



**Use of Information and Communication Technology (ICT) and e-commerce
in small remote hospitality establishments in KwaZulu-Natal.**

By

Tenson Nkosana

Submitted in fulfilment of the requirements

For the degree of

**Master of Management Science: Specialising in Tourism and Hospitality
Management**

Durban University of Technology

April, 2016

Supervisor: Dr. E.M Mnguni

Declaration

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements) nor material which to a substantial degree has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed..... Date:

Tenson Nkosana

Student Number: 21357021

Supervisor: Date:

Dr. E. M. Mnguni

Acknowledgements

Firstly, I would like to sincerely thank my academic supervisor Dr. Erasmus Mnguni for all his encouragement, support and guidance throughout this process. To Dr. Hloniphani Ndebele, I thank you, my dear friend for setting the pace and for all your help, phone calls and support from afar.

I express my fond gratitude to all those who participated in any way in this dissertation, especially to those who responded to the questionnaires and to the interviews. I am indebted to all those whom I cannot mention by name owing to space constraints for their contributions directly or indirectly to the success of this project. Needless to say, I have benefited immensely from a lot of people to whom I extend my profound gratitude.

Most importantly, I would like to thank my wife, Trinity for her everlasting kindness, patience, love and support throughout this very long process. I love you.

Abstract

The advent of Information and Communication Technologies (ICT) coupled with sophisticated network channels and applications have unveiled new avenues for small organizations and those in the hospitality industry must be included. However, there is limited industry specific research activity on the impact of adoption and utilisation of ICTs on business specifically with regard to the hospitality industry in developing countries.

This report records the findings of an analysis into ICT and e-commerce adoption and use in small remote hospitality establishments in the Natal Midlands of KwaZulu-Natal, South Africa. The research used a mixed methods approach involving questionnaires, observations and interviews. The participants were drawn from three case areas namely Curry's Post, Nottingham Road and Lions River. From each case area, two restaurants, two wedding venues, two lodges and two curio shops participated.

The findings indicate that most establishment acknowledged the need to adopt and utilise ICT and e-commerce. The links between ICT adoption and level of business success were marked. The challenges to adoption and utilisation of ICT were found to centre on cost, owners' lack of familiarity with ICTs, and a corresponding lack of ICT skills amongst staff. The inability of imported software packages to suit local needs also emerged as a significant issue. Recommendations involve targeted sponsorships of ICT courses, language accessibility initiatives, and adaptation of software packages to local needs, along with advantages in starting small and adopting more sophisticated ICT as the business grows.

Key Words: Small hospitality establishments, ICT adoption challenges, utilisation

Table of Contents

Definition of Terms	ix
1. Chapter 1-Introduction and background to the study	1
1.2 Introduction and background to the study	1
1.3 Statement of research problem	6
1.4 Purpose of the study	6
1.5 Research questions and objectives of the study	7
1.6 Significance and assumptions of the study	8-9
1.7 Delimitation of the Study	9
1.8 Limitations of the study	10
1.9 Organization of work	10
1.10 Summary	12
2. Chapter 2- Literature Review	13
2.1 Introduction and purpose of literature review	13
2.2 ICT and e-commerce defined	14
2.3 ICT uses in hotels	15
2.4 ICT functions by departments- Front office and rooms	17
2.5 ICT functions in restaurants	19
2.6 ICT in marketing department	20
2.7 E-commerce in SA- An overview	21
2.8 E-commerce challenges in SA	24
2.9 Adoption of ICTs and e-commerce by small establishments	25
2.10 Limitations to ICTs adoption	27
2.11 Summary	30
3. Chapter 3- Research Methodology	31
3.1 Introduction, research design	31
3.2 Research approach	32

3.3 Subjects (Study population)	33
3.4 Sampling procedure	34
3.5 Research instruments	35
3.6 Reliability and validity	39
3.7 Data analysis	41
3.8 Summary	43
4. Chapter 4- Findings and discussion	44
4.1 Introduction, results presentation and discussion	44
4.2 Internet connectivity for guests	75
4.3 ICT for marketing	79
4.4 Summary	88
5. Chapter 5- Conclusion and Recommendations	89
5.1 Introduction, summary of findings	89
5.2 Conclusions	92
5.3 Recommendations	93
5.4 Direction for future research	94
5.5 References	95

List of Tables

Table 1: Background information for restaurants in CP	47
Table 1.1: Background information for restaurants in NR	48
Table 1.2: Background information for restaurants in LR	48
Table 2: Background information for wedding venues in CP	49
Table 2.1: Background information for wedding venues in NR	50
Table 2.2: Background information for wedding venues in LR	50
Table 3: Background information for lodges in CP	51

Table 3.1: Background information for lodges in NR	52
Table 3.2: Background information for lodges in LR	52
Table 4: Background information for curio shops in CP	53
Table 4.1: Background information for curio shops in NR	54
Table 4.2: Background information for curio shops in LR	54
Table 5: ICT adopted by Wedding Venues in CP	58
Table 5.1: ICT adopted by Wedding Venues in LR	59
Table 5.2: ICT adopted by Wedding Venues in NR	60
Table 6: ICT adopted by Curio Shops in CP	62
Table 6.1: ICT adopted by Curio Shops in LR	63
Table 6.2: ICT adopted by Curio Shops in NR	64
Table 7: ICT adopted by Restaurants in CP	66
Table 7.1: ICT adopted by Restaurants in LR	67
Table 7.2: ICT adopted by Restaurants in NR	68
Table 8: ICT adopted by Lodges in CP	71
Table 8.1: ICT adopted by Lodges in LR	72
Table 8.2: ICT adopted by Lodges in NR	73
List of Figures and Charts	
Figure 1: Ecommerce usage in South Africa	22
Figure 2: Location of all 3 case areas	34
Figure 3: Location of the three case areas	45
Chart 1: ICT Adoption mode	56
Figure 4: Frequency of guests asking for internet connectivity	75

Figure 5: Availability of free internet for guest use	77
Figure 6: Internet service provider reliability	78
Figure 7: Website visitor count facility	79
Figure 8: Marketing through social networks	80
Figure 9: Effectiveness of social networks as marketing tools	81
Figure 10: Booking and marketing sites used by establishments	82
Figure 11: PMS Adoption by establishments	83
Figure 12: Challenges of adopting and using ICTs	86

List of Appendices

Appendix 1: Questionnaire	103
---------------------------	-----

DEFINITION OF TERMS

1. **Establishment:** This term can be used interchangeably with enterprise, business, or entity and refers to a company organised for commercial purposes.
2. **Software:** Refers to computer programs used to direct the operation of a computer as well as documentation giving instructions on how to use them.
3. **Adoption:** A process of incorporating, acquisition. In this project, the term is used to refer to the process of acquisition and making use of ICT.
4. **Developing Country (DC):** Refers to a non-industrialized poor country that is seeking to develop its resources by industrialization. In this research it is used to refer to most countries in Southern Africa including South Africa.
5. **Small and Medium-sized Enterprises (SME):** Refers to small businesses which employ fewer than 100 persons and which have an annual turnover not exceeding fifty million rand.
6. **Hospitality Establishment:** A business in the tourism sector. In this project it includes lodges, wedding venues, restaurants, curio shops, small hotels and guesthouses.
7. **E-commerce:** Refers to business transactions conducted on the internet. The term e-commerce is also used interchangeably with e-business.
8. **Front Office:** An office that handles bookings or reservations in a lodge, wedding venue or hotel.

- 9. Remote Areas:** Refers to marginalised areas that are in the country or rural areas. It refers to any areas that are not classified as urban or city, town and growth points
- 10. Network:** A system containing any combination of computers, computer terminals, printers, audio or visual display devices, or telephones interconnected by telecommunication equipment or cables used to transmit or receive information

CHAPTER 1- INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

This chapter introduces the entire study. It also gives a detailed background of ICTs and their applications with specific reference to the hospitality industry. Furthermore, it hints at specific components of ICT currently being used in small and large hospitality establishments throughout the world. In this chapter, it explores briefly into the factors motivating the direction chosen for this study, which is the significance of the study. The statement of the problem is also outlined in this particular chapter, as is as the research questions, purpose of the study, objectives of the study and limitations and delimitations of the study.

The research samples (Case areas) namely Nottingham Road, Curry's Post and Lions River are also introduced as is the Midlands region in general.

1. BACKGROUND TO THE STUDY

Information and Communication Technologies (ICTs) have fundamentally changed the way in which global business is conducted. ICTs encompass the utilization of computer software and hardware, and telecommunication gadgets to manipulate, convert, store or protect, send and receive digital data (Olifer and Olifer, 2006). Globally, the application and utilization of ICTs has gradually evolved to include many forms of telecommunication tools (even micro-electronic) such as computers and laptops, the Internet (via various connection modes), mobile telephone technology, and many other modern technology communication gadgets (Freeman and Hasnaoui, 2010). Research, according to (Mpofu and Watkins-Mathys, 2011) indicates that developed countries are competing effectively on the global market place due to a technological advantage over the less developed countries. He adds that the ICTs revolution currently unrolling across Europe, America and some Asian nations has

changed the business and economic environment. Businesses progressing well in these western countries have not only embraced ICTs, but mastered the skills to adopt and utilize ICTs for the betterment of their business while they also carve niches for themselves on the global marketplace due to improved levels of productivity (Mpofu and Watkins-Mathys, 2011). Generally, businesses in less developed countries continue to struggle to fully adopt ICTs, as a result, they find it more difficult to carve a niche on the same marketplace. As long as this north/south technological imbalance exists, global business competition is gathering momentum, leaving businesses in less developed countries more vulnerable economically. Although this technological imbalance remains a topical issue on local and international platforms (Grout, Oram and Pickling, 2006), little is known regarding its nature, scope and impact on specific industries.

According to Moyo, (2006) the hospitality industry has always been on top of the list among the first industries to capitalise on new ICTs. This has been necessitated by the fact that it depends more than other industries on finding and developing new mechanisms to distribute hospitality products and services, marketing information to customers, and providing comfort and convenience to travellers (Zhou, 2004: 3). The lodging industry has come to embrace the internet, realizing that e-commerce is the future of the travel industry. Tesone (2006), highlights that some companies in developed countries are building so-called e-hotels, offering services, including 100- megabytes high speed internet access, video-on-demand systems, limited video conferencing in all rooms, wireless access throughout the building; internet kiosks in the lobby; and customised applications that let guests tap into the back-office to order food and services and to pay bills. (Mpofu and Watkins-Mathys, 2011) argue that the case is however not the same for small hotels, lodges, restaurants and wedding venues in remote areas of developing countries like South Africa.

Kalakota and Whinston, (1996) provide a brief analysis explaining the advent of network protocols. They speculate that the use of ICTs throughout modern

business societies started over the past few decades with the introduction of internet. They add that the internet primarily started as a network for researchers developed for the purpose of sharing information and ideas. The commercialization of internet was instigated by the development of the World Wide Web (WWW) in the early 90s by Tim Berners-Lee of European Organization for Nuclear Research (CERN) (Kalakota and Whinston, 1996).

Nwakanma, Ubani, Asiegbu, and Nwokonkwo, (2014), highlight on the application of networking in the hospitality industry. They elaborate that networking usage in front office helps in sharing information within the hotels in a group or chain. Tesone (2006) generalizes the application of networking. Tesone maintains that the increase in the use of networked computers is a growing and most significant trend in business computing. Although linking of computers (networking) is not new in business organizations, Ritchie and Brindley (2003), advise that its application in the hospitality industry is dramatically on the increase, so much so, that it is now a major issue in ICTs.

Agboh (2015), adds that the internet facilitates fast and efficient movement of data individuals and business at a very low cost. Internet has subsequently lead to the booming of electronic business (e-business), which has become one of the principal means of conducting business transactions (Mpofu and Watkins-Mathys, 2011). Tesone (2006) defines Electronic Commerce (e-commerce) as transactions and interactions that occur through computer telecommunications networks. It encompasses all business transactions that can be processed through telecommunications networks in any industry. The term e-business is used interchangeably with e-commerce (Mpofu and Watkins-Mathys, 2011). Electronic business is a new way of doing business. E-business, just as e-commerce involves transactions, buying, selling and marketing of goods and or information through an electronic media, especially the internet (Tesone, 2006).

Lucchetti and Sterlacchini (2004) illustrated the role of ICTs in revolutionizing industries. They revealed that the high growth rate experienced in the United States economy in the 1990s, which resulted in high productivity and increased

employment levels, was attributed to early and quick adoption of ICTs. Galloway and Mochrie (2005) support the findings of Lucchetti and Sterlacchini that full adoption of ICTs is an elevation for economic growth. Mutula and Van Brakel (2006) assert that ICTS are important tools which give small businesses a competitive advantage in the new economy. However, they lamented the problem of access to information in developing countries like Botswana and South Africa, attributed to lack of ICT infrastructure.

The advent of e-commerce, as stated by Basu and Muylle (2007), has significantly changed how business processes are carried out. It has helped enhance trade relationships between businesses and their suppliers and customers. They add that businesses in most industries evaluated the opportunities and threats presented by e-commerce. The Hospitality industry which has been labeled as a new hybrid of business by Wagner and Teixeira (2014), benefited tremendously from the support of ICT applications.

Literature argues that hospitality and tourism cannot go further without a support of ICT application (Buhalis, 1998; Reino, Frew, and Albacete-Sáez, 2011; Nwakanma, Ubani, Asiegbu, and Nwokonkwo, 2014). Although ICT is an important component in the competitiveness of hotels in the hospitality sector (Wagner and Teixeira, 2014), little has been studied in developing countries such as South Africa (Samkange, 2008). Furthermore, Buick (2003) points out that the hospitality sector in particular, traditionally lags other industries in adopting ICTs, but this has drastically changed over the past few years and research into their applications has also followed suit.

This study was therefore instituted to establish the nature of ICT tools used for marketing and management, and the challenges faced by the hospitality sector in the utilization of ICT by small establishments in remote areas of the Midlands of KZN. Wagner and Teixeira, (2014), emphasized that the contribution of ICT towards the development of the hospitality industry and towards the country as a whole is enormous and that organizations from all over the world now depend almost solely on the use of ICT to manage and market their services.

Samkange (2008), reveals that the hospitality industry's contribution to the overall growth of South Africa's economy cannot be overemphasized. Samkange emphasizes that for the industry to succeed, there is urgent need for embracing efficient and modern trends of business practices that are ICT driven as they present bigger opportunities to the industry and the country as a whole.

The extent of ICTs adoption by SMEs with specific reference to South African was tackled by Mutula and Brakel (2006), who pointed out that about 69% of SMEs in South Africa have at least three or more computers. The duo added that 87% of these SMEs sadly, do not use internet to transact. Literally, this highlights a massive growth possibility for South African enterprises to exploit networking technologies and the internet. Mutula and Brakel (2006) counsels enterprises to rethink their approach to adoption of ICTs. They emphasize the need for establishments to utilize network technologies and the internet as they are an effective way of marketing and advertising certain goods and services directly to the potential buyers. On the contrary, Herselmen (2003) laments the extremely high cost of connectivity coupled with serious lack of infrastructure as the major problems facing South Africa as a whole. He further points out that the development of South Africa has been in an uneven manner, where world class cities like Johannesburg (Sandton City in particular) have the latest most sophisticated technologies while remote and rural areas are lagging seriously behind- something this research aims to clarify as the Midlands has been classified as a remote area. Herselmen bemoans scarcity of ICTs infrastructure such as electricity and telephones, which are basic necessities in order for businesses in remote regions of South Africa to thrive. On the other hand, Mutula and Brakel (2006), provided a note of optimism by announcing that the South African government was aware of these challenges and have since mandated the local communications giant Telkom, which is partly owned by government of South Africa), to maneuver quickly towards achieving its target of connecting the whole of South Africa while at the same time reducing the associated costs of connectivity.

Scholars (Agboh, 2015; Wagner and Teixeira, 2014; Samkange, 2008) find skepticism about ICT and e-commerce lamentable. They argue that this has always been a barrier to reaping the benefits inherent in their adoption especially in the developing countries where information and communication technology (ICT) is yet to see its best days.

This research therefore assesses the level of ICT and e-business adoption in the hospitality industry in the remote areas of the Midlands, KZN, in order to identify the factors impeding the adoption and the benefits that the early adopters of this technology have gained.

1.2 STATEMENT OF RESEARCH PROBLEM

This research seeks to analyse the use of information and communication technology (ICT) and e-commerce for effective management, marketing and customer service quality in small remote hospitality establishments.

The problem statement is:

What is the impact of full adoption of ICT and e-commerce to small remote hospitality establishments' business success?

The focus was on two restaurants, two curio shops, two wedding venues and two lodges, a total of eight participants from each of the three case areas. All in all, the participants numbered a combined twenty-four from all three areas in the Natal Midlands, KwaZulu-Natal South Africa.

1.3 PURPOSE OF THE STUDY

This study looks at the fundamental components of ICT and e-commerce which could be instrumental and substantive for effective management, marketing and customer service quality in small remote hospitality establishments. It demonstrates the significance of ICT and e-commerce applications in remote

small hospitality establishments and the challenges of using ICT and e-commerce in small hospitality establishments in Natal Midlands of South Africa. The study will make recommendations to systems that would be adopted by the hospitality operators to make improvements.

1.4 RESEARCH QUESTIONS

Once the problem and purpose of the study had been stated, the problem was then divided into sub-questions as outlined below:

- Which ICT and e-commerce tools are currently being used by small remote hospitality establishments in the Natal Midlands for marketing and effective management?
- Why is ICT and e-commerce application useful in remote hospitality establishments?
- What are the challenges of acquiring and using ICT and e-commerce in remote small hospitality establishments?

1.5 OBJECTIVES OF THE STUDY

The aim of the study was to analyse the use of information and communication technology (ICT) and e-commerce in small remote hospitality establishments of the Natal Midlands, KwaZulu-Natal South Africa.

The objectives of the study are:

- To establish the fundamental components of ICT and e-commerce that can be instrumental and substantive for effective management, marketing and customer service quality in small remote hospitality establishments in Natal Midlands of South Africa.
- To demonstrate the significance of ICT and e-commerce applications in remote small hospitality establishments in Natal Midlands of South Africa

- To investigate the challenges of using ICT and e-commerce in small hospitality establishments in Natal Midlands of South Africa

1.6 SIGNIFICANCE OF THE STUDY

Businesses today are inevitably exposed to information and communication technologies either directly or indirectly. The hospitality industry in general, traditionally utilize manual operation systems in their front offices particularly organizing the occupancy tables for guest rooms, generating guest bills and all cost related aspects of the guest's stay through to check out. In the present times, these complex functions are performed using modern technologies. The use of ITCs in front office operations and restaurants in the hospitality sector is growing rapidly making work much easier. Computerization of these basic functions is becoming a necessity for all departments in any establishment in order to run the business efficiently and effectively. It is hoped that the results of the study would:

- Help hospitality operators identify and adopt available ICT components suitable for their establishments.
- The study will demonstrate the significance of ICT and e-commerce applications in remote small hospitality establishments in Natal Midlands, South Africa.
- The study will motivate operators to have a closer look at the challenges of using ICT and e-commerce in small hospitality establishments in Natal Midlands, South Africa and map strategies to improve on the existing problem areas, where necessary.

The study would enable the hospitality operators to review their systems as well as to assess the benefits of having world class ICT components.

1.7 ASSUMPTION OF THE STUDY

An assumption is a condition, which is taken for granted and without which the research effort would be impossible. Thus within the study we made the following assumptions:

- ICT and e-commerce are tools for increased customer service quality;
- Effective management and marketing are ICT driven;
- Successful business operation hinges on full utilization of ICT and e-commerce
- Investing in ICT and e-commerce will over time, yield good return.

1.8 DELIMITATION OF THE STUDY

The Midlands is situated north of Pietermaritzburg and extends from Curry's Post and Rietvlei in the east, to Fort Nottingham and Dargle Valley in the west, (The Midlands Meander, 2015). This 'tourist hotspot' is about 80km's long and brimming with stunning sights and activities. There are weavers, potters, woodcrafters, leather workers, artists, metalworkers, box makers, herb growers, cheese makers, beer brewers and so much more. There are a large number of fantastic restaurants with a diversity of local cuisine from which to choose.

It is from this concentration of Hospitality establishments that I chose to investigate the adoption and application of ICTs by small operators. Three sections (case areas) were purposefully chosen namely Curry's Post which is in the eastern part of Midlands, Nottingham Road in the west and Lion's River in the south-west. In each case area, a total of eight small establishments were chosen. In order for the samples to be fairly representing the whole area (The Midlands), I chose to involve four categories of operators in the hospitality industry which are Restaurants, Lodges, Wedding Venues and Curio Shops/ Crafter's Markets. In each case area two of each of the four categories were

included in the study, giving me a total of eight establishments in each case area, summing up to twenty-four all in all.

1.9 LIMITATIONS OF THE STUDY

Some logistical difficulties were experienced in conducting the study. These were:

- Movement from one hospitality establishment to another was difficult owing to the fact that they are scattered;
- There was the problem of returned questionnaires being incompletely filled in, and of questions being misinterpreted.
- Few funds were allocated for the project. As a result, the researcher struggled with the costs involved in printing and typing of the research document.
- The researcher is employed full-time so time constraints affected the collection of data. However, all questionnaires that were scheduled to be collected, were indeed collected.

1.10 ORGANIZATION OF WORK

This dissertation has been presented in five well-structured chapters and coordinated order as outlined below;

Chapter one gives brief but concise background information on the application of Information and Communication Technology to business. It also presents brief information about the role ICTs and e-commerce play in the hospitality industry, and their significance towards the economic growth of the economy and the future prospects of e-commerce in small remote hospitality establishments. The subsections outlining the statement of the problem,

objectives of the study, the significance of the study, the scope and limitations of the study, as well as the organization of the research were elaborated.

Chapter two reviews literature related to ICTs and the hospitality industry both in South Africa and elsewhere. It discusses in detail, the application of ICT and e-commerce, and their adoption. This chapter also outlines the benefits and challenges of incorporating ICT and e-commerce in small remote establishments and finally it presents the general description of the hospitality industry in South Africa.

Chapter three explores the methodology employed in the research. It details steps taken in conducting the research. Furthermore, it explores the study area as well as the population and the sampling techniques used in the research. It is in this chapter again that the data collection procedures used, research instruments used, research design and the data analysis used are unveiled.

Chapter four deals with the analysis and discussion of the results obtained from data collected. It's a chapter that presents findings obtained from the field. Research findings are displayed in various forms in this chapter. These include chart, graphs, tables and descriptions.

Chapter five elaborating from chapter four, gives a detailed summary of the research findings. In this chapter an attempt is made to relate findings from the literature to the actual findings obtained from the field. These discussions help to draw conclusions for the study and recommend possible solutions to the shortcomings unearthed by the research. Directions for future research are also be outlined at the end of this chapter.

1.11 SUMMARY

This is an introductory chapter which demonstrates the direction of the study. The chapter highlighted the background to the study. The researcher scholarly highlighted the factors that motivated him to pursue this study. Literature examined highlighted on the adoption, application and utilization of ICTs in other industries. Little was said about the utilization of the same ICTs in remote hospitality establishment hence the researcher developed this study. Based on the background information, the researcher developed a precise statement of the problem.

Although short, the chapter displays the organization of work that is the contents of the following chapters. Assumptions of the study are also outlined, as is the rationale of the study, delimitation and limitations of the study. Common terms to be used in the entire study are also defined in the context of this study. The researcher also highlighted on the number of cases to be used and their compositions. Problems that were faced by the researcher are outlined as well.

In the next chapter, various scholars and relevant literature will be examined in relation to the phenomenon under study. The researcher attempts to match findings from similar studies with the assumptions made in chapter 1 and to critique those findings with evidence documented in relevant studies conducted both in South Africa and other countries. An effort is made to balance findings from earlier researches conducted, with the current issue at hand.

CHAPTER 2- LITERATURE REVIEW

2. INTRODUCTION

The chapter focuses on the purpose of literature review, the components of ICTs and E-commerce available on the market, a survey of existing views, knowledge and other information relevant to the theme, objectives and the research questions of this study. In this regard, the review focuses on the adoption of ICT and e-commerce, benefits, and challenges.

2.1 Purpose of Literature Review

The literature review was concerned with examining materials both published and unpublished, that seemed to have any bearing on the subject of the study. The information that the review provided helped the researcher to satisfactorily identify the strengths and weaknesses of study. Relevant literature pertaining to ICTs and e-commerce application and adoption were reviewed. Research carried out in other countries was also looked at in order to broaden the writer's understanding of this phenomenon from an international perspective. This was alluded to by Leedy (1997:71) who says:

“The more one knows about the peripheral investigations relevant to one's study the more intelligently one can approach the problem inherent in one's own area of investigation”.

Bithel and Robert (1986:18) state that literature reviews help in developing and focusing the problem into their proper educational perspective and relevance. The literature review provided the researcher with information on the present state of knowledge of the study. It also informed the researcher of what had already been done in the subject, so as to avoid duplication. The need for this was supported by Borg (1989:117) who wrote:

“The purpose of literature review is to help you to develop a thorough understanding and insight into the previous work and the trends that have emerged”.

Leedy (1980:6) argues that literature review suggests,

“A method or technique of dealing with a problematic situation which may also suggest avenues of approach to the solution of similar difficulties you will be facing”.

The above will inform the study in addressing various methods of tackling the problem. In offering solutions to the problem under research, related literature review will actually provide empirical solutions.

2.2 ICT and E-commerce Defined

Ritchie and Brindley (2005) define ICT as the array of primarily digital technologies designed to collect, organize, store, process and communicate information within and external to an organization. Lucchetti and Sterlacchini (2004) enumerate the following technologies as examples of ICTs; simple telephone, point-of-sale systems, stand-alone PCs, networked environments, Internet and credit card facilities.

Tesone (2006) defines Electronic Commerce (e-commerce) as transactions and interactions that occur through computer telecommunications networks. E-commerce includes all business functions that may be processed over telecommunication networks in any industry (Lucchetti and Sterlacchini, 2004). For this reason, the term e-business is used interchangeably with e-commerce. Zhou (2004), further elaborates that e-commerce is more than just the act of buying and selling on line. Zhou explains that e-commerce encompasses all activities associated with buying and selling, such as financial transactions, business data exchange, and communicating with customers and suppliers.

ICT can fulfill a number of business needs such as strategic, operational or marketing needs, or a combination of all of them (Ritchie and Brindley, 2005). The different needs of the business lead to the categorization of the use of ICT.

Lucchetti and Sterlacchini (2004) categorize them into the following groupings: general-user, production-integration and market-oriented groups. Lucchetti and Sterlacchini further elaborate that the general-user group is where the basic technologies are used such as telephone, e-mail and Internet in order to carry out administrative functions of the enterprise, while the production-integration group is where ICT is tightly coupled with production of goods and functionality of the business. The market-oriented group is where ICT is used to market or communicate with the outside world.

2.3 ICT uses in Hotels

ICT changes rapidly in the hospitality industry and with globalisation becoming commonplace, a lot of hotels especially hotel chains find it necessary to have a proactive approach to ICT (Gabrielsson and Gabrielsson, 2003). One of the major systems that is being adopted by most hotels is a property management system (PMS) and this is:

“The single-site version of the central reservation system used by large hotel chains. In a single-site hotel, it will be used to handle reservations and to monitor the status of rooms. The PMS will often connect to other software applications such as accounting, telephone management or restaurant management” (Caterersearch, 2005, para 72).

As time has progressed such systems have developed the ability to interact and be integrated with other systems within the hotel and have become one system with many different options that can be added (Dehan, 2007). Property management systems, according to Viuker (2007), are becoming an integral part of most hotels in the world. Viuker argues that many hotels are now using their PMS to manage revenue and cover all aspects of their hotel including integration with Food and Beverage, Housekeeping, Maintenance and other areas of a hotel. Many hotels are also customising their PMS to suit their organisations (Albright, 2008). Small hotels, mostly referred to as ‘boutique hotels’, have employees that multi-task (Viuker, 2007). According to Khemsurov (2005), such establishments concentrate a lot on offering sophisticated

technologies in their rooms and do not have a PMS simply because they believe that a simple accounting package such as Mind Your Own Business(MYOB) is as good as these packages and can be customised to suit the organisation's demands. Standards in these boutique hotels differ considerably as some can be extremely luxurious and others of budget level (Khemsurov, 2005). These small establishments concentrate on giving the guest a level of personal service not seen in large sophisticated hotels that benchmark their service quality on ICTs (Van Hartesvelt, 2006).

According to Buhalis and Egger (2008), PMS play an increasingly important role in the overall operation of a hotel unit. Buhalis and Egger elaborate on the positives of PMS, which among others, include the ability to extract valuable reports about business performance. Bardi (2006), substantiates on Buhalis and Egger's (2008) claim, he explains that the rooms division, front office and food and beverages departments can feed data into a PMS and then reports can be generated on room availability or status, inventory and guest information. On the other hand, Breukel and Go (2009) argue that knowing capabilities of a PMS should help the employee operating the systems understand the value derived from such and the value they bring to the organisation. The duo, in their assertion, were trying to elaborate on the importance of in-depth training of staff in order for them to be fully aware of the applications of PMSs and their benefits. David (2007) recognises the importance of PMSs in that they enable operators to extract reliable and valuable information needed by strategists or General Managers to have a clear understanding of business functions, more informed decision making, and a better analysis of problems that may be recurrent in the business. David adds that PMSs should be able to generate accurate customer accounts in a timely manner. Regrettably, all the scholars (David, 2007; Breukel and Go, 2009; Buhalis and Egger, 2008; Bardi, 2006) failed to cover the applicability of such a well applauded software to small hospitality establishments. Their writings only cover the applicability of PMSs to chain hotels and large city hotels, and no mention is made of their applicability to a small remote four bed lodge.

The complexity of the hospitality business is explored by Tesone (2006), who labels the industry as a 'unique business'. Tesone bases his labelling on the way that the staff interact with the customers, and stresses that the relationship should be a faultless process to ensure customer satisfaction. According to Gale (2005), to avoid the faults, PMS comes into play as it is a systematic way of performing transactions within a unit. Gale (2005) and Perkins (2006) maintain that PMS's are here to stay; they are not going anywhere and will have positive impact on all hotels in their quest to retain or become competitive. Gale (2005) adds that integration of PMSs with accounting functions and other departments in a hotel is increasingly becoming more common and is the future of PMSs.

2.4 Functions by departments

ICTs and e-commerce offer many advantages to a hotel of any size. Lucey (2005), enumerates two major advantages of ICTs, one being increased effectiveness of a hotel as a result of cost decrease and revenue expansion. Another advantage, he says, is that of enhanced customer relationships quality due to speedy contact and dialogue with the customer through sound ICTs. Perkins (2006) illustrates that through the use of ICTs guests can respond to questions about their preferences for rooms, and whether they would require additional services beforehand such as airport transfers and payment methods for the duration of their stay. Use of ICTs by departments is explored in detail below.

2.4.1 ICT Applications in Front Office and Rooms Division Department

ICTs applications in the front office are centered on reservations functions. Tesone (2006) breaks the ICT functions within reservations to include emailing, telephone enquiry, web-based bookings, online payments of accommodation and confirmations through fax and emails. The greater function of ICTs in the

front office according to Wagner and Teixeira, (2014), has been publicized by the advent of Centralized Reservation Systems (CRS). This, according to Tesone (2006), is used to exploit data and information resources among participating hotels. Wagner and Teixeira, (2014), add that linking to a CRS is one of the greatest advantages of joining any hotel franchise. In support of Wagner and Teixeira, Lucey (2005) adds that networking the CRS lowers front office costs, speeds up communications, and enhances exchange of information between member hotels and efficient management of data. The benefits of CRS are further alluded by Knowles (1998), who states that CRS in a hotel chain or group supplies member hotels and their managers with a formidable asset to increase occupancy levels, maximize room sales, stir yield management, increase market share and improve guest services. Tesone (2006) explains the relationship between hotel CRSs and airline CRSs. The hotel CRSs, according to Tesone are linked to airline CRSs to form a Global Reservation System (GRS), in an effort to allow travel agents to make direct reservations for their clients. Despite the numerous positives of CRS, Knowles (1998) laments the unprecedented operational and guest services challenges associated with CRS such as system downtime, costs of affiliation and requisition of inherent technologies.

Baker, Huyton and Bradley (2006), explore other ICTs applications in any hotel set up of the 21st century. They point out that computers in hotel front offices are used to record bookings, generate bills and invoices, check-in and check-out guests, record guest general information and their expenditure and share information within departments and across the chain or group. Tesone (2006) highlights on the e-commerce function of ICTs in front offices. He appraises the advent of credit and debit card payments in the business environment. Baker, Huyton and Bradley (2006), explain that ITCs have become an integral part of front office operation today as guests can make payment for their bookings online or via speed point machines to facilitate their reservation, which saves time, reduces the risk of being robbed of large sums of cash and reduces queuing at front offices when going through the manual booking process.

2.5 ICT Functions in Restaurants

David, Grabski and Kasavana, (1996) demonstrate the relevance of ICTs in restaurant operations. They applaud the invention of an Electronic-point-of-sale-system (EPOS), which Buergermeister, (2001) defines as a device used to take and manage customers' orders electronically. This widely used device represent the core restaurant ICTs applications (David et al, 1996). An EPOS is designed to perform such functions as stock control, sending communication between waiters and the kitchen, generation of bills as well as the consolidation of sales data and reports (Buergermeister, 2001). In its set up, an EPOS system is composed of a number of terminals interfaced to a remote central processing unit (CPU) which is also known as back office systems. Back-office systems perform the administrative function of food cost analysis, staff scheduling and inventory and financial controls at the restaurant level (Ansah, Blankson, and Kontoh, 2012)

Buergermeister (2001) unpacks the applicability of EPOS in restaurant setup in detail. He begins by outlining the basic advantages of EPOS which include among others; the ability to reduce errors, save time hence improved customer service quality, satisfaction and personalization. For example, interfaces with customer databases enable staff to identify customers and call them by their names and that makes them feel important and recognised. He adds that EPOS improves communication among departments from order taking, production of food, service and payment for the bill. Buergermeister (2001) sheds light on the inventory management function if ICTs (EPOS). He asserts that inventory control system has been made easy and less of a hustle. The system automatically records and reports on stock levels, alerts the user to stocks that have hit their reorder level. In addition, food costs percentages can also be computed beforehand and this will assist in pre-costing menus for pricing before they are introduced. The table management systems (e.g. reservation, waiting list management, floor-plan, and table availability) show table status for

improving timing of service and speed up turnarounds (Buergermeister, 2001). Although different and many ICTs perform these restaurant functions (David et al, 1996), integration among them and with other adopted departmental ICTs for marketing, finance and security is extremely important to enable operations' efficiency and effectiveness.

2.6 ICT in Marketing Department

Marketing by definition, involves a variety of activities aimed at attracting potential customers through generating interest in the products and services on offer, and to stimulate repeat purchases (Kokt and Koelane, 2013). The digitalisation of information through the internet has, together with the increased use of ICTs, created a new concept of e-marketing. Contextually, e-marketing has a broader definition, as it includes many digital media components such as e-mail, websites, wireless media, and the electronic customer relationship management systems (E-CRM systems). It also includes the management of digital customer data (Cleofhas and Gibson, 2009). They also encourage all organisations to employ some form of ICT-based marketing programmes and communication as part of their overall marketing strategy. Consumers, according to Kokt and Koelane (2013), are becoming more technologically inclined and the prominence of ICTs in marketing is gradually increasing, leaving behind those who did not consider adopting the ICTs.

Ngai (2003) suggests that establishments should develop a user-friendly website with online promotional techniques and links such as search engines, email contact forms and banner advertising. Ngai further explains that an interactive website is a formidable marketing tool in that potential customers do not struggle to get information about products or services they require. Chester and Montgomery (2008), noted that businesses of late, are rapidly investing in three types of digital marketing, and these are online videos (for example: YouTube), social networks (for example: Facebook, Twitter and MySpace), and

mobile technology (for example: Blackberry and iPhones). Other widely used channels of digital marketing as noted by Ngai (2003), include banners, podcasting, video streaming and blogging.

2.7 E-commerce in South Africa- An overview

The importance of ecommerce in a developing country is highlighted by Ecommerce and South Africa (2014), in their assertion that it offers buyers maximum convenience through being able to visit websites of multiple vendors round the clock, to compare prices and make purchases, without having to leave the comfort of their homes or offices from around the globe. According to the website, the advantages of e-commerce are not just for consumers, as retailers also find out that there are advantages to selling online. Customers can shop in their own time, and an online store doesn't require additional sales staff. Even in South Africa, on an increasing basis, consumers turn to the internet to purchase products ranging from travel packages to clothing (Ecommerce and South Africa, 2014). The website adds that the launch of PayPal in South Africa and more internet penetration into the market means that there is greater possibility of an increase in ecommerce sites in the near future

-"Paypal is an international company offering an online payment system, it is a system used on the Internet which allows you to buy directly from a website and transfer money between yourself and someone else via email or between merchant, South Africa is the 190th country to get paypal accounts" (Ecommerce and South Africa, 2014).

The application of ecommerce in the greater part of South Africa especially in the cosmopolitan societies has been fueled by recent flooding of smartphones on the market, supplied by three largest mobile telephone companies namely Vodacom, Cell C and MTN. Fig 1 below portrays a sketch picture of what most consumers with smartphones in South Africa use their phones for with regards to ecommerce applications.

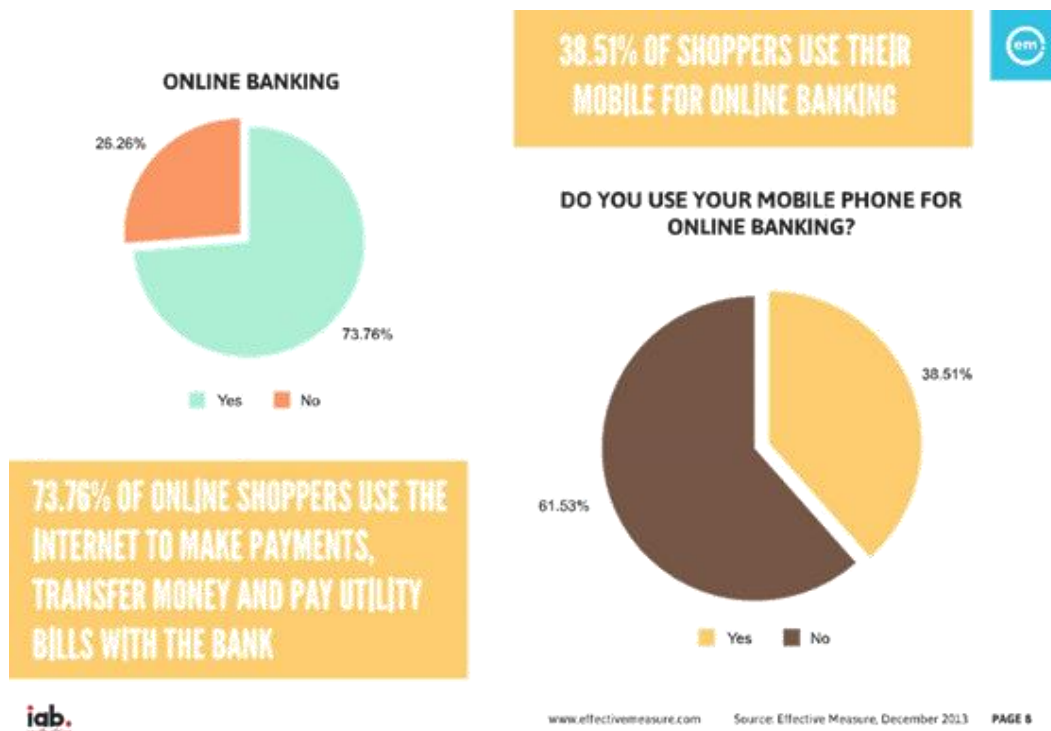


Figure 1: Ecommerce usage in South Africa

(Source: Effective Measure, December 2013, p8)

An analysis of the data displayed in fig 1 above confirms that the South African market is gradually making use of ecommerce for online shopping, however the data does not integrate the overall picture of ecommerce usage by the general populace. Shoppers are using mobile banking and online banking as major platforms to transact online. Looking at the South African e-commerce market, Bronkhorst (2014) highlighted that the country is projected to see 29.8 million Internet users by 2016, with a 25% increase in online spend anticipated in 2014. He also noted that, in 2014, South Africa is expected to have 80% smartphone penetration as mobile operators such as Vodacom and MTN are working to bring sophisticated devices to more people at a more affordable price. This revelation projects a promising future for South Africa's ecommerce adoption drive.

Factors that will affect the rise of ecommerce in South Africa were outlined (Ecommerce and South Africa, 2014), as follows:

- The launch of PayPal in South Africa: This will enable South African businesses to sell products and services to PayPal's global customer base of more than 81 million active users in about 190 markets around the world and move the proceeds to their FNB accounts. Briefly, this development will allow South African based online stores to trade in Rands at ease, but the service is limited to FNB bank users.
- The increase in online retail sales: According to AfricaOnline (2009) online retail sales surpassed the one billion rand mark for the first time in 2008 and were predicted to grow a further 20% in 2009.
- The penetration of internet in South Africa: The usage of internet in South Africa has by far exceeded the 5 million users' milestone, which is 10% penetration rate in the country
- Internet Speed: The speed of internet connectivity has a huge impact on the adoption and usage of ecommerce. "The arrival of Neotel's Seacom submarine fibre-optic cable will increase South African broadband access a staggering 40 times, making internet access cheaper and internet shopping more comfortable", AfricaOnline (2009).

All of the above outlined factors will play a greater role in getting the general populace exposed to online shopping. However there still remains one big question unanswered which is how quickly will the general populace accept the increase and popularity of online shopping, how soon will consumers trust online shopping and the security and part with giving out their credit card details? Early adopters of ecommerce in South Africa who have done things properly have certainly made a huge success out of it (Ecommerce in South Africa, 2014). The website comments that most of these adopters are larger companies who were able to get through the limitations of online transacting faced in South Africa. The playing fields have rapidly changed. Establishing an

e-commerce enhanced website is gradually becoming easier than it was before. They however acknowledge that this enables smaller parties such as small lodges and restaurants to jump into the limelight and grab their percentage of the market share.

2.8 E-commerce Challenges in South Africa

There are still a number of hindrances in South Africa, according to E-commerce in South Africa (2014), when it comes to setting up e-commerce. These hindrances include among others, capital or start-up costs, clear understanding of objectives, lack of online marketing, credit card processing limitations and maintenance. These 5 major problems, according to E-commerce in South Africa (2014), have become less of a problem over the past few years, but will continue to torment proprietors until the right education is provided:

1. Capital or Start-up Costs –These include all initial costs of putting together an e-commerce enabled website and all the necessary ICTs. Setting up a viable site requires the assistance of a professional as it is a technical area which can cost a lot of money (E-commerce in South Africa, 2014).
2. Understanding Objectives –. The website highlights that in order to run a successful ecommerce site, an organization needs to have a clear understanding of its objectives. This is noted as a serious problem as businesses end up with an irrelevant set up. The website however, suggests that businesses need to define their marketing plan, and come up with appropriate strategies that will advance their ecommerce adoption endeavour.
3. Lack of Online Marketing –Businesses in South Africa lack online marketing strategy. Without a strong online marketing strategy, the business according to Ecommerce in South Africa (2014), will struggle to

capture a market share. Services such as Search Engine Optimization (SEO), electronic Newsletters and Social Media are now an essential part of the marketing plan.

4. Credit Card Processing – Fortunately, this drawback is becoming less of a hindrance as the South African credit card providers, (Ecommerce in South Africa, 2014) are providing solutions that are less complicated. The website further recommends that when businesses choose a payment processor, they should be thorough about all the options available, specifically costs involved, banks they are aligned with and their requirements from the enterprise to get a merchant account. Some of the options available include PayPal, PayGate, MyGate, PayFast, iVeri, VCS, and PayFast.
5. Maintenance – One of the biggest challenges facing businesses that adopted E-Commerce website earlier is that of inability to maintain the system (Ecommerce in South Africa, 2014). The website adds that companies which purchase a theme and use an e-commerce plug-in often have problems when new upgrades are released. They find it regrettable that approaching a web design company for help results in huge costs, as the company will need to do an overhaul of the whole system.

2.9 The Adoption of ICTs and E-commerce by small establishments

Research, according to Samkange and Crouch (2008) indicates that countries that compete effectively on the global market place generally enjoy a technological advantage and these tend to be developed countries. The digital revolution sweeping across Europe, America and some Asian countries has altered the economic landscape and the business environment (Odedra, Lawrie, Bennet and Goodman, 1996). Samkange and Crouch emphasized that progressive business organizations in these countries have not only embraced electronic management (e-management) of information systems and technical

business operations but demonstrated the ability and capacity to adapt, implement and utilize ICT systems for best business practice carving niches for themselves on the global market place as their levels of productivity improved. They regret that business organizations in developing countries (DCs) continue to struggle technologically finding it increasingly difficult to make their mark on the same market place. Odedra et al (1996), noted that most businesses in less developed countries recognize the fierce global competition inherent with the trends in ICTs advancement, yet they struggle to keep pace with this development. Due to immense pressure to perform and survive in this hostile global economic environment, these organizations find themselves importing technologies from developed countries. There is a growing concern over the wholesale importation of ICTs by less developed countries raising questions about the suitability of such technologies to service the specific needs of small organizations in the less developed countries (Samkange and Crouch, 2008).

ICTs' adoption by small establishments can be stimulated or restrained by government's intervention, which apart from the suppliers, customers and competitors, is also viewed as an external source of pressure. According to Howell and Terziovski (2005), the Government plays a pivotal role in policy development, which is the main driver for any national ICTs development initiatives to promote e-business adoption by small establishments.

They add that in this role, the government works closely with other key stakeholders to leverage resources. In light of this important role, the government therefore comes into play as a knowledge dispersing and standard setting body (Seyal and Rahman, 2003). Howell and Terziovski (2005), note a very interesting point with regards to the relationship between the role played by the policy maker and demand for intervention by small establishments. They reveal that the demand for intervention and support for ICTs adoption by small establishments may indicate whether policy-makers are playing a leadership role or a facilitative role. If there is a strong demand for ICT in any given

business environment, small establishments and the broader community are likely to adopt ICT as initiators, centres of influence or champions of change.

Smallbone and Welter (2001) focus on the role played by government in stimulating ICTs adoption in the private sector. They argue that the direct support interventions are not the primary role for government in promotion of ICTs adoption. They stress that the government should create the conditions necessary (through policies) for the development of the private sector with the intention to support growth and sustainability, particularly in the adoption and development of ICTs and e-business.

Can small establishments be set up, survive and even grow without government's direct intervention? On addressing this issue, Smallbone, Leigh and North (1995), note that this is made possible by the commitment and creativity of proprietors in mobilizing resources and flexibility in adapting to hostile external environments.

2.10 Limitations to ICT adoption

Small establishments are faced with many challenges in their quest to adopt ICTs. Ngwenyama and Morawczynski (2007) note that most businesses assume that ICTs will irrevocably bring about tangible benefits, turning a blind eye on the fact that not all environments are the same. The factors affecting successful adoption of ICTs according to MacGregor and Vrazalic (2006) are both socio-economic and technological. They point out that these hindrances can be stimulated by factors external and/or internal to the organization. Herselman (2003), notes that most people in South Africa's rural areas live below subsistence levels and remain impoverished due to lack of access to basic infrastructure essential for economic growth and development.

Outlined below are some of the limitations noted that prevent small establishments from adopting ICTs:

- Martin (2005) considers the lack of knowledge about the strategic use of ICT as the major barrier to adoption. Martin regrets the lack of knowledge by owner managers and proprietors about the benefits of ICTs adoption. He explains that this challenge is due to the fact that the owner (who usually manages the business) makes most of the executive decisions about the business and therefore the owner or manager's limitations consequently become limitations of the business.
- Mutula and Van Brakel (2007) note that lack of necessary IT skills-base is another serious barrier to ICTs adoption by small establishments. They suggest that the adoption of ICTs by the small business largely depends on the owner or manager's ICT skills and attitude towards technology.
- High setup cost or capital injection according to Herselman (2003), is another major limitation to adoption. Herselman suggests that ICTs adoption is perceived to be very expensive by small business so they often skip it in their budget. He identifies types of costs associated with ICTs: tools (hardware), software, connectivity, maintenance and other hidden costs such as license fees for software and programs, and upgrade fees.
- MacGregor and Vrazalic (2006) explore the dynamics (ever-changing ICTs environment) as a limitation to adoption. They regret the ever-changing ICTs environment, which requires adopters to constantly learn and update their technologies. They add that technology is constantly evolving, getting smarter, faster and more powerful. This calls for the need to monitor technologies as they constantly evolve into the future. The owner managers and the staff need to be motivated to accept and embrace changes as well as kept excited enough to have an interest in the changes as they unfold.

- Ngwenyama and Morawczynski (2007) highlight on the issue of geographical disparities as a limitation to adoption. They illustrate the South African dilemma in this regard, noting that the country faces an internal digital divide caused by underdeveloped rural areas as compared well-developed cosmopolitan societies like Johannesburg and Pretoria. The rural areas have an acute shortage of resources and infrastructure, for example there are no proper address systems and fixed telephone connectivity is still a huge problem although cell phone usage is high.

Having noted all the positive impacts of ICTs on the hospitality industries, it is important to allocate funds for the procurement of hardware, software and networking devices and their installation, security concerns, staff development and training on the use of systems, and routine maintenance (MacGregor and Vrazalic, 2006).

2.11 Summary

This chapter reviews related literature pertaining to the application of ITCs and e-commerce in the hospitality industry and related studies on remote establishments in Africa and other continents. The major drawback the researcher faced was limited literature on adoption and utilization of ICTs by small hospitality establishments in South Africa. Abundant literature available is for chain hotels in developed countries and not for small establishments in developing countries. Information obtained about other small businesses in developing countries, excluding South Africa helped to clarify what the situation could be with regards to adoption of ICTs by small hospitality establishments in South Africa. Various authors have contributed a lot of information, which helped the researcher to have clearer insight in the study.

Research on the applications of ICTs in developing countries with specific reference to the hospitality industry is still lagging behind. In this chapter, reviewed literature also covered the projections made by scholars on the future of ICTs adoption and utilisation in South Africa in general, with little effort to forecast on adoption by geographical location. Most of the existing studies and projections made, are for cosmopolitan societies, which made it very difficult for the researcher to link available literature to the phenomenon under study.

In the next chapter, the methodology employed in this project will be detailed. Although it is a broad chapter, effort will be made to clarify the research design adopted, the approach employed and subjects (the population) under study introduced. Discussion of research instruments chosen: the questionnaire, interviews and observations, will be undertaken.

CHAPTER 3- RESEARCH METHODOLOGY

3.0 Introduction

The three terms (methodology, method, and technique) are usually used interchangeably, but various authors (Babbie, 1998; Leedy, 1997; Saunders, Lewis and Thornhill, 2007) differentiate the two main terms (methodology and methods). Babbie (1998) defines research methods as a set of tools or techniques used to conduct a research and these include experimental methods, survey methods, observation methods, documentary analysis methods among others. Leedy (1997) argues that research methodology is the discipline or whole strategy of the research that utilizes these methods. In simpler terms, the methodology is the grand plan under which the methods to be employed fall.

In the previous chapter (Chapter 2) literature and information from previous studies were reviewed to enlighten the researcher about findings from similar studies. This chapter will deal with the grand plan of how the actual work of research will be carried out.

It explains how the research methodology (the grand plan) was formulated and the subsequent methods to be used in the research. It examines the form or design of the study, the population, sampling procedures and instruments of data collection. The chapter also justifies the use of chosen instruments, thus giving their advantages and disadvantages, and indicates the relevance of the instruments selected to the study.

3.1 Research Design

This is the overall grand plan describing procedures of data collection, interpretation and analysis. It outlines specifications for enhancing internal and external validity of the design, further providing details about the respondent, conditions and the actual process of conducting the study.

The methodology chosen for this research was mixed model research. Saunders, Lewis and Thornhill (2007:146 – 147) state that,

“Mixed model research combines quantitative and qualitative data collection techniques and analysis procedures as well and combining quantitative and qualitative approaches at other phases of the research ... you may take quantitative data and qualitis it ... Alternatively you may quantitise your qualitative data”

The reason for using mixed methods was to collect both qualitative and quantitative data simultaneously, combine the data, and use the overall result to understand the research problem (Creswell, 2008). In addition, Babbie (1998) points out the existence of an inherent risk in qualitative research, that of selective perception; where the researcher only takes cognisance of elements that support the theoretical conclusions. On the other hand, Babbie (1998) advises that this danger may be avoided to a certain degree by complementing quantitative observations with qualitative ones. Mixing methods enhance the credibility or accuracy of the study (Creswell, 2008).

3.2 Research approach

A multiple case study research approach will be adopted in this study. This approach facilitates exploration of a phenomenon within its context using a variety of sources. This therefore ensures that the issue is not explored through one lens but through a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (Baxter and Jack, 2008). Three case areas within the Natal Midlands which include the Curry’s Post, Nottingham Road and Lions River areas will be examined in relation to the phenomenon under study. Each of the three areas represent a case area and in total there are three case areas combined together to come up with a bigger case representing the whole the Midlands. These three remote case areas have small hospitality organisations ranging from restaurants, lodges, small hotels and wedding venues. This therefore positions them as primary data sources of this particular study. There are a number of advantages of using qualitative

case studies. According to Yin (1994), the examination of data in a case study is often conducted within the context of its use. In addition, the detailed information often produced from case studies does not only help to describe the data in real life set up, but also helps explain the ramifications of real life situations which might not have been captured through a survey or experimental research (Zaidah, 2003).

3.3 Subjects (Study Population)

The population for the study was carefully chosen, defined and specifically delimited in order to set precise parameters for ensuring discretion. Entiwhistle and Nisbet (1970:24) define population as “any group of people or observations or test items in which we happen to be interested”.

In this study the target population was small hospitality establishments in the Natal Midlands, KwaZulu-Natal and South Africa. A total of twenty-four participants were drawn from all three case areas to participate, representing the greater Midlands.

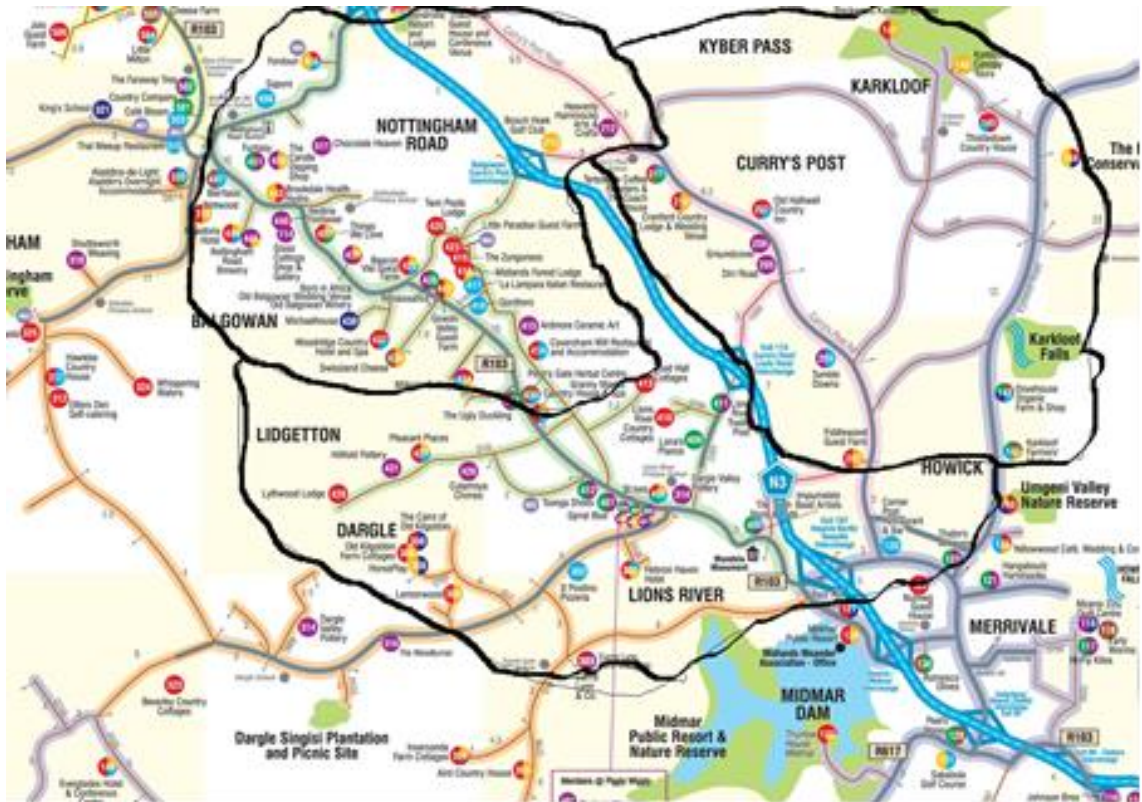


Figure 2: Location of all 3 case areas (Curry's Post, Nottingham Road and Lions River) in the Midlands

(Source: Adapted from www.midlandsmeander.co.za)

The three case areas are circled on the map displayed above on figure 2. They are Nottingham Road on the north western section, Curry's Post on north eastern section while Lions River is on the southern part.

3.4 Sampling Procedures

Sampling is defined by Babbie, (1998) as a process of selecting a portion a population that is considered to be normally representative of the entire population. According to Creswell (2008), a target sample is particularly a group of people with a common defining characteristic which a researcher can identify and study. Within this target population, researchers will, due to various factors, choose a sample. Specific sampling techniques, as noted by Babbie (1998), allow the researcher to determine beforehand the likelihood of specific elements being included or excluded in the entire study population. Sample size and its representativeness of the entire population according to Creswell (2008), is a

basic consideration in sampling. A sample is considered representative if the aggregate characteristics of the sample closely approximates the same characteristics as the population relevant to the research in question (Babbie, 1998).

The researcher used purposive sampling method to select a sample of managers/owners in the selected areas. The major advantage of this type of sampling according to Marshall and Rossman, (2006), is that the researcher will purposefully target a sample of participants with expertise to answer the research questions. The participants provided data on the adoption of ICT and ecommerce in small hospitality establishments, applications, importance and challenges of acquisition and use/ maintenance inter alia. Findings were valid because the sampling targeted the core area under study. The sample was representative, as it comprised eight establishments per case area paired as follows; two wedding venues, two lodges, two restaurants, and two curio shops from three areas in the Natal Midlands namely Curry's Post, Nottingham Road and Lions River.

With this method it was easier to collect information economically. Also, the carefully chosen sample permitted making inferences and generalizations and drawing conclusions about the entire population by applying the evaluation only to the sample.

3.5 Research Instruments

Interview and questionnaires were used to collect data. The use of interviews and questionnaires was deemed appropriate for the elimination of weaknesses and enhanced validity and reliability. The two methods of data collection mentioned complement each other because of the shortcomings inherent in the questionnaire, such as it can only work with literate participants and the percentage rate can be very low at times.

3.5.1 The Questionnaire

The questionnaire was divided into five sections related to (Demographics, ICT tools and ecommerce functions in use, Software connectivity and interface, importance and challenges). Both the closed and open-ended questions were used. This helped the participants to make contributions that they considered to be important. This was considered to be particularly relevant as the perceptions; attitudes, knowledge and skills of the respondents were key to the success of this study. The combination of both closed and open-ended questions was seen to be appropriate, as this offset the weaknesses and strength of each method. As an instrument, questionnaires facilitated the collection of data from samples whose geographical location was far away. Because of the nature of questionnaire, this gave participants opportunities to express personal views freely as well as completing the questionnaires during their free time.

Bless and Higson-Smith (1995:120) highlight the main disadvantage of questionnaires: "Questionnaires have the disadvantage of being difficult to interpret subjects' response, difficult to check that the subject understands the question and there is a possibility of low response."

The questionnaire had the following major factors:

- There was limited time to collect data from the respondents. The questionnaire helped to establish a wide coverage of the population timeously within a manageable financial cost and effort.
- The questionnaire also maintained anonymity of the respondents. This helped the respondents to feel free to provide accurate information without fear or favour.

Questionnaires were handed to the proprietors and managers of hospitality establishments who participated in the completion of the questionnaire for three weeks. The respondents were requested not to post the questionnaires, as the researcher personally collected them at an agreed date and place. This

ensured that most of the questionnaires to be returned for data analysis. From the 8 targeted hospitality establishment in each case area, responses were obtained through both questionnaires and interviews although some questionnaires were incompletely answered. However, quantifiable information from the questionnaires was solicited.

3.5.2 Pre-testing of the Questionnaire

Pre-testing testing enables the researcher to obtain some assessment of the questions' validity and the reliability of the data collected. If no pre- testing is carried out, the chances of the questionnaire being misunderstood, having inadequate responses, errors and containing unreliable answers will be very high. The pre-testing of the questionnaire was conducted on two proprietors. The two proprietors did not take part in the eventual study.

3.5.2 Interviews

The second tool applied was the face-to-face and telephone interviews. According to Cohen, Manion, & Morrison (2001), interviews are an additional means of gathering information directly from respondents either through face to face or over the telephone. Saunders et al, (2007) applaud interviews in that they give the researcher an opportunity to clarify meanings, thereby developing common understanding as well as capturing more interpretations of the matter at hand.

Follow up interviews with key personnel (Managers and owners of lodges and wedding venues) were done to further enrich the data collection process. These interviews were crucial in the sense that they enabled differences in perception that were highlighted during the questionnaire analysis. The interviews were conducted with property managers. Each interviewee was allocated thirty minutes, to maintain concentration of both the interviewer and interviewees, as well as subjectivity. Robson (1993), suggests that interviews should be short. He adds that an interview under half an hour long is likely to be valuable,

anything going above an hour may be uncomfortable to the interviewees as they might be having busy schedules of their own. This weakness could have an effect of reducing the number of individuals willing to participate, which may lead to bias in the sample.

The interviews were being conducted in order to not only allow respondents to elaborate their views, but to also provide opportunities to probe and solicit for other opinion. Interviews allowed for elaboration of questions by the researcher which the respondents would not have understood. Borg (1989) asserts that the use of an interview, as a research tool is unique and that it involves the collection of data through direct verbal interaction between individuals. This established a friendly, secure and trusting relationship resulting in the respondent giving out certain confidential information that might otherwise have not been released if asked to write. The main advantage of an interview is its flexibility and adaptability as way of finding things out as the interviewer can alter the interview to suit the situation. Face to face interviews offer the possibility to modify the researcher's line of enquiry, follow up on interesting responses from interviewees as well as investigating the underlying motives; something questionnaires cannot do (Borg, 1989). He suggests that by conducting interviews, researcher is able to observe non-verbal expressions of the respondents, which may help in understanding the verbal responses. The interview also, allowed the researcher to follow up leads thus, obtain more in-depth, data and greater clarity. Borg (1989) outlines the disadvantages of interviews as follows:

- The presence of the interviewer makes interviews lack anonymity and as a result the interviewee might tell the interviewer what they think they want to hear.
- The interview is also costly in terms of time and money to travel; the researcher could miss the interviewee even after making appointments.

- The weakness of the interview will be minimized by clearly explaining the purpose of the study on the selected people.

In this study the interview was chosen to understand the effect of ICT and ecommerce on customer satisfaction with reference to the responses provided to the questionnaire property managers. Saunders et al, (2007) identified three types of interviews that can be used as research tools and these are, unstructured interviews, structured interviews and semi-structured interviews. The structured interviews are the ones that include a series of closed form of questions similar to those used in questionnaires. In this study, structured interviews were conducted with both managers and proprietors. The instruments comprised of fifteen questions.

3.6 Reliability and Validity

An attempt was made to validate and determine the reliability of the research instruments when determining instruments adoption on the problem under investigation. With regards to the questionnaire, it is difficult to ascertain that participants would properly understand and accurately respond to the questions (Seliger and Shohamy, 1989). In light of this predicament, a semi-structured questionnaire with a high degree of closed questions was crafted as these were “deemed to be more efficient than the open ones” (Seliger and Shohamy, 1989, p. 173). Regrettably, Marshall and Rossman, (2006) point out that closed questions have limited ability in capturing the rich descriptive experiences of respondents

Accordingly, this weakness was counterbalanced by incorporating some open-ended questions in the questionnaire to afford the respondents a chance to be in control of the situation and write freely in their own words (Saunders et al, 2007).

The actual number of the open-ended questions in the questionnaire was limited since such questions invariably fuel a lot of repetition and supply of

irrelevant information which takes unnecessarily long time to sift through (Seliger and Shohamy, 1989). To prevent participants from becoming disconcerted by shifting from one topic to the next and back in the questionnaire, the questions were all grouped into systematic categories and logically sequenced with section headings (Saunders et al, 2007).

De Vos, Strydom, Fouché, and Delpont, (2005), warn that it is extremely important that the researcher minimize the amount of irrelevant information in the interviews. Seliger and Shohamy, (1998) recommend that the best possible way to minimize gathering irrelevant information is by preparing several open-ended questions before the interview in form of a semi-structured interview process with specific and defined questions developed beforehand. Hence the interviews (see Appendix B attached) focused mainly on responding to the research questions in an effort to minimise irrelevant information gathering and overloading of data that might have resulted in compromised data and affecting its reliability and validity (De Vos et al, 2005).

Seliger and Shohamy, (1998) noted that the response from questionnaires submitted may be very low, if the researcher does not make an effort to collect them by hand. To avoid this weakness, collection days were scheduled, on which all the completed questionnaires were hand collected on agreed dates. The use of interviews and questionnaires simultaneously allows triangulation to enhance reliability and validity of data (Saunders et al, 2007). Similarly, De Vos et al, (2005) warns that interviews may have their own constraints such as interactions between researchers and respondents can lead to biases such as; the interviewee eager to please the researcher; and there is a tendency by the researcher to seek answers that support pre-conceived emotions. To counter-balance this problem, the researcher kept the interviews short and professional as guided by suggestions from several scholars (Saunders et al, 2007; Seliger and Shohamy, 1998; De Vos et al, 2005).

From the respondents' point of view, De Vos et al (2005) noted that some respondents may not understand parts of the questionnaire resulting in them

failing to interpret it correctly and accurately. The researcher was aware of this weakness of the questionnaire as an instrument for data collection. There is need to back up the questionnaire to make up for the reluctance and inadequacy in the responses from the respondents, hence the researcher scheduled follow up interviews with the respondents.

3.7 Data Analysis

Data analysis comprised seeking patterns of responses and ascertaining causal linkages of responses to provide a more solid descriptive narratives of participants' perspectives on the use of ICTs for effective marketing and management in their establishments. The data collected for analysis in this research project consisted of:

- The questionnaire responses
- Notes written of interviews conducted
- Observation notes on establishments visited for first-hand information by the researcher

A mixed method approach using multi-case studies was utilized to study the characteristics of all individual groups in a real-world. According to Creswell (1998), mixed methods research entails the collection, the analysis, and mixing of both qualitative and quantitative data. This approach suggests that employing both types of data collection will result in a better understanding of the research problem than one data collection method alone could produce.

A preliminary exploratory analysis of the data was conducted through ducking into data in its entirety in an effort to obtain a general sense of the data, and considering whether the researcher would need more data or not (Creswell, 1998).

Quantitative data gathered from the questionnaires were analysed using the Excel from Microsoft Office Tools of Windows 8.1, which through formulae

grouped the frequency distribution into tables. According to De Vos et al, (2005), descriptive statistics describe the organizing and summarizing of quantitative data. De Vos et al further explain that tabular presentation of data serves to reduce data to a more interpretable form thus providing an opportunity for less sophisticated analysis.

Statgraphics Centurion 15.1 (2010) and Microsoft Excel 2013 were used to prepare the following graphical presentations from the tabular data prepared:

- Bar charts, being either horizontal or vertical bars and in different forms, with various levels of complexity, (Seliger and Shohamy, 1998)
- Pie charts, these are widely used to show divisions between groups, people or spending (Seliger and Shohamy, 1998)
- Cross-tabulations, were used to show data obtained from observations made in the field.

According to De Vos et al, (2005) graphic presentations help researchers to comprehend the most important features of frequency distribution as well as helping with comparative analysis of the data. In qualitative research, Seliger and Shohamy, (1998) maintains that the researcher seeks to narrate someone else's story hence the researcher has to be attentive to words and phrases said in participant's own vocabulary.

De Vos et al, (2005) limited the task of the "observer" to inferring what that reality on the ground must be. Observations conducted in this study provided first-hand chance to see ICT adopted by hospitality establishment in the three selected case areas, giving the researcher an opportunity for further research probing participants for their recollections, interpretations and points of view (Seliger and Shohamy, 1998). Cresswell, (1998) defines inference as a systematic process of arriving at a conclusion. The central question of the study was qualitative in nature and therefore necessitated open ended questions in

the questionnaire, interviews and observations. Inferences of meanings were automatically drawn from the observations.

3.8 Summary

This chapter disclosed the framework of the research study, which is the methodology that was used in the study (Mixed model research). It further outlined and provided motivation for the research design, sampling and research method selected as they were deemed most appropriate. The questionnaire, face-to-face, and telephone interviews were the selected methods. Also, there was a discussion of the pros and cons of the various instruments used.

A cross examination of the reliability and validity of the data obtained from the field was done. Related literature was reviewed to support academically the fact that indeed data obtained was valid and reliable. Instruments used in this exercise were also discussed and these included among others software and graphical presentations

The chapter touched briefly on the population to be examined and gave a brief explanation on sampling procedures that were followed.

The following chapter (Chapter four) deals with data presentation and analysis. In this chapter, data obtained from the field in various forms such as graphs, charts, descriptions and tables among others, is presented. The findings from the research are interpreted and simplified where necessary.

CHAPTER 4- DATA PRESENTATION AND DISCUSSION

4.0 Introduction

In the previous chapter, the grand plan of the research was explored. and the master plan of the research was detailed from the design chosen, sampling techniques, the population composition, data collection instruments and the verification of data reliability. All the research done in accordance with the formula explained in chapter three is presented in detail in chapter four.

This chapter presents data that was collected from the field. The study makes an attempt to “Analyse the use of ICT and e-commerce for effective management, Marketing and customer service quality in small remote hospitality establishments: A case study of the Natal Midlands, KwaZulu-Natal”.

Descriptive statistical data was used because of its suitability in providing a clear reflection of the findings of the research. Creswell, (2003) advises that descriptive statistics enable one to describe and summarizes the measurement of observations and opinions of the population under study.

For statistical analysis, data was entered into the computer using Excel and Statgraphics Centurion. Data was categorized and computed using formulas and tables to produce graphs and pie charts to illustrate and categorize responses. This information was used to rate responses obtained from the fieldwork. Furthermore, qualitative details presenting insights into the answers to the problem under the analysis were captured.

4.1 RESULTS: PRESENTATION AND DISCUSSION

Background information of cases and their location in the Midlands

The three case areas were located in the Midlands region, between two small towns called Howick and Mooi River, both under Umngeni and Mooi- Mpofana local municipalities respectively, uMgungundlovu District of KwaZulu-Natal

Province. The specific locations of Curry's Post, Nottingham Road and Lions River areas are shown in Figure 3 below.



Figure 3: Location of the three case areas namely Curry's Post, Nottingham Road and Lions River.

(Source: Adapted from www.midlandsmeander.co.za)

Thousands of international and local tourists traverse the Midlands Meander each year due to its uniqueness. Information documented suggests that around 1985 artists, weavers and potters from the Midlands joined forces and created an arts and crafts route. Later on, about six art studios opened their doors to the public hence the inception of the Midlands Meander, which is also regarded as the 'arts and crafts route'. Over the years, the Midlands Meander has progressively grown to harbour 160 plus places to shop, play, eat and drink,

sleep, as well as a fascinating and diverse mix of arts and crafts (Midlands meander, 2014)

The Midlands is the major tourist hotspot in KwaZulu-Natal. From a contextual point of view, drawing cases and participants of a study from such a highly thriving environment characterized by huge numbers of guest arrivals; active marketing support (The Midlands Meander Association) and the easy availability of business information, helped the research with valuable insights and in-depth analysis of selected small businesses on their potential to adopt and utilize ICTs in South Africa.

Restaurants

A total of six restaurants were included in the study. Two restaurants were drawn from each of the three case areas making them six in total. Table 4.5 below tabulates basic information about each of the six restaurants that participated in the study. For purposes of anonymity, a unique systematic naming method was used to identify establishments. Restaurants from Curry's Post were named CP R1 (meaning Curry's Post Restaurant 1) and CP R2 (meaning Curry's Post Restaurant 2). This system was developed to protect the identity of participating establishments. NR R1 means Nottingham Road Restaurant 1, NR R2 means Nottingham Road Restaurant 2. LR R1 means Lions River Restaurant 1, while LR R2 means Lions River Restaurant 2.

Three of the six restaurants are quite small with a seating capacity averaging 31 customers at a time while the other three are bigger, with seating capacities of 50, 65 and 80 customers. Both restaurants from the Curry's Post area are owner managed, as well as one from Lions River and one more from Nottingham Road. The remaining two are run by an employed manager and not by owners. Two of the six restaurants specialize in certain foods, one specializes on steaks hence branding themselves as a 'Steak House' while the other ones do bistro and pancakes.

Two restaurants only serve breakfast and lunch, while the other two serve all meals, which is breakfast, lunch and dinner. The last two restaurants serve lunch and dinner only.

Table 1: Summary of background information for Restaurants in Curry's Post

	Name of Establishment	CP R1	CP R2
Case	Type of Establishment	Restaurant	Restaurant
	Location	Curry's Post	Curry's Post
	Number of Employees	8	6
	Background		
	Seating Capacity	36	65
	Number of Dining rooms	2	3
	Information		
	Serving	Breakfast and Lunch	Lunch and Dinner
	Specialisation	Bistro and Pancakes	no
Years in Business	12	5	
Identification of guests (%)	Local	70	55
	Foreign	30	45

(Sources: Interviews, observation and Questionnaires)

Table 1.1: Summary of background information for Restaurants in Nottingham Road

	Name of Establishment	NR R1	NR R2
	Type of Establishment	Restaurant	Restaurant
Case	Location	Nottingham Road	Nottingham Road
Background	Number of Employees	13	12
	Seating Capacity	80	50
Information	Number of Dining rooms	3	1
	Serving	Lunch and Dinner	All meals
	Specialisation	Steaks	No
	Years in Business	6	18
Identification of guests (%)	Local	35	40
	Foreign	65	60

(Sources: Interviews, observation and Questionnaires)

Table 1.2: Summary of background information for Restaurants in Lions River

	Name of Establishment	LR R1	LR R2
	Type of Establishment	Restaurant	Restaurant
Case	Location	Lions River	Lions River
Background	Number of Employees	7	9
	Seating Capacity	25	30
Information	Number of Dining rooms	1	2
	Serving	Breakfast and Lunch	All meals
	Specialisation	No	
	Years in Business	7	9
Identification of guests (%)	Local	40	50
	Foreign	60	50

(Sources: Interviews, observation and Questionnaires)

The clientele base of all six restaurants is largely drawn from international tourists flocking the midlands for its beauty and abundant activities to enjoy. Only two of the six restaurants indicated that locals constituted a larger portion of their customers (averaging 62.5% being locals and 37.5% being foreign clients). The managers of these two restaurants (CP R1 and CP R2) mentioned that most of their clients on Friday which is their busiest day are guests attending weddings at nearby wedding venues. Data indicates that business over the weekend for these restaurants is drawn by people coming to attend weddings in the area.

Table 2: Summary of background information for Wedding Venues in Curry's Post

	Name of Establishment	CP WV1	CP WV2
	Type of Establishment	Wedding Venue	Wedding Venue
Case	Location	Curry's Post	Curry's Post
Background	Number of Employees	23	15
	No. of Reception Venues	1	2
Information	Chapel on Site	Yes	Yes
	Star Grading	Not graded	Not Graded
	Number of Beds	35	16
	Years in Business	8	11
Identification of guests (%)	Local	90	85
	Foreign	10	15

(Sources: Interviews, observation and Questionnaires)

Table 2.1: Summary of background information for Wedding Venues in Nottingham Road

	Name of Establishment	NR WV1	NR WV2
	Type of Establishment	Wedding Venue	Wedding Venue
Case	Location	Nottingham Road	Nottingham Road
Background	Number of Employees	28	14
	No. of Reception Venues	3	2
Information	Chapel on Site	Yes	Yes
	Star Grading	4	4
	Number of Beds	40	25
	Years in Business	16	10
Identification of guests (%)	Local	65	80
	Foreign	35	20

(Sources: Interviews, observation and Questionnaires)

Table 2.2: Summary of background information for Wedding Venues in Lions River

	Name of Establishment	LR WV1	LRWV2
	Type of Establishment	Wedding Venue	Wedding Venue
Case	Location	Lions River	Lions River
Background	Number of Employees	26	15
	No. of Reception Venues	3	1
Information	Chapel on Site	Yes	Yes
	Star Grading	4	4
	Number of Beds	40	29
	Years in Business	11	6
Identification of guests (%)	Local	90	75
	Foreign	10	25

(Sources: Interviews, observation and Questionnaires)

Six wedding venues were selected, two from each case area to participate in the project. A similar unique naming system to the one used above on restaurants was adopted. CP WV1 means Curry's Post wedding venue 1, CP WV2 is Curry's Post wedding venue 2, NR WV1 means Nottingham Road wedding venue 1, and LR WV1 means Lions River Wedding Venue 1. CP WV1 is a family run business, the owners who originate from the UK bought the venue in 2007, and the daughter coordinates weddings. The business is doing well and the setup is formal with sectional heads employed. NR WV2 is owned by partners who employed a general manager to run it on their behalf. It's a 4 star graded popular wedding venue. 80% of the couples booking to getting married at this venue are locals from within South Africa while the other 20% are foreigners from countries like the UK, Canada and Australia. Both venues from Curry's Post are not graded, while the other 4 venues are all 4 star graded. All venues have a chapel on the property, have accommodation on the premises and some have more than one reception venue on the premises.

Table 3: Summary of background information for Lodges in Curry's Post

	Name of Establishment	CP L1	CP L2
	Type of Establishment	Self –Catering	B&B Lodge
Case	Location	Curry's Post	Curry's Post
Background	Number of Employees	4	7
	Number of Rooms	8	10
Information	No of Beds	12	10
	Star Grading	0	3
	Years in Business	5	8
Identification of guests (%)	Local Guests	35	5
	Foreign Guests	65	95

(Sources: Interviews, observation and Questionnaires)

Table 3.1: Summary of background information for Lodges in Nottingham Road

	Name of Establishment	NR L1	NR L2
	Type of Establishment	Self-Catering	Guesthouse
Case	Location	Nottingham Road	Nottingham Road
Background	Number of Employees	2	9
	Number of Rooms	6	10
Information	No of Beds	8	12
	Star Grading	3	4
	Years in Business	8	6
Identification of guests (%)	Local Guests	20	10
	Foreign Guests	80	90

(Sources: Interviews, observation and Questionnaires)

Table 3.2: Summary of background information for Lodges in Lions River

	Name of Establishment	LR L1	LR L2
	Type of Establishment	Country Lodge	Lodge
Case	Location	Lions River	Lions River
Background	Number of Employees	11	6
	Number of Rooms	12	8
Information	No of Beds	14	12
	Star Grading	4	0
	Years in Business	4	13
Identification of guests (%)	Local Guests	10	30
	Foreign Guests	90	70

(Sources: Interviews, observation and document analyses)

Six lodges were selected from all the three case areas (two from each area) to represent the accommodation sector of the broad hospitality industry. A similar

unique identification system was used to anonymously name the establishments. A combination of self-catering, bed and breakfast and guest house establishments were incorporated into the study. CP L1 is a family run and owned self-catering lodge in Curry's post. It was formerly a pig rearing farm that was later turned into a guest farm. It is however not star graded. 65% of their visitors are foreigners while the other 35% is composed of locals, people from within South Africa. NR L2 is a 4 star graded guest house in the Nottingham Road area. It is owned and run by an Afrikaans couple who bought the place about six years ago. LR L1 is a 4 star graded Country Lodge in Lions River with 12 rooms all en-suite. "Most of the weekend occupancy is drawn from people attending weddings at venues within the Midlands" (CP L1, Owner Manager). Midweek days are however filled by locals on holiday, but overall foreign guests constitute a larger fraction of the total arrivals. All establishments used in the research are relatively small with an average of 9 rooms for each lodge and an average of 11 beds per establishment.

Table 4: Summary of background information for Curio shops or Crafter's Markets in Curry's Post

	Name of Establishment	CP CS1	CP CS2
	Type of Establishment	Leather Co.	Curio Shop
Case Background Information	Location	Curry's Post	Curry's Post
	Number of Employees	6	2
	Years in Business	18	6
Identification of guests (%)	Local	10	5
	Foreign	90	95

(Sources: Interviews, observation and Questionnaires)

Table 4.1: Summary of background information for Curio shops or Crafter's Markets in Nottingham Road

	Name of Establishment	NR CS1	NR CS2
	Type of Establishment	Art Gallery	Arts Centre
Case Background Information	Location	Nottingham Road	Nottingham Road
	Number of Employees	6	5
	Years in Business	11	5
Identification of guests (%)	Local	3	20
	Foreign	97	80

(Sources: Interviews, observation and Questionnaires)

Table 4.2: Summary of background information for Curio shops or Crafter's Markets in Lions River

	Name of Establishment	LR CS1	LR CS2
	Type of Establishment	Crafter's Market	Curio Shop
Case Background Information	Location	Lions River	Lions River
	Number of Employees	3	2
	Years in Business	10	7
Identification of guests (%)	Local	10	5
	Foreign	90	95

Sources: Interviews, observation and Questionnaires

Tables 4, 4.1 and 4.2 above outline the background information of six curio shops/ crafter's markets that participated in this research project. Two shops or establishments were chosen from each of the three case areas under study. A

unique identification system was used to name the shops, CP CS1 means Curry's Post Curio Shop 1, NR CS1 means Nottingham Road Curio Shop 1 and LR CS1 means Lions River Curio Shop 1. CP CS1 is a family run leather company with a proper business structure. Most of their products are exported abroad. It is one of the oldest pioneers of art and craft in the area. It is situated on their farm, production happens there and there is also a shop selling all their products and a few that they order elsewhere. The composition of their clientele base is 90% foreign customers and 10% local customers. Operators bemoan stiff competition from cheap imports, one operator had this to say;

"The advent of Chinese products and Malls has killed our local market to almost non-existent" (NR CS1, Owner Manager

ICTs adopted by participating establishments

ICT systems were generally adopted by the hospitality establishments in the Midlands of KZN, South Africa as a tool to achieve business operational efficiency. Findings were tabulated into groups of six restaurants, six lodges, six wedding venues and six curio shops as shown in Tables below. Findings will be discussed in their individual groupings. The questionnaires administered and interviews conducted had a section dedicated to finding out the actual ICTs adopted by individual establishments.

The first question across the board in this section was: “How did you establish your current ICTs in your establishment? Tick where appropriate

Inherited Systems	Introduced Systems	Not sure

Chart 1 below shows the responses given across the board, from all twenty-four establishments included in the study

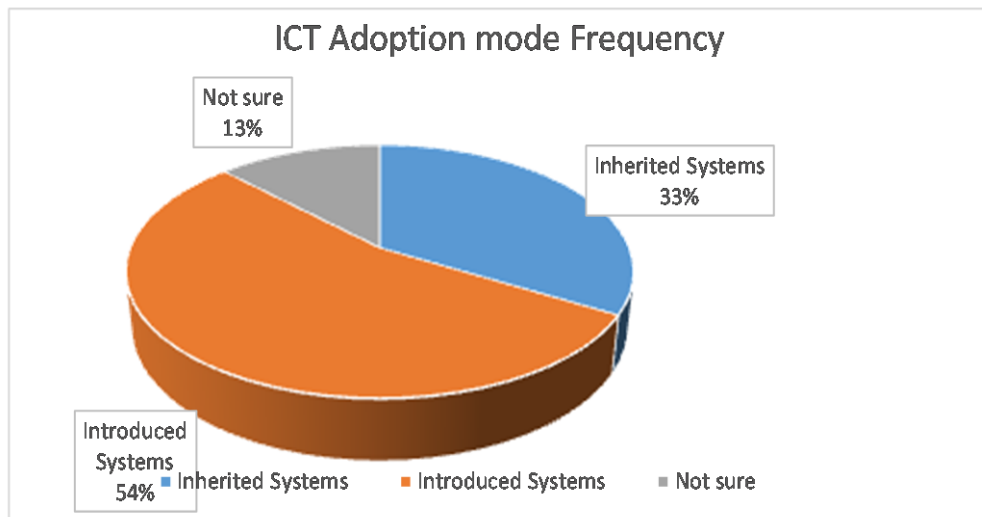


Chart 1: ICT Adoption mode

(Source: Interviews and questionnaires)

Results displayed on the pie chart above demonstrate how establishments embraced ICTs. More than 50% introduced the systems because they started the business from scratch hence everything they have is a result of their input. 33% inherited the systems with the business from either previous owners they bought it from while some inherited the businesses and the current systems from their parents (the case with the LR WV1). 13 % are not sure whether the systems were introduced by owners or were inherited. These responses were obtained from establishments run by managers who are hired by owners to run the business on their behalf (the case with NR WV2).

Table 5: Actual ICT adopted by Wedding Venues in Curry's Post

Category of ICT Systems		ICT Adoption by individual Wedding Venues		Examples of uses of adopted ICT
		LR WV1	LR WV2	
Telecommunications Technology		Telkom Land line	Telkom Land line	Bookings and enquiries
		Cell phones MTN, Vodacom	Cell phones Vodacom	Communication
Information Technology		Computer hardware and components (e.g. laptops; iPads, PCs Photocopiers/scanners/printers	Computer hardware and components (e.g. PCs; laptops; Printers/ photocopiers	Typing Record keeping Printing, photocopying
		Computer Software Windows 8 Micros	Computer Software Windows 7 Opera	Property Management Bookings management
Networking Technology		Internet Website, email Wi-Fi, 3G ADSL line Connection	Internet Website, email 3G Internet	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies		Speedpoint Facilities Cards accepted: Visa; MasterCard,	Speedpoint Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Billing Purposes
		E-commerce site on website, Online payment security (Paygate)		End user/customer online payment security
Other	Security Systems	Alarm, rapid response CCTV Cameras,	Alarm, rapid response	Security Purposes
	Audio Visual Conference	LED HD TV/VCD/DVD	LED HD TV/VCD/DVD Screen projector	Entertainment Conferencing Entertainment

Table 5.1: Actual ICT adopted by Wedding Venues in Lions River

Category of ICT Systems		ICT Adoption by individual Wedding Venues		Examples of uses of adopted ICT
		LR WV1	LR WV2	
Telecommunications Technology		Telkom Land line	Telkom Land line	Bookings and enquiries
		Cell phones MTN, Vodacom	Cell phones Vodacom	Communication
Information Technology		Computer hardware and components (e.g. laptops; iPads; PCs Photocopiers/scanners/printers	Computer hardware and components (e.g. PCs; laptops; printers; photocopiers	Typing Record keeping Printing, photocopying
		Computer Software Windows 8 Micros	Computer Software Windows 7 Opera	Property Management Bookings management
Networking Technology		Internet Website, email Wi-Fi, 3G ADSL line Connection	Internet Website, email 3G Internet	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies		Speed point Facilities Cards accepted: Visa; MasterCard,	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Billing Purposes
		E-commerce site on website, Online payment security (Paygate)		End user/customer online payment security
Other	Security Systems	Alarm, rapid response CCTV Cameras,	Alarm, rapid response	Security Purposes
	Audio Visual Conference	LED HD TV/VCD/DVD	LED HD TV/VCD/DVD Screen projector	Entertainment Conferencing Entertainment

Table 5.2: Actual ICT adopted by Wedding Venues in Nottingham Road

Category of ICT Systems	ICT Adoption by individual Wedding Venues		Examples of uses of adopted ICT
	NR WV1	NR WV2	
Telecommunications Technology	Telkom Land line		Bookings and enquiries
	Cell phones MTN, Cell C	Cell phones Cell C, Vodacom	Communication
Information Technology	Computer hardware and components (e.g. laptops; Tablet; PCs Photocopiers/printers	Computer hardware and components (e.g. laptops; PCs Printers/ photocopiers	Typing Record keeping Printing, photocopying
	Computer Software Windows 7	Computer Software Windows XP	Property Management Bookings management
Networking Technology	Internet Website, email ADSL line Connection Wi-Fi	Internet Website, email 3G Internet Wireless Hotspots	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Diners Club	Speed point Facilities Cards accepted: Visa; MasterCard, Amex	Billing Purposes
			End user/customer online payment security
Other	Security Systems	Alarm, rapid response	Alarm, rapid response CCTV Cameras, Security Purposes
	Audio Visual Conference	LED HD TV/VCD/DVD	LED HD TV/VCD/DVD Screen projector Entertainment Conferencing Entertainment

(Source: Interviews and questionnaires)

Table 5 above shows actual ICTs adopted by wedding venues across all three case areas of Curry's Post, Nottingham Road, and Lion River. The results displayed in Table 4.1 above indicate that the thriving wedding venues CP WV1 and LR WV1 adopted full ICTs and their applications, and are utilizing them well to their benefit than the financially struggling CP WV2 establishment. Data gathered confirms perceived importance of ICTs amongst all wedding venues as they all have an active website each and email addresses. All establishments have speed point machines (credit card facilities) on site. However only three of the six establishments accept all cards, while the other three (CP WV 1, CP WV2 and LR WV1) do not accept American Express credit cards. According to the manager of LR WV1 interviewed, the cost of running Amex cards far outweighs the benefits as only a few (less than 5%) of their guests have ever wanted to pay with an Amex card.

CP WV2 is owner managed, and the business is also struggling financially. According to the owner manager interviewed,

"Focus is being directed on revamping physical structures at a slow pace and investment on ICTs will be considered only after employment of an astute general manager whom we hope will turn around the fortunes of our business"

They do not have a fixed Telkom landline telephone, they lamented the high monthly fixed cost of a business line by Telkom while the lines are always down all the time due to cable theft and weather catastrophes. CP WV1 does not subscribe to armed security response due to high costs and unavailability of a reliable security company in the area. On the positive, it's only them (CP WV2), LR WV1 and LR WV2 that have a proper booking system and Property Management Systems (PMS) of all the six establishments. CP WV2 subscribes to NightsBridge, while LR WV1 and LR WV2 each subscribe to Micros and NightsBridge respectively. David (2007) applauds the relevance of PMS to the hospitality sector. He further recognises their ability to generate accurate stock information which enables food and beverages managers to effectively manage their departments through cost reduction and proper food costing to increase profits. He adds that PMS helps compute customer bills accurately and timeously all the time.

LR WV1 and NR WV1 have e-commerce sites on their websites as well as security backup to secure online payments for the benefit of the end user (Customer). They both use Paygate, a security software that backs and protects online transactions

from malicious malware and online fraudsters. NR WV1 manager didn't know about the ecommerce site and online payments security.

Table 6: Actual ICT adopted by Curio Shops in Curry's Post

Category of ICT Systems	ICT Adoption by individual Curio Shops		Examples of uses of adopted ICT
	CP CS1	CP CS2	
Telecommunications Technology	Telkom Land line		Bookings and enquiries
	Cell phones	Cell phones	Communication
	Vodacom	Vodacom	
Information Technology	Computer hardware and components (e.g. laptops; iPads; PCs Photocopiers/scanners/printers	Computer hardware and components (e.g. laptops; PCs printers; photocopiers	Typing Record keeping Printing, photocopying
	Computer Software Windows XP	Computer Software Windows Xp	Computer applications
Networking Technology	Internet 3G internet Connection	Internet email 3G internet Connection	Enquiries, Emails, Advertising
Ecommerce Technologies	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club		Billing Purposes
Other	Security Systems	Alarm, rapid response	Security Purposes

Table 6.1: Actual ICT adopted by Curio Shops in Lions River

Category of ICT Systems		ICT Adoption by individual Curio Shops		Examples of uses of adopted ICT
		LR CS1	LR CS2	
Telecommunications Technology				Bookings and enquiries
		Cell phones Vodacom	Cell phones Cell C, Vodacom	Communication
Information Technology		Computer hardware and components (e.g. PCs; iPads; laptops Photocopiers/printers/scanner	Computer hardware and components (e.g. PCs; laptops; Printers/ photocopiers	Typing Record keeping Printing, photocopying
		Computer Software Windows 8	Computer Software Windows 7	Computer applications
Networking Technology		Internet Website, email Wi-Fi	Internet email 3G internet Connection	Enquiries, Emails, Advertising
Ecommerce Technologies				Billing Purposes
Other	Security Systems		Alarm, rapid response	Security Purposes

Table 6.2: Actual ICT adopted by Curio Shops in Nottingham Road

Category of ICT Systems	ICT Adoption by individual Curio Shops		Examples of uses of adopted ICT
	NR CS1	NR CS2	
Telecommunications Technology	Telkom land line	Telkom land line	Bookings and enquiries
	Cell phones Vodacom, MTN	Cell phones MTN, Vodacom	Communication
Information Technology	Computer hardware and components (e.g. Laptops; Tablet; PCs Printers/Laminators/Scanners photocopiers	Computer hardware and components (e.g. PCs; laptops; Printers/ photocopiers	Typing Record keeping Printing, photocopying
	Computer Software Windows 7	Computer Software Windows XP	Computer applications
Networking Technology	Internet email ADSL line Connection	Internet Website, email Wi-Fi Wireless Hotspots	Enquiries, Emails, Advertising
Ecommerce Technologies	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Speed point Facilities Cards accepted: Visa; MasterCard, Amex	Billing Purposes
Other	Security Systems Alarm, rapid response	Alarm, rapid response CCTV Cameras,	Security Purposes

(Source: Interviews and questionnaires)

Tables 6, 6.1 and 6.2 above display adopted ICTs by Curio Shops/ Crafter's Markets in all three case areas. This sector of the hospitality industry plays a support role to the accommodation sector and is largely dependent on resorts or cluster of lodges in one area. CP CS1 is one of the oldest crafters in the Midlands Meander. It's a well-run leather company, selling most of their products abroad and they have a healthy

financial status. They have most of the ICTs necessary to run a business successfully, including alarms and armed response mechanisms in place.

LR CS1 is a crafter's market, office set up is located at each individual member's house. They do not have an office at the market but individual stalls at the "tourist hotspot". They all have cell phones from different mobile operators such as MTN, Vodacom and Cell C.

"We are relatively new and haven't yet established a proper communal office to run from as we are still doing all admin work from home and sales are done here at the market. Our operations are also quite small to set up a vibrant office with all necessary ICTs as the overheads will surpass the income thereby killing the business at its inception, we will acquire all those ICTs at the right time in future" (LR CS1, Partner)

Those were comments from an interview conducted with a co-owner of LR CS1. Data gathered illustrates that the operators of the crafter's market are quite keen to embrace ICTs only at the right time and that they realise the importance of adopting ICTs for the success of their business. NR CS1 is a formal art gallery and the business is doing quite well. They adopted all the ICTs sought for, they have a running website, accept all credit cards, have landline telephone and alarm and armed response systems in place. Data gathered suggests that the establishments doing well are bigger in size, have a healthy financial status and are owner managed.

Data gathered suggests that three of the six establishments are operating above board while the other three are breaking even and keeping afloat. Among the three that are struggling, and failing to fully adopt ICTs is LR CS2, the manager had this to say about their failure to adopt fully;

"There is currently stiff competition, lodges and wedding venues are not supporting us anymore, they have since opened gift shops on their properties selling artwork from other crafters and some from China if you could imagine!, we are now relying on passer-by type of customers and not visitors to the Midlands. For one to afford world class ICTs they should be making money to finance that, otherwise we will all flock to banks for some loans to finance those"

The main factor hindering adoption is not ignorance but lack of funding as data gathered suggests. Funding is limited due to slow business inflows and stiff

competition from imported artefacts which crafters have labelled as “counterfeit” and “cheap quality”.

Table 7: Actual ICT adopted by Restaurants in Curry’s Post

Category of ICT Systems		ICT Adoption by individual Restaurants		Examples of uses of adopted ICT
		CP R1	CP R2	
Telecommunications Technology		Telkom Land line		Bookings and enquiries
		Cell phones Vodacom	Cell phones Vodacom	Communication
Information Technology		Computer hardware	Computer hardware	Typing
		and components (e.g. PC	and components (e.g. PCs; laptops;	Record keeping
		Computer Software	Computer Software	Printing, photocopying
		Windows XP RePos	Windows XP Micros	Property Management Bookings management
Networking Technology		Internet Website, email Wi-Fi, 3G connection Wireless Hotspots	Internet Website, email 3G internet Connection	Enquiries, Emails, Advertising
Ecommerce Technologies		Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club Point Of Sale system	Speed point Facilities Cards accepted: Visa; MasterCard Point Of Sale system	Billing Purposes Sales
Other	Security Systems	Alarm, rapid response	Alarm, rapid response	Security Purposes
	Audio Visual Equipment	LED HD TV/Video/DVD	LED HD TV/Video/DVD	Entertainment

Table 7.1: Actual ICT adopted by Restaurants in Lions River

Category of ICT Systems		ICT Adoption by individual Restaurants		Examples of uses of adopted ICT
		LR R1	LR R2	
Telecommunications Technology		Telkom Land line		Bookings and enquiries
		Cell phones Cell C, MTN	Cell phones MTN	Communication
Information Technology		Computer hardware and components (e.g. PCs; laptops; iPads	Computer hardware and components (e.g. PCs;	Typing Record keeping Printing, photocopying
		Computer Software Windows 8 Micros	Computer Software Windows 7 RePos	Property Management Bookings management
Networking Technology		Internet Website, email Wi-Fi ADSL line Connection	Internet Website, email 3G Connection	Enquiries, Emails, Advertising
Ecommerce Technologies		Speed point Facilities Cards accepted: Visa; MasterCard, Point Of Sale system	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club Point Of Sale system	Billing Purposes Sales
Other	Security Systems	Alarm, rapid response CCTV Cameras,	Alarm, rapid response	Security Purposes
	Audio Visual Equipment	LED HD TV/VCD/DVD	LED HD TV/VCD/DVD	Entertainment

Table 7.2: Actual ICT adopted by Restaurants in Nottingham Road

Category of ICT Systems	ICT Adoption by individual Restaurants		Examples of uses of adopted ICT
	NR R1	NR R2	
Telecommunications Technology		Telkom Land line	Bookings and enquiries
	Cell phones Vodacom	Cell phones MTN, Vodacom	Communication
Information Technology	Computer hardware and components (e.g. PC		Typing Record keeping Printing, photocopying
	Computer Software Windows 7		Computer Software Windows XP Micros Property Management Bookings management
Networking Technology	Internet Website, email 3G Connection	Internet Website, email Wi-Fi Wireless Hotspots	Enquiries, Emails, Advertising
Ecommerce Technologies	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Speed point Facilities Cards accepted: Visa; MasterCard, Amex Point Of Sale system	Billing Purposes Sales
Other	Security Systems	Alarm, rapid response	Alarm, rapid response CCTV Cameras, Security Purposes
	Audio Visual Equipment	LED HD TV/VCD/DVD	LED HD TV/VCD/DVD Entertainment

(Source: Interviews and questionnaires)

Tables 7, 7.1 and 7.2 above show ICT components adopted by restaurants in all three case areas namely Nottingham Road, Curry's Post and Lions River. The evidence gathered from CP R1 manager interviewed indicates that management characteristics such as attitude, skills, experience and background knowledge played a major role in ICTs adoption. As an illustration, internet access (high speed) through Wi-Fi connectivity appeared very relevant and important to the successful restaurant. Explaining this phenomenon, the ICTs genius CP R1 owner manager had the pleasure of explaining, during the interview his views about full adoption of ICTs;

"The idea of wireless internet connection came up following several requests from guests, mostly those coming from overseas with laptops. Several of them have come here asking for wireless internet connection for their laptops and we then decided to set up the wireless hotspot internet and Wi-Fi access here, besides everything is now dependent on technology. We manage the whole restaurant on a PMS, Point of Sale systems credit card facilities are all important tools to have as 90% of our clients come from abroad where such systems are basic in any business".

Three of the six restaurants under study offer free Wi-Fi connectivity to customers having their meals at the restaurants. This is perceived as a 'value added' initiative to increase guest satisfaction and build loyalty and repeat business and patronage. Data gathered confirms comprehensive adoption by restaurants as compared to other operators in hospitality such as lodges, curio shops and wedding venues. All restaurants have credit card facilities, point of sale systems and PMS except for one restaurant NR R1 which does not have a PMS and a point of sale system (POS).

Most of the managers interviewed (5 out of 6) mentioned that the engagement of high technology security systems such as CCTV cameras and alarms for armed response were prompted by vulnerability of their clients late at night after a few drinks one could be violent and disturb other patrons or they could fall prey to criminals as they exit the restaurants hence need for cameras everywhere. All six restaurants have high definition plasma units and audio systems for entertainment such as live sports matches.

According to CP R1 manager, they experience high volumes on Saturdays as people come to have drinks or dinner while watching a live rugby match with friends. This has prompted all restaurant operators to follow suit and adopt these technologies.

Three out of six have fixed line telephones from Telkom while three say they have given up on fixed lines as they are always faulty due to cable theft. They rely on mobile cell phones as they are sure not to lose business as they will be accessible anytime for bookings. All three major mobile networks (MTN, Vodacom, and Cell C) were found to be in use by all six restaurants.

Table 8: Actual ICT adopted by Lodges in Curry's Post

Category of ICT Systems		Actual ICT Adoption by individual Lodges		Examples of uses of adopted ICT
		CP L1	CP L2	
Telecommunications Technology		Telkom Land line		Bookings and enquiries
		Cell phones MTN, Vodacom	Cell phones Vodacom	Communication
Information Technology		Computer hardware and components (e.g. Laptops, PCs; iPads Printers/ scanners/ Laminators	Computer hardware and components (e.g. PCs; laptops; printers; photocopiers	Typing Record keeping Printing, photocopying
		Computer Software Windows XP Semper	Computer Software Windows Xp Micros	Property Management Bookings management
Networking Technology		Internet Website, email Wi-Fi , Satellite Internet Wireless Hotspots	Internet Website, email 3G internet Connection	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies		Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Speed point Facilities Cards accepted: Visa; MasterCard	Billing Purposes
		E-commerce site on website, Online payment security (Paygate)		End user/customer online payment security
Other	Security Systems	CCTV Cameras, Alarm, rapid response Guest room key cards	Alarm, rapid response	Security Purposes
	Audio Visual Conference	Overhead-Screen projector LED HD TV/VCD/DVD Equipment	LED HD TV/VCD/DVD	Conferencing Workshops, seminars Entertainment

Table 8.1: Actual ICT adopted by Lodges in Lions River

Category of ICT Systems	Actual ICT Adoption by individual Lodges		Examples of uses of adopted ICT
	LR L1	LR L2	
Telecommunications Technology	Telkom Land line		Bookings and enquiries
	Cell phones Vodacom	Cell phones Vodacom	Communication
Information Technology	Computer hardware and components (e.g. PCs; laptops; iPads printers; scanners/ photocopiers	Computer hardware and components (e.g. PCs; laptops; Printers/ photocopiers	Typing Record keeping Printing, photocopying
	Computer Software Windows 8 Micros	Computer Software Windows 7 Opera	Property Management Bookings management
Networking Technology	Internet Website, email Wi-Fi ADSL line Connection	Internet Website, email 3G Internet	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies	Speed point Facilities Cards accepted: Visa; MasterCard,	Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Billing Purposes
	E-commerce site on website, Online payment security (Paygate)		End user/ customer online payment security
Other	Security Systems	Alarm, rapid response	Alarm, rapid response Security Purposes
	Audio Visual Conference	Overhead-Screen projector LED HD TV/VCD/DVD Equipment	LED HD TV/VCD/DVD Conferencing Workshops, seminars Entertainment

Table 8.2: Actual ICT adopted by Lodges in Nottingham Road

Category of ICT Systems		Actual ICT Adoption by individual Lodges		Examples of uses of adopted ICT
		NR L1	NR L2	
Telecommunications Technology		Telkom Land line	Telkom Land line	Bookings and enquiries
		Cell phones MTN, Vodacom	Cell phones Cell C, MTN	Communication
Information Technology		Computer hardware and components (e.g. PCs; laptops; Tablet, Printers/ photocopiers/ Laminators	Computer hardware And components (e.g. PCs; laptops; printers; photocopiers	Typing Record keeping Printing, photocopying
		Computer Software Windows 7	Computer Software Windows XP Micros	Property Management Bookings management
Networking Technology		Internet Website, email ADSL line Connection	Internet Website, email Wi-Fi, 3G Connection Wireless Hotspots	Online bookings and Enquiries, Emails, Advertising
Ecommerce Technologies		Speed point Facilities Cards accepted: Visa; MasterCard, Amex, Dinners Club	Speed point Facilities Cards accepted: Visa; MasterCard, Amex	Billing Purposes
			E-commerce site on website, Online payment security (Paygate)	End user/customer online payment security
Other	Security Systems	Alarm, rapid response	Alarm, rapid response CCTV Cameras,	Security Purposes
	Audio Visual Conference	LED HD TV/Video/DVD	Screen projector LED HD TV/Video/DVD Equipment	Conferencing Workshops, seminars Entertainment

(Source: Interviews and questionnaires)

Tables 8, 8.1 and 8.2 above display actual ICTs adopted by lodges from all three case areas under study. Data gathered suggest that ICTs adoption in this group is still at lower levels. Of all six lodges, only one has got an active e-commerce site on their website (NR L2), two lodges do not accept cards (CP L1 and CP L2), while only two out of six lodges have a property management system (PMS).

An interview with the owner manager of CP L1 gave the research some clues about the backwardness in terms of adoption in this group, the manager said;

“Our major challenge is that of huge competition as everyone in the area who has a farm has turned into a little B&B or self-catering unit while some with greater financial muscles have turned farms into wedding venues. Having said that, you will find out that we are all sitting with zero occupancies midweek and get a few bookings over the weekend most of which are overflows from wedding venues. Most of us are breaking even and not making any money out of the business. We have very little left over after paying overheads, which we can invest in ICTs” (CP L1, Manager)

The comment from owner manager of CP L1 was an eye opener as it highlights real challenges faced by these micro operators in the remote areas of the Midlands. Half of the Lodges interviewed have fixed landline phones while the other half do not have. They now depend on mobile phones as they lament on cable theft and poor response from Telkom to faulty lines due to whether catastrophes.

All lodges have some form of internet connectivity, however only 3 have internet available for guest use through Wi-Fi connectivity. The manager of CP L2 opened up during the interview, about their inability to embrace vibrant internet connectivity;

“A working system for rural internet is the acquisition of satellite internet connectivity as fixed lines are always faulty due to cable theft and bad weather prevalent in the area. However, the cost of installation of such is anything between R16, 000 and R22, 000 which is quite hefty given our cash flows and revenue levels that are seriously very low. I do not cancel the idea of investing in ICTs but the matter for us small operators requires all players including government to intervene and resuscitate the micro business, we can't consider loans for setting up internet as we are servicing our bonds and vehicle finances”

Data gathered suggests that adoption of ICTs is linked to business prosperity. Early adopters like NR L2 do not agree to that suggestion, they concluded that success comes from full adoption. According to the manager of NR L2;

“Business success in this competitive environment is fuelled by full adoption of ICTs, we sacrificed a lot to be here today, we decided to sell our top of the range cars a few years ago and invested in ICTs and marketing and now we are enjoying the benefits. ICTs are vital for marketing and effective management of the business”

4.2 Internet Connectivity Availability for Guests

Question; Do your guests ever ask for internet connectivity?

This question was asked to all twenty-four participating establishments and the results were aggregated and displayed in the graph below;

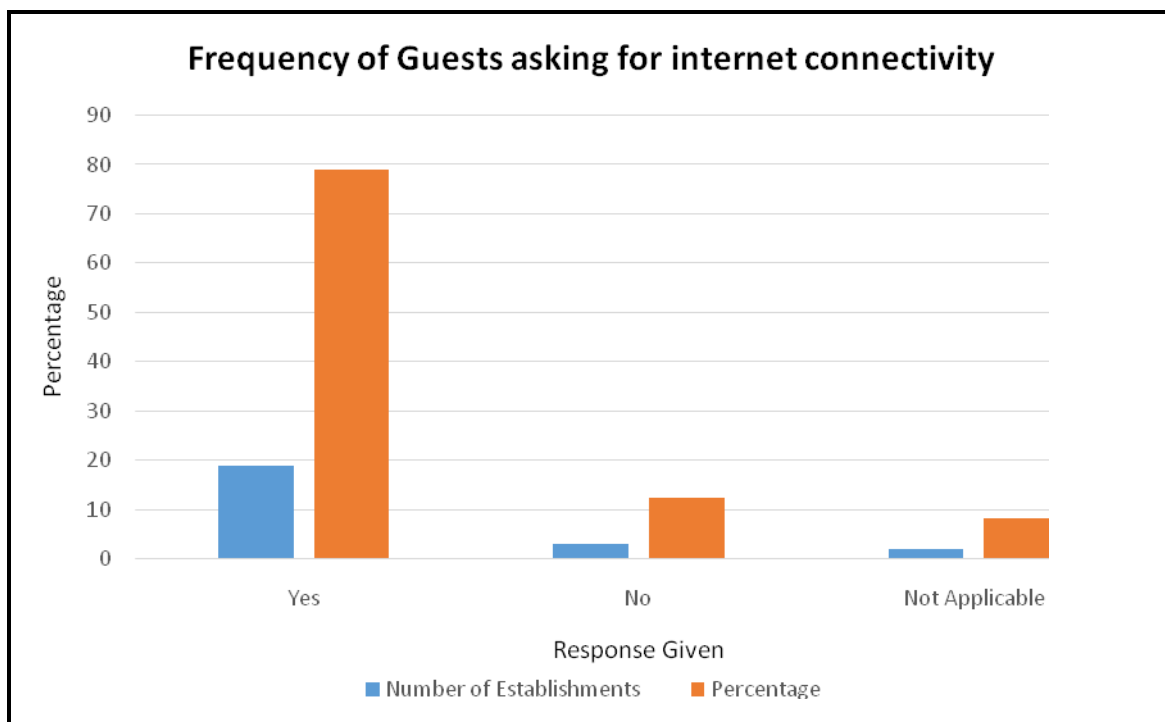


Figure 4: Frequency of guests asking for internet connectivity

(Source: Interviews and questionnaires)

About 79% of respondents confirmed that their guests ask for internet availability, these are wedding venues, restaurants and lodges, the remaining 21% who responded with a 'No' and 'Not Applicable' are Curio shops. Those that said the question was not applicable are Crafters Market. They argued that customers stop by for a few minutes to buy, they have no seating areas for guests where they can use internet, unlike in lodges and restaurants. Only one establishment classified

under curio shops (Art Gallery) confirmed that their customers ask for internet connectivity, they have a lobby and tea garden where customers get to sit down and get a chance to use their ICT gadgets

Question: *Is free internet available for guest use?*

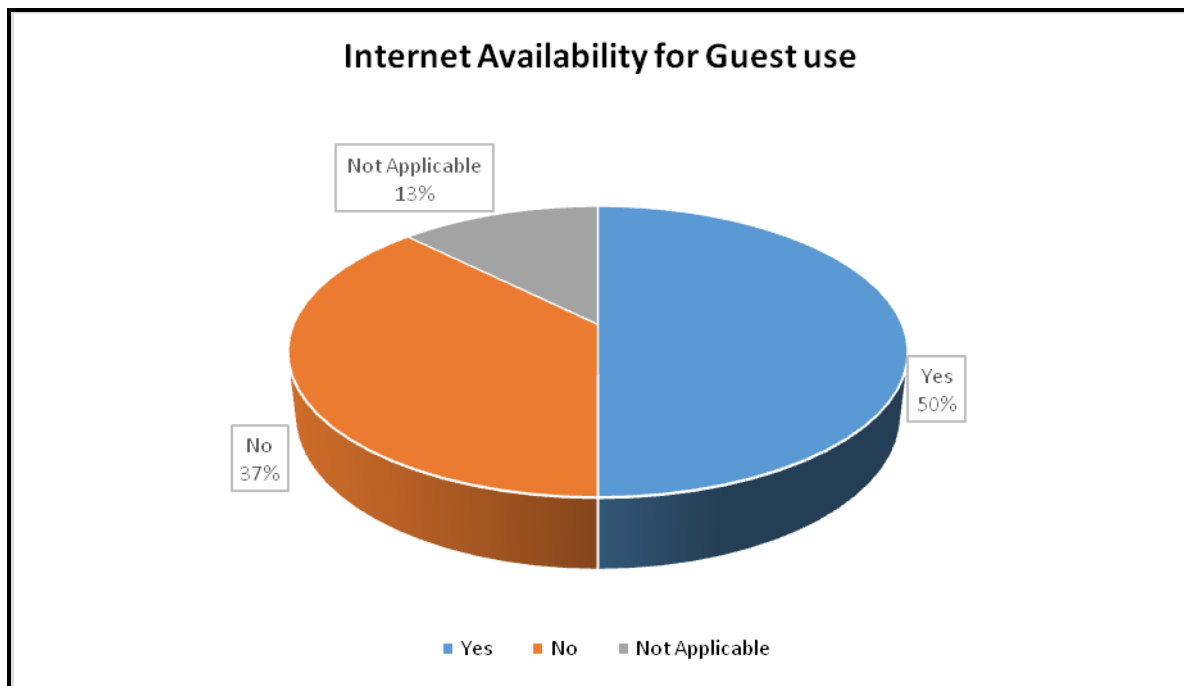


Figure 5: Availability of free internet for guest use

(Source: Questionnaire and Interviews)

This question was asked to all participants across the board and, - responses obtained suggest that internet availability for guests' use was largely dependent on success and financial prosperity of the business. Five out of six restaurants offer free connectivity via Wi-Fi, three wedding venues also supply free internet to guests as well as one curio shop (art gallery) and three lodges. Three lodges mentioned that it is expensive to share internet with guests as they use 3G connectivity and that data bundles from mobile network operators is soaring high given the fact that data packages are capped. According to CP WV1 Owner manager,

"It is costly to set up a viable internet connectivity system for guest use, the way to go is acquire satellite internet like we have done. It is uncapped, fast and reliable so we offer it free of charge to all our guests via Wi-Fi. The monthly subscription is quite affordable, the benefit of having far outweighs the cost of running it as its one of our strategies to increase guest satisfaction"

Five of the curio shops do not offer any internet connectivity to guests, three said it is not applicable as guests spend an average of ten to twenty minutes buying artworks and leave immediately.

Question: *How reliable is your internet service provider?*

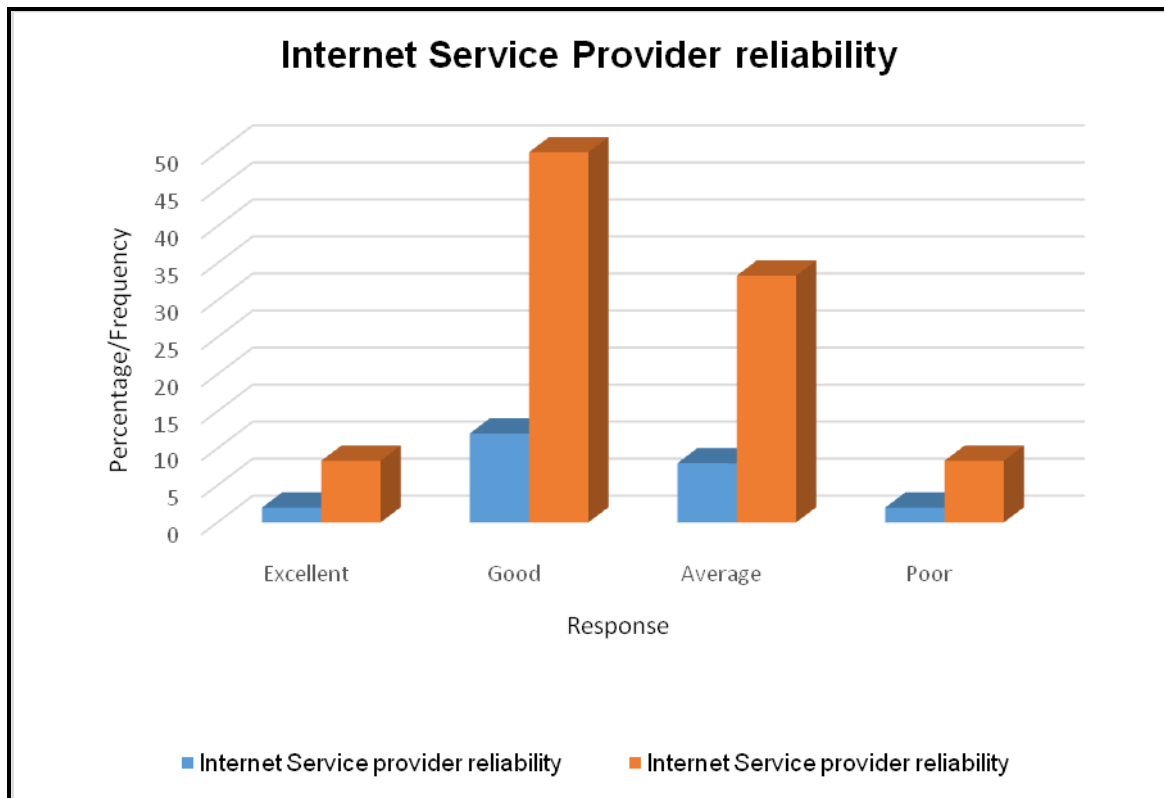


Figure 6: *Internet service provider reliability*
 (Source: Interviews and Questionnaires)

The above question sought to establish the reliability of internet services providers, that is, the speed of connectivity, response to faults reported and value for money. Eight percent reported that the service was excellent. These use Satellite internet. They highlighted that connection is ever available and the signal and speed are very high, data is uncapped therefore good value for money. Eight percent highlighted that the service was poor. These use 3G connectivity for a mobile operator whom they said signal is intermittent, data is capped and expensive hence they cannot afford to offer it free to guests. Fifty percent said the service is good; these use both 3G and ADSL connectivity, while 33% said it is average. These use 3G connectivity, they lament high cost of data bundles and the fact that data is capped. They

mentioned that they do not get value for money as there are no added benefits to the available packages.

4.3 ICT for Marketing

Question: *Does your website have a visitor counter facility?*

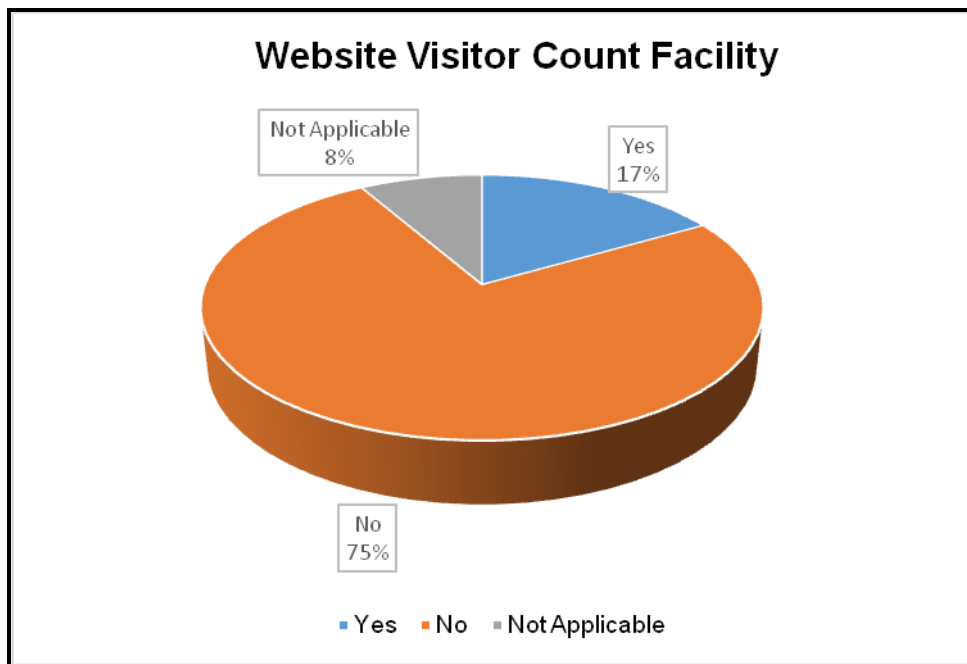


Figure 7: Website visitor count facility
(Source: Interviews and questionnaires)

The question above was structured to establish the amount of potential customers visiting individual establishment. It was aimed at finding out the power of websites as ICT components in drawing the attention of guests to products marketed through websites. The results obtained suggest that most operators have failed to develop active websites that can establish an amount of visits on the website on either daily, weekly or monthly basis. 75% registered a 'NO', while 17% registered a 'Yes' and 8% (Curio Shop) said it was 'Not Applicable' to them. According to LR L2 Manager,

“This is an important eye opener as having a website as a marketing tool does not mean anything if one cannot establish or know how many people are actually visiting their website every day or week. I think we will definitely go back to the drawing board and ask our web developer to put that feature for us”

Most of the operators who said they didn't have the visitor count facility were quite fascinated to find out there was such a clever tool to establish how many people hit on one's website. Something they said was worth incorporating on their websites.

Question: *Which social networks does your establishment market on?*

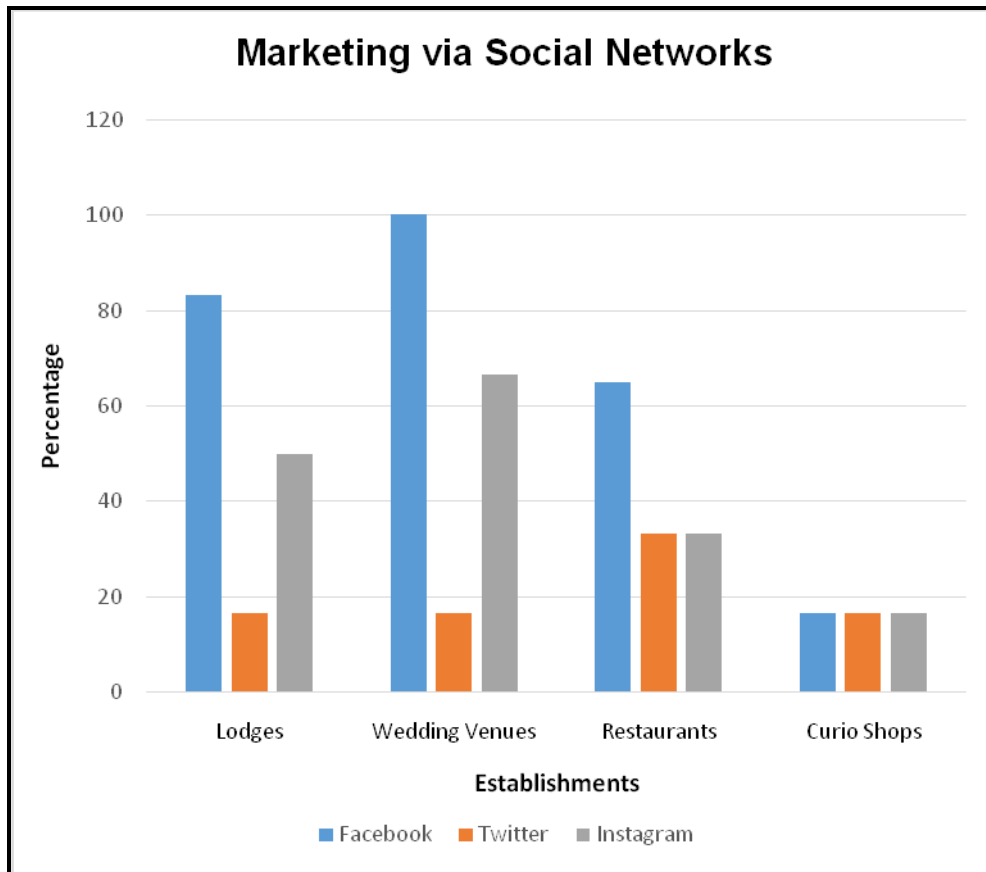


Figure 8: Marketing through social networks
(Sources: Interviews and questionnaires)

All establishments across the board demonstrated a keen interest in the social media. Lodges and wedding venues were more enlightened and adopted more than restaurants and curio shops. Facebook was the more popular followed by Instagram, and twitter trailed behind. An interview with NR WV1 Manager enlightened the researcher on adoption and utilisation of these social networks as the researcher wanted to establish why Facebook was so popular than any others?

“Facebook is the leading social network, besides its easy to use and understand than the other two (Instagram and Twitter). Everyone is on Facebook, opening a Facebook page is like opening an instant

marketing platform that grows gradually and attracts relevant target groups. It also gives you a chance to interact and respond to your followers as well as posting pictures for them to see” (NR WV1, Manager)

Question: *How effective are social networks as marketing tools?*

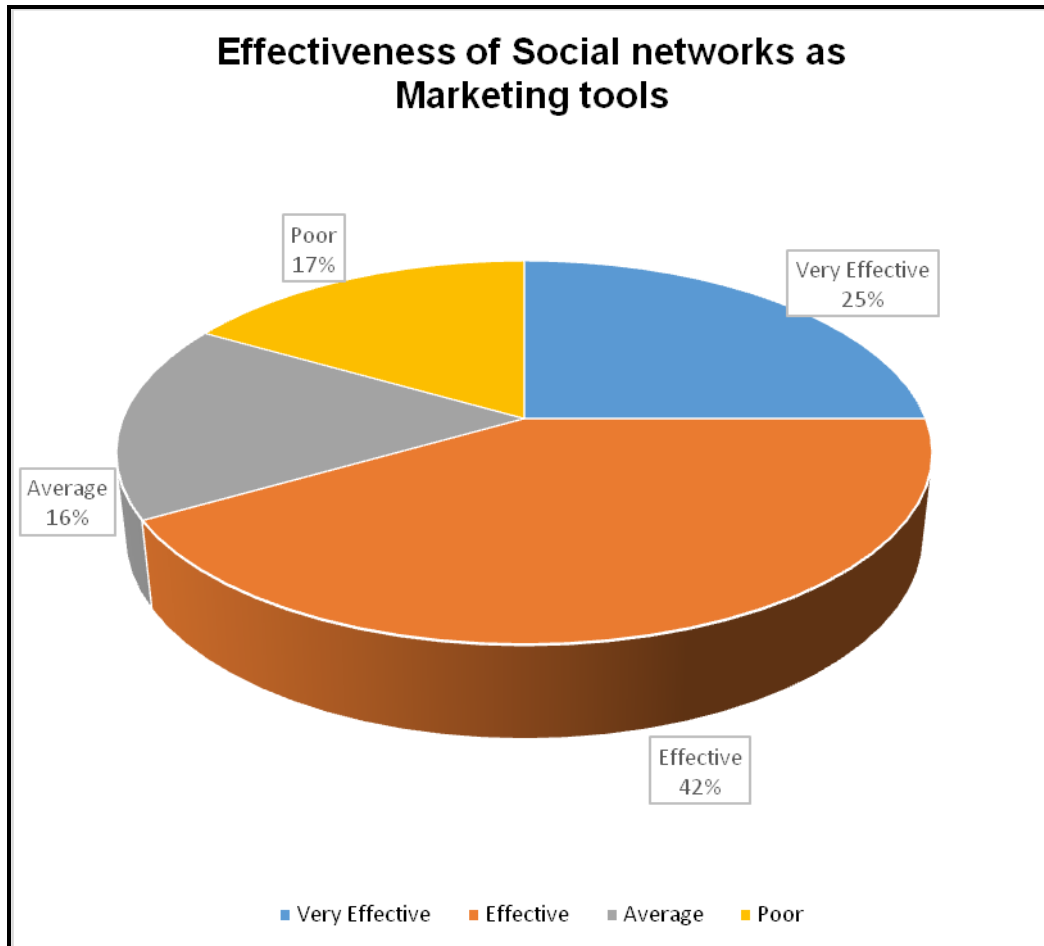


Figure 9: Effectiveness of social networks as marketing tools

(Source: Interviews and questionnaires)

The above question was received with mixed feelings. It was drafted in an effort to gather first-hand experiences on the successes and effectiveness of these Social Medias as marketing tools. Twenty-five percent of the overall respondents affirmed that they are very effective. These are wedding venues, with a dedicated marketing manager, trained in modern marketing and social networks marketing channels. 42% agreed that they were effective, while 16% say they are average and 17% say they are poor. An interview conducted with NR WV2 Manager was an eye opener, the manager said:

“Social media marketing requires putting a capable and well trained marketing personnel to spearhead the campaign, otherwise randomly setting up a Facebook page will not draw the required attention and at the end wrong followers are attracted, and resources such as labour and time would have been wasted”

Question: Which booking and marketing sites does your establishment subscribe to?

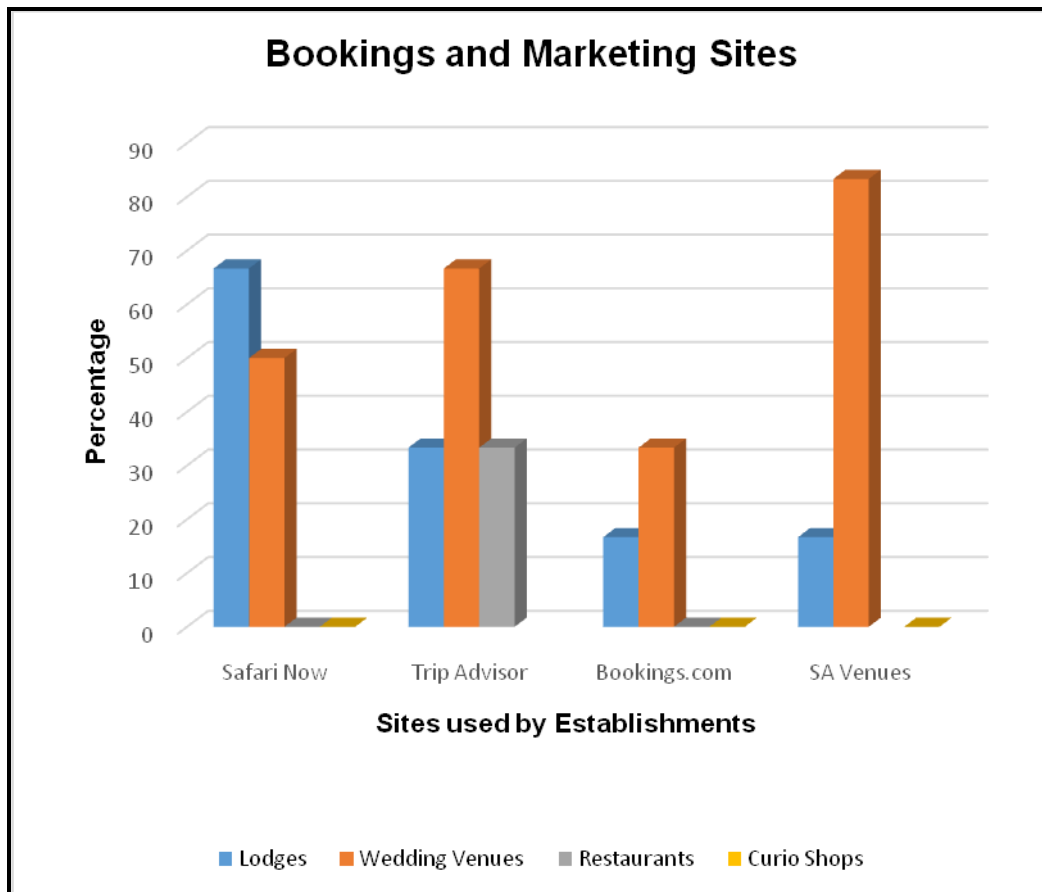


Figure 10: Bookings and marketing sites used by hospitality establishments

(Source: Interviews and questionnaire)

This question found more relevance with lodges and wedding venues (accommodation establishments). Curio shops recorded zero percent subscription to booking sites as they lamented that their business set up does not work on a pre-booking set system. Restaurants too, followed suit but acknowledged use of marketing and service review sites such as Trip Advisor. SA Venues was the most popular used booking site, followed by Safari Now. Trip Advisor was highlighted by most as Marketing oriented as it is mainly a service review site, working well as a marketing platform. Bookings.com was last on the list, the reason established being

that they charge for listing an establishment and a commission for every booking secured.

Question: *Does your establishment have a Property Management System?*

Ten out of the twenty-four establishments answered 'Yes' to this question, eight answered 'No', while six (Curio shops) answered 'Not Applicable'. The question was meant to gather information on adoption of a PMS for effective management of an establishment. Of the ten which answered 'yes', five were restaurants, two lodges and three wedding venues. Figure 4.8 below aggregates the responses obtained from all four groups.

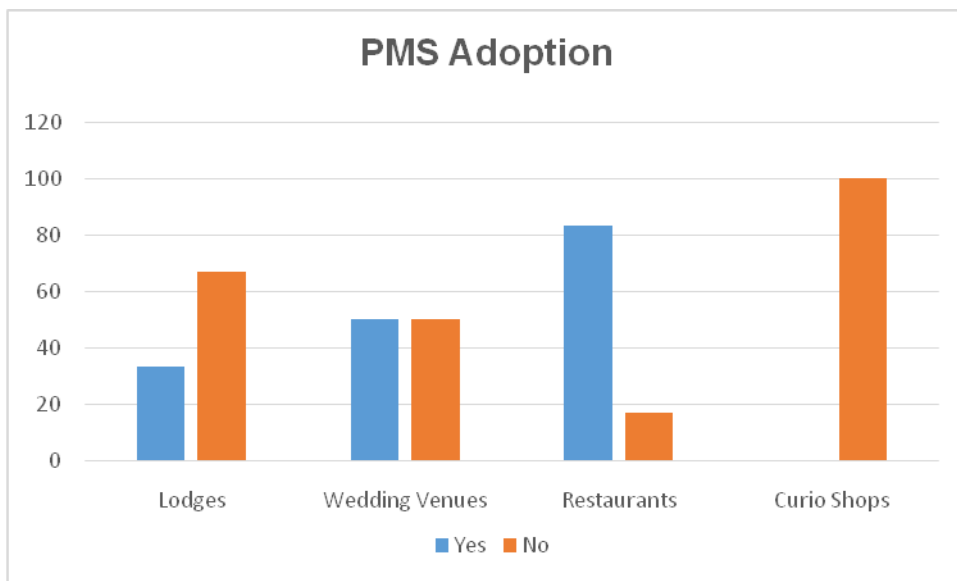


Figure 11: PMS Adoption by establishments
(Source: Interviews and questionnaires)

The above graph depicts that PMS are more popular with the restaurants in the Midlands, followed by wedding venues. Lodges are trailing behind with only two establishments having adopted out of six which were interviewed. According to NR R2 Manager interviewed;

“The nature of our operation requires accurate food and beverage management, through good stock management, revenue management, and sound financial management hence one

requires a system that integrates all these tasks to effectively manage your restaurant, so PMS packages are the way to go these days”

The interpretation was that properties are embracing PMS for their ability to integrate management functions’ such as reports, financials, stock management etc.

Question: In your view, is a PMS relevant for effective management? Please comment

Twelve respondents replied with a ‘yes’, five replied with a ‘no’ while one replied with an ‘it depends’ answer, this response was elaborated on

“Its effectiveness will depend on relevancy and proper training for the users, the major challenge I see besides is lack of skills in our staff. If workers are well trained and the system is fully adopted, then PMS becomes relevant for effective management” (NR R2 Manager)

Comments from respondents who said yes the PMS was relevant were itemised below:

- *The general manager always has factual information on which to make decisions. Important information is readily available through reports that can be accessed anytime.*
- *It links our front and back office automatically, orders are passed to kitchen and the kitchen in return send information to the front office for billing process. At the same time the food and beverage manager gets reports on which to effect orders when food stocks are low, its simply an ‘amazing web’.*
- *It saves us time in that stock takes are automatic and one doesn’t need to run around the whole lodge to place orders and transport bills from restaurant to front office for guests to settle when checking in. It’s a very important development in modern management.*
- *It has cut our wage bill substantially.*
- *I am managing this establishment from one point, saving me time and energy. But I always spend a lot of time training new staff as people are always on the move.*

- *It is relevant and a good management system but one needs to go out and meet guests on a one on one basis to find out how they are finding our services. It has a tendency though of keeping me locked in my office as everything is accessible from my computer, where as one actually needs to walk around and make sure everyone is doing their jobs.*
- *We are a small operation; our PMS has helped us keep our standards high through effective financial management.*

A summary of the comments above shows:

- Most operators recognise the relevance of PMS in their business
- PMS have integrated operations of individual establishments
- Managers are quite aware that they need to back up PMS with manual systems as they cannot entirely cover everything.

Question: Does the adoption and utilisation of ICTs have an effect on customer service quality? Comment

The question above was asked to all the twenty-four participants across the board, all participants answered 'yes', which is a hundred percent acknowledgement of the effect of ICTs on service quality. Below is a list of comments randomly picked from all responses;

- ICTs have positive effects; they make booking for a room convenient in the comfort of their homes via email or website enquiry
- We offer free Wi-Fi and our guests love that and always comment positively on that extra mile we go
- Secure payments have been made possible by adopting Paygate online security and that puts our guests at ease knowing their cards and bank accounts are secure while transacting with us.
- Through our PMS, guests can book meals from their rooms without coming to the restaurant and order drinks from the bar through the system and pay once for everything on checkout, how convenient!
- Guests can compare many establishments at one go via booking portals like Safari Now, which we subscribe to and choose the one they like and book via

website without wasting a lot of money driving around shopping for a room or making endless calls.

- ICTs speed up everything, the booking process, billing process and check out
- It saves our guests a lot of money as they now find us only unlike travel to tourist information centres.
- Credit card facilities and e-commerce availability means our guests will need not to travel with large sums of cash which is high risky for any traveller, so this puts them at easy knowing they are safe and their money will not be accessed by criminals.

Summary: All participants agree that adoption of ICTs have positive effects on customers' service quality. They all have positive comments about the service quality emanating from ICTs adoption.

Question: What are the challenges of adopting and utilisation of ICTs in your establishment? Please Comment

The above question was asked to all twenty-four participants across the board. The results were tabulated and aggregated to show the common problems observed by operators. Figure 4.9 below shows the problems identified

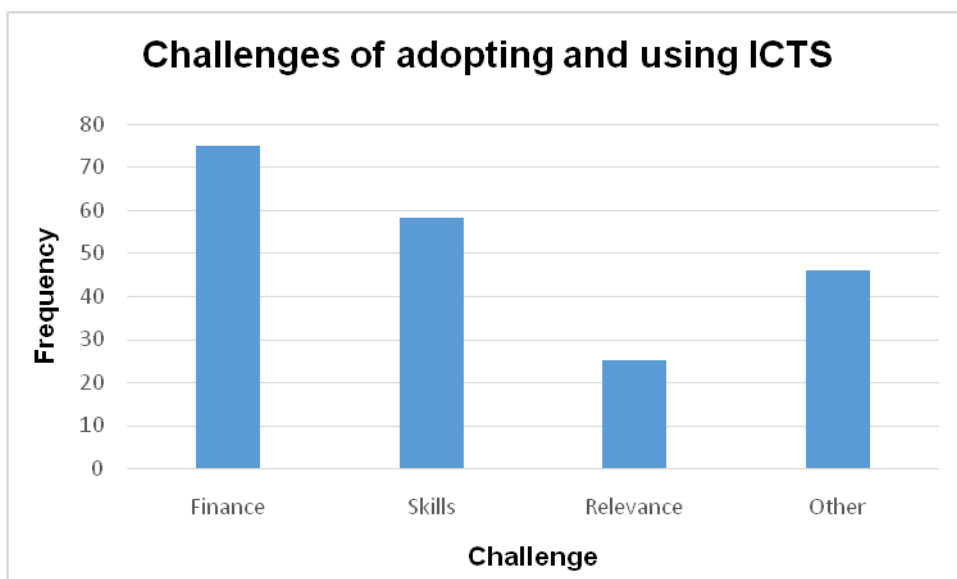


Figure 12: Challenges of adopting and using ICTs
(Source: Interviews and questionnaires)

Comments given by respondents are listed below randomly. They all cover the above classified challenges of financing ICTs, skills shortage, relevance of ICTs and other challenges:

- In my opinion packages like PMS are irrelevant to us small operators in that we are quite small to want full computerised systems, besides its only us owners and three other employees working here
- ICTs are so expensive to buy, install and maintain, we do not make that much money to invest in sophisticated systems that won't bring much benefit to us
- We lack skills here to use those, to start with we are not even well informed on how those operate. None of my employees is that educated to run a PMS
- Most of my employees are Zulu literate and these packages are offered only in English which make them not user friendly as the interface is only available in one language which is English and not vernacular.
- We can afford to buy them but maintenance cost may soar as time goes on, besides these modern ICTs become obsolete quickly and one has to upgrade often which all costs money.
- Monthly internet costs are high, internet scams are on the rife, and online transactions security is compromised.

4.4 Summary

Chapter four dealt with the analysis of data collected from the respondents. In the early sections of the chapter, the summarised background information of the participating establishments was discussed. This was very important as it introduced the actual participants, which also aided in understanding their attributes in relation to adopted ICTs.

Further to the general background information, the actual ICTs adopted by each of the 24 selected respondents were tabulated. This helped draw a specific picture of the situation on the ground rather than just generalise on the adoption and utilisation, something that would have affected the validity of the data.

Sections that followed outlined responses obtained from respondents; some were direct quotations from interviewed persons. Various forms of data presentation were employed depending of data to be computed. A combination of pie charts and descriptions were used as well as graphs, tables and general descriptions to present the findings from the field work carried out.

The following chapter, (chapter 5) which is also the last chapter of the project deals with conclusions and recommendations following from the data obtained from the fieldwork. It attempts to tally the findings from literature with what was obtained in the field and to come up with conclusions. Having drawn conclusions, the researcher will recommend possible solutions to the gaps and limitations unearthed in the research. Lastly, areas that other researchers might want to pursue in future following from the research findings, will be suggested.

CHAPTER 5- CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter is directly linked to this current chapter. Their relationship is symbiotic in that chapter 5 is hugely dependent on the findings tabulated in chapter 4, while chapter 4 makes more sense after reading the discussions in chapter 5. In the previous chapter, the findings from the actual research were discussed in detail. In this current chapter (chapter 5), the key findings from the study are summarised. Information obtained from literature is tallied against findings from the field to establish if there were any gaps. Conclusions are drawn from the findings and then recommendations are made.

5.1.1 Summary of Findings

Based on data obtained and analysed, the following key findings were made:

5.1.2 Level of ICTs and E-commerce Adoption

On the adoption of ICTs and E-commerce, the study established that operators were aware of the need to adopt systems and tools for business operations. It was also established that ICT hardware used by these hospitality establishments were computers, laptops, iPads, printers and audio equipment, software such as Property Management Systems (PMS), Websites, online reservations, internet connectivity (Satellite, ADSL, 3G, Wi-Fi hotspots), emails, fixed and mobile telephones.

The results show that hospitality establishments in the Natal Midlands of KZN use ICTs and e-commerce to perform information gathering and management, emailing services, marketing, online transactions, online security, property security management, entertainment, reservations, and conferencing. Of all 24 units included in the study, only six adopted a Property Management System (PMS). This revelation does not only deviate from the second assumption of the study (Successful operation hinges on full utilisation of ICT and e-commerce), but raises concerns with regards to the failure by proprietors to adopt this useful tool. Buhalis

and Egger (2008) applauded the positive impact of PMS in effective management of hotels. The lack of skills and the general knowledge about these important ICTs displayed by respondents explains a bit about this failure to adopt. Breukel and Go (2009) emphasized on the importance of staff training and development as it is the first step for keen entrepreneurs towards full adoption of these ICTs. It is also necessary given the fact that Bronkhorst (2014), projected that there will be about 29.8 million internet users in South Africa by 2016, making it increasingly necessary to fully adopt.

5.1.3 Benefits of using ICTs and E-commerce

Basu and Muylle, (2007), suggested that companies must gain two fundamental types of benefits from e-business. These are generally described as: Value Creation or Value Enhancement and lower cost of providing goods and services to the market.

An example of value creation include improvement in internal and external communications through effective e-marketing, increased business through an e-commerce enabled website integrated with a back-office system. As a result, great customer service quality will be achieved (Basu and Muylle, 2007).

Examples of reduced or lower cost are: reduction in communication and travel costs by using online tools such as online reservations by guests in the comfort of their homes. This research confirmed these positives of ICTs as suggested by reviewed literature. The researcher found out that hospitality business operators enjoy many benefits from ICTs and e-commerce. Availability of online payments, according to lodge managers interviewed, enable bookings to be confirmed before clients arrive and minimise the chance of last minute cancellation which was predominantly a major challenge before the advent of e-commerce.

The research findings confirm that marketing costs are reduced through online marketing and social media marketing. This is in contrast of suggestions by a variety of scholars (Ngwenyama and Morawczynski, 2007; MacGregor and Vrazalic, 2006) who regretted the high cost of ICT maintenance, which suggests their applications in marketing and reservations draws out a substantial amount of money from the

business, outweighing the benefits they bring into the business. On the contrary, the situation on the ground is different. Operators interviewed applauded ICTs for increasing guests' satisfaction as booking a room has been made easier since guests can do that in the comfort of their homes through web based bookings and e-commerce platforms for payments to confirm bookings.

Operators asserted that ICTs have increased management efficiency through PMS and, it has been established that accurate reports produced from such software programmes help managers make and execute sound decisions and strategies for business expansion. Basic benefits include good stock management, accurate financial reporting, integration of in-house functions such as software linked operations between the restaurant, front office, kitchen, the bar and finance office. Time is not wasted by staff moving between work stations submitting orders or bills as these are sent automatically from the POS system to kitchen, front office and finance.

5.1.4 Challenges of adopting and using ICTs and E-commerce

Many writers of e-business extol the enormous potential and opportunities provided for consumers and business globally. However, there are some drawbacks associated with the adoption of ICTs (Bynoe, 2002).

While many commentators hold the view that e-business has many advantages for developing countries, the African continent has a number of major challenges to overcome before it can fully exploit the benefits of e-business. A number of constraints, specific to doing e-business in Africa, are apparent (Akoh, 2001). These include but not limited to the following: low level of economic development and small per-capita incomes; limited skills base with which to build e-business services; the number of internet users need to build a critical mass of online consumers and; lack of familiarity with even traditional forms of electronic business such as telephone sales and credit card use (Akoh, 2001).

This study found out that despite the benefits that accrue to business operating with the aid of ICTs and e-commerce, it was still fraught with challenges. The major challenges identified were the applicability of imported systems to the local remote

establishments of the Natal Midlands, poor network infrastructure, lack of knowledge of IT and e-commerce and the relatively high cost associated with investment in ICTs.

The other challenges identified are the lack of applicability to other businesses especially curio shops, lack of ICT skills and competencies among operators and their managers, and the failure to supply software and operating systems like PMS in vernacular as the majority of employees understand vernacular languages other than English. These challenges were found to be the major hindrance to total business integration.

Though all respondents had some technology that enabled them to use e-business, these factors affected negatively the attitude of stakeholders towards using it. The challenges militating against the adoption of ICTs are indicative of the difficulties in the adoption of ICTs and e-commerce.

5.2 Conclusion

This study revealed that establishments in the Midlands have adopted ICTs as part of their strategy. The purposes for adopting are to: gather and manage information, perform e-mailing functions, develop and run websites, transact online and perform electronic marketing functions. However, these small establishments have not been able to adopt full ICT systems and integrate them for effective management, marketing and customer service quality.

It can also be concluded that ICTs have been beneficial to the businesses that adopted them. In respect of benefits accruing to the establishments, it was gathered that adopting ICTs resulted in improved customer satisfaction through, convenient booking systems via emails and website based bookings in the comfort of their homes, improved stock management and increased profits due to reduced food costs caused by pilferage, effective marketing through online channels and overall effective property management.

It can also be concluded that ICT adoption and utilisation is still confronted with some challenges. Notwithstanding the fact that e-business has been touted as a

valuable concept in leveraging business opportunities, it is still fraught with a lot of problems in South Africa. Major challenges established were lack of skills in staff, lack of finance to purchase ICTs, lack of knowledge on which ICTs to adopt and their advantages to the operators and the unavailability of ICT interfaces developed in vernacular languages, have affected attitude towards the use of the ICTs.

5.3 Recommendations

Based on the findings of this study, the following recommendations have been made to improve and encourage full adoption and utilisation of ICTs and e-commerce in the hospitality industry:

- The call for adoption to be put on national agenda through formulation of policies that encourage small operators to adopt ICTs as the only way to put themselves on the world map. Government through treasury should set up funding for such, as operators are failing to raise capital for such. This will increase business and expansion as it means more people will be employed. In other words, government needs to look at it as a way of helping companies create more jobs for the general populace.
- The department of Tourism should partner with the Culture Art Tourism Hospitality and Sports Sector Education and Training Authority (Cathsseta), and develop training programmes and short courses to boost IT skills of the workforce of small establishments in the hospitality industry.
- Hospitality representative boards should lobby for user friendly applications from manufacturers, for example Property Management Systems and any other basic software to come in vernacular languages, such as IsiZulu, to cater for the vast majority of South Africans who understand languages other than English.
- Small establishments should aim to start small in adoption and adopting more sophisticated ICT as the business grows.

5.4 Directions for Future Research

It is recommended that students and the academia conduct further studies to enhance knowledge that will address ICT concepts in the hospitality industry in South Africa, especially from the customers' perspective. The following could be possible areas of interest:

- The prospects of local languages use on ICT interfaces and their contribution to the increase in ICT adoption.
- Factors affecting the growth of e-business in South Africa.
- What the future of ICTs and e-commerce adoption in South Africa should be?
- Government policies and legal framework in relation to promotion of ICTs adoption and utilization in South Africa

References

1. Agboh, D.K. (2015). "Drivers and challenges of ICT adoption by SMES in Accra metropolis, Ghana", *Journal of Technology Research*, vol. 6, pp. 1.
2. Al-Mudimigh, A. S. (2007). E-Business Strategy in banking Services, A case study of Internet banking and commerce. *Journal of internet banking and commerce*, Vol 12
3. Albright, B. (2008). Hosted PMS solutions find home in hotels. *Hotel & Motel Management*, 223(14), 139.
4. Akoh, B. (2001). E-business in developing world, Africa and Ethiopia in the knowledge age. *Journal of Operations Management*, Vol., 25(1) pp 65-82.
5. Ansah, A. K., Blankson, V. S., and Kontoh, M (2012), The Use of Information and Communication Technologies (ICT) in Front Office Operations of Chain Hotels in Ghana, *International Journal of Advanced Computer Science and Applications*, Vol. 3, No. 3, 2012: 72
6. Babbie, E (1998) *The Practice of Social Research*. 8th Edition. Boston: Wadsworth Publishing Co.
7. Bardi, J. (2006). *Hotel front office management*. Hoboken. NJ: John Wiley.
8. Baker, S., Huyton, J. and Bradley, P. (2006) *Principles of Hotel Front Office Operations*. London: Thompsons Learning.
9. Basu, A., and Muylle, S. (2007). How to use E-Business to plan Business Initiatives in Established Companies. *MIT Sloan Management Review*, Vol 49 No. 1.
10. Baxter, P., and Jack, S. 2008, *Qualitative Case Study Methodology: Study design and implementation for novice researchers*. *The Qualitative Report*, 13(4):544-559.
11. Bithel, B. and Robert, C. (1986) *Financing Education in Third World Countries*. Throwbridge: Redwood.
12. Bless, C. and Higson-Smith, C. (1995) *Fundamentals of Social Research Methods: An African Perspective*. Cape Town: Juta

13. Borg, R (1989) School Administration and Management. Harare: College Press: Bartech automatic systems (Online). Available: <http://www.brantasinternational.com/wawcs016333/In-bartech-mini-bar.html?gclid=CKSbt8Csko4CFREhggodFRO2Dg> (Accessed 20 August 2014)
14. Breukel, A., and Go, F. (2009). Knowledge-based network participation in destination and event marketing: A hospitality scenario analysis perspective. *Tourism Management*, 30 (2), 184-193.
15. Bronkhorst, Q., 2014. The future of Ecommerce in South Africa (Online). Available: <http://businesstech.co.za/news/internet/45736/the-future-of-e-commerce-in-sa/> (Accessed 11 September 2014)
16. Buergermeister, J. (2001), Point-of-sale technology for foodservice: underutilised power tool. *International Journal of Hospitality Information, Technology*, vol.1, no. 2, pp. 9- 20.
17. Buhalis, D. (1998). Strategic Use of Information Technologies in the Tourism Industry. *Tourism Management* 19(3): 409-423
18. Buhalis, D. and Egger, R. (Eds) (2008). *eTourism case studies: Management and marketing issues*. Oxford: Butterworth-Heineman.
19. Buick, I. (2003). "Information technology in small Scottish hotels: is it working." *International Journal of Contemporary Hospitality Management* 15(4): 243-247
20. Bynoe, M. (2003). University of West Indies. Retrieved April 17, 2014, from University of West Indies website: <http://www.cavehill.uwi.edu/salises/conferences/2003/e-commercepaper.pdf>
21. Technology jargon buster (online). 2014 Available: <http://www.caterersearch.com/Articles/2005/08/31/302345/technology-jargon-buster.html> (Accessed 14 August 2014)
22. Chester, J. and Montgomery, K. (2008). Digital marketing, interactive food and beverage marketing: targeting children and youth in the digital age. An update memo prepared for NPLAN/BMSG (Online). Available: <http://ftc.gov/os/comments/foodmktgtokidspra-3/529477-00004.pdf> (Accessed: 28 August 2014).

23. Cleofhas, B. and Gibson, K. (2009). Effects of IT in marketing of communication services. Case: Safaricom KenyaLtd.Laurea University of Applied Sciences, Vantaa, Finland.
24. Cohen, L., Manion, L., and Morrison, K. (2001). Research Methods in Education. New York: Routledge
25. Creswell, J. W (1998) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 3rd Edition. London: Sage Publications Inc.
26. Creswell. J. (2003) Research design: Qualitative, quantitative and mixed methods approaches. (2nd ed.) New Delhi, India: Sage.
27. David, J., Grabski, S. and Kasavana, M. (1996), The productivity paradox of hotel-industry. Cornell Hotel and Restaurant Administration Quarterly, vol. 37, no. 2, pp. 64-70.
28. David, F. (2007). Strategic management – concept and cases. 11th ed. Upper Saddle River, NJ: Pearson Education.
29. Dehan, W. (2007). PMS software provides one click solutions. Hotel & Motel Management, 222(20), 24. 115
30. De Vos, A.S., Strydom, H., Fouché, C.B. and Delpont, C.S.L.(2005). Research at Grass Roots for the Social Sciences and Human Services Professions (3rd ed.). Pretoria: Van Schaik Publishers: 333-349.
31. Ecommerce and South Africa (Online). 2014. Available: <http://virtuosa.co.za/what-we-say/ecommerce-and-south-africa/> (Accessed 11 September 2014)
32. E-commerce in Africa: Not quite ready for take-off (online). 2014. Available: https://www.paygate.co.za/content.php?paygateneeds&articleid=189#.U_4dqDUalCA (Accessed 27 August 2014)
33. Entiwhistle, N. and Nisbet, J. D. (1970) Educational Research Methods. London: Longman.
34. Freeman I., and Hasnaou, A. (2010).Information communication technology: a tool to implement and drive corporate social responsibility (CSR). [Online]. Available: www.hal.archives-ouvertes.fr/docs/...aim2010-FreemanI-HasnaouiA.pdf (Accessed: 18 July 2014).

35. Gabrielsson, M., and Gabrielsson, P. (2003). Global marketing strategies of born globals and globalising internationals in the ICT field. *Journal of Euromarketing*, 12(3/4), 123-145.
36. Gale, D. (2005). Property management systems: Centralization offers advantages, savings. *Hotels*, 40(4), 53-56.
37. Galloway, L. and Mochrie, R. (2005), 'The Use of ICT in Rural Firms: a Policy-Orientated Literature Review,' *Info*, 7(3), 2005, 33-46.
38. Grout, V., Oram, D. and Pickling, R. (2006). *Proceedings of the First International Conference on Internet Technologies and Applications*. NEWI. Wrexham, Wales
39. Herselman, M. E. (2003), 'ICT in Rural Areas in South Africa: Various Case Studies,' *Proceedings of Informing Science*, June 2003, 945-955. [Online]. Available: <http://informingscience.org/proceedings/IS2003Proceedings/docs/120Herse.pdf> (Accessed 8 September 2014)
40. Howell A. and Terziowski M. (2005) *E-Commerce, Communities and Government - a Snapshot of the Australian Experience*. Communities and Technologies. Netherlands: Springer Publishers.
41. Leedy, P. D. (1980) *Practical Planning and Design*. New York: McMillan Publishing
42. Leedy, P. D. (1997) *Practical Research Planning and Design*: New Jersey: Prentice Hall
43. Lucchetti, R. and Sterlacchini, A. (2004), 'The Adoption of ICT among SMEs: Evidence from an Italian Survey,' *Small Business Economics*, 23 (2), 151-168
44. Lucey, T. (2005) *Management Information Systems*. London: Book Power.
45. Kalakota, R., and Whinston, A. B. (1996) *Frontiers of Electronic Commerce*. Michigan: Addison-wesley.
46. Khemsurov, M. (2005). Boutique hotels on a budget. *Business 2.0*, 6(3), 28.
47. Koko, D. and Koelane, T. (2013) *Reflecting on Information and Communication Technology (ICT) in marketing from a marketer's and student*

- perspective. *African Journal of Business Management*, Vol. 7(31), pp. 3098-310
48. Knowles, T. (1998) *Hospitality Management: An Introduction*. 2nd Ed. London: Prentice Hall.
 49. Kumar, V., Smart, P., Maddern, H., and Maull, R. (2008). Alternative perspectives on service quality and customer satisfaction: The role of BPM. *International Journal of Service Industry Management*, 19(2), 176-187.
 50. MacGregor, R. C. and Vrazalic, L. (2006), The Effect of Small Business Clusters in Prioritising Barriers to E-commerce Adoption in Regional SMEs. *Journal of New Business Ideas and Trends*, 4 (1), 24-44.
 51. Marshall, C. and Rossman, G.B., 2006, *Designing Qualitative Research*. London: Sage publications.
 52. Martin, L. (2005), Internet Adoption and Use in Small Firms: Internal Processes, Organisational Culture and the Role of the Owner-Manager and Key Staff,' *New Technology, Work and Employment*, 20 (3), 190-204.
 53. Midlands Meander (online). 2014. Available: http://www.midlandsmeander.co.za/midlands/mm_map2013.jpg (Accessed 11 July 2014)
 54. Modimogale, L. (2008), ICT and SMEs' Competitiveness in South Africa: How can SMEs Use ICT to Become Competitive in South Africa? M.IT mini-dissertation, Communications of the IBIMA 13 University of Pretoria. [Online], <http://upetd.up.ac.za/thesis/available/etd-08272008-111005/> (Accessed on 5 May 2014)
 55. Moyo, L.M. (1996). Information Technology Strategies for Africa's Survival in the Twenty-first Century: IT All Pervasive. *Information Technology for Development*. 7(1): 17-27
 56. Mpofo, K. C. and Watkins-Mathys, L. (2011). Understanding ICT adoption in the small firm sector in Southern Africa. *Journal of Systems and Information Technology*, 13(2), 179-199.
 57. Mutula, S. and Van Brakel, P. (2006), E-readiness of SMEs in the ICT sector in Botswana with respect to information access. *The Electronic Library*, 24 (3): 402-417

58. Mutula, S. and Van Brakel, P. (2007), ICT Skills Readiness for the Emerging Global Digital Economy among Small Businesses in Developing Countries: Case Study of Botswana. *Library Hi Tech* , 25 (2), 231-245.
59. Namasivayam, K., Enz, C. A., and Siguaw, J. A. (2000). How wired are we? *Cornell Hotel and Restaurant Administration Quarterly*, 41(6), 40- 48.
60. Ngai EWT (2003). Internet marketing research (1987-2000): A literature review and classification. *Eur. J. Market.* 37(1/2):24-49.
61. Ngwenyama, O. and Morawczynski, O. (2009), Factors Affecting ICT Expansion in Emerging Economies: An Analysis of ICT Infrastructure Expansion in Five Latin American Countries, *Information Technology for Development (Early view)*. [Online]. Available: <http://www3.interscience.wiley.com/> (Accessed 10 July 2014)
62. Nwakanma, I.C., Ubani, E.C., Asiegbu, B.C. and Nwokonkwo, O.C. (2014), "Factors Affecting the Adoption of ICT in the Hospitality Industry in Imo State", *International Journal of Computer Science Issues (IJCSI)*, vol. 11, no. 4, pp. 170
63. Odedra, M., Lawrie, M., Bennet. S. and Goodman, S. (1997). *Information Technology in Sub-Saharan Africa. Interface Technology and Training in Africa*, University of Pennsylvania, African Studies Centre, Pennsylvania.
64. Olifer, N. and Olifer, V. (2006) *Computer Networks, Principles, Technologies and Protocol for Network Design*, England: John Wiley and Sons Ltd.
65. Perkins, D. (2006). A new generation of property management systems. *Lodging Hospitality*, 62(7), 24
66. Reino, S., Frew, A.J. & Albacete-Sáez, C. 2011, ICT adoption and development: issues in rural accommodation, *Journal of Hospitality and Tourism Technology*, vol. 2, no. 1, pp. 66-80
67. Ritchie, B. and Brindley, C. (2005), *ICT Adoption by SMEs: Implications for Relationships and Management*. *New Technology, Work and Employment*, 20(3), 205-217.
68. Robson, C. (1993) *Real World Research; A research for Social Scientists and Practitioners Researchers*. Oxford: Blackwell Publishers

69. Samkange, F. and Crouch, D. 2008. Adaptation, Implementation and Utilisation ICT in the Hospitality Industry: Trends and Perspectives from a Developing Country. ICT Africa 2008 Conference, University of Derby Buxton.
70. Saunders, M., Lewis, P. and Thornhill, A. (2007). Research methods for business studies. 4th ed. Harlow, UK: Prentice Hall.
71. South Africa's biggest ICT challenges (online). 2014. Available: <http://businesstech.co.za/news/it-services/51088/sas-biggest-ict-challenges/> (Accessed 14 August 2014)
72. Seliger, H. W., and Shohamy, E. (1989). What is research? A paradigm for second language research. Oxford, UK: Oxford University Press.
73. Seyal, A., H. and Rahman M. N. A. (2003) A Preliminary Investigation of e- Commerce Adoption in Small and Medium Enterprises in Brunei. Journal of Global Information Technology Management Vol.6, No.2, pp. 6- 25.
74. Shanker, D. 2008. ICT and Tourism: Challenges and Opportunities. Conference on Tourism in India- Challenges Ahead. Guwahati, 15-17 May 2008, India Institute of Technology, 50-58
75. Smallbone D., Leigh R., and North D. (1995). The Characteristics and Strategies of high growth SMEs. International Journal of Entrepreneurial Behaviour and Research, Vol. 1 (3) in Department of Trade & Industry (DIT), SME Research Database, Institute for Small Business Affairs and Small Business Research Trust.
76. Smallbone D. and Welter F. (2001) The Role of Government in SME Development in Transition Economies. International Small Business Journal, Vol. 19, No.4, pp.63-77.
77. Tesone, D.V. (2006) Hospitality information systems and e-commerce. Upper Saddle River, NJ: John Wiley.
78. Van Hartesvelt, M. (2006). Building a better boutique hotel. Lodging Hospitality, 62(14), 32.
79. Viuker, S. (2007). Suite of amenities for business traveler. National Real Estate Investor, 49(8), 14.
80. Wagner, A. S. and Teixeira, R.M. (2014), "Information Technology Adoption by Small and Medium Enterprises in the Hospitality

Sector in Sergipe", *Revista Brasileira de Pesquisa em Turismo*, vol. 8, no. 1, pp. 59

81. Wang, Y.C. (2008). Examining the level of sophistication and success of destination marketing systems: impacts of organizational factors. *Journal of Travel and Tourism Marketing*, Vol. 24 No. 1, pp. 81-98.
82. Yin, R. 1994, *Case study research: Design and methods*. 2nd Edition. Beverly Hills, CA: Sage Publications
83. Zaidah, Z., 2003, *An Investigation into the effects of Discipline-Specific Knowledge, Proficiency and Genre on Reading Comprehension and Strategies of Malaysia ESP Students*. Unpublished Ph.D. Thesis. Malaysia: University of Reading
84. Zhou, Z. (2004), *E-Commerce and information technology in hospitality and tourism*, Thomson Delmar Learning, Canada

Questionnaire for Hospitality and Tourism Establishments

This questionnaire has been designed with the purpose of finding relevant facts on **the use of information and communication technology (ICT) and e-commerce for effective management, marketing and customer service quality in small remote hospitality establishments: A case study of the Natal Midlands, KwaZulu Natal South Africa.** The results or responses will be guaranteed strict confidentiality and will not be used for any other purposes. For the reasons of the interviewee`s privacy, names will be withheld. Please fill in your opinions in all applicable areas

Interviewee Personal Details

Occupation.....

Gender.....

Age.....

Background Information

1. Select the type of your establishment (Tick where appropriate)

Lodge (B&B/ S/C)	Restau rant	Wedding venue	Curio shop

2. How many years have your business been in operation?

.....

3. Location of

Establishment.....

4. Number of Employees working at your

establishment.....

5. How is your clientele composed? Fill in below

Locals	Foreigners
%	%

6. How many Dining rooms does your establishment have?.....

7. Do you specialise on any certain foods and which meals do you serve?
Tick where appropriate below

.....
.....
.....

Breakfast	Lunch	Dinner

8. Is your establishment Star graded? If yes, how many stars is your establishment.....

9. For Wedding venues, how many reception halls do you have?.....

10. How many Beds does your establishment have.....?

11. Do you have a chapel on site?.....

ICT and e-commerce tools

12. How did you establish your ICTs in your business? Tick where appropriate

Inherited Systems	Introduced Systems	Not Sure

13. Does your establishment have any of the following tools?

Tool	Yes	No	NA
Computer (desk top/ laptop)			
Landline telephone			
Fax (landline/ fax to email)			
Speed point (card machine)			
Point of sale (POS) system			
Company cell phone			

14. What other ICTs do you have and what do you use them? Complete the table below

Category of ICTs	ICTs Adopted	Uses
Telecommunications		
Software		
Networking Technology		
Ecommerce		
Security Systems		
Audio Visual Conference		

Software, Connectivity and interface

15. Does your establishment have any of the following software, connectivity and interface?

Item	Yes	No	N/A
ADSL internet connection			
Wi-Fi			
Property Management System (PMS)			
Website			
E-mail account(s)			
3G connectivity (Dongle)			
Satellite internet			

16. How reliable is your internet service provider?

Excellent	Good	Average	Poor

17. Is your internet connectivity available for guest use?

Yes	No	N/A

18. If the answer to the above is no, do they ever ask for internet connectivity?

Yes	No	N/A

19. How do your guests feel when you tell them that internet is not available for their use?

.....

20. If the answer to **question 18** is yes, in what form do you provide internet connectivity to your guests?

ADSL	Wi-Fi	3G dongle

21. Does your guests ever ask for internet connectivity?.....

22. Do you charge your guests to use internet at your establishment?.....

23. If the answer to question 22 is yes, how much do you charge them?.....

24. Does your website have a visitor count facility? Tick where appropriate

Yes	No	N/A	

25. Does your website have an e-commerce site? That is online booking and payment facility?

Yes	No	N/A

26. If the answer to the above is yes, does your website offer any security to the end user (guest) through software such as 'Paygate'?

Yes	No	N/A

27. Does your business subscribe to such social networks as Facebook, twitter, whatsapp?

Yes	No	N/A

28. If the answer to **question 28** is yes, which ones do you use most?

.....

.....

.....

29. How do you find these social sites as an effective marketing channel? Tick and comment

Very effective	Effective	Average	Poor

.....

.....

.....

.....

.....

.....

30. Does your establishment subscribe to any booking sites, marketing sites or associations?

Yes	No	N/A

31. If the answer to Question 31 is yes, which sites do you subscribe to?

.....

.....

.....

.....
.....
.....
.....
.....

32. Do you have a Property Management System (PMS)? Tick where appropriate

Yes	No	N/A

33. In your view, is a PMS relevant for effective management? Please comment

.....
.....
.....
.....
.....
.....

Importance of ICT and e-commerce

34. In your own opinion, why is ICT and e-commerce application in remote hospitality establishments useful?

.....
.....
.....
.....
.....
.....
.....
.....
.....

