general consensus on the importance of issues such as _planning, strategy, active involvement in business,_ and _having a clear business direction_. With 93% of the SMHE owner/managers agreeing or strongly agreeing to the statement that _ICT is a part of the business strategy_, the lower adoption rate of Internet technologies is uncharacteristic. If the owner/managers understand the

contribution ICTs can make to their businesses, the slow pace at which SMHEs are adopting Internet technologies must be attributable to other factors.
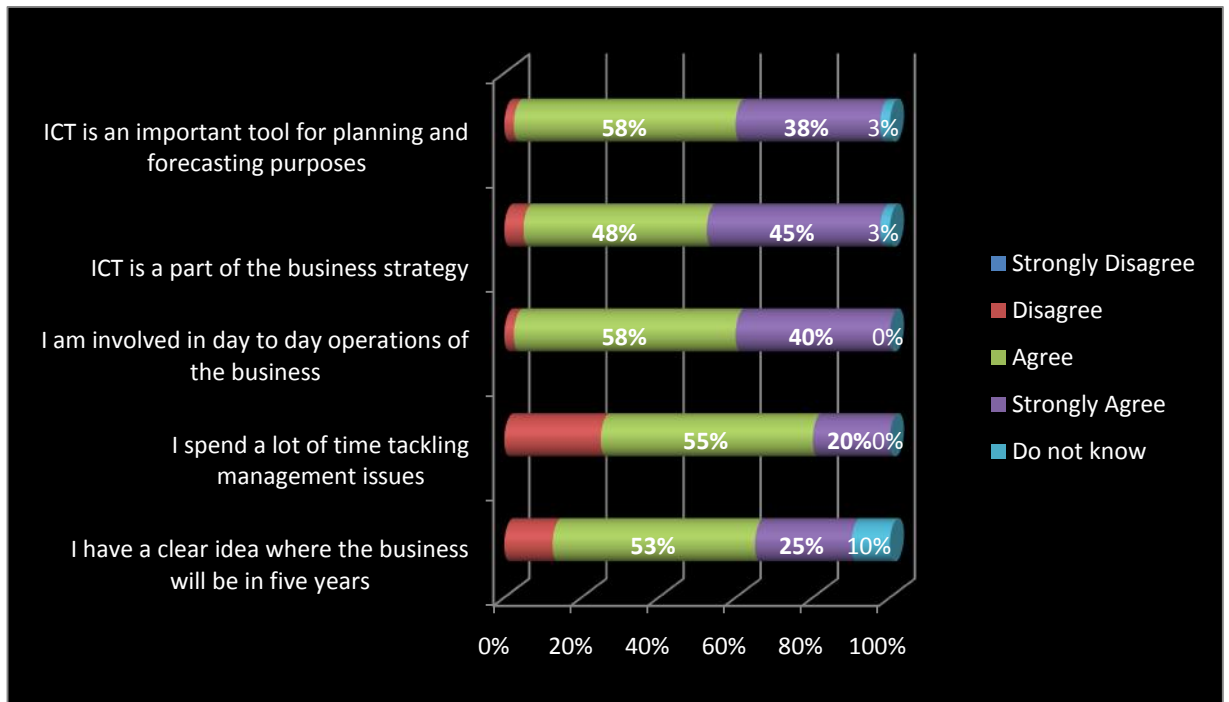
Figure 6-10: Organisational context influencing factors (1)

How important are the following to ensuring business success?

The feedback from the respondents strongly (only 10% disagrees) indicates that the SMHE owner or managers agree in principle that prior to implementing an ICT solution both negative and positive consequences as well as how potential benefits will be measured, must be considered. They also agree that it is important to ensure that ICT tools are used for their intended purposes, with only 3% finding this slightly important.
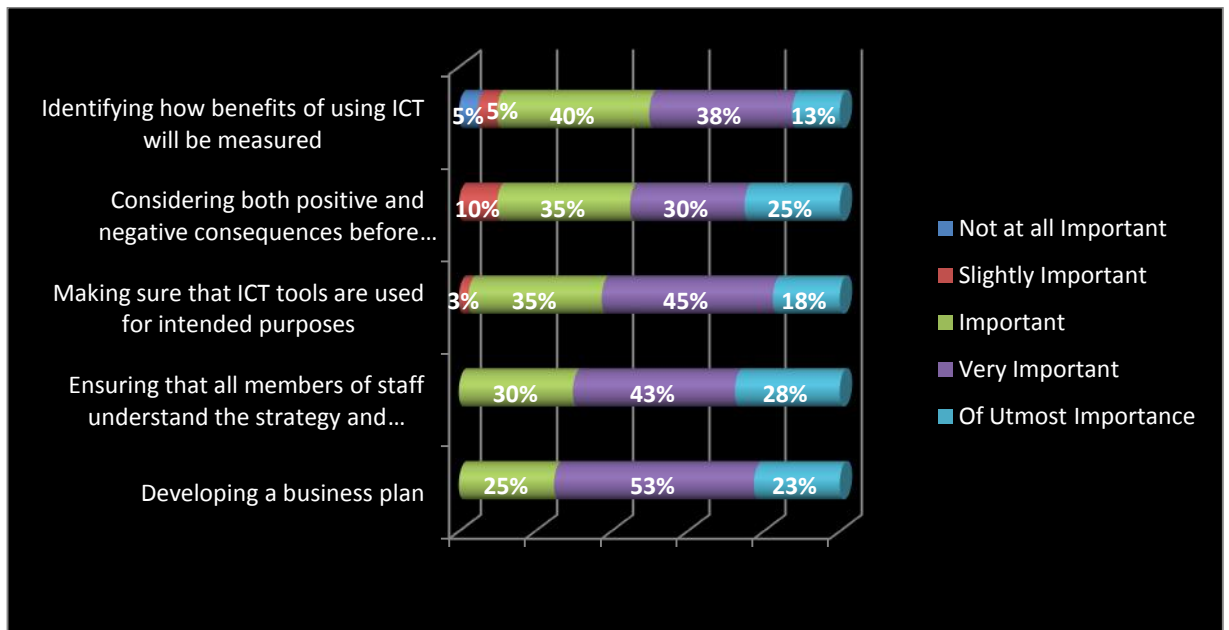
Figure 6-11: Organisational context influencing factors (2)

6.5.2.3   Interview Findings

The workshop participants were interviewed and irrespective of gender, age, location or number of years the business has been operating, of those participants who expressed frustration with some aspects of ICTs overall, they stated that these negative experiences would not deter them from using ICT with one even commenting that "*We are pro-active when it comes to finding ways of improving business performance*", thus confirming that ICTs are recognised as a tool that can help SMHEs to improve their business performance. Then there are those whose businesses according to the owner/managers "*rely on technology*", because technology gives them the flexibility to conduct business activities from anywhere. These activities range from the ability to receive business phone calls on the landline telephone but also to forward calls to a cellphone when necessary; to send and receive faxes and email using your cellphone or laptop from anywhere; and to confirm receipt of payments and make payments to suppliers. The SMHE owner/managers who have made the decision to invest in technology understand the role that

technology plays in their businesses and the added value from using technology. One owner/manager summarises why they invest in ICT by saying "*Technology is an important part of business today.*"

6.5.2.4   Observation Findings

The use of fonts which are not relevant to the web context, use of poor quality pictures, ambiguous messages about what the business objectives are, and very static text saturated web pages, will do very little to gain any competing advantage for any business. This seemed to be the prevalent nature of the observed websites.

However, there was one exception which had:

- ✓ very attractive and clear images,
- ✓ the website clearly communicated the service offering,
- ✓ the content included a local attractions page with all the relevant pictures and captivating summaries, and
- ✓ keywords (meta data) were included in the website design to make it easier for search engines (SEO) to find.

Four websites were observed and one of the four displayed the above characteristics which distinguished it from the other three. This exception highlights that there are certain improvements that will make your product different from that of your competitors.

Anecdotal records of findings from the observation are summarised in the table below:

Table 6-5 : Observation results

Organisation Name	Observation (Findings)
L	- font and pictures too small - no pictures in gallery (but message is there that states the photos will be available soon) - a web based form is created for website enquiries - has directions menu option but no map (image) is included; text is used to describe the path to be taken - very static and has low visual appeal - confusing business objectives stated (transfer skills, create employment, invest back in the community, and help local farmers) - too little information is provided on the services offered.
P	- very clear pictures included - advanced form created for enquiries - map and GPS coordinates can be found on contacts page
T	- very catchy introduction and a different approach is used - small images rotate on random image rotator - very little done to promote the hospitality side of this multi-faceted business (only one page on the website) - no pictures
AF	- very attractive slide show images (of the area, the B&B and people) on front page - includes menu item: *Area attractions* (this included lots of picture of the area and activities around the area) - meta keywords included - map

This section was designed to determine factors which would constitute a competitive advantage. In summary competitive advantage can be gained if SMHEs clearly identify who their target audience is for the website, provide details on the website on how their service differs from other SMHEs, and create a brand associated with their businesses. The questionnaire findings contained in this section raise areas of

concern, one such area being that the focus of SMHE owner/managers needs to prioritise customer needs over manager's experiences (*cf* Figure 6-9). Secondly, from the questionnaire and the interviews it is evident that SMHE owner/managers understand the important contribution ICT can have in their businesses; however, notable numbers also stated that they do not have a clear idea of business direction, and that ICT is not a part of business strategy. This signifies a lack of business planning, and a lack of alignment between business strategy and ICT strategy. The next section will explore findings that address the third research sub-question.

6.5.3 Third Research Sub-question

> ***What components must be considered in developing a model that will support SMHEs to gain advantage from using Internet technologies?***

6.5.3.1 Literature Findings

In Chapter 4 the various models were reviewed in an attempt to identify the relevant components that should be considered when developing the proposed model. *Alignment* and *E-commerce* success were the two main topics considered in the development of the proposed model.

Ward and Peppard (2002) stress the importance of aligning IT strategy to business strategy. Investing in IT alone does not guarantee the realisation of identified IT benefits; however, aligning IT strategy to business strategy improves the value creation and value retaining processes within the organisation. According to the ITGI (2007) IT Governance processes are designed to ensure effective and efficient use of IT in enabling an organisation to meet its objectives. The alignment components considered for the proposed model: *Strategic alignment, Value delivery, Risk*

management, Resource management, and *Performance measurement* are from an IT Governance model (*cf.* Figure 4-4).

E-commerce will succeed where inhibiting factors are minimised and enabling factors are maximised (Quaddus and Achjari, 2005). These factors are present in the internal and external environment. These factors (and how they interact) are outlined in e-commerce success models. The components considered for e-commerce success are from the Delone and McLean (2004) IS success model (*cf.* Figure 4-3) and include: *Systems quality, Information quality, Service quality, Intention to use, Use, User satisfaction,* and *Net benefits*. The components mentioned in this section were discussed in detail in Chapter 4.

6.5.3.2   Questionnaire Findings

The influence of owner/mangers has been highlighted in the literature review and further emphasised in the questionnaire findings of this study. Any proposed solution to the identified research problem cannot overlook the important role and influence of the owner/managers in SMHEs. This additional factor (the influence of the owner/manager) will be taken into consideration when developing the proposed model for this study.

6.6   Conclusion

In Chapter 6 the results and findings from the primary data collected, and the literature review were summarised, analysed and discussed. Conclusions drawn from these discussions confirmed that a problem definitely exists in the area of ICT usage by SMHEs. A detailed discussion of the research instrument was included, and how this instrument was refined in the pilot study. Data was analysed and grouped into three categories (*Questionnaire findings, Literature review, and Observations*) for discussion.

This chapter has dealt with the research findings and results by analysing the findings according to the three research sub-questions identified in this study. Firstly, the findings provided a sound idea of how SMHEs use the Internet in trade. Secondly, competitive advantage was discussed in the context of SMHEs. Finally, components to be considered in developing a model that would support SMHEs to gain advantage from using Internet technologies, were identified. The research sub-questions were derived in an attempt to answer the main research question. The analysis of findings in response to the main research question is discussed in the next chapter.

CHAPTER 7: Summary and Recommendations

7.1 Introduction	7.2 Evaluation of Research Outcomes • 7.2.1 Summary of Main Research Question
7.3 Creation of an E-commerce Success Model for SMHEs • 7.3.1 Customer/User Focus • 7.3.2 Organisational Focus • 7.3.3 Validation	7.4 Conclusion
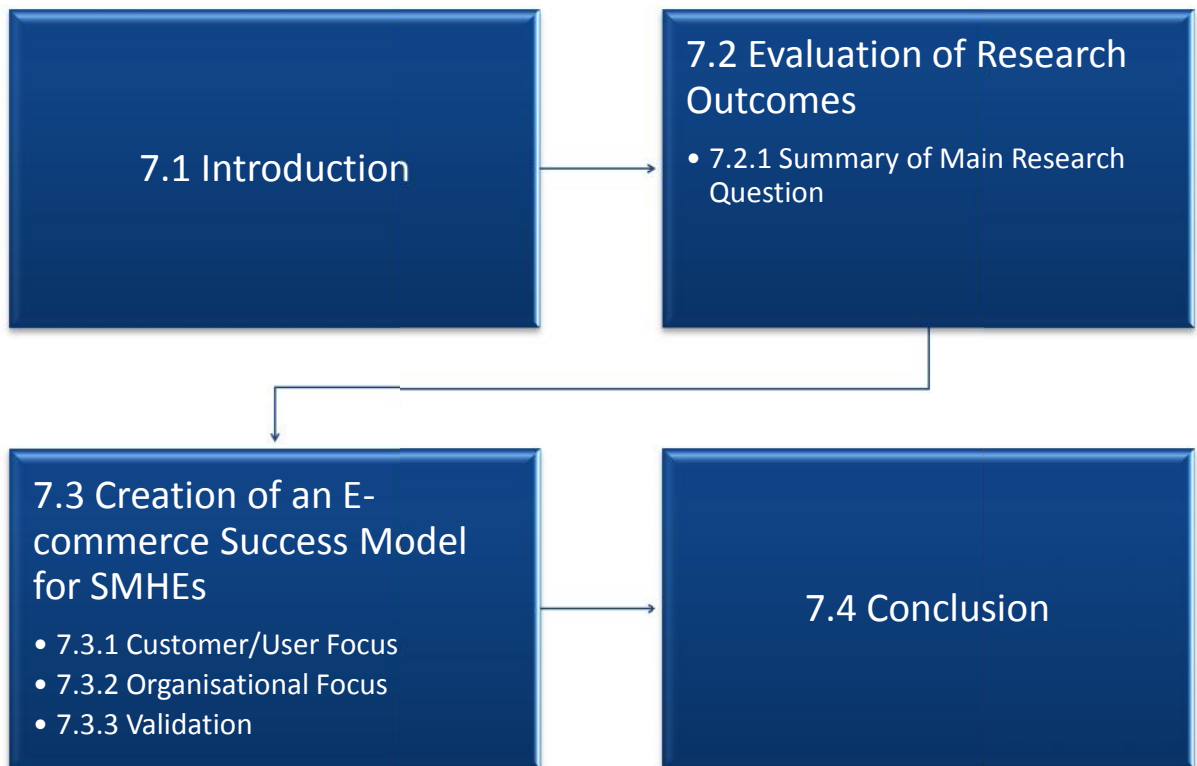
7.1   Introduction

The problem identified in section 1.2 is that SMHEs do not derive the full benefit of using the Internet as a business tool that can improve their competitiveness. In an attempt to address this problem a research question was submitted (main research question) and subsequent sub-questions were developed from the main research question. In providing answers to these questions a solution to the research problem was identified. This chapter provides a summary of the findings to the three research questions (discussed in detail in Chapter 6) and an overall summative analysis of the findings which addressed the main research question. A model is then proposed as a solution to the identified problem.

7.2   Evaluation of Research Outcomes

The main research question for this study as stated in section 1.2.1 is:

How can SMHEs take full advantage of the opportunities to improve business efficiency and effectiveness available through the use of Internet technologies?

In order to address the main research question three research sub-questions were established. Therefore the combined outcomes of the three sub-questions in Chapter 6, will address the main research question.

First sub-question: *How do SMHEs currently use the Internet to support their trade activities?*
Technology has influenced how business is conducted in many industrial sectors including the tourism industry. The problem identified in this study stems from the premise that SMHEs underutilise technology. ICT is a broad concept narrowed down to focus only on SMHE online activities or more specifically, the technologies used on

SMHE websites (including e-commerce activities), herein referred to as Internet technologies.

Chapter 2 of this study detailed the challenges faced by SMHEs preventing them from investing in ICTs. These factors were determined to be related to technology tools (technological), linked to internal factors within the organisation (organisational), or as a result of influences external to the organisation (environmental). Having accepted the definition of e-commerce as the exchange of information online followed by an exchange of goods or services and payment (*cf* 2.4), this study narrowed the challenges to only those which impact on an SMHE's e-commerce activities. The following e-commerce challenges were identified in section 2.4.2: *Enterprise attitudes, Perceived risk, Time, Size and Limited resources, Overreliance on intermediaries,* and *Security*. The majority of these challenges are not Internet specific, but can be applied to other ICT aspects within an SMHE.

The questionnaire findings revealed the following Internet technologies currently used by SMHEs: *email*, *Internet banking*, *fax to email*, *online bookings*, *online payments*, *online database registration*, and *search engine listing* (*cf* 6.5.1.2). According to the questionnaire findings, over 60% of participating SMHEs have websites; however, findings from both the questionnaire and observations confirmed that SMHEs do not use their websites for competitive gain. The second sub-question proposes Internet technologies that SMHEs can use to gain competitive advantage.

Second sub-question: *How can SMHEs use Internet technologies to gain a competitive advantage?*

The Internet has created a new platform for business to provide information to customers, perform business transactions, and to interact with customers (*cf* 3.2). In the global web of the Internet SMHEs are represented by the use of websites. With technology constantly advancing, the tools (i.e. technologies) used on websites have dramatically changed. Internet technologies have improved the manner in which businesses conduct online activities. In Chapter 3 Internet technologies which can be

applied to SMHEs were discussed; these included (*cf* 3.4); *Search engine marketing*, *Electronic word-of-mouth (blogs)*, *Online bookings*, *Online queries*, *Social networking*, *Media and content syndication (RSS)*, and *Internet based services (email, sms, chats, forums, fax to email)*.

Compared to the Internet technologies currently used by SMHEs (discussed in the first sub-question above), it is evident that a number of the relevant Internet technologies are yet to be explored by SMHEs. Internet technologies such as Search engine marketing, Electronic word-of-mouth (blogs), Social networking, and Media and content syndication (RSS) remain relatively unexploited.

Haphazard use of Internet technologies by SMHEs will not ensure positive benefits (*cf* 3.5). In section 3.5 three factors which should be considered on providing a competitive advantage are: clearly defining the targeted customers, stating on the website the services offered and how they differ from those offered by competitors, and developing a strong brand. SMHEs must be careful to ensure that the information provided on the website is useful, and easy to access. If the customers perceive the website to be useful, their continued use of the website is almost a certainty (*cf* 3.5).

The objective of this study is to develop a model that will act as a guide for SMHEs when aligning Internet technologies to business strategy to gain a competitive advantage (*cf* 1.4). The third sub-question considers the factors which must be considered in developing the proposed model.

Third sub-question: *What components must be considered in developing a model that will support SMHEs to gain advantage from using Internet technologies?*

The proposed model is based on existing models and theories. These models were combined in order to address the problem identified in this study. The proposed thesis for this research project is that by aligning Internet technologies to business objectives SMHEs stand to gain competitive advantage. Thus, the Internet

technologies discussed in Chapter 3 must be implemented in response to specific business objectives.

Alignment of Internet technologies to business objectives is the first component to be considered for the proposed model. An SMHE can benefit from using the Internet by aligning Internet technologies to business objectives. In the context of SMHEs this alignment of Internet technologies and business objectives will involve SMHE owner/managers ensuring that (*cf* 4.2);
- ✓ business objectives are clearly defined,
- ✓ the information required from various processes within the business has been identified, and
- ✓ the technological tools required to deliver the desired information are correctly identified.

The second component for consideration is e-commerce success. Measuring the impact of e-commerce is difficult due to the intangible nature of services offered online (*cf* 4.3). From the selection of authors (Quaddus and Achjari, 2005; Molla, 2004) who ventured different approaches to measuring e-commerce success, the Delone and McLean IS success model (2004) was selected for the purposes of this study. This model was initially presented by Delone and McLean in 1992, and has since been reviewed and criticized by various authors. The Delone and McLean (2004) model is an updated version of their original model. While this study does not insinuate that the Delone and McLean (2004) is flawless, certain components of the model are relevant and can be applied to SMHEs. The model is made up of seven interrelated dimensions; *Systems quality*, *Information quality*, *Service quality*, *Intention to use*, *Use*, *User satisfaction*, and *Net benefits* (*cf* 4.3.1).

The last component considered is IT Governance. IT Governance refers to the processes which ensure that ICTs are effectively and efficiently used in allowing the business to meet its objectives (*cf* 4.4). The theoretical basis for alignment of Internet technologies to business strategy is primarily drawn from the ITGI's Five domains of

the IT Governance model (2007). The ITGI (2007) model is made up of five focus areas (*Strategic alignment, Value delivery, Risk management, Resource management,* and *Performance measurement*) which have also influenced the proposed model.

A unique component of SMHEs revealed by the findings from the literature review and the questionnaire, was the influence of owner/managers on SMHE business strategy (*cf* 2.4.2.6 and 6.5.1.2). Therefore, in addressing a problem which relates to SMHEs, the influence of the owner/manager cannot be overlooked. Based on the answer and findings to the research sub-questions, a model was proposed which can be applied in order to ensure that SMHEs benefit from using the Internet. The proposed model is presented in section 7.3 of this chapter. The following section now addresses the main research question.

7.2.1   Summary of Main Research Question

To answer the main research question conclusions can be drawn from the answers to the sub-questions (*cf* 7.2).

An e-commerce success model for SMHEs can thus be used to help SMHEs to:
- ✓ Focus on developing customer centric services;
- ✓ Clearly define business objectives;
- ✓ Understand the information processes within the businesses;
- ✓ Plan for investment in ICTs;
- ✓ Monitor the impact of ICTs;
- ✓ Ensure that the implemented ICTs are efficiently and effectively used; and
- ✓ Facilitate the process of adopting ICTs.

The next section presents a recommended model that will act as a guide for SMHEs when aligning Internet technologies with business strategy in order to gain a competitive advantage.

7.3   Creation of an E-commerce Success Model for SMHEs

Based on the research objective, the literature survey, findings from the data collection mechanisms used in this study, and existing models, a theoretical framework for the adoption and implementation of e-commerce in SMHEs is developed in this section. Using a combination of the two models discussed in Chapter 4 (*cf.* Figure 4-3 and 4-4) the proposed model was derived. This model focused on including the best components of both models as well as adding additional components specific to the SMHE context. These models were chosen based not only on applicability but also that they had been tested, redesigned and discussed by various authors over the years. Delone and McLean's model of IS success has been refined over 17 years, while the ITGI's Five focus areas of IT Governance model, although relatively new, is based on well established IT Governance principles. Successful ICT adoption and implementation has been achieved in some sectors (e.g. banking); adjusting tested existing models to fit the SMHE context will improve the success probabilities of the proposed model.

The following figure depicts the major factors that influence the success of e-commerce initiatives by SMHEs:
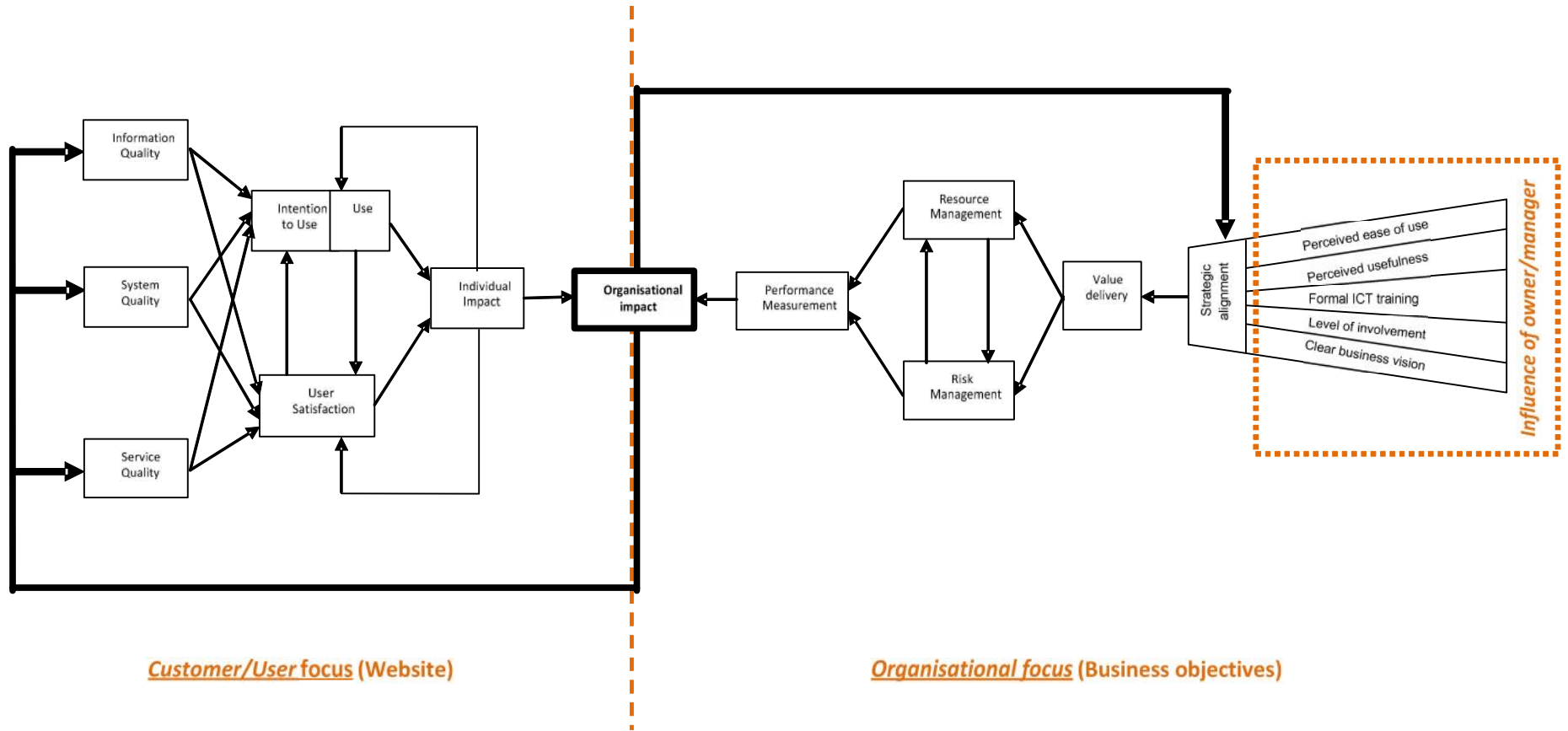
Figure 7-1: E-commerce success model for SMHEs

The identified components for IT Governance and e-commerce success were carefully analysed and applied to the SMHE scenario. This application resulted in the formulation of the model depicted above (*cf.* Figure 7-1). The model is made up of three focus areas namely *Customer/User focus, Organisational focus* and the *Influence of owner/managers*. This grouping by focus area depicts the symbiotic relationship between IT strategy, business objectives and the influence of the owner/manager on business strategy. Customer focus summarises the interaction with ICT from a customer's perspective and how these interactions eventually influence the organisation. The Organisational focus looks at the suggested way in which SMHEs must plan for ICT investments and how this will impact the organisation.

Organisational impact is the focal point of the model as it should be of any business. Decision and actions taken by the owner/managers will influence the business either negatively or positively. ICT investment decisions are no exception. Alignment between IT strategy and business objectives (strategy) has been commended in the literature review as the solution to ensuring that the desired value is derived from investing in ICT.

By offering accommodation and hospitality services to the customer SMHEs derive financial benefits when the customer pays for services received. The Customer focus represents the primary objective of the business which is to deliver a service to a customer. ICT presents an alternative way of providing that service to the customer. Success factors guiding the process of using ICTs in business processes, is discussed in the following section.

7.3.1 Customer/User Focus

The Customer/User focus of the model identifies aspects that must be addressed by the ICT tools used to offer a service to the customer (e.g. Website). The Delone and McLean (2004) model used in this study is an adaptation of their original model

created in 1992. The 2004 version of the model saw the combination of two factors namely *Individual impact* and *Organisational impact* into *Net benefits*. However the findings of this study indicated that in the case of SMHEs the separation and distinction between the benefits to the user and those which accrue to the business, must remain clear. The questionnaire findings strongly indicated that although some SMHE owner/managers paid attention to customer needs prior to investing in ICTs, the greater majority did not. Therefore is can be assumed that the value derived from ICT usage is largely influenced by other factors in the case of SMHEs. Consequently, the proposed model has been modified to substitute Net benefits with the original components, *Individual impact* and *Organisational impact*. All other changes suggested by Delone and Mclean in their arguments for the amendments they affected to the original model, have been accepted for the purposes of this study. These components which were then adapted for the SMHE context (*cf.* Figure 7-1), are discussed below:

Information Quality

The most popular and acceptable use for SMHEs is to provide information. The information provided on these websites is often minimal and limited to a description of how the business was formed and a marketing pitch that describes business aspects such as the tranquility of the SMHE and its proximity to the sea, shops or the like. In the case of SMHEs, this information remains unchanged for the entire lifespan of the website. Looking at this from a website user perspective it would not encourage the user to visit the website again after the initial visit. Use of Internet technologies such as *hit-counters* (count the number of times the website has been accessed by users) helps to monitor how often the website is viewed. This gives a good indication of its effectiveness. SMHEs have to ensure that the information is relevant to their potential customers. This information must be *relevant*, *current*, and *easy to access*.

Relevant - By looking at the guest comments book and keeping a record of all enquiries (including telephonic) SMHEs can use these sources as a base for determining what kind of information should be provided on the website.

Current - Although aspects of the website (e.g. the About us section) will not change, SMHEs have to ensure that the information provided on the website remains current (i.e. is updated). Linking the website to other useful websites (e.g. tour operators, regional tourist information centres) by creating actual links on the front page or using Internet technologies like RSS feeds, will help to ensure that the front page is updated.

Easy to access – Providing information on a website is not enough; the layout of the website must be designed well to make it easy for the user to find the information they are looking for. Both the literature review and the questionnaire findings indicate that perceived ease of use will influence the user's use or intention to use. Information quality (relevant, current and easy to access) is also a significant influencing factor for intention to use, and eventually actual use.

Systems Quality

Various systems exist within an organisation. The Internet represents another type of information system within the SMHE. The website (e-commerce) of the organisation is also a system with inputs, processes and outputs. The quality of the system can influence the customer's intention to use and user satisfaction. Delone and McLean (2004) highlight four quality system attributes namely: *usability, reliability, adaptability, response time*.

Usability – In Chapter 4 (*cf.* 4.3.1) four aspects of usability are mentioned:

- **Language:** The language used must be relevant to the identified target market.

- **Layout and graphics:** The website is an extension of the image the business presents to potential customer, therefore the same attention must be paid to ensure that organisational brand/image is not compromised as with all other marketing initiatives.

- **Information architecture:** As previously mentioned in this section intensive planning will to determine how information on the website will be linked; this will help improve ease of access.

- **User interface:** The User interface is what the customer sees when they visit the website on the Internet. The Menu improves ease of access and is used to navigate around the website. Another useful tool to improve ease of access of information in a website is the website search option (Search box/button). This unfortunately is the responsibility of the website designer; however the SMHE owner/manager can test their own website to see how easy it is access information on the website.

Service Quality

The customer's online experience must be of the same quality as the services received by the customer through alternative forms of interaction with the business (e.g. telephonically, or when the customer makes direct contact by visiting the business at its place of operation). At the core of providing services over the Internet is the issue of support. Lack of support in this area can also result in loss of customers. SMHEs have to ensure that email enquiries or web form enquiries are given the same level of importance as those received for example, telephonically.

All the factors mentioned above namely: *Information quality*, *Systems quality*, and *Service quality* have a direct impact on the user's Intention to use, Satisfaction and actual Use. By improving on one or all three the business automatically increases the probability that the use of the Website will result in added value to the business. This value arises as a result of the benefit (Individual benefit) enjoyed by the user from using the Website. When the user successfully achieves their desired intentions, this influences Individual benefit. When the user finds the Website useful and uses the information or services, this results in future or immediate organisational benefits.

7.3.2 Organisational Focus

Organisational aspects need to be factored so as to align Internet technologies with business objectives. The five pillars (*Strategic alignment, Value delivery, Risk management, Resource management, Performance measurement*) of the ITGI's IT Governance model included in the proposed model have been discussed in detail in Chapter 4. Alignment of business strategy and IT strategy is crucial to ensuring that value is derived from ICT investments. Using ICT to deliver on customer services cannot be isolated from the organisational focus of the business. The model above (*cf.* Figure 7-1) includes Strategic alignment as an important component that SMHEs must consider. As discussed in Chapter 2 the most unique aspect of SMHEs is the influence of a single person, the owner/manager. Findings from the questionnaire also confirmed that owner/managers themselves acknowledge that their own perceptions and experiences have a considerable influence on business decisions taken.

The model shows five influencers of owner/manager opinion namely: *Perceived ease of use*, *Perceived usefulness*, *Formal ICT training*, *Level of involvement*, and *Clear business vision*. These five influencers were selected as the most popular based on the questionnaire and literature findings. SMHE owner/managers must acknowledge that these influencing factors exist and have a direct impact on the strategic direction of their businesses.

The Organisational focus dimension of the model is summarised in this paragraph. When the ICT invested is aligned to business strategy, technology has to be monitored to ensure that it supports the value delivering processes within the organisation. With new technologies or processes risks will arise and additional resources (e.g. processes, people, applications, infrastructure, and information) may need to be acquired. Risk management and Resource management addresses the planning and management of any potential risks that may arise and the additional

resources required. Performance management measures the balance of scales between the effort of investing, and the benefit derived from using technology. This is a very important activity as it is aimed at ascertaining the type of value and quantifying it (where possible) and crediting it to the organisation (*Organisational impact*).

7.3.3 Validation

The proposed model (*cf* Figure 7-1) was presented to five experts in the tourism industry for review and comment. The following feedback was received from the experts at the end of the validation process. Firstly, the attempt to assist SMHEs to add value in their service delivery process was admired. Secondly, the focus on using technology in SMHEs was recognised as a priority area for tourism support organisations, and the model's potential to make the transition process easier or more structured for the owner/managers was commended. Thirdly, concern was raised that the model was 'technical' in nature, and the ICT skills capabilities of the owner/managers were seen as a possible deterrent for successful implementation of the model. Finally, owner/manager influence must not be underestimated as this is a unique factor for SMEs including SMHEs. Overall, the model is seen as a useful and relevant tool which can help SMHEs, if proper training/guidance is made available to them.

7.4 Conclusion

In this chapter, the findings from the research sub-questions were summarised and the main research question was addressed. The analysis of data led to the development of a model that SMHEs could use to derive value from using technology. The model proposed in this chapter (*cf.* Figure 7-1) addressed three pertinent issues that influence the adoption of ICT by SMHEs namely: *Customer focus*, *Organisational focus*, and the *Influence of owner/managers*. The model implies that if the customer

services offered are enhanced by technology, and the SMHE owner/managers have a clear strategy for the business ensuring that any investment in technology is aligned to business objectives, a competitive advantage can be enjoyed by the SMHE as value will be derived.

A summative conclusion of this research project will be presented in the next chapter. This conclusion will include: a summary of the findings, recommendations, and comments on any proposed future research.

CHAPTER 8: Conclusion

8.1 Overview → 8.2 Summary of Research Findings

8.3 Recommendations to the Findings → 8.4 Contributions Made by this Study

8.5 Limitations of the Study → 8.6 Directions for Future Research

8.7 Summary

8.1 Overview

Chapter 6 and 7 provided the findings of this study. The findings were presented in response to the research question and sub-questions, which constituted the framework within which the findings were discussed. The previous seven chapters laid a foundation for this study's main objective which was the development of a model that would guide SMHEs when aligning Internet technologies with business strategy in order to gain competitive advantage.

The theoretical framework for this study was discussed in Chapter 2, 3, and 4. The baseline and pre-emptive deductions on the SMHEs ICT scenario, influences affecting the behaviour of SMHE owner/managers, as well as models (IS success and IT Governance) applicable to the SMHE context, were presented in these chapters. Chapter 5 highlighted the research design and methodology applied in the study. Although, this study took a primarily Interprevist approach, triangulation (using both qualitative and quantitative) data collection methods using questionnaires, observation, semi-structure interviews and document analysis was applied. The findings and analysis were discussed in Chapter 6 and 7 provided the recommendations. This chapter will summarise the research project and report on each research objective, and finally provide a research conclusion.

8.2 Summary of Research Findings

The problem identified in this research study is that SMHEs do derive the full benefit of using the Internet as a business tool which could improve their competitiveness. In order to address the research the problem, research questions were asked. This section will provide a summary of the research outcomes of this study against the research questions stated in Chapter 1. The sub-questions were used to collect information that would answer the main research question, namely:

> ***How can SMHEs take full advantage of the opportunities to improve business efficiency and effectiveness available through the use of Internet technologies?***

To answer the main research question three sub-questions were identified:

- *How do SMHEs currently use the Internet to support their trade activities?*
- *How can SMHEs use Internet technologies to gain a competitive advantage?*
- *What components must be considered in developing a model that will support SMHEs to gain advantage from using Internet technologies?*

These sub-questions discussed in detail in Chapter 6 and 7 were matched to answers drawn from the various data collection methods (questionnaire, interviews, literature, and observation) used in this study. Below is a summary of the main findings based on the responses to the questionnaire, interviews, literature study, and observations.

IS Success

Questionnaire:

- ✓ Although the majority of SMHEs indicated (*cf.* 6.5.2.2) that they considered the negative and positive consequences of using technology prior to investment, the following deductions can be made from collectively viewing their responses:
  - ○ IS success is given a lower priority than indicated and the overpowering consideration prior to investing in ICT is the owner/manager's opinions or experiences (*cf.* 6.5.1.2).
  - ○ Measuring the results/impact of the technology invested is not a factor that is considered.

Interviews:

- ✓ Of the various challenges identified in the literate review that hinder ICT adoption by SMHEs (*cf.* 2.4.2.1 - 2.4.2.7), the following were mentioned in interviews (*cf. 6.5.1.3*):

- o Finance,
- o Security,
- o Limited ICT knowledge,
- o Time,
- o Staff literacy, and
- o Limited human resources to support ICT.

Literature review:

- ✓ The literature reviewed showed that IS Success has been discussed extensively by different authors, but very few of these discussions considered small and medium businesses, or more specifically SMHEs.
- ✓ This study showed that SMHEs have unique challenges that can hinder the pace of ICT adoption. The following challenges were highlighted (*cf.* 2.4.2.1 – 2.4.2.7):
  - o Enterprise attitudes,
  - o Perceived risk,
  - o Time,
  - o Size and limited resources,
  - o Overreliance on intermediaries,
  - o Lifestyle choice of the owner/manager, and
  - o Security.

Observation:

- ✓ Sixty percent (*cf.* 6.5.1.2) of the participating SMHEs indicated that they had a website. Based on the findings of the observation in most cases no consideration was given to how the website could add value to the business; it was merely a case of the owner/manager responding to the expectation that the SMHE should have a website.
- ✓ The overreliance on intermediaries was clearly evident upon observation of the SMHE websites. The limitations of the website were attributed to limited

knowledge (*cf. 6.5.1.3*) and therefore the owner/managers were dependent on intermediaries (*cf.* 2.4.2.5) for guidance.

IT Governance

Questionnaire:

- ✓ The questionnaire responses indicated that SMHE owner/managers acknowledge that planning was important in business (*cf.* 6.5.2.2). However, viewing this response in the context of all the other responses (including the adoption of ICT, and current Internet technologies used) one can contest that this ideal view expressed in section 6.5.2.2 was not implemented when it came to IT planning within the business.

Interviews:

- ✓ The interview findings (*cf.* 6.5.2.3) also substantiated that although there was intention to plan, implementation was lacking.

Literature review:

- ✓ Based on the definition provided in the literature review (*cf.* 4.4) which described IT Governance as the processes which ensure effective and efficient use of IT in enabling a business to achieve its goals, it is evident that IT Governance is very relevant to the SMHEs.
- ✓ By encouraging SMHEs to review their value creation processes and ensure that any technology invested is aligned to business objectives, a competitive advantage will be enjoyed.

Overall, the major challenge with IS Success was that it was considered separately from IT Governance, and that the challenge with IT Governance in the case of SMHEs was that strategic planning was not a popular exercise amongst SMHE owner/managers.

The next section discusses recommendations based on the findings of this study.

8.3   Recommendations to the Findings

The SMHE is seen as a positive contributor to the economy of developing countries. The hospitality sector of the tourism industry has enjoyed significant benefits from the advent and development of the Internet. As a result of the Internet the SMHEs which serve local clients, now have easier access to both local and international clients. However, not all SMHEs enjoy the full benefits provided by Internet technologies. This study sought to identify how SMHEs can benefit from using Internet technologies in order to gain a competitive advantage.

This study found that although some SMHEs have business websites, there is very little diversity as far as Internet technologies are concerned on these websites. This could be attributable to two factors indentified in this study, the low level of formal ICT skills of owner/managers and SMHE owner/managers' dependency on the guidance of ICT vendors/intermediaries. It is recommended that SMHE owner/managers identify sources of current ICT information (e.g. tourism industry publications, tourism industry regulators) to ensure that they are aware of relevant technological developments. The ICT information will help decrease the level of dependency on intermediaries. Additionally SMHE owner/managers have to invest in personal ICT up skilling for themselves and their employees. To reduce the risk of ICT failure, once the technologies are implemented the staff must be trained to ensure they are comfortable with using the technology.

The findings of this study also revealed that although SMHE owner/managers in principle acknowledge the importance of planning, in practice they do not implement this in their own businesses. It is also recommended that SMHE owner/managers incorporate planning as part of other business activities. Proper planning will help to clearly define the objectives of the business and thus make executing tasks to ensure objectives are met, easier. Prior to selecting Internet technologies SMHE

owner/managers need to clearly identify how the technologies will assist towards meeting the objectives of the business (IT strategy).

It is further recommended that SMHEs ensure that ICT investment initiatives are aligned with business objectives. The model proposed in this study (*cf* Figure 7-1) provides a guide for how SMHEs can achieve this. How this proposed model will benefit SMHEs is discussed in the next section.

The 3 research sub-questions have been answered which in turn answer the main research question which was derived from the problem statement.

8.4   Contribution made by this study

The aim of this study was to develop a model that would guide SMHEs when aligning Internet technologies with business strategy in order to gain competitive advantage. The model depicted in Figure 7-1 illustrates that SMHEs have to align IT investment decisions to business objectives in order to derive value from ICT investments. This alignment should pay specific attention to the attributes (components of the model) that will ensure that value is derived from the investment in ICT. The model can be applied to an individual ICT investment decision or to collectively review the contribution made by ICT to the organisation. Continuous review and observation must be conducted to ensure that technology always addresses business needs.
Technology is constantly advancing and therefore evolving, and the owner/managers are faced with challenging choices of technologies that are purported to have a revolutionary effect on business profits. The model simply suggests that with any technological tool or gadget the owner/manager must first indentify what the business objectives are, and secondly answer this question: "Will this technology tool help the business meet the identified business objectives"?

In addition, the model proposes that in order to ensure that ICT value is optimised owner/managers have to recognise the influence they exert over the strategic alignment of the business. Value will be enjoyed from technology if IT strategy is aligned with business strategy. The owner/managers of SMHEs are the custodians of business strategy. The model depicts two main drivers of strategic alignment in an IT Governance context namely, influence of technology (based on results from using technology) and the influence of the owner/manager (based on owner experiences and knowledge).

Efforts from the customer focus and organisational focus of the model result in the organisational impact depicted in the model. In a case when all components of the model are carefully considered prior to investing in technology the impact will be added value to the organisation.

The limitations of this study are outlined in the next section.

8.5   Limitations of the Study

The scope of this study was clearly defined in Chapter 1, and the limitations noted in this section have had no negative effect on the findings of this study, as data collected was well within the predefined scope. The following limitations were identified in this study:

- ✓ The geographic spread of the participants of the survey was concentrated in the Buffalo City local municipality which represents 1 out of 37 local municipalities in the Eastern Cape; and
- ✓ Only 40 participants participated in the survey.

The researcher would like to reiterate that the results are reliable and credible as agreed with the experts that participated in the expert review, in spite of the limitation listed above. Future study possibilities are outlined below.

8.6   Directions for Future Research

Further research can be undertaken to explore the following:
- o This study focused on the Internet as an ICT tool; a similar study could be undertaken where focus is placed on other technologies used by SMHEs (e.g. Reservation management systems).
- o This study can also be repeated with SMEs not aligned to the tourism industry.
- o It should be conducted in other provinces in South Africa to see if the findings are similar.

8.7   Summary

The aim of this study was to develop a model that would guide SMHEs when aligning Internet technologies with business strategy in order to gain competitive advantage. Data from 40 SMHEs, literature, and observations was collected and analysed and a model was created based on the analysis findings. The strength of the e-commerce success model for SMHEs lies in its ability to encourage alignment between ICT and business objectives. This alignment can be achieved by addressing all three focus areas highlighted by the proposed model (*cf* Figure 7-1), namely: Customer focus, Organisational focus and Owner/manager influence on organisational strategy. While this model was created based on findings from SMHEs in the Buffalo City Municipality, it is relevant to any SMHE. Having answered all the research questions, the e-commerce success model for SMHEs (*cf* Figure 7-1) thus embodies the recommendations of this study and represents the fulfilment of the objective of this study.

Reference List

Adeyinka, T. and Mutula, S. (2010). A proposed model for evaluating the success of WebCT course content management system. *Computers in Human Behavior, 26*, 1795-1805.

Adomavicius, G., Bockstedt, J.C., Gupta, A. and Kauffman, R.J. (2008). Making sense of technology trends in the Information Technology landscape: A Design Science approach. *MIS Quarterly, 32* (4), 779-810.

Andam, Z.R. (2003). *e-Commerce and e-Business.* Retrieved April 18, 2010, from www.apdip.net: http://www.apdip.net/publications/iesprimers/eprimer-ecom.pdf

Babbie, E.R. (2005). *The Basics of Social Research.* Belmont, CA: Thomson Wadsworth.

Breukel, A. and Go, F.M. (2009). Knowledge-based network participation in detsination and event marketing: A hospitality scenario analysis perspective. *Tourism Management, 30*, 184-193.

Brooker, E. and Burgess, J. (2008). Marketing destination Niagara effectively through tourism life cycle. *International Journal of Contemporary Hospitality Management, 20* (3), 278-292.

Brown, D.H. and Kaewkitipong. (2009). Relative size and complexity: e-business use in small and medium sized tourism enterprises in Thailand. *Journal of Enterprise Information Management, 22* (1/2), 212-231.

Buhalis, D. and Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet - The state of eTourism research. *Tourism Management, 29*, 609-623.

Buhalis, D. (1998). Strategic use of information technologies in the toursim industry. *Tourism Management, 19*, 409-421.

Carson, D. (2008). The 'blogosphere' as a market research tool for tourism destinations: A case study of Australia's Northern Territory. *Journal of Vacation Marketing, 14* (2), 111-119.

Castaneda, J.A., Frias, D.M. and Rodriguez, M.A. (2007). The influence of the Internet on destination satisfaction. *Internet Research, 17* (4), 402-420.

Chalkiti, K. and Sigala, M. (2008). Information Sharing and Idea Generation in Peer to Peer Online Communities: The Case of 'Dialogoi'. *Journal of Vacation Marketing, 14* (2), 121-132.

Chen, J.S. and Tsou, H.T. (2007). Information technology adoption for service innovation practises and competitive advantage: the case of financial firms. *informationresearch, 12* (3), 1-6.

Chiware, E.R.T. and Dick, A.L. (2008). Information needs and information seeking patterns of Small, Medium, and Micro Enterprises in Namibia. *Information Development, 24* (1), 24-36.

Chiware, E.R.T. and Dick, A.L. (2008). The use of ICTs in Namibia's SME sector to access business information services. *The Electronic Library, 26* (2), 145-157.

Cloete, E. (2001). *SME's in South Africa: Acceptanced and Adoption of e-commerce.* University of Cape Town, Department of Information Systems, Cape Town.

Cohen, L. and Manion, L. (1994). *Research Methods in Education (4th Edn).* London: Routledge.

Collis, J. and Hussey, R. (2003). *Business Research: A practical guide for undergraduate and postgraduate students* (*2nd Edn.*). New York: Palgrave.

Cooper, D. R. and Schindler, P.S. (2006). *Business Research Methods (9th Edn).* New York: McGraw Hill.

Creswell, J.W. (2003). *Social Research.* London: Sage Publications.

D'Ambra, J. and Mistilis, N. (2010). Assessing the E-capability of visitor information centers. *Journal of Travel Research, 49* (2), 206-215.

De Haes, S. and Van Grembergen, W. (2009). Exploring the relationship between IT governace practises and business/IT alignment through extreme case analysis in Belgian mid-to-large size financial enterprises. *Journal of Enterprise Information Management, 22* (5), 615-637.

De Luca, D. and Kock, N. (2007). Publishing Information Systems Action Research for a Positivist audience. *Communications of the Association for Information Systems, 19*, 183-204.

De Villiers, M.R. (2005). Three approaches as pillars for interpretive information systems research: development research, action research and grounded theory. *Proceedings of the 2005 annual research conference of the South African Institute of Computer Scientists and Information Technologists on IT research in developing countries.* (pp. 142-151). South Africa: White River.

Delone, W.H. and McLean, R. (2004). Measuring E-commerce success: Applying the Delone & Mclean information success model. *International Journal of Electronic Commerce, 9* (1), 31-47.

Denzin, N.K. (1970). *The Research Act in Sociology.* Chicago: Aldine.

Diaz, D. (2001). The viability and sustainability of International Tourism in developing countries. *Symposium on Tourism services. 22-23 February.* Geneva: World Trade Organisation.

Dube, P., Liu, Z., Wynter, L. and Xia, C. (2007). Competitive equilibrium in e-commerce: Pricing and outsourcing. *Computers & Operations Research, 34*, 3541-3559.

Dwyer, L., Edwards, D., Mistilis, N., Roman, C. and Scott, N. (2009). Destination and enterprise management for a tourism future. *Tourism Management, 30*, 63-74.

Eikebrokk, T.R. and Olsen, D.H. (2007). An empirical investigation of competency factors affecting e-business success in European SMEs. *Information & Management, 44*, 364-383.

Elliott, J. (1991). *Action Research in Educational Change, Developing Teachers and Teaching.* (M. Keynes, Ed.) Philadelphia: Open University Press.

Fesenmaier, D.R. (2007). Introduction: Challenging Destination Promotion. *Journal of Travel Research, 46*, 3-4.

Fitsimmons, G. (2009). Resource management: materials, equipment, facilities. *The Bottom Line: Managing Library Finances, 22* (3), 86-88.

Fitzsimmons, C.L., Gilleece, M.H., Ranson, M.R., Wardley, A., Morris, C. and Scarffee, J.H. (1997). Central venous catheter placement: extending the role of the nurse. *Journal of the Royal College of Physicians of London, 31* (5), 533.

Formica, S. and Kothari, T.H. (2008). Strategic Destination Planning: Analyzing the Future of Tourism. *Journal of Travel Research, 46*, 355-367.

Frempong, G. (2009). Mobile telephone opportunities: the case of micro- and small enterprises in Ghana. *info, 11* (2), 79-94.

Garrity, E.J., Glassberg, B., Kim, Y.J., Sanders, L.G. and Shin, S.K. (2005). An experimental investigation of Web-based information systems success in the context of electronic commerce. *Decision Support Systems, 39*, 485-503.

Guba, E.G. and Lincoln, Y.S. (1994). *"Competing paradigms in qualitative research", in Denzin N.K. and Lincoln, Y.S. (Eds), A handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Holloway, I. and Wheeler, S. (2002). *Qualitative Research in Nursing* (*2nd Edn*.). Oxford: Blackwell.

Hosany, S., Ekinci, Y. and Uysal, M. (2006). Destination image and destination personality: An application of branding theories to tourism places. *Journal of Business Research, 59* (5), 638-642.

Hu, C., Han, Y., Jang, S. and Bai, B. (2005). E-relational characteristics on Hospitality and Tourism program web sites. *Journal of Hospitality & Tourism Research, 29* (4), 508-522.

Huff, S., Wade, M., Parent, M., Schneberger, S.C. and Newson, P. (2000). *Cases in Electronic Commerce.* Columbus, OH: Irwin/McGraw-Hill.

Hwang, L.J. and Lockwood, A. (2006). Understanding the challenges of implementing best practises in hospitality and tourism SMEs. *Benchmarking: An International Journal, 13* (3), 337-354.

Irvine, W. and Anderson, A.R. (2008). ICT (information communication technology), peripherality and smaller hospitality businesses in Scotland. *International Journal of Entrepreneurial Behaviour & Research, 14* (4), 200-218.

ITGI. (2005). *Cobit 4.0 - Control Objectives, Management Guidelines and Maturity Models.* Illinnois: IT Governance Insittute.

ITGI. (2007). *Control Objectives for information and related technologies 4.0.* Illinnois: IT Governance Institute.

Jayawardena, C., Patterson, D.J., Choi, C. and Brain, R. (2008). Sustainable tourism development in Niagara - Discussions, theories, projects and insights. *International Journal of Contemporary Hospitality Management, 20* (3), 258-277.

Kaplanidou, K. and Vogt, C. (2006). A structural Analysis of Destination Travel Intentions as a function of Web site features. *Journal of Travel Research, 45*, 204-216.

Karadag, E., Cobanoglu, C. and Dickinson, C. (2009). The characteristics of IT investment decisions and methods used in the US lodging industry. *International Journal of Contemporary Hospitality Management, 21* (1), 52-68.

Karanasios, S. and Burgess, S. (2006). Exploring the Internet use of small tourism enterprises: Evidence from a developing country. *The Electronic Journal on Information Systems in Developing Countries, 27* (3), 1-21.

Kim, M., Chung, N. and Lee, C. (2010). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, 1-10.

Kollmann, T., Kuckertz, A. and Breugst, N. (2009). Organizational readiness and the adoption of electronic business - The moderating role of national culture in 29 European countries. *The Database for Advances in Information Systems, 40* (4), 117-131.

Krauss, S.E. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report, 10* (4), 758-770.

Krefting, L. (1991). Rigor in qualitative research: the assessment of trustworthiness. *American Journal of Occupational Therapy, 45* (3), 214-222.

Kyobe, M. (2008). The influence of strategy-making types on IT alignment in SMEs. *Journal of Systems and Information Technology, 10* (1), 22-38.

Law, R. and Bai, B. (2008). How do the preferences of online browsers differ on the design and content of travel websites? *International Journal of Contemporary Hospitality Management, 20* (4), 388-400.

Law, R. (2009). Disintermediation of hotel reservations - The perception of different groups of online buyers in Hong Kong. *International Journal of Contemporary Hospitality Management, 21* (6), 766-772.

Law, R., Qi, S. and Buhalis, D. (2010). Progress in tourism management: A review of website evaluation in tourism research. *Tourism Management, 31*, 297-313.

Lee, S. and Connolly, D.J. (2010). The impact of IT news on hospitality firm value using cumulative abnormal returns (CARs). *International Journal of Hospitality Management, 29*, 354-362.

Lee, S., Lee, S. and Park, Y. (2007). A prediction model for success of services in e-commerce using decision tree: E-customer's attitude towards online service. *Expert Systems with Applications, 33*, 572-581.

Leech, N.L. and Onwuegbuzie, A.J. (2010). Guidelines for conducting and Reporting Mixed Research in the field of Counselling and beyond. *Journal of Counseling & Development, 88* (1), 61-69.

Leedy, P. (1997). *Practical Research: Planning and Design. (6th Edn).* New Jersey: Prentice-Hall.

Loi, H. (2005). A Model of Factors Influencing Electronic Commerce Adoption among Small and Medium Enterprises in Brunei Darussalam. *International Journal of Information Technology, 10* (1), 72-87.

Martin, L.M. (2004). E-innovation: Internet impacts on small UK hospitality firms. *International Journal of Contemporary Hospitality Management, 16* (2), 82-90.

Massingham, P. (2010). Knowledge risk management a framework. *Journal of Knowledge Management, 14* (3), 464-485.

Meyers, M.D. (1997). Qualitative Research in Information Systems. *MIS Quarterly, 21* (2), 241-242.

Minghetti, V. and Buhalis, D. (2010). Digital Divide in Tourism. *Journal of Travel Research, 49* (3), 267-281.

Molla, A. (2004). *IDPM Working papers.* Retrieved 09 21, 2010, from Manchester University: http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/di_wp18.htm

Moriarty, J., Jones, R., Rowley, J. and Kupiec-Teahan, B. (2008). Marketing in small hotels: a qualitative study. *Marketing Intelligence & Planning, 26* (3), 293-315.

Mouton, J. (2005). *How to succeed in your Master's & Doctoral studies. A South African Guide and Resource Book.* Pretoria: Van Schaik Publishers.

Murphy, H.C. and Kielgast, C.D. (2008). Do small and medium-sized hotels exploit search engine marketing. *International Journal of Contemporary Hospitality Management, 20* (1), 90-97.

Murphy, L., Benckendorff, P. and Moscardo, G. (2007). Linking Travel Motication, Tourist Self-Image and Destination Brand Personality. *Journal of Travel & Tourism Marketing, 22* (2), 45-59.

Niininen, O., Buhalis, D. and March, R. (2007). Customer empowerment in tourism through consumer centric marketing (CCM). *Qualitative Market Research: An International Journal, 10* (3), 265-281.

Oates, B.J. (2006). *Researching Information Systems and Computing.* London: Sage.

Oates, B.J. (2008). *Researching Information Systems and Computing.*(*3rd Edn.*)London: Sage.

Okello-Obura, C., Minishi-Majanja, M.K., Cloete, L. and Ikoja-Odongo, J.R. (2008). Business activities and information needs of SMEs in northern Uganda: Prerequisites for an information system. *Library Management, 29* (4/5), 367-391.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64* (1), 12-40.

Power, D. (2009). Profiles of innovation in business-to-business e-commerce - Three Australian cases. *European Journal of Innovation, 12* (2), 257-279.

Quaddus, M. and Achjari, D. (2005). A model for electronic commerce success. *Telecommunications Policy, 29*, 127-152.

Ramdani, B., Kawalek, P. and Lorenzo, O. (2009). Predicting SME'adoption of enterprise systems. *Journal of Enterprise Information Management, 22* (1/2), 10-24.

Riyadh, A.N., Akter, S. and Islam, N. (2009). The Adoption of E-banking in Developing Countries: A Theoretical Model for SMEs. *International Review of Business Research Papers, 5* (6), 212-230.

Roland, D. and Wicks, D.A. (2009). A conversational model for qualitative research: A case study of clergy and religious knowledge. *Australian Academic & Research Libraries, 40* (4), 252-265.

Rufaro, E., Chiware, T. and Dick, A.L. (2008). Information Needs and Information Seeking Patterns of Small, Medium and Micro Enterprises in Namibia. *Information Development, 24* (1), 24-36.

Salwani, M.I., Marthandan, G., Norzaidi, M.D. and Chong, S.C. (2009). E-commerce usage and business performance in the Malaysian tourism sector: empirical analysis. *Information Management & Computer Security, 17* (2), 166-185.

Schlenker, L. and Crocker, N. (2003). Building an e-business scenario for small business: the IBM SME Gateway project. *Qualitative Market Research: An international Journal, 6* (1), 7-17.

Schmallegger, D. and Carson, D. (2008). Blogs in tourism: Changing approaches to information exchange. *Journal of Vacation Marketing, 14* (2), 99-110.

Schmidt, S., Cantallops, A.S. and Dos Santos, C.P. (2008). The characteristics of hotel websites and their implications for website effectiveness. *International Journal of Hospitality Management, 27*, 504-516.

Scupola, A. (2009). SME's e-commerce adoption: pespectives from Denmark and Australia. *Journal of Enterprise Information Management, 22* (1/2), 152-166.

Service, R.W. and Madduxx III, H.S. (1999). Building competitive advantage through information systems: the organizational information quotient. *Journal of Information Science, 25* (1), 51-65.

Shalhoub, Z. K. (2006). Trust, privacy, and security in electronic business: the case of the GCC countries. *Information Management & Computer Security, 14* (3), 270-283.

Singh, G., Pathak, R.D. and Naz, R. (2010). Issues faced by SMEs in the internationalization process: results from Fiji and Samoa. *International Journal of Emerging Markets*, 153-182.

StatPac. (2010). Retrieved 09 24, 2010, from http://www.statpac.com/surveys/sampling.htm

Stolley, K. (2009). Integrating Social Media into existing work environments: The case of Delicious. *Journal of Business & Technical Communication, 23* (3), 350-371.

Sung, T.K. (2006). E-commerce critical success factors: East vs West. *Technological Forecasting & Social Change, 73*, 1161-1177.

Symonds, J.E. and Gorard, S. (2010). Death of mixed methods? Or the rebirth of research as a craft. *Evaluation & Research in Education, 23* (2), 121-136.

TGCSA. (2010). Retrieved March 10, 2010, from Tourism Grading Council South Africa: http://www.tourismgrading.co.za/default.aspx?pid=32&stepid=1&oid=75

Tiessen, T.H., Wright, R.W. and Turner, I. (2001). A model of e-commerce use by internationaliszing SMEs. *Journal of International Management, 7*, 211-233.

Tornatzky, L.G. and Fleischer, M. (1990). *The Processes of Technological Innovation.* New York: Lexington Books.

Voce, A. (2004). Retrieved April 16, 2010, from www.docstoc.com: http://www.docctoc.com/docs/18652270/What-is-a-research-paradigm/

Vrana, V. and Zafiropoulos, C. (2006). Tourism agents' attitudes on Internet adoption: an analysis from Greece. *International Journal of Contemporary Hospitality Management, 18* (7), 601-608.

Ward, J. and Peppard, J. (2002). *Strategic Planning for Information Systems* (*3rd Edn.*). England: John Wesley and Sons, Ltd.

Warr, W. (2008). Social software: fun and games, or business tools? *Journal of Information Science , 34* (4), 591-604.

Wen, I. (2009). Factors affecting the online travel buying decision: a review. *International Journal of Contemporary Hospitality, 21* (6), 752-765.

Williams, A. (2006). Tourism and hospitality marketing: fantasy, feeling and fun. *International Journal of Contemporary Hospitality Management, 18* (6), 482-495.

Wu, J. and Wang, Y. (2006). Measuring KMS success: A respecification of the Delone and McLean's model. *Information & Management, 43*, 728-739.

Wu, S., Wei, P. and Chen, J. (2008). Influential factors and relational structure of Internet Banner advertising in the tourism industry. *Tourism Management, 29*, 221-236.

Xiang, Z., Gretzel, U. and Fesenmaier, D.R. (2009). Semantic represenation of Tourism on the Internet. *Journal of Travel Research, 47* (4), 440-453.

Xiang, Z., Wober, K. and Fesenmaier, D.R. (2008). Representation of the online Tourism domain in Search Engines. *Journal of Travel Research, 47* (2), 137-150.

Yilmaz, Y. and Bititci, U.S. (2006). Performance measurement in tourism: a value chain model. *International Journal of Contemporary Hospitality Management, 18* (4), 341-349.

Zehrer, A. (2009). Service experience and service design: concepts and application in tourism SMEs. *Managing Service Quality, 19* (3), 332-349.

Acronyms

IS	Information Systems
IT	Information Technology
ITGI	IT Governance Institute
SME	Small and Medium Enterprise
SMHEs	Small and Medium Hospitality Enterprises
SATSA	Southern Africa Tourism Association
ICT	Information and Communications Technology
ICTs	Information and Communications Technologies
TGCSA	Tourism Grading Council of South Africa
SAM	Social Media Applications
SEM	Search Engine Marketing
URL	Uniform Resource Locator
PFP	Pay for Performance
SEO	Search Engine Optimisation
UGC	User Generated Content
RSS	Really Simple Syndication
HTML	Hyper Text Markup Language
SMS	Short Messaging Services

Glossary

Business Strategy

It is management plan or method for completing objectives. Further, it is plan of procedures to be implemented, as a way of doing things.

IT Strategy

The purpose of the IT strategy is to enable the business strategy to set the direction of the initiatives driven from the business requirements and help the organisation create a competitive edge using IT.

Information Technology

IT is hardware and software. IT automates an information system which is independent of IT. The term IT used within this study refers to both IT and IS interchangeably, as the two in effect operate together within an organisation to enable business objectives to be met.

Risk

The potential of loss and/or damage to assets through vulnerabilities. It is usually measured by a combination of impact and probability of occurrence (ITGI, 2005:194).

Framework

A basic conceptual structure, used to solve a complex issue.

E-commerce

Electronic commerce is the buying and selling of goods and services on the Internet.

Peer-to-peer applications

Applications in which users can use the Internet to exchange files with each other directly or through a mediating server.

Appendix A: Information Leaflet and Informed Consent

University of Fort Hare

Small Hospitality Enterprises and the Internet: an IT Governance model for conducting business online.

Primary Investigator: Ms Bukelwa Ngoqo   Supervisors: Prof. S. Flowerday

                                                                                          Prof. M. Herselman

Dear Research Participant,

I am asking for your voluntary participation in research study leading to a fulfillment of requirement for my M.Com.(IS) studies. This information leaflet is to help you fully understand what is involved in the study, and thereafter, decide if you would consider participating in it.

Purpose of Research:

The purpose of this research is to develop an IT Governance model for Small and Medium Hospitality Enterprises (SMHEs) which can be applied in order to ensure they benefit from using the Internet.

Description of the Research:

- This research will use multiple case studies of selected small and medium business that are using Information Systems in their operations.

What you will be required to do if you accept to participate:

Should you decide to participate in this study you will be required to:

- Sign the informed consent form.
- Complete the questionnaire. The questions will be about the Information System being used. It should take not more than 15 minutes to respond to all the questions. Because of the limited time frame for this study, the researcher will greatly appreciate if you could return the completed questionnaire today still

Potential Harm, Injuries, Discomforts or Inconvenience:

There is no known harm associated with participation in this study.

Potential Benefits:

The benefit of participating in this study is:

- You will make contribution towards establishing a model for assisting SMHEs make informed IT investment decisions.

You will, however, **not be financially** compensated for participating in this study.

Participation:

Your participation in this study is completely voluntary. Consequently, you may withdraw your consent or participation in this study without providing reasons for such a decision, and there will be no negative consequences.

Confidentiality:

Your anonymity will be maintained during data analysis and publication or presentation of the results, and no information that discloses your identity will be released or published. The following will be observed to ensure confidentiality.

- You will be assigned a number as names will not be recorded.
- The researcher will save the data file by your number, **not** by name.
- Only the researcher and the supervisors will view collected data in detail.
- All the data files will be stored in a secured location, accessed only by authorized researchers.

Approval of the Study:

The Faculty Research and Higher Degrees Committee of University of Fort Hare has approved this study and its procedures.

If you have any questions about this study, you should feel free to contact them now or any time throughout the study. You may contact:

Prof. Stephen Flowerday, Seating Chair of the FRHDC that approved the study and the Head of Department of Information Systems: Tel: +27437047071; E-mail: sflowerday@ufh.ac.za

INFORMED CONSENT

By signing this form I agree that:

- I understand the nature, conduct, benefits and risks of this study.
- All my questions were answered.
- I have the right not to participate and the right to withdraw at any time.
- I may refuse to participate or withdraw without consequences.
- I am free now, and in the future to ask any questions about the study.
- I have been informed that my personal information will be kept confidential.

I now in my own free will accept to participate in the study.

Participant's Name_____   Signature_____

Date _____

Appendix B: Questionnaire

A.	**Details of person completing the questionnaire**

1. Name: _____ **2.** Position in organisation: _____

B.	**Business Details**

3. Registered name of business: _____

4. Business tel. number: _____ **5.** Email address: _____

6. Business fax number: _____ **7.** Website address: _____

8. Numbers of years in operation: _____

9. How many people are employed in the business? _____

10. List the core services offered by the business:

    10.1 _____

    10.2 _____

    10.3 _____

    10.4 _____

11. Business ownership: *(Check **only one**)*

    ☐ The owner is the founding member of the business.

    ☐ The owner inherited the business.

    ☐ The owner bought the business as a going concern.

12. Has the business been graded by the Tourism Grading Council (TGCSA)? **Yes** ☐   **No** ☐

13. If answer is **Yes**, what rating was received (number of stars)? **1** ☐ **2** ☐ **3** ☐ **4** ☐ **5** ☐

14. How much revenue does the business generate in a month?

☐ Less than R25 000.   ☐ R40 001 and R65 000.

☐ Between R25 001 and R40 000.   ☐ Above R65 000.

C.	**Owner/Manager Profile**

15. Is the owner(s) of the business also the manager(s) of the business? **Yes** ☐   **No** ☐

16. How many people hold management positions in the business? _____

17. Does the owner(s) or manager(s) have any formal training in ICT? **Yes** ☐   **No** ☐

18. If answer is **Yes**, state where/how the training was acquired:

☐ Short computer course.

☐ Part of 3 year qualification.

☐ Accumulated through years of experience in ICT use.

19. Are the earnings from the business the primary source of income for the owner(s)? **Yes** ☐ **No** ☐

D. Technological Context

20. What has influenced the investment into ICT?

☐ Heard about ICT from a friend.
☐ Industry recommendation.
☐ Other (Specify)_____

☐ Own experience.
☐ Referral from another business.

21. What initiates the investment in ICT for the business?

☐ Customer needs (pressure).
☐ Owner's judgment.
☐ Other (Specify)

☐ Trends in the industry.
☐ Delete this box?

22. Below are possible ICT tools that could be invested in, please indicate the ones that your business has invested in.

☐ A Computer.
☐ Accounting software (e.g. Pastel, Quickbooks)
☐ Fax
☐ Cellphone banking
☐ Other (Specify)_____

☐ Access to the Internet
☐ Reservation system.
☐ Antivirus
☐ DSTV

23. Below are possible Internet related technologies that could be invested in, please select the ones that your business is currently using.

☐ Website
☐ Online bookings
☐ Online payments (e.g. PayPal)
☐ Fax to Email
☐ Bulk SMS
☐ Other (Specify)_____

☐ Email
☐ Internet banking
☐ Search engine listings
☐ Online database registration
☐ Blogs

If your business has a website please answer questions **(24 to 28)** below:

24. Can enquiries be made via the website? **Yes** ☐   **No** ☐

25. If answer is **Yes**, how are enquiries made via the website?

☐ **Email**   ☐ **Interactive Website**

26. Can bookings/reservations be made via the website? **Yes** ☐   **No** ☐

27. If answer is **Yes**, how are bookings made via the website?

☐ **Email**   ☐ **Interactive Website**

28. Can payments be made via the website? **Yes** ☐   **No** ☐

Perceived Ease of Use					
29. Please indicate the extent to which you agree or disagree with the following statements by putting a ✓ in the appropriate box.					
	STRONGLY DISAGREE	**DISAGREE**	**AGREE**	**STRONGLY AGREE**	**DO NOT KNOW**
1. I find it difficult to use the Internet.	☐	☐	☐	☐	☐
2. Learning to use the Internet is not easy for me.	☐	☐	☐	☐	☐
3. Interacting with the Internet is often frustrating for me.	☐	☐	☐	☐	☐
4. I find it easy to perform tasks on the Internet.	☐	☐	☐	☐	☐
5. Interacting with the Internet takes a lot of my mental effort.	☐	☐	☐	☐	☐
6. Overall, I find using the Internet easy to use.	☐	☐	☐	☐	☐

Perceived Usefulness					
30. Please indicate the extent to which you agree or disagree with the following statements by putting a ✓ in the appropriate box.					
	STRONGLY DISAGREE	**DISAGREE**	**AGREE**	**STRONGLY AGREE**	**DO NOT KNOW**
1. Using ICT improves the quality of my work.	☐	☐	☐	☐	☐
2. Using ICT makes it easier to manage the business.	☐	☐	☐	☐	☐
3. I use ICT to accomplish tasks more quickly.	☐	☐	☐	☐	☐
4. Using ICT supports important business activities/tasks.	☐	☐	☐	☐	☐

5.	Using ICT increases business productivity.	☐	☐	☐	☐	☐
6.	Overall, I think ICT is a useful tool in business.	☐	☐	☐	☐	☐

E. Environmental Context

31. How important is each of the following when making the decision to invest in ICT. Make your selection by putting a ✓ in the appropriate box.

		NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	IMPORTANT	VERY IMPORTANT	OF UTMOST IMPORTANCE
1.	What the customers want.	☐	☐	☐	☐	☐
2.	Laws and government regulations.	☐	☐	☐	☐	☐
3.	What other similar businesses are doing.	☐	☐	☐	☐	☐
4.	Recommendations made by ICT companies.	☐	☐	☐	☐	☐
5.	Owner/Managers own experience (what they have used in the past).	☐	☐	☐	☐	☐
6.	Staff members understand and know how to use ICT.	☐	☐	☐	☐	☐
7.	The business can afford to buy technological equipment.	☐	☐	☐	☐	☐

F. Organisational Context

32. Please indicate the extent to which you agree or disagree with the following statements by putting a ✓ in the appropriate box.

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE	DO NOT KNOW
1.	I have a clear idea where the business will be in five years.	☐	☐	☐	☐	☐
2.	I spend a lot of time tackling management issues.	☐	☐	☐	☐	☐
3.	I am involved in day to day operations of the business.	☐	☐	☐	☐	☐
4.	Information and Communication Technology (ICT) is a part of the business strategy.	☐	☐	☐	☐	☐
5.	Information and Communication Technology is an important tool for planning and forecasting purposes.	☐	☐	☐	☐	☐

		NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	IMPORTANT	VERY IMPORTANT	OF UTMOST IMPORTANCE
33.	**How important is each of the following to ensuring your businesses success, please indicate by putting a ✓ in the appropriate box.**					
1.	Developing a business plan.	☐	☐	☐	☐	☐
2.	Ensuring that all members of staff understand the strategy and objectives of the business.	☐	☐	☐	☐	☐
3.	Making sure that ICT tools are used for intended purposes.	☐	☐	☐	☐	☐
4.	Considering both positive and negative consequences before investing in ICT.	☐	☐	☐	☐	☐
5.	Identifying how benefits of using ICT will be measured.	☐	☐	☐	☐	☐

34. Has the business ever experienced problems with prior ICT use?

_____
_____
_____
_____
_____

35. State whether the problems above influenced the current investment in ICT?

_____
_____
_____
_____
_____

36. What other challenges hinder the business from investing in technology?

_____
_____
_____
_____
_____
_____

Thank you for taking the time to fill in this questionnaire!

Appendix C: Analysis of Questionnaire Responses

SECTION 1:

	Organisation Name	Website	Fax	Email	Owner involved in management	Prior ICT training	Tourism Grading	Grading Stars	No of years in operation	No of employees	No of Rooms	Business Formation	Location
1	A	0	0	1	1	0	1	3	2	3	5	1	King Williams Town
2	B	0	1	0	0	1	1	3	1	2	10	3	King Williams Town
3	C	0	0	1	1	1	1	3	8	4	8	1	King Williams Town
4	D	0	0	1	1	0	1	3	1	3	4	1	King Williams Town
5	E	0	1	1	0	1	1	3	11	5	10	2	King Williams Town
6	F	1	1	1	1	1	1	3	2	4	4	1	East London
7	G	0	1	0	1	0	1	3	4	3	6	1	East London
8	H	0	1	1	1	0	1	3	3	4	7	1	East London
9	I	0	1	1	1	0	0	0	10	4	8	3	East London
10	J	1	1	1	1	0	1	3	9	5	7	1	East London
11	K	1	1	1	1	0	1	4	8	4	5	1	King Williams Town
12	L	1	1	1	1	1	0	0	2	2	8	1	King Williams Town
13	M	0	1	1	0	1	1	3	3	4	10	1	King Williams Town
14	N	1	1	1	1	0	1	3	8	6	9	1	East London
15	O	1	1	1	1	0	0	0	2	5	5	1	East London
16	P	1	1	1	0	1	1	4	15	9	12	1	King Williams Town
17	Q	0	0	1	1	0	0	0	1	2	5	1	King Williams Town
18	R	1	1	1	0	1	1	4	6	3	6	1	East London
19	S	1	1	1	1	1	1	3	3	3	7	1	East London
20	T	1	0	1	1	0	0	0	13	3	4	1	East London
21	U	0	1	1	1	0	1	3	10	3	12	1	Kenton on Sea
22	V	1	1	1	1	0	1	4	5	7	10	1	Somerset East

23	W	1	1	1	0	1	1	1	3	3	5	4	East London
24	X	0	1	1	1	0	1	2	2	2	4	1	East London
25	Y	1	1	1	0	0	1	3	6	3	13	1	East London
26	Z	1	1	1	1	0	1	2	2	2	4	1	East London
27	AA	1	1	1	0	0	1	3	3	4	4	1	East London
28	AB	0	1	1	1	0	1	2	12	2	4	1	East London
29	AC	1	1	1	1	1	1	3	4	2	8	1	East London
30	AD	1	1	1	1	1	1	3	2	2	7	1	East London
31	AE	1	1	1	1	1	1	3	5	5	5	1	Bhisho
32	AF	1	1	1	1	1	1	3	6	3	9	1	King Williams Town
33	AG	0	1	1	1	1	1	4	1	8	9	1	King Williams Town
34	AH	1	1	1	1	0	1	4	7	4	10	1	King Williams Town
35	AI	1	1	1	0	0	1	3	1	4	7	1	East London
36	AJ	1	1	1	1	0	1	2	1	6	9	1	East London
37	AK	1	1	1	1	1	0	0	3	3	6	1	East London
38	AL	0	0	1	1	1	0	0	4	4	11	1	King Williams Town
39	AM	0	1	1	1	1	1	3	3	5	6	1	East London
40	AN	1	1	1	1	1	0	0	6	3	6	1	East London
		60%	85%	95%	78%	48%	80%						

SECTION 2 and 3:

	Organisation name	1 A	2 B	3 C	4 D	37 AK	38 AL	39 AM	40 AN	**Results** **AO**
	Weighting	3%	3%	3%	3%	3%	3%	3%	3%	**100%**
	Technological Context									
20.1	Heard about ICT from a friend	1		1				1		**8%**
20.2	Own experience		1		1	1	1		1	**13%**
20.3	Industry recommendation									**0%**
20.4	Referral from another business									**0%**
20.5	Other									**0%**
21.1	Customer needs (pressure)			1						**3%**
21.2	Trends in industry									**0%**
21.3	Owner's judgment		1		1	1	1	1		**13%**
21.4	Tourism industry associations	1							1	**5%**
21.5	Other									**0%**
22.1	A Computer		1	1		1			1	**10%**
22.2	Access to the Internet		1			1			1	**8%**
22.3	Accounting software (e.g. Pastel or Quickbooks)		1							**3%**
22.4	Reservation system								1	**3%**
22.5	Fax		1	1	1	1		1	1	**15%**
22.6	Antivirus		1	1		1			1	**10%**
22.7	Cellphone banking			1						**3%**
22.8	DSTV	1	1	1	1				1	**13%**
22.9	Other						1			**3%**

										Percentage
23.1	Website				1	1			1	**8%**
23.2	Email			1	1	1	1	1	1	**15%**
23.3	Online bookings	1							1	**5%**
23.4	Internet banking			1		1			1	**8%**
23.5	Online payments (e.g. Paypal)					1			1	**5%**
23.6	Search engine listings								1	**3%**
23.7	Fax to Email				1	1		1	1	**10%**
23.8	Online database registration								1	**3%**
23.9	Bulk SMS									**0%**
23.10	Blogs									**0%**
23.11	Other									**0%**
24.1	Enquiries can be made via the website				1	1			1	**8%**
24.2	Enquiries cannot be made via the website	1		1						**5%**
										0%
25.1	Enquiries are made via email				1	1			1	**8%**
25.2	Enquiries are made via Interactive website functions									**0%**
26.1	Bookings can be made via the website	1							1	**5%**
26.2	Bookings cannot be made via the website			1	1	1				**8%**
27.1	Bookings are made via email								1	**3%**
27.2	Bookings are made via Interactive website functions	1								**3%**

										%
28.1	Payments can be made via the website	1				1				5%
28.2	Payments cannot be made via the website			1	1				1	8%
	Perceived ease of use									
29.1	I find it difficult to use the Internet									
	Strongly Disagree			1			1		1	8%
	Disagree	1	1		1					8%
	Agree					1		1		5%
	Strongly Agree									0%
	Do not know									0%
29.2	Learning to use the Internet is not easy for me									
	Strongly Disagree						1		1	5%
	Disagree	1	1		1			1		10%
	Agree					1				3%
	Strongly Agree			1						3%
	Do not know									0%
29.3	Interacting with the Internet is often frustrating for me									
	Strongly Disagree			1			1		1	8%
	Disagree	1	1			1		1		10%
	Agree				1					3%
	Strongly Agree									0%
	Do not know									0%

		C1	C2	C3	C4	C5	C6	C7	C8	%
29.4	I find it easy to perform tasks on the Internet									
	Strongly Disagree									**0%**
	Disagree				1	1				**5%**
	Agree	1	1	1			1	1		**13%**
	Strongly Agree								1	**3%**
	Do not know									**0%**
29.5	Interacting with the Internet takes a lot of my mental effort									
	Strongly Disagree								1	**3%**
	Disagree	1	1	1			1			**10%**
	Agree				1	1				**5%**
	Strongly Agree							1		**3%**
	Do not know									**0%**
29.6	Overall, I find using the Internet easy to use									
	Strongly Disagree									**0%**
	Disagree					1				**3%**
	Agree	1	1		1		1	1		**13%**
	Strongly Agree			1					1	**5%**
	Do not know									**0%**
										0%
	Perceived Usefulness									
30.1	Using ICT improves the quality of my work									
	Strongly Disagree									**0%**
	Disagree				1					**3%**

		C1	C2	C3	C4	C5	C6	C7	C8	%
	Agree		1	1		1	1	1	1	**15%**
	Strongly Agree									**0%**
	Do not know	1								**3%**
30.2	Using ICT makes it easier to manage the business									
	Strongly Disagree									**0%**
	Disagree				1					**3%**
	Agree		1	1		1	1	1	1	**15%**
	Strongly Agree									**0%**
	Do not know	1								**3%**
30.3	I use ICT to accomplish tasks more quickly									
	Strongly Disagree									**0%**
	Disagree									**0%**
	Agree		1	1	1	1	1	1		**15%**
	Strongly Agree								1	**3%**
	Do not know	1								**3%**
30.4	Using ICT supports important business activities/tasks									
	Strongly Disagree									**0%**
	Disagree				1					**3%**
	Agree		1			1	1	1	1	**13%**
	Strongly Agree			1						**3%**
	Do not know	1								**3%**
30.5	Using ICT increases business productivity									

		C1	C2	C3	C4	C5	C6	C7	C8	%
	Strongly Disagree									**0%**
	Disagree				1			1		**5%**
	Agree		1	1		1	1			**10%**
	Strongly Agree								1	**3%**
	Do not know	1								**3%**
30.6	Overall, I think ICT is a useful tool in business									
	Strongly Disagree									**0%**
	Disagree				1					**3%**
	Agree		1			1	1	1	1	**13%**
	Strongly Agree			1						**3%**
	Do not know	1								**3%**
	Environmental Context									
31.1	What customers want									
	Not at all Important									**0%**
	Slightly Important		1							**3%**
	Important					1	1			**5%**
	Very Important	1						1		**5%**
	Of Utmost Importance			1	1				1	**8%**
31.2	Laws and Government regulations (Provincial/Regional authorities)									
	Not at all Important									**0%**
	Slightly Important									**0%**
	Important		1			1				**5%**
	Very Important	1		1			1	1	1	**13%**

	C1	C2	C3	C4	C5	C6	C7	C8	%
Of Utmost Importance				1					**3%**
31.3 What other similar businesses are doing									
Not at all Important									**0%**
Slightly Important	1				1				**5%**
Important		1		1		1	1	1	**13%**
Very Important			1						**3%**
Of Utmost Importance									**0%**
31.4 Recommendations made by ICT companies									
Not at all Important					1				**3%**
Slightly Important				1					**3%**
Important	1	1				1		1	**10%**
Very Important			1				1		**5%**
Of Utmost Importance									**0%**
31.5 Owner/Managers own experience (what they have used in the past)									
Not at all Important									**0%**
Slightly Important	1								**3%**
Important		1			1	1	1		**10%**
Very Important			1	1					**5%**
Of Utmost Importance								1	**3%**
31.6 Staff members understand know how to use ICT									
Not at all Important									**0%**

										%
	Slightly Important				1						3%
	Important		1			1	1				8%
	Very Important	1						1			5%
	Of Utmost Importance			1						1	5%
31.7	The business can afford to buy technological equipment										
	Not at all Important										0%
	Slightly Important					1	1				5%
	Important		1		1						5%
	Very Important	1		1				1			8%
	Of Utmost Importance									1	3%
	Organisational Context										
32.1	I have a clear idea where the business will be in five years										
	Strongly Disagree										0%
	Disagree										0%
	Agree	1			1	1	1				10%
	Strongly Agree			1				1			5%
	Do not know		1							1	5%
32.2	I spend a lot of time tackling management issues										
	Strongly Disagree										0%
	Disagree			1						1	5%
	Agree	1	1		1	1	1				13%
	Strongly Agree							1			3%
	Do not know										0%

#		C1	C2	C3	C4	C5	C6	C7	C8	%
32.3	I am involved in day to day operations of the business									
	Strongly Disagree									**0%**
	Disagree									**0%**
	Agree	1	1	1		1	1	1		**15%**
	Strongly Agree				1				1	**5%**
	Do not know									**0%**
32.4	ICT is a part of the business strategy									
	Strongly Disagree									**0%**
	Disagree									**0%**
	Agree		1		1	1	1			**10%**
	Strongly Agree	1		1				1	1	**10%**
	Do not know									**0%**
32.5	ICT is an important tool for planning and forecasting purposes									
	Strongly Disagree									**0%**
	Disagree									**0%**
	Agree	1	1		1	1	1		1	**15%**
	Strongly Agree			1				1		**5%**
	Do not know									**0%**
33.1	Developing a business plan									
	Not at all Important									**0%**
	Slightly Important									**0%**
	Important		1							**3%**
	Very Important	1		1	1	1	1	1		**15%**

		1	2	3	4	5	6	7	8	%
	Of Utmost Importance								1	**3%**
33.2	Ensuring that all members of staff understand the strategy and objectives of the buisness									
	Not at all Important									**0%**
	Slightly Important									**0%**
	Important	1	1							**5%**
	Very Important				1	1	1	1		**10%**
	Of Utmost Importance			1					1	**5%**
33.3	Making sure that ICT tools are used for intended purposes									
	Not at all Important									**0%**
	Slightly Important				1					**3%**
	Important	1	1							**5%**
	Very Important			1		1	1	1	1	**13%**
	Of Utmost Importance									**0%**
33.4	Considering both positive and negative consequences before investing in ICT									
	Not at all Important									**0%**
	Slightly Important				1					**3%**
	Important	1	1				1	1		**10%**
	Very Important					1				**3%**
	Of Utmost Importance			1					1	**5%**

33.5	Identifying how benefits of using ICT will be measured									
	Not at all Important									0%
	Slightly Important									0%
	Important		1		1	1	1	1		13%
	Very Important	1		1						5%
	Of Utmost Importance								1	3%

SECTION 4:

	34	**35**	**36**
B	DTSV Signal.	No.	No.
C	Fax broken when we were expecting an important fax.	No. Someone came to fix the fax.	No.
F	General faults with fax, copier. And sometimes we can't access the website. We get support from The Tourism Enterprise Program (TEP).	No. Problems can be fixed.	None. However, becaused of security we are hesitant to use some products e.g. Internet Banking.
H	No.	No.	We don't have enough money to buy equipment, for example a computer for staff.
I	No.	No.	When the Internet is down (Telkom ADSL) we cannot email, electronic banking is not available, only the accounting package can be accessed without Internet.
J	When technology fails/crashes - you lose information on the booking register, and internet capping also causes problems.	No.	None. However, becaused of security we are hesitant to use some products e.g. Internet Banking.

K	No - Maybe connectivity.	No.	No full time staff member to man telephone. I do bookings myself by diverting landline to cellphone - so online bookings will not work.
L	No.	No.	Lack of funds at times.
R	Not except when computer gets viruses now and then.	No.	No.
T	All our problems are from being only able to use dial up connection.	No.	Lack of knowledge.
U	No.	No.	Finances.
V	Yes. Constantly have connecting issues.	No.	None. Technology is a must have.
X	No.	No.	Finance.
Z	No, as the business has not fully invested in ICT.	No.	Finances and Time.
AA	No.	No.	Financial.
AD	Problems of communicating with some of the clients where the telephonic call has been missed.	No.	Staff literacy.
AE	We get problems from Telkom and Vodacom service providers e.g. Towers not working or technicians not showing up on time.	Yes they do because one is only careful not to put too much emphasis into technology that can fail.	Ease of use. Issues of security (online payments). Issues of bank charges.
AG	Yes. Internet sometimes going off.	No.	No.
AH	Sometimes we experience problems with viruses or programs.	IT man will sort problems out.	No.
AI	No.	No.	Finances, the business is still relatively new.