



Digital Divide: Investigating the integration of marketing and ICTs for South African retailers expanding throughout Africa

A dissertation submitted in partial fulfilment of the requirements for the degree of
Master of Business Science in Marketing

Faculty of Management Studies
University of Cape Town

Student: Bethany Hill
Student No: HLLBET002

Supervisor: Dr. Joel Chigada

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Acknowledgements

I would like to express my gratitude to my supervisor Dr. Joel Chigada for his continuous support, advice, patience and motivation throughout the process of this master thesis. I would also like to thank Dr. Chigada for the knowledge he bestowed upon me and the recognition that I am more capable than I feel at times. I would also like to thank the participants of this study, dedicating their time to me and making this master's thesis possible. To my friends and family, for your patience and understanding of my limited time and energy throughout this process. Finally, a special thank you to my partner who has been on the frontline of this battle with me from start to finish, offering continual support, assistance and caring for me throughout.

Abstract

Information Communication Technologies are increasingly used in organisations' market expansion strategies. These Information communication technologies provide organisations with opportunities such as ease of communication and movement of resources, making the entry into new markets a faster and less resource heavy process. When expanding throughout the African continent, the challenge presented in using this approach is that many African markets have underdeveloped information communication technology infrastructure. In considering this barrier, the extent to which information communication technology enables market expansion throughout the African continent is the topic which has been fully analysed and discussed. An exploratory research design and a qualitative method have been used in this study. The subjects of the data collection were three key individuals selected from a large South African retailer. These three individuals job roles spanned across the marketing and IT departments and were influential in the organisation's expansion efforts throughout Africa. The findings of this study show that the levels of information communication technology infrastructure vary vastly from country to country on the African continent, noting South Africa, Kenya, Nigeria, Zambia and Botswana as the more advanced nations with the Democratic Republic of Congo and Uganda lagging in development. The findings also show that for retailers, the retail focused technology available in South Africa is not yet available in other African nations which causes challenges in offering the same value to consumers across the board. However, the finding show that the development of cloud-based systems has assisted in the widespread use of technologies without the need of heavy investments into physical locations.

KEYWORDS: Information Communication Technology, market expansion, African markets, ICT enablement, digital divide, ICT infrastructure, developing nations, Enterprise Resource Planning, cloud computing.

Table of Contents

Acknowledgements	ii
Abstract	iii
List of Figures	vii
List of tables	vii
CHAPTER ONE: INTRODUCTION AND BACKGROUND OF STUDY	1
1.1 Background of Study	1
1.2 Research Problem	4
1.3 Purpose of the Study	5
1.4 Significance of Study	5
1.5 Research Question and Objectives	5
1.6 Theoretical Model	6
1.7 Research Methodology	7
1.7.1 <i>Research paradigm</i>	8
1.7.2 <i>Research design</i>	8
1.7.3 <i>Research methods</i>	9
1.7.4 <i>Population</i>	9
1.7.5 <i>Sampling strategy</i>	10
1.7.6 <i>Data collection</i>	10
1.7.7 <i>Data analysis</i>	10
1.7.8 <i>Ethical considerations</i>	11
1.8 Scope and Delimitations	11
1.9 Organisation/Structure of Study	12
1.10 Conclusion	13
2.1 Introduction	14
2.2 Role of Literature Review	15
2.3 Theoretical Framework	15
2.4 South African Retail Industry	17
2.4.1 <i>Types of Retailers</i>	19
2.5 Challenges confronting retailers	21
2.6 Expansion into Africa	22
2.6.1 <i>Regional Expansion</i>	24
2.6.2 <i>International Expansion</i>	24
2.6.3 <i>Global Expansion</i>	24
2.7 Challenges in the African Retail Marketplace	25
2.8 The Digital Divide	27

2.9 ICT as an enabler for global expansion	31
2.10 Aligning ICT to organisational strategy	33
2.10.1 <i>Elements of alignment</i>	34
2.10.2 <i>Motivations driving alignment</i>	34
2.11 Cybersecurity legislation	35
2.12 Empirical studies of firms using ICT as a global expansion enabler	37
2.12.1 <i>Massmart</i>	37
2.12.2 <i>H & M</i>	38
2.12.3 <i>Yuppiechef</i>	39
2.13 Conclusion	39
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY	40
3.1 Introduction	40
3.2 Research Philosophy	41
3.2.2 <i>Interpretive paradigm</i>	42
3.3 Research Design	43
3.4 Research Strategy	44
3.5 Target Population	47
3.6 Sampling	47
3.6.1 <i>Probability sampling</i>	47
3.6.2 <i>Non-probability sampling</i>	47
3.7 Research Instrument	48
3.8 Data Analysis	49
3.9 Trustworthiness and Authenticity	51
3.9.1 <i>Trustworthiness</i>	51
3.9.2 <i>Authenticity</i>	52
3.10 Limitations of the Study	53
3.11 Elimination of Bias	54
3.12 Ethical Considerations	54
3.13 Conclusion	55
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	56
4.1 Introduction	56
4.2 Emerging Themes	57
4.3 Thematic Data Analysis	58
4.3.1 <i>What are the challenges faced in using ICTs in South African retailer's expansion strategies throughout the African continent?</i>	58
4.3.2 <i>What intervention strategies have been used to overcome the challenges?</i>	61

4.3.3 What are the benefits of using ICTs in South African retailer’s expansion strategies throughout the African continent?	61
4.3.4 To what extent does the digital divide effect South African retailer’s ICT driven expansion across the African continent?	62
4.3.5 How do differences in Cyber Security legislation in different regions effect an organisation’s ICT policies and protocols in different regions?	65
4.4 Interpretation of findings	66
4.4.1 What are the challenges faced in using ICTs in South African retailer’s expansion strategies throughout the African continent?	66
4.4.2 What intervention strategies have been used to overcome the challenges?	68
4.4.3 What are the benefits of using ICTs in South African retailer’s expansion strategies throughout the African continent?	69
4.4.4 To what extent does the digital divide effect South African retailer’s ICT driven expansion across the African continent?	69
4.4.5 How do differences in Cyber Security legislation in different regions effect an organisation’s ICT policies and protocols in different regions?	72
4.5 Conclusion	72
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	73
5.1 Introduction	73
5.2 Summary of Findings	73
5.2.1 Findings from literature review	73
5.2.2 Findings from primary study	75
5.3 Conclusions	77
5.4 Recommendations	78
5.5 Recommendations for Future Research	80
5.6 Conclusion for the study	82
REFERENCES	1

List of Figures

Figure 1: ICT Development Index.....	6
Figure 2: Population and internet penetration by country for Africa.....	28
Figure 3: Social media platform usage over Africa.....	29
Figure 4: Top messenger apps by country.....	31
Figure 5: The ICT Sector and its impact on other industries.....	32
Figure 6: Research Methods	42

List of tables

Table 1 – Interview Protocol	51
------------------------------------	----

List of acronyms

ICT – Information Communication Technology

ERP – Enterprise Resource planning

DRC – Democratic Republic of Congo

SA – South Africa

SADC - Southern African Development Community

TFG – The Foschini Group

IDI - ICT Development Index

IT - Information Technology

CHAPTER ONE: INTRODUCTION AND BACKGROUND OF STUDY

1.0 Introduction

Information Communication Technologies (ICTs) are increasingly enabling global expansion and providing opportunities for retailers in developed and saturated regions (Business Connections, 2018; Roberts, 2017). However, advancements in ICT development are occurring at vastly different rates in developing countries, posing various challenges to those organisations looking into regions such as Africa for the next profitable expansion ventures (Business Connections, 2018). Retailers in developed nations such as European countries experience saturation in the local retail markets providing no possibility for growth. These retailers commonly look to less developed nations for profit maximizing opportunities and the African continent has been flagged in recent years for large growth potential with growth in Sub-Saharan Africa forecasted at 3.2% for 2018 (Forbes Magazine, 2017). Developments in ICT infrastructure have enabled organisations to expand globally by bridging the communication gap, making the expansion process quicker and less resource heavy. The benefits of integrating ICT into business activities have been listed as enabling businesses to compete on a global scale, improved efficiency and closer customer and supplier relationships. These benefits of ICT integration are however subject to certain conditions, namely: correct infrastructure; skilled ICT employees and the availability of budget to invest in ICT (Ashrafi, & Murtaza, 2008; Alam & Noor, 2009; Taruté & Gatautis, 2014). The complication arising for organisations using ICTs as an enabler for expansion lies in the availability of ICT technology infrastructure and human resources in the entrant country. The African continent is well noted for its slow development of ICT infrastructure, causing many challenges for an organisation relying on ICT enablement for expansion. This study investigates the integration of ICTs and marketing in the expansion strategies used by a South African retailer in their expansion throughout the African continent.

1.1 Background of Study

The South African retail landscape is exposed to a saturated domestic market, a large presence of informal marketplaces and high competition from international entrants (Dakora & Bytheway, 2014; Dakora & Manson, 2016; Statistics South Africa, 2017). Additionally, South Africa has a volatile Rand currency and experienced slow

consumer spending (Mataranyika, 2016; Brown, 2017). These factors have caused many South African retailers to look outside of South Africa to further their success and build profits. Regional expansion has become a trend for South African retailers and has been further aided by the formation of regional blocs such as SADC (Southern African Development Community) consisting of Angola, Botswana, Congo (DR), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe (Department of Agriculture, Forestry and Fisheries (DAFF), 2016). South African retailers tend to focus their expansion efforts into the SADC member countries due to the ease of flow of resources (Mr Price Group, 2016; The Foschini Group [TFG], 2016; Pick n Pay, 2017; Shoprite, 2017; Steinhoff International, 2017; Woolworths, 2017).

Various challenges have been noted by organisations looking into expansion into the African continent. The challenges noted as inherent to operating businesses in African countries are: difficulty in finding suitable local partners, the requirements for local ownership and employees, logistical challenges due to lack of infrastructure. It has been reported that slow ICT development and an underdeveloped retail landscape causing difficulty in finding a suitable subject for an acquisition approach (Dakora & Bytheway, 2014; Dakora & Manson, 2016; Mataranyika, 2016). This study investigated the slow ICT development and how this affects retailers using ICTs in their expansion strategies throughout the African continent. This concept is further defined as the digital divide. The digital divide is understood through the analysis of literature as a barrier in access ability and use of ITCs.

The key players in South Africa's retail market consist of Woolworths, The Foschini Group (TFG), Pick n Pay, Mr Price and Shoprite. Shoprite and Pick n' Pay traditionally being grocery retailers, have since added other product lines such as homeware, clothing, electronics, financial services among others (Shoprite Holdings, 2017; Pick n Pay, 2018). Woolworths is a food, clothing and homeware retailer for a higher market consumer. The Foschini Group and Mr Price focus on fashion retailing and homeware. All these organisations have expanded into further African countries (Mr Price Group, 2017; TFG, 2017).

Woolworths has opened stores in 11 African countries outside South Africa, namely; Botswana, Namibia, Lesotho, Swaziland Ghana, Kenya, Tanzania, Uganda, Zambia,

Mozambique and Mauritius. Woolworths also attempted entry into the Nigerian market however pulled out due to difficulties in the market (Woolworths, 2017). Woolworths being a higher priced retailer struggles in highly price conscious markets in which the brand presence is not strong and has chosen to focus efforts on their expansion throughout Australia and South African market (Woolworths, 2017).

The Foschini Group stated its vision is to be the leading fashion lifestyle retailer in Africa (TFG, 2017). Currently TFG has operations in South Africa, Botswana, Ghana, Kenya, Lesotho, Namibia, Swaziland and Zambia. TFG also has a presence outside of Africa with operations in Europe, Middle East Asia and Australia, however these outlets contribute 14,8% of turnover while the African outlets contribute to 79,8% of turnover (TFG, 2017). Of the African operations, the SADC countries take the focus with 99% of the African outlets in SADC countries and 93% in South Africa (TFG, 2017).

Pick n Pay's African footprint is currently limited to SADC member countries, namely, Botswana, Lesotho, Namibia, Swaziland, Zambia and Zimbabwe. However, Pick n Pay has plans to expand outside of the SADC region into both Ghana and Nigeria with a planned expansion into Nigeria and an opportunity identified in Ghana (Pick n pay, 2018).

The Mr Price Group operates in Botswana, Namibia, Zambia, Ghana, Nigeria, Lesotho, Swaziland, South Africa and Australia. The group has a small presence in Australia with only 3 stores in operation. As with the other retailers, the African footprint is stronger in the SADC region with less than 1% of the African stores outside of the SADC region and the South African stores contributing 93% of the global presence (Mr Price Group, 2018).

Shoprite has the largest presence across the African continent with stores in South Africa, Zambia, Mozambique, Botswana, Namibia, Lesotho, Swaziland, Mauritius, Madagascar, Uganda, Angola, Ghana, Nigeria, Malawi and Democratic Republic of Congo, with a recent move into Kenya. Shoprite began their expansion into the continent in 1990 opening a store in Namibia and has continued to expand its presence becoming Africa's largest retailer in 2010 (Shoprite holdings, 2018). In 2018 Shoprite was named the 94th biggest retail group in the world in the Deloitte Global Powers of Retail Report (Kalish & Eng, 2018).

Advancements in communication technology have enabled organisations to find quicker and easier methods of international expansion, opening a new world of opportunity (DAFF, 2016). The challenge posed here is that while new technologies may be available for an organisation in their country of origin, these technologies may not be available in the entrant country. Considering this, it is important to understand the extent to which organisations make use of ICTs in their expansion strategies and how this becomes challenging in an African marketplace characterised by slow ICT development. Theory surrounding these issues is further discussed and analyzed throughout this study with specific mention to the ICT development Index or IDI, the digital divide (elaborate) and the concept of ICT and organisational alignment.

1.2 Research Problem

Research shows that ICT density levels are lower in Africa than in any other region (International Telecommunication Union [ITU], 2015). This slow pace of ICTs' uptake in Africa poses a problem for ICT enabled continental expansion. Possible reasons for this slow pace in ITCs include a lack of appreciation or understanding of the benefits of technology, lack of skills available for the personal and economic use of ICTs and a lack of resources and infrastructure for ICTs to be implemented (Ayanso, Cho & Lertwachara, 2013; Ohemeng & Ofosu-Adarkwa, 2014). The problem posed with regard to ICT enabled continental expansion is that this approach requires large investment funds from the entrant company. An entrant would need to overcome many barriers by either implementing self-created infrastructure or adapting to what is available both of which would likely require complying with regulations. In addition to investment outlays, most consumers in Africa require consumer education on the use and importance of online shopping and use of other ICTs in facilitating transactions. In such a case where there is little knowledge and lack of understanding how these ICTS work, there is a possibility that it might be daunting for retailers to use ICTs as enablers of global expansion reference. Chigada (2014) also states that the use of ICT as an expansion strategy is not a guarantee that the firm's expansion strategy will succeed, but, there are concerted efforts required to support ICTs. It is in this context that the researcher, asks the extent to which South African retailers are using ICT enabled expansion strategies in their expansion efforts throughout the African continent.

1.3 Purpose of the Study

The purpose of this study is to conduct an in-depth investigation into the impact of the digital divide across the African continent using ICT as an expansion strategy.

1.4 Significance of Study

To uncover insights into the true challenges faced in an ICT enabled approach and how these challenges have been overcome in practice. An additional contribution of this study is understanding what the digital divide truly encompasses beyond the theoretical definition and understanding from the point of view of a retailer, what the true state of ICT infrastructure is in specific African nations. This study integrates two areas of academic learning and industry into one concept, namely IT and marketing. For future research it is integral that these areas are not studied in isolation as they are becoming increasingly amalgamated in both industry and academia. The findings of this study can be used in recommendations for other South African retailers considering their expansion strategies throughout the continent. The findings can also be used to provide insights into the retail landscape of continent for foreign investors. Furthermore, the findings can be utilised in future research into the digital divide across the continent and the ability for organisations to expand throughout the continent using ICTs in their expansion strategies.

1.5 Research Question and Objectives

The research objective developed for this study is:

“To what extent a South African retailer has used ICTs in its expansion strategies, throughout the African continent which faces the challenge of slow ICT adoption and the digital divide”

This objective is further expanded upon by the following research questions:

1. What are the challenges faced in using ICTs in South African retailer’s expansion strategies throughout the African continent?
2. What intervention strategies have been used to overcome the challenges?
3. What are the benefits of using ICTs in South African retailer’s expansion strategies throughout the African continent?

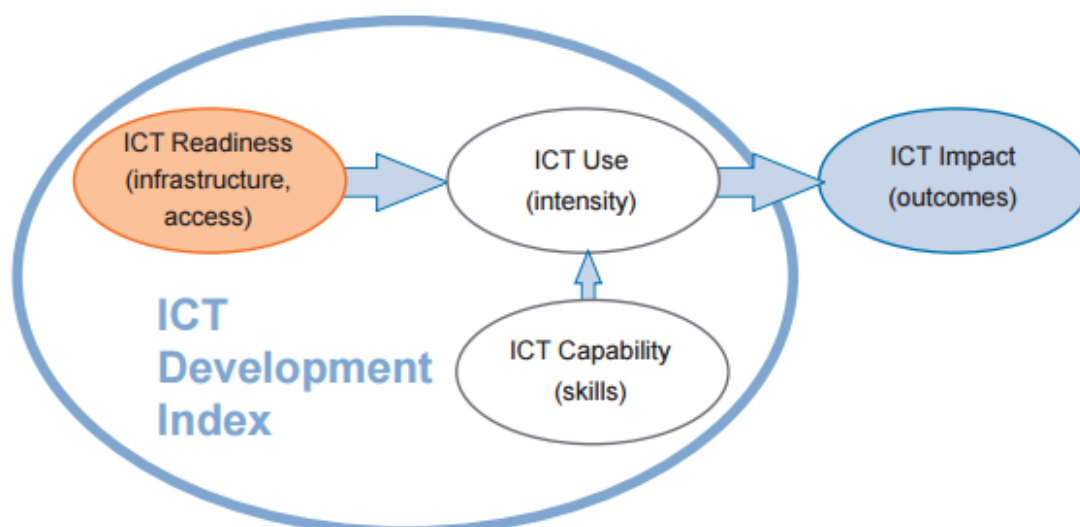
4. To what extent does the digital divide effect South African retailer's ICT driven expansion across the African continent?
5. How do differences in Cyber Security legislation in different regions effect an organisation's ICT policies and protocols in different regions?

1.6 Theoretical Model

Three main theories are discussed throughout the literature of this study which are further analysed and expanded upon given the research findings. These are the Information Communication Technology Development Index (IDI), the digital divide and the alignment of ICT and organisational strategy.

The IDI was developed in an attempt to measure and identify the stages of ICT development in developing nations and track the digital divide (ITU, 2009; Jeremic & Markovic, 2012; Ayanso, Cho & Lertwachara, 2013). Using this model to measure African nations ICT development shows that among developing nations worldwide, Africa's developing nations are shown to be less developed and South Africa is among the more developed of the nations on the African continent (ITU, 2016; 2017). This shows the divide between Africa and other continents but also the divide between South Africa and other African nations.

Figure 1: ICT Development Index



Source: ITU (2009)

Figure 1 depicts the measurement factors of the ICT Development Index namely: ICT Readiness, ICT use and Capability and ICT Impact (ITU, 2009).

The concept of the digital divide was first formed in 1995 to describe the gap in telecommunication access (NITA, 1995). Since then, the term has evolved, along with communication technology, to hold a wider definition. Throughout the discussions of this study, further suggestions are given to the causes and types of digital divides present across the African continent, expanding the definition thereof.

Considering the disparities in ICTs throughout the African continent, a South African retailer expanding into new territories needs to consider the concept of ICT alignment. Business IT Alignment is defined as the collaboration and synthesis of the core business goals and strategies with the core IT goals and strategies to create and achieve a unified goal for the business (Chan & Reich, 2007; Charoensuk, Wongsurawat & Khang, 2014). ICT alignment concept is suggested throughout literature to be important for improvement of operational efficiency, improvement of communication and creating a competitive advantage which are essential for regional expansion attempts (Charoensuk *et al.*, 2014; Gerow, Thatcher, & Grover, 2015). One of the differences between South Africa and other African countries is cyber security legislation as South Africa is more regulated than other countries in the continent. Although there is a possibility to take advantage of the fact that other nations lack regulation, the concept of alignment suggests that a uniform approach should be taken across all business activities (Chigada, 2018). When expanding into nations with different or lack of technologies available, alignment becomes a challenge to incorporate across regions. The research in this study suggests methods to overcome these challenges and highlights the importance of alignment.

1.7 Research Methodology

In this section, the researcher describes the research methods that helped guide the collection, analysis and interpretation of data for the study. Firstly, the research paradigm has been described, followed by the research design and research methodology. After this, the target population has been outlined and sampling strategies have been discussed. After this, the data collection process has been explained and ethical considerations taken by the researcher have been discussed.

1.7.1 Research paradigm

A research paradigm is a collection of concepts or beliefs held by a researcher (Rahi, 2017; Patel, 2015). The belief system that informed this study was an interpretivist paradigm. Interpretivism is concerned with the unique nature of a specific phenomenon and focuses on providing context and depth into this phenomenon. Interpretivism is based on the belief of a deep understanding and exploration of concepts, encouraging the significance of qualitative research (Chowdhury, 2014). Following an interpretivist mindset allowed for a flexible approach to the research process, which gave the researcher the ability to uncover insights not previously predicted which provided depth and context into the research topic.

1.7.2 Research design

The research design selected for this study was an exploratory research design. The characteristics of an exploratory research design include flexibility in the research process and small sample sizes of respondents (Malhotra, 2010; Yilmaz, 2013; Dudovskiy, 2018). The purpose of an exploratory design is to ask questions and uncover insights, and this approach is generally taken in when research into a topic is in its primary stages (Drammeh & Karlsson, 2017; Rahi, 2017). Exploratory research does not fulfil the goal of finding a single conclusive solution to a problem but rather this approach allows the researcher to give context, multiple possible solutions and a basis for further research to be conducted (Dudovskiy, 2018). As this study has taken the form of an investigation into a certain topic, an exploratory research design was selected as the most fitting and appropriate design. Yin (2009) states that case studies are effective strategies for collecting, analysing and interpreting data when there is limited time. Whilst the case of one organisation may not be representative of industry, certain aspects of the case can be translatable to certain similar situations.

A case study approach is a popular research strategy in business research (Bryman & Bell, 2015; Drammeh & Karlsson, 2017). For this reason, an instrumental case study approach was used as the research strategy, with a major South African retailer for the case organisation. The dictionary definition of a case study given by Merriam-Webster (2018) defines a case study as "an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment." Justification for use of a case study approach was to enable the researcher to gather information from a major player in the retail space and gain in-depth insights into their

experience of the integration of ICT and marketing in expansion strategies. The case study data collection process made use of both secondary and primary data. The secondary data used was an in-depth review and analysis of relevant literature as well as industry reports and articles specific to the business case selected. The primary data used was open ended semi structured interview questions which took the form of in depth interviews with key respondents and were voice recorded for record keeping. Thematic analysis was conducted using both Nvivo software and researcher knowledge and interpretation to bring about themes and develop findings.

1.7.3 Research methods

Research methods can be either quantitative or qualitative in nature (Malhotra, 2010; Yilmaz, 2013). As the belief system which informed this study was interpretivist, a qualitative method was the most suitable method aligning to these beliefs and this was selected using a case study approach. The advantages of a qualitative approach include, flexibility in the research process and depth responses however this methodology has been criticized for its lack of generalisability and reliability (Carson, 2005; Malhotra, 2010; Yilmaz, 2013). The researcher was able to collect and contextualise data to real-life complexities through the case study lens. The true challenges were uncovered by using the case study, whilst giving the researcher an understanding of how management approached these challenges.

1.7.4 Population

Chigada (2014) defines a target population as that group of elements of interest to the researcher where data is collected and contextualised to a natural setting. The target population for this study was managers in IT and marketing departments involved in decision making regarding the continental expansion strategies of the organisation chosen for this study. For example, the Marketing, IT, strategy managers and chief marketing officer formed the target population for the study. Due to limitations arising, three key individuals were selected whose responsibilities spanned across marketing and IT, with departments somewhat overlapping, who were present in the organisations' expansion efforts throughout the continent. The employees selected held the titles of Marketing, IT and Chief Strategy Managers.

1.7.5 Sampling strategy

Sampling techniques in research include probability and non-probability sampling. Probability sampling involves predetermining the probability for the selection of each sampling unit while non-probability sampling relies on the judgement of the researcher to select sample units (Malhotra, 2010; Bryman & Bell, 2015; Drammeh & Karlsson, 2017). Non-probability, convenience purposive sampling was used initially by the researcher to select and contact key respondents. After confirming participation of the initial respondent, a snowballing technique was utilised. The reason for the use of convenience purposive sampling was that the information required by the researcher was industry specific and required answers from respondents in Marketing and IT positions of a large African retailer. Therefore, the respondents needed to be selected based on their occupations and the organisation they worked for. This need for specific knowledge also justified the use of snowballing technique as an appropriate means of selecting additional respondents.

1.7.6 Data collection

Both primary and secondary data were collected in this study using three data collection methods. Secondary data was collected through industry reports of the case study organisation and through an in-depth review of surrounding literature. Primary data was collected in the form of semi-structured, open ended interview questions with three key individuals of the case study organisation. The rationale for combining the three methods of data collection was to triangulate the data, to ensure reliability of the findings. The process of conducting semi-structured interviews involved the interviewer preparing a set of questions to be answered by all interviewees, however, there was a possibility of additional questions asked during interviews to clarify or further expand certain topics (Malhotra, 2010; Dudovskiy, 2018). Benefits of semi-structured interview include detailed information gathered and the possibility of clarification of answers, while disadvantages of this technique are difficulties in arranging the interviews and time involved in the conducting of the interviews (Malhotra, 2010; Dudovskiy, 2018).

1.7.7 Data analysis

Qualitative research does not have a set method for data analysis as the research process is flexible. The most suited approach considering the objective of this study was to conduct a thematic analysis of the data collected. This method was selected to

allow the researcher to uncover themes in the data surrounding the research topic which was achieved by a combination of qualitative data analysis software Nvivo 12 and researcher interpretation and analysis. Once themes had been identified, the data relating to these themes were further discussed and analysed.

1.7.8 Ethical considerations

The main ethical concerns in this study were around protecting the identities of the respondents and the case study organisation. For this reason, the respondents were not named, nor official titles given, and the case study organisation has not been named. Further ethical considerations were to ensure that the participants fully understood the purpose of the research and their role therein and that official consent be given by them for their participation. Participants were provided with a document describing the nature and purpose of the research along with a consent form and the questions to be asked in advance of the interviews. These documents were again provided at the time of the interviews and the consent forms were signed by each participant prior to the interview beginning.

1.8 Scope and Delimitations

The objectives of this research paper focused on uncovering insights regarding the digital divide and its effect on ICT integrated expansion strategies for South African retailers expanding throughout Africa. Considering these objectives an exploratory research design and qualitative approach was deemed the most appropriate research avenue. Exploratory research tends to be selected as a design for studies in which little is known about the research problem and when the research problem needs to be defined further (Malhotra, 2010; Drammeh & Karlsson, 2017). Exploratory research designs have the characteristics of a flexible, research process and small sample sizes which lend kindly to uncovering insights (Malhotra, 2010; Yilmaz, 2013). The type of study in which a qualitative approach is the most appropriate selection would be those in which the nature of the topic in question cannot be measured quantifiably and also those in which a problem requires a more precise definition, both of which are the case for this research (Malhotra, 2010).

The delimitations of this study refer to the boundaries set for the scope of the study. It is important for a researcher to set boundaries to ensure the focus of the study is kept intact. This study uses the case of one South African retailer's experience expanding

throughout the African continent. The case organisation has a large presence in South Africa and has expanded into 15 other African nations, limited to Sub-Saharan Africa, throughout the past 25 years. The respondents of the case study organisation held high level roles in both marketing and IT and are involved in strategic decisions and operations with regard to regional expansion. Although the case of one organisation cannot be representative of all organisations in a region, this approach was selected due to time and resource constraints, however, the case organisation selected is recognised as highly reputable in the retail space.

1.9 Organisation/Structure of Study

To investigate and fully answer the research objectives of this study, the structure of this study takes the form of the following six chapters.

Chapter 1: Introduction and Background of the Study

This chapter gives a general background into the retail landscape and the use of ICTs as an enabler for global expansion. It further discusses the challenges faced regarding ICTs in Africa which leads to the problem statement and purpose of the study – to determine the effects of the digital divide on ICT enabled expansion strategies when expanding throughout the African continent. Following this, theoretical models are given, and the research design and methodology used in the study is discussed and the scope and delimitations of the study are discussed. Finally, the structure of the study is laid out and then conclusions of the introduction are provided.

Chapter 2: Literature Review

The purpose of the literature review is to discuss the topics of the study in full to give the reader background knowledge into the area of research and to justify the importance of the study. The topics discussed in this literature review are; the role of the literature review, theoretical framework, the South African retail industry, types of retailers, challenges confronting retailers, expansion into Africa, challenges confronted in African expansion, the Digital Divide, ICT as an enabler for global expansion, aligning ICT to organisational strategy, cybersecurity legislation, empirical studies of firms using ICT as a global expansion enabler and finally a conclusion is given.

Chapter 3: Research Design and Methodology

Chapter 3 discusses the various methods used by the researcher from research philosophies to research strategy. Other elements discussed in this chapter include target population, sampling strategies, research instrument, validity reliability limitations, bias and ethical considerations. These topics are discussed fully, and the methods selected for this study are highlighted and their selection justified in this discussion.

Chapter 4: Data Presentation, Analysis and Interpretation:

This chapter presents the data collected through the research process beginning with a description of the themes uncovered. Following this, a thematic data analysis is conducted, leading to the interpretation of the data presented and analysed. Throughout the analysis and interpretation processes in this chapter, the objectives of the study are answered.

Chapter 5: Conclusions and Recommendations

Chapter 5 is the final chapter of this study. The focus of this chapter is on presenting the conclusions of the primary and secondary data. These findings are presented in point form and combined into conclusions. The conclusions drawn from the findings are then used to form recommendations for industry and future research. Following this, the final conclusion of the study is presented.

1.10 Conclusion

In conclusion, the focus of the introductory chapter was to provide a background and contextual setting of the problem at hand. This study was premised on a well-known global retailer whose leadership decided to use ICTs as a vehicle for the company's expansion into Africa. The researcher acknowledged that ICT enabled market expansion is a growing trend among organisations looking to increase their profits through global expansion. With reference to the use of ICTs, organisations were provided with tools and abilities to expand and reduce the investment required. However, when entering underdeveloped nations of the African continent, the ICT infrastructure and development tends to be lacking. This creates a challenge to organisations using an ICT focused strategy for expansion which leads to the question: to what extent are ICTs being used in expansion strategies into the African continent? By conducting this study, the researcher intends to uncover the underlying challenges

and adoption rate of ICTs as vehicles for expansion in to the rest of the African continent. Therefore, it is imperative to conduct this study and highlight issues that should be considered by firms before using ICTs as a tool for expansion. Various scholarship is reviewed in the next chapter to ascertain what other scholars have said in studies closely related to the current study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

For the context and setting of this study to be fully understood, this chapter conducts a review of the relevant literature using journals, textbooks, reports and online articles. Fink (2014) defines a research literature review as “a systematic, explicit, and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners”. To begin this chapter, the role of the literature review is explained. Following this, a theoretical model- the ICT Development Index (IDI) is introduced. This model was developed to measure and rank the stages of ICT development in developing nations. An investigation into the current retail landscape in South Africa is then conducted, showing how South Africa’s retail landscape has caused many big local players to look outside South Africa for profit maximizing opportunities. The challenges of regional and global expansion are then evaluated and this section further outlines the challenges inherent to expansion on the African continent.

Following this, the digital divide is discussed. The digital divide is defined through the analysis of literature as a barrier in access ability and use of ITCs. The digital divide is then discussed in the context of global expansion, how ICTs are used in expansion activities and the development of ICTs throughout Africa. ICTs are then discussed in the context of enabling market expansion leading to the importance of aligning ICT strategy to organisational strategy and cyber security regulations. The final section of the literature review details three empirical studies of the use of ICT in enabling market expansion through Africa. Finally, a conclusion is drawn summarising and synthesising the literature discussed and highlighting the gaps to be further researched, providing a direction for the study.

2.2 Role of Literature Review

The purpose of this chapter is to give a theoretical background to the study by thoroughly reviewing all relevant literature and highlighting the gaps currently existing in this literature. In doing so, a well-rounded and in depth understanding of the topic can be understood by the reader. The gaps in literature noted in the literature review have formed the argument and the context of this study to be conducted. The literature review begins with the theoretical framework of the ICT Development Index showing the development of the African continent after which a background into the current climate of the retail industry in South Africa is discussed. Following this, reasons for and methods of regional expansions have been reviewed with the focus of South African retailers expanding regionally throughout Africa. This is discussed under the concept of global expansion and includes review of literature on regional, international and global expansion. The concept of the digital divide is then discussed, analysed and defined into the relevant contextual definition, after which Information Communication Technology is discussed, further expanded upon as ICTs in Africa and ICTs in expansion and marketing. Following this a conclusion has been drawn outlining the gaps in the current literature, leading to the need for research to be conducted in the specific area of South African retailers' use of ICTs as an expansion strategy throughout Africa.

2.3 Theoretical Framework

A theoretical framework is a model that informs the researcher on how to conduct and build a case for their research. It helps the researcher to dig deeper into body of literature acts as a guide and helps to logically unpack the area under investigation (Creswell, 2009; Statistics Solutions, 2017). Considering the nature of this study, a theoretical model encompassing the digital divide and ICT development has been selected.

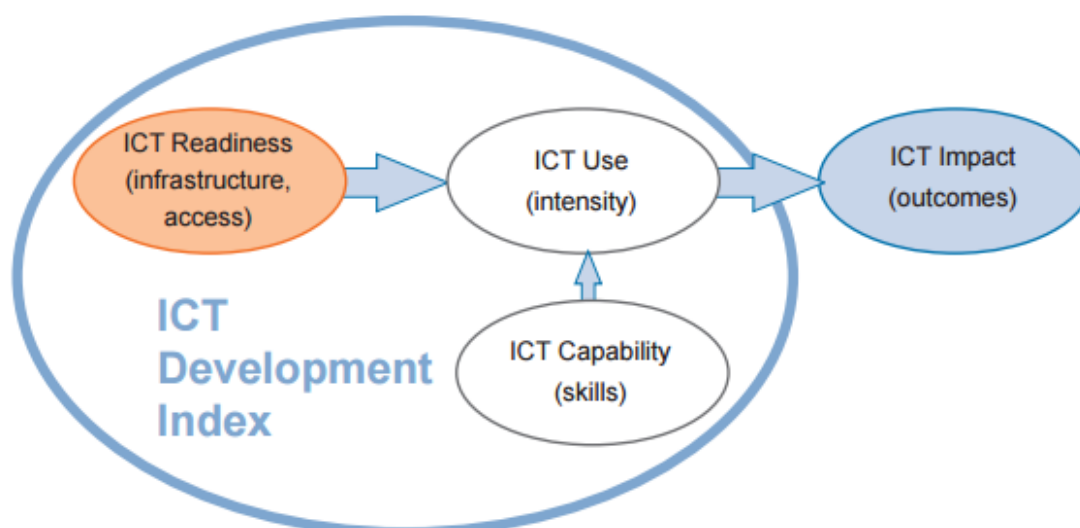
To measure and identify the stages of ICT development in various developing nations and track the digital divide, an index has been constructed called the ICTs Development Index (IDI) (ITU, 2009; Jeremic & Markovic, 2012; Ayanso, Cho & Lertwachara, 2013). The significance of this model is that it helps assess and measure the digital divide across developing nations. This study requires knowledge of the assessment of ICT development to delve deeper into the use of ICTs in expansion strategies into these developing nations.

The ICT Development Index was originally developed in 2009 by the International Telecommunication Union as a means to measure the progress of countries in becoming information societies (ITU, 2009; Ayanso, Cho & Lertwachara, 2013). There are four measurement outcomes of this model, laid out by the International Development Index (2009):

“The development of ICT in countries and relative to other countries, the level of advancement of ICT in all countries, the digital divide and the development potential of ICT or the extent to which countries can make use of ICT to enhance growth and development, based on available capabilities and skills.”

The main objectives of this model are further laid out and justified by ITU (2009) as measuring the development of ICT in countries and these relative to other countries; the level of advancement of ICT in all countries; the differences in levels of ICT development in different countries – the digital divide; and the development potential of ICT to enhance growth and development based on the skills and capabilities available. A conceptual framework describing the process measuring the IDI through a three-stage model is depicted below

Figure 1: ICT Development Index



Source: ITU (2009)

The model uses a three-stage approach in describing the process of countries becoming information societies. These three stages are ICT readiness, ICT use and

capability and ICT impact. These components, whilst separate, can be viewed as closely linked as for example, there cannot be access without infrastructure or use without access.

ICT Readiness or access reflects the level of networked infrastructure and access to ICT and is measured using fixed telephone line penetration, mobile cellular penetration and international internet bandwidth per internet user, proportion of households with computer and proportion of households with internet (ITU, 2009; Ayanso, Cho & Lertwachara, 2013). ICT use or intensity is reflective of the society's level of use of ICT and is measured using internet user per 100 inhabitants, fixed broadband subscribers per 100 inhabitants and mobile broad subscribers per 100 inhabitants (ITU, 2009; Ayanso, Cho & Lertwachara, 2013) and ICT capability or skills is measured using adult literacy rate, secondary gross enrolment ratio and tertiary gross enrolment ratio (ITU, 2009; Ayanso, Cho & Lertwachara, 2013). Finally, ICT impact is reflective of the results of effective and efficient use of ICTs.

Criticisms of this model revolve mainly around the measurement of factors. It has been noted that one person could have both a mobile and a broadband subscription, compromising the reliability of this measurement tool (Dobrota, Jeremic & Markovic, 2012). It also needs to be noted that the methods of internet access evolve and that a model built in 2009 may not be an effective tool in 2017. Other criticisms speak to the limitation of research by country, suggesting that regions within countries may vary significantly (Ayanso, Cho & Lertwachara, 2013).

Using this model to depict how African nations' ICT development compares to other developing nations, it is clear that the continent is falling behind other developing nations, with the highest ranking African country, Mauritius, ranking 73 out of 175 countries, and the majority of other African countries sitting below median (ITU, 2016). This slow development of ICT presents challenges and opportunities for foreign investors using an ICT integrated approach to investing into African nations which should be investigated.

2.4 South African Retail Industry

Retail industry in South Africa accounts for 14% of total Gross Domestic Product (GDP) and around 20% of total employment (StatsSA, 2017). Although contributing heavily to these two areas, the current South African retail environment is

characterised by market saturation and high levels of competition, especially international competition (Dakora & Bytheway, 2014; Dakora & Manson, 2016). Along with this, a weak and volatile currency, paired with high inflation rates have decreased retail spending in South Africa (Mataranyika, 2016; Brown, 2017).

The retail industry in South Africa has been largely dominated by a few key players, namely, Shoprite, Woolworths, Pepkor, Pick n Pay and Mr Price (Dakora & Manson, 2016). These key players share the characteristic of having expanded regionally into further African countries. Shoprite having expanded the widest, with a presence in South Africa, Zambia, Mozambique, Botswana, Namibia, Lesotho, Swaziland, Mauritius, Madagascar, Uganda, Angola, Ghana, Nigeria, Malawi, Democratic Republic of Congo and most recently, Kenya. Woolworths having a presence in South Africa, Botswana, Namibia, Lesotho, Swaziland, Ghana, Kenya, Tanzania, Uganda, Zambia, Mozambique and Mauritius. Pepkor in South Africa, Botswana, Lesotho, Namibia and Swaziland, Angola, Nigeria, Uganda, Mozambique, Zambia, Zimbabwe and Malawi. Pick n Pay with presence in South Africa, Botswana, Lesotho, Namibia, Swaziland, Zambia and Zimbabwe. And Mr Price in Botswana, Namibia, Zambia, Ghana, Nigeria, Lesotho, Swaziland and South Africa (Dakora & Manson, 2016).

Until recent years, these local companies have ruled the South African marketplace, however, the emergence of a few strong international retailers has increased the competitiveness of the industry (EY, 2017). The strongest performing international players, Cotton On and H&M have acquired 1.3% and 0.6% market share respectively since their entrances into the clothing retail market which can be partly accredited to the competitive prices they have brought into the retail market (Pricehouse Waters Coopers [PWC], 2016; Brown, 2017). The effects of this international competition can be seen in the scaling back of retail giant Edcon and the recent closing down of Stuttafords (Brand-Jonker, 2017).

Another characteristic of the South African retail landscape causing further internal competition is the large presence of informal markets and retailers (Charman *et al.*, 2016; Rogerson, 2016). It has been estimated that South Africa's informal market contributes to the employment of around 2.7 million people which is around 12% of the labour force (StatsSA, 2017). Data collection regarding the informal sector is

notoriously difficult due to lack of willing respondents or logistical issues and therefore the true impact of the informal retail sector on the formal retail section can only be estimated. A slowing in local spending and difficult economic climate paired with an increased presence of international and local competition constitutes motivation for local retailers to focus on their regional expansion strategies.

2.4.1 Types of Retailers

Although many retailers in 2018 stock a wide variety of categories of merchandise in their stores, academic literature has attempted to segment types of retailers into the following categories; supermarkets, discount stores, warehouse stores, speciality stores, category specialists, e-tailers and department stores (Levy & Weitz, 2011; MSG,2013, IIBM, 2015). Supermarkets can be divided into conventional supermarkets, limited assortment supermarkets, super centres and convenience stores (Levy & Weitz, 2011; IIBM, 2015). The big supermarket players in South Africa include Shoprite, Pick n Pay, Spar and Woolworths and these players can be divided into these subsections. Conventional supermarkets would be Pick, n Pay, Shoprite, Spar and Woolworths in the traditional format (Gauteng Provincial Treasury, 2012; Levy & Weitz, 2011; MSG, 2013).

A limited assortment retailer offers limited SKU's, such as two brands per product with one being a store brand, at a low price such as USave (Levy & Weitz, 2011; MSG, 2013). A supercentre or hyper market is a supermarket offering around 100 000 SKU's, South African examples include Super Spar, Pick n Pay Hyper and Checkers Hyper. Convenience store's stores are conveniently located and charge a premium price, these include shops such as 7Eleven, corner stores, Engen Woolworths and BP Pick n Pay Express (Levy & Weitz, 2011; IIBM, 2015).

Discount stores offer a wide range of merchandise at low prices, these stores generally have limited service and minimal infrastructure (IIBM, 2015; MSG, 2013). In South Africa you would find these types of stores in large parks of factory outlets such as Access Park. Warehouse stores include Game or Makro where customers can buy in bulk and merchandise is offered at low prices and ranges from kitchenware to appliances, furniture, electronics and more (Levy & Weitz, 2011; MSG,2013).

Speciality stores focus their merchandise in a specific area such as Wellness Warehouse selling health foods and supplements or Toys R Us selling children's toys (Levy & Weitz, 2011; MSG, 2013). One thing to note about speciality stores is that they offer a premium product at a premium price whereas category specialists also focus on a specific area but offer discount prices (Levy & Weitz, 2011; IIBM, 2015). Category specialists in South Africa would be stores such as Builders Warehouse or Sportsmans' Warehouse.

E-tailers are online retailers or E-commerce sites. In South Africa, around 1,1% of total retail spend comes from online shopping platforms, whilst this may not seem like much, passing the 1% mark was a milestone for South African online retail progress (Prinsloo, 2015; World Wide Worx, 2016). Pure online retailers, also known as e-tailers, in South Africa include Takealot, Superbalist, and Zando, sell goods and services via online channels and do not have a brick and mortar shopping element. It is however important to note that in South Africa omnichannel retailing is a preferred strategy and many brick and mortar stores partake in omnichannel retailing having an online store as well (Prinsloo, 2015). An example of this is Mr Price, a leading South African clothing retailer, generated R156million of its annual revenue in 2016 from the online store and has adopted omnichannel operations for all three of its brands (Levy & Weitz, 2011; Mr Price Group, 2017).

Department stores offer a wide variety of merchandise such as clothing, cosmetics, electronics, toiletries, footwear, sportswear, jewellery, toys and books. Department stores can generally be split up into three main categories; upscale, traditional and value orientated offering (Levy & Weitz, 2011; MSG, 2013). Upscale departments store would be somewhere offering premium brands such as Stuttafords who have recently closed shop in South Africa, or Woolworths, however Woolworths' definition is slightly broader as they also offer groceries in their merchandise mix. Upscale departments stores look to serve the higher income consumer market. Traditional department stores would be stores such as Edgars who offer a wide range of brands from the basic in store brand to some higher end international options, serving a wide consumer range. Finally, there are value offering department store and this is the category something such as Pep stores would fall under. A value offering department

store offers a wide product range at low prices to serve the lower income market (Levy & Weitz, 2011; MSG, 2013).

Classifying retailers not considerate of the African marketplace which does not share some of the characteristics of American or European market places as it completely disregards the existence of informal markets (Levy & Weitz, 2011). In addition to this, the African marketplace classifies e-tailers as a separate category not accounting for the fact that many brick-and-mortar retailers of all classifications now have an online presence and e-tailers such as Amazon have now invested in a new and disruptive version of a brick and mortar store.

2.5 Challenges confronting retailers

With the growth of globalisation and the rapid pace of technology, retailers are facing bigger and far more intricate challenges (Dakora & Bytheway, 2014; Dakora & Manson, 2016; StatsSA, 2017). As mentioned above, the economic climate in South Africa is unstable which has a large influence on spending, there is increasing pressure from international retailers with wider variety of merchandise and lower prices as well as the internal local pressure from the huge informal market, on top of this, there is the challenge of finding the balance between brick and mortar and online with every brick and mortar retailer essentially now competing directly with online retailers or e-tailers (Gauteng Provincial Treasury, 2012; Dakora & Bytheway, 2014; Dakora & Manson, 2016; StatsSA, 2017). Other challenges include changing consumer preferences, rising food prices, rising costs of transport and electricity and skills shortages (Gauteng Provincial Treasury, 2012). The particular shortages highlighted for this sector include those in the job titles of store managers, retail buyers and sales managers (Gauteng Provincial Treasury, 2012).

The South African economy suffers from a weak and volatile Rand currency and high inflation (Mataranyika, 2016; Brown, 2017). As a result of this, the rate of consumer spending in the domestic market is not sufficient for all local retailers to compete with each other and international retailers as their opportunity to grow their operations within South Africa has been maximised (Dakora & Bytheway, 2014; Dakora & Manson, 2016; Mataranyika, 2016; Brown, 2017; StatsSA, 2017). South Africa's large informal sector also plays a role in this intense competition as informal retailers do not

incur the same costs associated with formal retailing and therefore can compete heavily on prices and compete on location in terms of proximity to the customer (Charman *et al.*, 2016; Rogerson, 2016). Many informal retailers operate out of the informal settlements which are home to their consumer base and therefore have direct and immediate access to the community of their customers (Mataranyika, 2016). Since the success of the 2010 world cup in South Africa international retailers have begun their entry into the South African market, a prime example being the May 2011 acquisition of Massmart by America's Walmart (Gauteng Provincial Treasury, 2012). Entrant such as Walmart are difficult for local retailers to compete with due to their size, advanced operations, financial advantages and global supply chain network (Gauteng Provincial Treasury, 2012).

2.6 Expansion into Africa

Expanding internationally has become a huge trend for retailers which is aided by the formation of regional blocs, economic groupings such as BRICS, consisting of the developing nations of Brazil, Russia, India, China and South Africa, regional blocs such as the Southern African Development Community (SADC) consisting of Angola, Botswana, Congo (DR), The Comoros, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe, and the rapid advancements in technology allowing faster communication and connectivity (DAFF, 2016).

Regional expansion, or foreign direct investment refers to firms expanding business activities and operations outside of their country of origin into new regions (Gemawat, 2005; Business Dictionary, 2017). Due to weakening of international trade barriers and advancements in technology, foreign direct investment has become a trend worldwide (Paliwoda & Slater, 2009; Hill, 2012). The total Greenfield capital investment increased by over 6% in 2016 to \$776,2bn with \$142,8bn of that increase being capital investment into the African Continent (FDI Intelligence, 2017). One reason noted for Africa being a focus of Greenfield capital investment revolves around the "retail revolution" taking place across Africa with the growth of the African middle class and consumer spending (Dakora & Manson, 2016). The pioneers of expansion into the further African continent have been major South African retailers such as Shoprite,

Pick n Pay, Pepkor and Woolworths among others (Dakora & Bytheway, 2014; Dakora & Manson, 2016).

There are several motivations for regional expansion including market factors, cost factors, environmental factors and competition factors (Czinkota & Ronkainen, 2013). Local markets can become saturated or have a high presence of international competition making local growth an impossibility (Cavusgil, Knight & Riesenberger, 2015; Boso, Oghazi & Hultman, 2016). This regional expansion motivates a company to look elsewhere to find profit maximising opportunities. Other motivations include slowing of local spending, high demand from outside the current market or favourable market conditions such as infrastructure and resources outside the country of origin (Cavusgil *et al.*, 2015). Lastly, for firms looking to decrease costs, investing operations in locations with low barriers to entry, cheaper labour and weaker currencies can help to create a more sustainable cost structure (Czinkota & Ronkainen, 2013; Boso *et al.*, 2016). The major reasons behind South African retailers expanding regionally are international competition, market saturation and slowing in spending in the local market due to unstable economic conditions, paired with a growing middle class, technological development and increased consumer spending in outside African nations (Dakora & Bytheway, 2014; Dakora & Manson, 2016; Mataranyika, 2016).

There are different methods of regional expansion which can be generalised into non-equity and equity entry modes (Cavusgil *et al.*, 2015; Boso *et al.*, 2016). Choosing between these modes involves a trade-off between control, risk and resource commitment (Dakora & Bytheway, 2014; Boso *et al.*, 2016). Non-equity modes include exporting, licensing and franchising, these entry modes have lower risk and resource commitment but also lower amounts of control (Cavusgil *et al.*, 2015). The equity modes include joint ventures, strategic alliances and direct investments (Cavusgil *et al.*, 2015). These entry modes give more control, however, they have higher risk and resource commitment. When deciding to expand into African countries, entry mode choice can often be influenced by local ownership regulations however many South African retailers have used the wholly owned approach due to lack of ability to find suitable local partners or acquisition targets and an underdeveloped marketplace (Games, 2008; Dakora & Bytheway, 2014). Another popular approach among South African retailers has been franchise operation, with the key motivations of this

approach listed by Sternquist (2007) as means to improve administrative efficiency, to extend limited resources and to provide risk management (Sternquist, 2007; Dakora & Bytheway, 2014).

2.6.1 Regional Expansion

Regional expansion in the context of this study would refer to South African companies expanding throughout the SADC region. As previously stated, the SADC region consists of 16 member countries. Some of the key players in the South African retail space who have achieved expansion into these regions are The Foschini Group with operations in 6 of the 16 SADC countries, Pick n Pay operating in 7 of the 16 SADC countries, Mr Price operating in 8 of the 16 SADC countries, Woolworths with operations in 9 of the 16 SADC countries, Pepkor with operations in 10 of the 16 SADC countries and finally the largest presence in the SADC region is Shoprite with a presence in 12 of the 16 SADC countries (Mr Price Group, 2016; TFG, 2016; Pick n Pay, 2017; Shoprite, 2017; Steinhoff International, 2017; Woolworths, 2017).

2.6.2 International Expansion

One step to international expansion refers to South African retailers opening operations in further African countries. Some retailers look to economies such as Nigeria, Ghana and Kenya before expanding fully throughout the SADC region do to the economic opportunities in these areas. The main players found in the rest of Africa outside SADC include, Mr Price with the widest spread presence having operations in Uganda Nigeria, Kenya and Ghana, Shoprite with operations in Ghana, Nigeria, Uganda and in the process of opening operations in Kenya, Woolworths following a similar path with operations in Uganda, Ghana and Kenya, Pepkor operating in Nigeria and Uganda and Pick n Pay in the planning stages of operations in both Ghana and Nigeria (Mr Price Group, 2016; Pick n Pay, 2017; Shoprite, 2017; Steinhoff International, 2017; Woolworths, 2017).

2.6.3 Global Expansion

Global expansion refers to South Africa retailers expanding beyond Africa into new continents. It is more common for international retailers to acquire South African retailers and make them a part of a global group than it is for South African retailers to become global themselves. Examples of South African retailers being acquired by international companies include Pepkor bought by the Steinhoff group which is an

international group with operations in USA, Europe and Australasia retail giant, Massmart being acquired by Walmart in 2011 (Gauteng Provincial Treasury, 2012; Steinhoff International, 2017). International retailers often acquire South African operations as a stepping stone into the African continent. There are however two South African retailers who have lead their own global expansion and those are Woolworths, with operations in Australia and New Zealand, and The Foschini Group which seems to have focused more on its global expansion than its regional or international expansion, having a presence in USA, Mexico, Europe, Middle East, Asia and Australia (Mr Price Group, 2016; TFG, 2016; Pick n Pay, 2017; Shoprite, 2017; Woolworths, 2017).

2.7 Challenges in the African Retail Marketplace

Challenges faced in global expansion can be categorised into the different types of risks present. Cavusgil, Knight and Riesenberger (2015) categorise these into commercial risks, financial risks, country risks and cross-cultural risks. Commercial risks include challenges related to correct selection of partners, timing, location, entry modes and entry strategies (Ghemawat, 2005; Lynch, 2014; Cavusgil, Knight & Riesenberger, 2015). Previous literature pertaining to South African retailers expanding throughout Africa note that one of the major challenges is finding suitable partners and often consider a wholly owned approach rather than franchising (Dakora & Bytheway, 2014; Dakora & Manson, 2016). Financial risks occur with fluctuations in currencies and interest and inflation rates in the entrant country (Frynas & Mellahi, 2011; Lynch, 2014). Country risks encompass barriers to trade, restrictive legislation, skill shortages, available resources and the infrastructure of the country to be entered (Fletcher & Crawford, 2014; Cavusgil, Knight & Riesenberger, 2015; Boso *et al.*, 2016).

Cultural distance poses a challenge to regional expansion as different languages, traditions, values, mind-sets and behaviours cause individuals to consume differently and react differently to marketing efforts (Hofstede, 1980; Angwin, 2001; Ahammad & Glaister, 2014; de Mooj, 2015). Dakora and Bytheway (2014) mention that one of the biggest challenges when entering retail space in African countries is the difference in business culture between the 54 African countries. They expand upon this point by stating that South African retailers struggle to sufficiently understand the differences

between these markets (Dakora & Bytheway, 2014). A later study conducted by Dakora, further differentiations have been outlined between African countries including factors such as the main business language used, which tends to be either French, English, Portuguese or Arabic, the countries' ease of doing business in each country, and geographically differentiating between North, South, East and West and the various regional blocs formed in these areas (Dakora & Manson, 2016). Dakora and Bytheway (2014) conclude their analysis of entry mode issues for South African retailers by suggesting that South African retailers risk being perceived as aggressive and inconsiderate when operating in other African regions due to the different market dynamics and business culture across the continent.

Consumer tastes and preferences differ widely throughout the continent and generalising an "African consumer" is not an effective strategy, proper research is required for each country and the consumer segments within that country to be able to successfully operate there (Dakora & Bytheway, 2014; Dakora & Manson, 2016). To expand further on this, South African retailers face an additional challenge of being viewed by other countries as very aggressive in their expansion and business practices (Dakora & Bytheway, 2014; Dakora & Manson, 2016). Particular risks outlined for investing in African nations relate to the economic structure of these nation. African countries tend to be characterised by weak local currencies and large government debts which are further exaggerated by fluctuations in the dollar exchange rate. Another characteristic causing risk in African countries is the tendency to lack market diversification and have an overreliance on exports. Furthermore, these markets are particularly susceptible to changes in developed economies such as the US and Europe, with uncertainty in global markets discouraging investors to take the risk of investing into the African continent (Spangenberg, 2017).

One of the biggest errors made by retailers expanding throughout Africa is lack of research and the assumption that the market characteristics of each African nation are similar. There are major differences in market factors between the different regions as well as cultural differences with only 41% of African nations using English as their main business language (Dakora & Bytheway, 2014; Dakora & Manson, 2016). Other challenges inherent to operating businesses in African countries are difficulty in finding suitable partners, the requirement of local ownership, logistical challenges due to lack

of infrastructure and an underdeveloped retail landscape causing difficulty in finding a suitable local retailer when adopting an acquisition approach (Dakora & Bytheway, 2014; Dakora & Manson, 2016; Mataranyika, 2016). The emergence of digital, rise in use of mobile across Africa and overwhelming infiltration of the internet as a commerce platform with lack of cyber security regulations, a new challenge has evolved in regional expansion and this challenge has been labelled the Digital Divide.

2.8 The Digital Divide

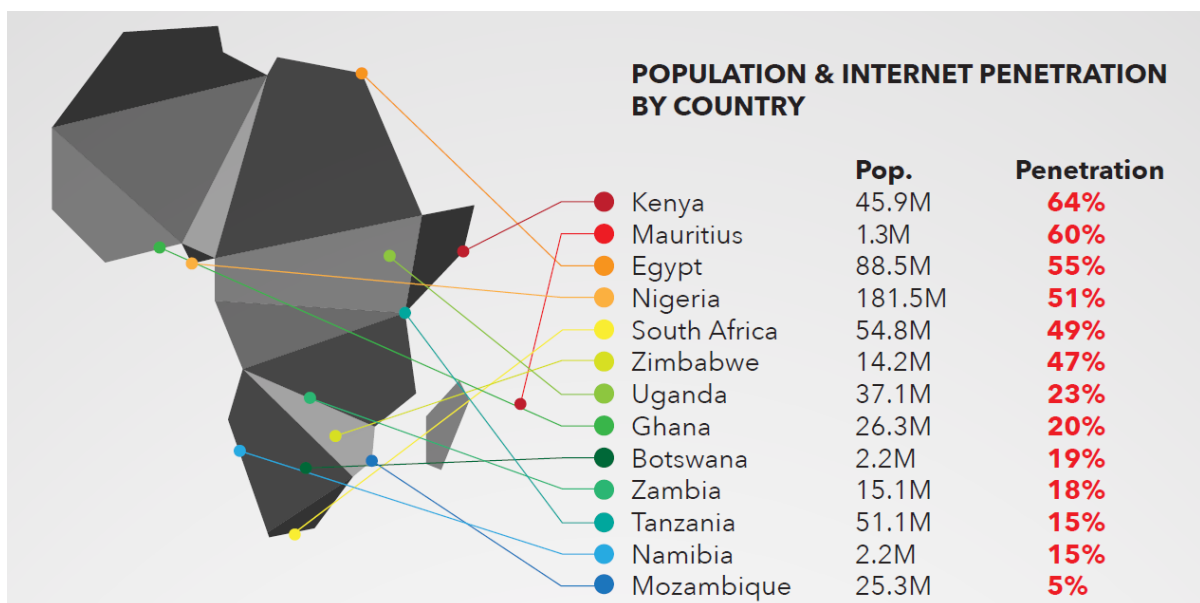
Globalisation and the growth of ICTs have provided opportunities for worldwide investments and opening of markets and borders, however, these developments have also highlighted a new kind of divide (Ayanso, Cho & Lertwachara, 2013). The digital divide is a concept originating in 1995 and has since changed and evolved in meaning over time. The various elements and definitions of the digital divide will be discussed using relevant and reliable literature.

The term “Digital Divide” holds many different definitions as the context and relevance evolves with the evolution of technology. The digital divide was originally conceived as a divide in ‘have and have-nots’ regarding telecommunication access (NITA, 1995). However, with the evolution of markets and technology, the definition has evolved alongside. A more holistic view of the digital divide ranges in definition between access, ability and actual use of ICTs (Fink & Kenny, 2003; Ayanso, Cho & Lertwachara, 2013; Ohemeng & Oforu-Adarkwa, 2014). Access refers to both internet or data access and access to computers or technological devices (Ayanso, Cho & Lertwachara, 2013). In rural areas of African countries people would not own or have access to computers in their places of work or school and may not have internet accessibility at all. South Africa is known to have very high data costs and therefore, the high cost of data is a barrier to access (van Zyl, 2016). A divide in ability refers to the populations’ skills and abilities in using ICTs (Ayanso, Cho & Lertwachara, 2013; Ohemeng & Oforu-Adarkwa, 2014). This is present in not only rural areas that lack access but also in the older populations who do not own technology by choice or find it difficult to learn how to use devices, also termed a divide in “mental access” (Ayanso, Cho & Lertwachara, 2013). Actual use of digital devices presents another divide and the impact of this actual use in terms of return of investment (Ayanso, Cho & Lertwachara, 2013; Ohemeng & Oforu-Adarkwa, 2014). For the purpose of this study,

the digital divide has been defined as encompassing all of these factors. Regional expansion using ICTs as a strategy considers access to, ability and skills in use of, and actual use of ICTs.

In considering this digital divide in an expansion strategy, it is important to note that different countries not only make use of different technologies inside businesses, but their customers may also use social media differently, there may be different approaches and best practices for digital marketing. There will be different challenges and opportunities around ecommerce and one very common aspect in African nations is vastly different payment methods.

Figure 2: Population and internet penetration by country for Africa



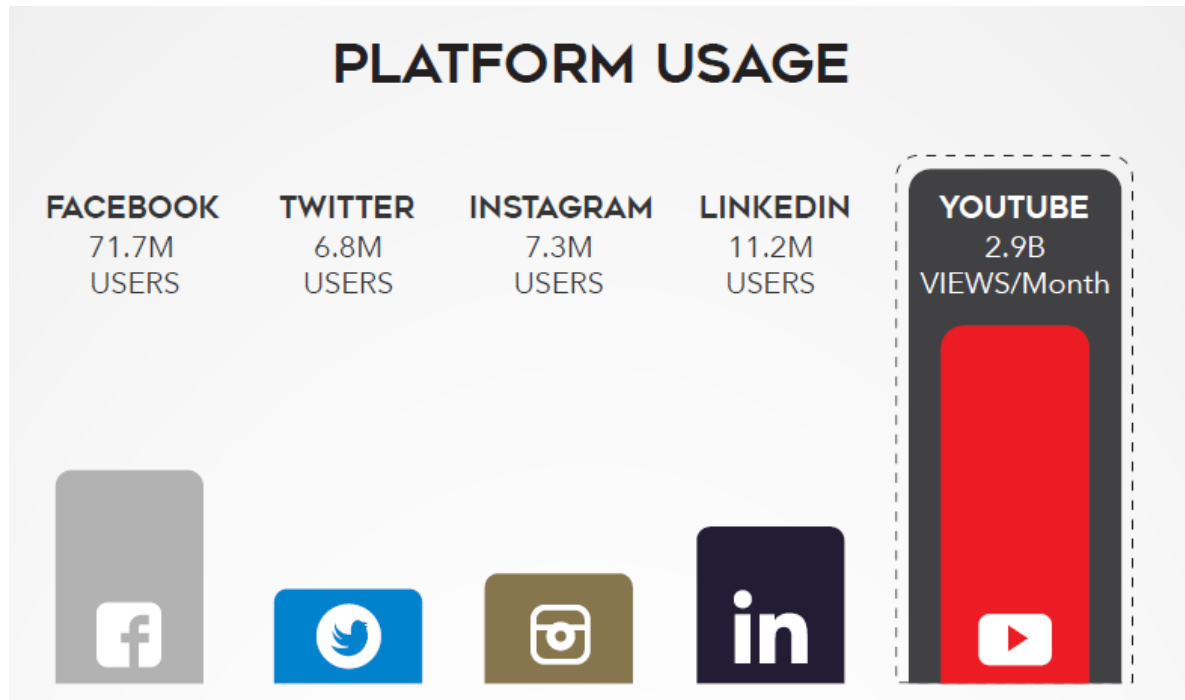
Source: Social@Ogivy (2016)

The above infographic demonstrates how internet penetration differs widely between different countries in Africa. Of the countries documented, Kenya has the highest penetration rate with 64% of its 45.9 million people regularly utilising the internet which has since rapidly increased to 86% in 2018 (World Statistics, 2018). The lowest recorded penetration rate comes from Mozambique with only 5% of its 25.3 million people regularly utilising the internet.

Using research such as the above record of internet penetration, a company expanding into further African nations need to decide on a number of different strategic elements. Firstly, they would need to decide whether they will remain aligned with their current ICT strategy, implementing the same technology in their new operations, and if this is in fact possible or appropriate given the available infrastructure (KPMG 2016; PWC, 2016).

Secondly, they will need to conduct research into the market's online activity and social media penetration to understand how their digital marketing strategies can be implemented and localised to their new territories (Law, 2016). African consumers tend to be very present in the online space and it has been mentioned throughout literature that mobile needs to be treated as the “first screen” with all communications and platforms optimised for mobile first (Kiveu, 2013; Ponelis & Holmner, 2015; Deloitte, 2016; KPMG, 2016; Law, 2016).

Figure 3: Social media platform usage over Africa



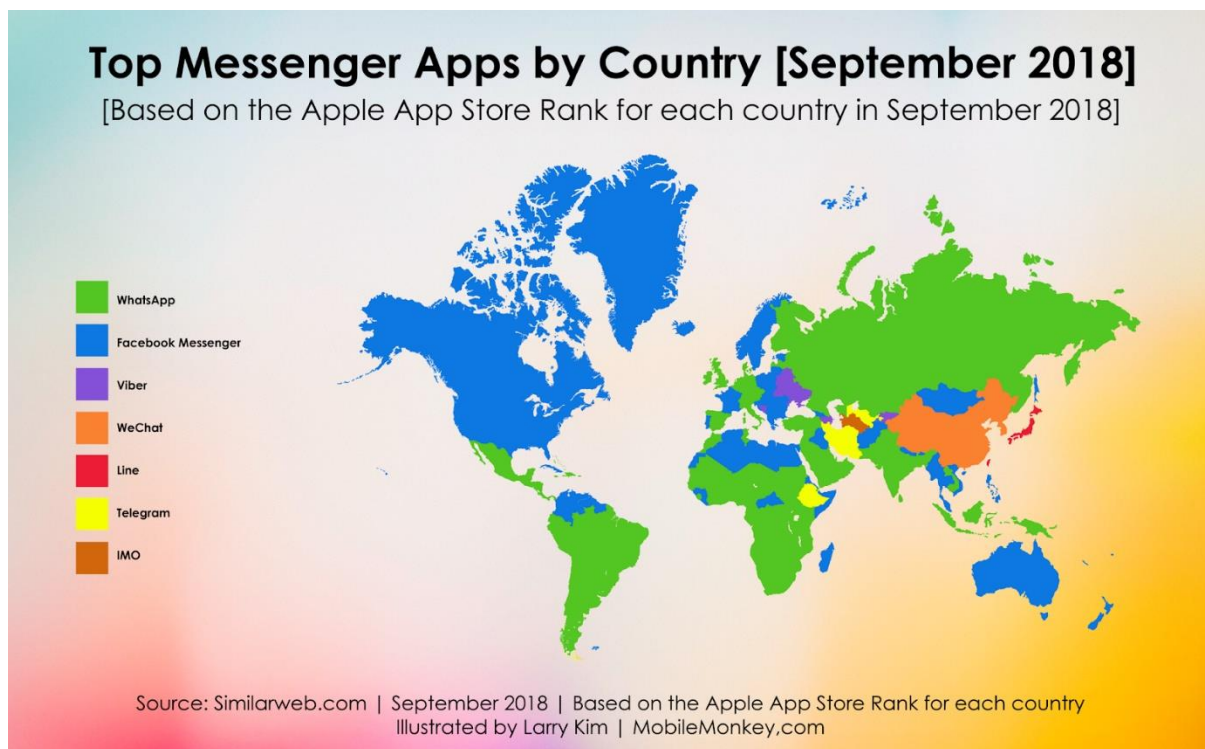
Source: Social@Ogilvy (2016)

The above infographic depicts the continent-wide usage per social media platform which shows Facebook to have the highest user base.

Another widely used social platform across Africa is WhatsApp, which has been labelled the most popular communication platform (Dahir, 2018). Some of the reasons noted for its popularity are the ability to download it on entry level smartphone devices, lack of traditional telecommunication infrastructure in many African regions, the cost saving aspect in that the app is free to download and calling or messaging is possible without high airtime or SMS charges (Thompson, 2018). Businesses in Africa have noted this widespread use of WhatsApp for communications and many have begun to integrate this platform into their business operations. An example of this has been ABSA launching WhatsApp chat banking in March of 2018 (ABSA, 2018; Vilar, 2018). ABSA's introduction of WhatsApp for business was part of a larger branding strategy focusing on the African consumer and along with this, introduced a slogan "Africanacity" when is further explained as "the distinctly African ability to always find ways to get things done. It's the driving force behind everything we do. That's Africanacity. That's Absa." (ABSA, 2018). ABSA's WhatsApp banking allows consumers to do simple banking activities such as; check their bank balance, buy airtime and data, get a mini statement, buy electricity and make a payment to an existing beneficiary (ABSA, 2018).

The image below shows top messaging apps by country. This infographic shows that WhatsApp tends to be more popular among developing nations than developed. It also shows that WhatsApp is the most popular messaging app in 128 countries, while Facebook messenger, the second most popular worldwide, is only top in 72 countries. Facebook messenger can be seen to be popular in North America, Canada, Australia and parts of Europe whereas WhatsApp largely dominates the remainder of countries as the top messenger app. The messenger app in third place is WeChat which is predominant in Asian countries as it was developed originally for an Asian market. Some of the reasons noted for WhatsApp's popularity on the African continent are due to its downloadability on entry level smartphones and low data or airtime costs required (Dahir, 2018; Thompson, 2018).

Figure 4: Top messenger apps by country



Source: SimilarWeb (2018)

Although ecommerce retailer contribution as a percentage of total retail value in many African countries is still below 1%, it has been suggested that in countries such as Nigeria with very bad traffic and difficulties in transportation accessing stores, online shopping is preferred (Dakora & Manson, 2016; KPMG, 2016). Although ecommerce is a trend on the rise, credit cards are not, many African customers do not have credit cards and conduct transactions using mobile money vendors such as M-pesa. (Deloitte, 2016; KPMG, 2016; Law, 2016). M-Pesa is the most widely used mobile money service with 32 million users across the African continent (Opudo, 2018). This shows that payment methods are another element to consider in the technological set up of the entrant firm.

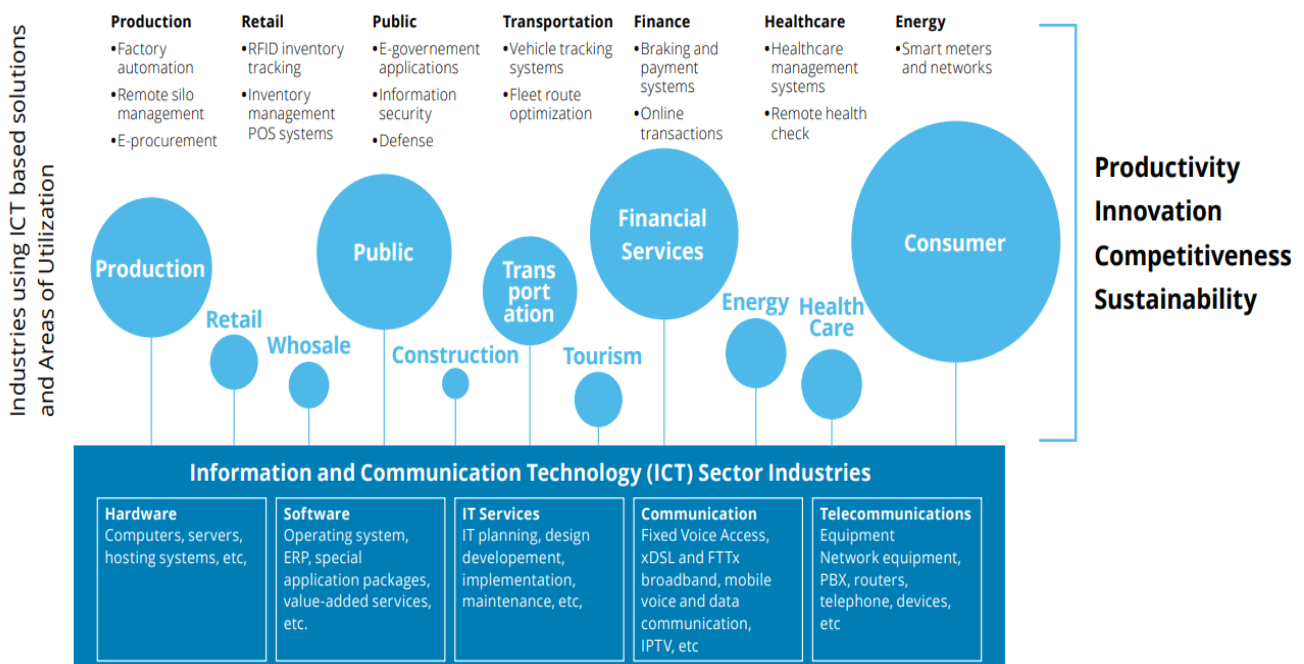
2.9 ICT as an enabler for global expansion

Developments in ICTs have changed the way in which businesses operate worldwide, providing opportunities for improvement and thus enabling global economic development (Deloitte, 2018; Rozzio, 2018). The benefits of utilising ICTs in business include the ability to reach new markets and improve product and service delivery

through a multitude of connection capabilities (Rozzio, 2018). Deloitte's 2018 *Insights about Digital Transformation and ICT Opportunities for Brazil* report provides the infographic below to depict the various areas and industries positively impacted by ICTs.

Figure 5: The ICT Sector and its impact on other industries

The ICT sector and its impact on other industries



Source: Deloitte (2018)

The ICT technologies highlighted for retail in Figure 5 include Radio Frequency Identification (RFID), inventory tracking and inventory management Point Of Sale (POS) systems which revolved mainly around stock control. Software increasingly used by retailers is Enterprise Resource Planning (ERP) software. ERP software allows retailers to automate day to day processes such as accounting, HR, inventory control and order processing, employee efficiency monitoring, creating shared project sites and employee portals to share information and track progress, enables communication across an organisation and can include features such as advanced reporting and business analysis (Continelli, 2017; Market Research Engine, 2017; Totka, 2017). Some of the key benefits highlighted for implementing ERP software are increased productivity, more efficient flow of data, improved communication and

collaboration, lower operating costs, and better decision-making capabilities with real time access to data (Continelli, 2017; Gratch, 2017; Totka, 2017).

When implementing ERP software, there are two options for deployment which are premised on deployment and cloud deployment (Continelli, 2017; Market Research Engine, 2017; Totka, 2017). On-premise deployment requires a manual installation of the software whereas cloud-based ERP is accessed online. Noted benefits of utilizing cloud-based instead of on premise ERP systems are lower investment costs and the ability to access and store data in real time from any geographic location (Continelli, 2017). In considering using ERP software to enable global expansion, cloud-based ERP software provides the freedom of mobilisation. A cloud-based ERP system is a centralised system that can be accessed from any geographic location, provided there is an internet connection. This allows a retailer to open operations in any geographic location and have real time access to the organisations data. This eases the process of opening new stores and operations by decreasing the time and financial investment required.

The digital business report published by MIT Sloan (2017) states that digitally maturing businesses are more likely to be successful, showing to be 26% more profitable than those competitors not adapting to digital (Kane, Palmer, Phillips, Kiron & Buckley, 2017; Rozzio, 2018). For South Africa, ICTs have enabled SMEs to find growth opportunities in avenues to foreign markets and connections to potential business partners (Rozzio, 2018). The challenges inherent to developing nations considering ICT enabled economic growth are the lack in ICT infrastructure and the willingness and actionability of government to invest in improving infrastructure (Rozzio, 2018; Deloitte, 2018). Given these challenges, it is important for an organisation to have a detailed, structured ICT strategy that aligns with the overall strategy of the organisation, to enable decision makers to find appropriate solutions and methods when faced with such challenges.

2.10 Aligning ICT to organisational strategy

Organisational and ICT alignment is a major concern for businesses in local operations and is even more vital to achieve before expanding operations regionally or internationally. The term frequently used throughout literature for this process has been labelled BIA which stands for Business IT Alignment, which can be further

defined as the collaboration and synthesis of the core business goals and strategies with the core IT goals and strategies to create and achieve a unified goal for the business (Chan & Reich, 2007; Charoensuk, Wongsurawat & Khang, 2014). The benefits of aligning business and IT are believed to include identifying value in IT, improving IT usage, improvement of operational efficiency, improvement of communication and creating a competitive advantage therefore allowing the ability to maximise the return on IT investment (Charoensuk *et al.*, 2014; Gerow, Thatcher, & Grover, 2015).

2.10.1 Elements of alignment

In aligning your ICT and organisational strategy, there are five main elements to consider as draw out by *Charoensuk et al.*, (2014). Firstly, strategic/intellectual dimensions, secondly operational/structural dimensions, thirdly social dimensions, fourthly cultural dimensions and finally, human dimensions (*Charoensuk et al.*, 2014). Strategic or intellectual dimensions refer to the alignment of the business and IT strategies to ensure that there is a common goal and that they are not working against one another (*Charoensuk et al.*, 2014). Operational dimensions are said to follow on from strategic dimensions (Chan & Reich, 2007; Chan 2002, *Charoensuk et al.*, 2014). Operational dimensions refer to the infrastructural and process alignment, including activities such as policy, procedure and system creation (Chan & Reich, 2007; *Charoensuk et al.*, 2014; Gerow *et al.*, 2015). Social dimensions refer to the human relationships of those in IT and IS with other business management figures to create shared visions and understanding of the alignment of needs (Whelan, Anderson, van den Hooff, & Donnellan, 2015). Cultural dimensions refer to the extent to which executive level promotes and the alignment of IT and business and the extent to which this alignment is enabled, furthermore, the extent to which the corporate culture is inclusive of IT alignment (Chan & Reich, 2007; *Charoensuk et al.*, 2014). The human dimensions are the level of technical skills and IT understanding of the people within the organisation (*Charoensuk et al.*, 2014).

2.10.2 Motivations driving alignment

IT is integrated into many aspects of everyday life and this is the same for business. Consumers are using technology constantly as a form of communication, information

gathering and even to make purchases and this presents a number of opportunities for a business serving their consumer (Charoensuk *et al.*, 2014; Gerow *et al.*, 2015). Firstly, integrating a technology focused strategy into the consumer journey can ease the process and delight the customer, communication and understanding of the customer can be enhanced, strategies around product and service innovation can be leveraged from the proper use of IT alignment and in addition, IT can be used to capture highly valuable consumer information (Charoensuk *et al.*, 2014; Gerow *et al.*, 2015; Smith & Proctor, 2015; Whelan *et al.*, 2015; Young, 2016). When companies use their IT strategy to harness and utilise vast amount of customer data, the security of the data also needs to be a focus of the alignment of IT and business strategy.

2.11 Cybersecurity legislation

In light of the recent cybersecurity attacks, WannaCry, Petya and a bit closer to home, the “Master Deeds” leak of 30 million South African’s private information, cyber security is an essential element of any business operating in 2017 (Fraser, 2017). The International Telecommunication Union (ITU) (2012) states that improving cybersecurity is essential to a country’s security and economic well-being. In order to have the best possible chance of avoiding such attacks, companies need to adopt information security rules and regulations that are adhered to and understood by all employees (Bulgurcu, Cavusoglu and Benbasat, 2010; Modiri and Sobhanzadeh, 2011; Chigada & Kyobe, 2018). One of the weakest links in businesses security are the employees. Employees tend not to understand the importance of strong passwords, changing passwords regularly and the importance of protecting information, therefore they tend to be the victims of phishing scams which allow hackers into the company’s internal systems (van Zadelhoff, 2016). The business and IT strategies need to account for this from two perspectives, firstly, the IT structure and procedures and secondly by educating employees on cyber security. Retailers are in possession of mass amount of customer data, especially those who also offer financial and other value-added services. Therefore, it is vital for such retailers to align their ICT and organisational strategies to be able to avoid ransomware attacks and data leaks.

The European Union has taken the issue of protection of privacy of personal information as a serious issue and has such implemented legislation around the topic. This legislation is the General Data Protection and Regulation or more commonly known as GDPR (EUGDPR, 2018). GDPR officially came into effect on the 24th May 2018 (European Commission, 2018). GDPR protects rights and personal data of citizens of the European Union, by enforcing businesses and organisations comply with regulations regarding the processing of data. These regulations attempt to limit the collection of and access to personal data to the minimum required, a process labelled “data minimisation”, along with giving citizens’ rights around their data such as: “the right for data subjects to obtain confirmation from the data controller as to whether or not personal data concerning them is being processed, where and for what purpose.” (EUGDPR, 2018).

The GDPR applied to all organisations with access to data of European citizens and with the ever-integrating global economy, this effects organisations worldwide. In South Africa the POPI act was developed to ensure that South African organisations compliance to GDPR (van Zyl, 2018). POPI stands for Protection of Personal Information and states the following principle:

“To promote the protection of personal information processed by public and private bodies; to introduce certain conditions so as to establish minimum requirements for the processing of personal information; to provide for the establishment of an Information Regulator to exercise certain powers and to perform certain duties and functions in terms of this Act and the Promotion of Access to Information Act, 2000; to provide for the issuing of codes of conduct; to provide for the rights of persons regarding unsolicited electronic communications and automated decision making; to regulate the flow of personal information across the borders of the Republic; and to provide for matters connected therewith.” (POPI, 2013).

Although compliance with such legislation is not required in many African nations, for a South African organisation expanding through Africa, POPI should at this time already be implemented into the ICT structure of the organisation. In considering the

importance of alignment of ICT and organisational strategies, the highest regulator applied in one region should be applied across all regions.

2.12 Empirical studies of firms using ICT as a global expansion enabler

This section discusses three empirical studies of retailers using ICTs as an enabler for global expansion. The empirical studies give insight into the research topic and add a practical perspective to the literature discussed. The three retailers to be discussed are Massmart, H&M and Yuppiechef.

2.12.1 Massmart

In 2011, global retail giant Walmart acquired a majority stake in South Africa's Massmart with the intention of using Massmart as a stepping stone into the African continent (Omarjee, 2017). Today, Massmart is Africa's second largest retail group with 423 stores across Sub-Saharan Africa spanning general merchandise, liquor, home improvement and wholesale food markets. Massmart is currently operating in 12 locations outside of South Africa. These locations are Namibia, Lesotho, Swaziland, Botswana, Zambia, Malawi, Mozambique, Tanzania, Kenya, Uganda, Ghana and Nigeria. While South Africa remains the major source of turnover, contributing to 91,7% of sales in 2017, Massmart continues to grow its "ex-SA" operations (Massmart, 2017).

Massmart has noted in recent years that investment into ICT infrastructure is an important element to the growth of the organisation. As a result, Massmart have begun to focus on omnichannel offerings and ERP systems by focusing on Systems Application Products (SAP) Hybris integration throughout their operations. Some of the key reasons noted by Massmart for this approach is the ability to reduce costs and therefore provide customers with lower prices and a wider offering and to improve the convenience and efficiency of the shopper experience (Douglas, 2016; Ngalonkulu & Mwendera, 2018).

Massmart's Integrated Annual Report (2017) states that investment into ICTs and digitisation was a priority going forward. Massmart labelled the various opportunities of doing so as; increasing customers' ease of shopping and interaction with our brands and merchandise by efficiently moving merchandise through different channels, innovation through the effective use of analytics and data insights to personalise

customer experience and the ability to respond to changing customer requirements by digitising in-store processes (Massmart, 2017).

SAP Hybris is an ERP software available in South Africa, used by several retailers to provide omnichannel retailing capabilities. Massmart have reported a 69% growth in online sales since implementing the SAP Hybris ERP software (SAP, 2018). Chief Information Officer of Massmart, Mark Huxtable, stated in a case study conducted by SAP:

“By leveraging the SAP team’s in-depth knowledge of global best practice, the customer experience has also been improved, which bodes well for our plans to scale the omnichannel functionality as we expand our footprint into Africa.”
(Huxtable, 2018).

Since the implementation of ERP software, Massmart have experienced growth in online sales and plan to use this investment in ICTs to enable their expansion throughout the African continent.

2.12.2 H & M

H & M clothing retailer was founded in Sweden in 1947 and has since expanded into 66 countries in every continent across the globe (Brown, 2017; H & M, 2017). H&M first expanded into Africa in 2015 opening a store in Cape Town, South Africa using an omnichannel approach and has expressed plans to use South Africa as a springboard to the rest the African continent (Faku, 2015). H & M made use of ICTs in this expansion launching the South African online store two months prior to opening the first South African brick and mortar store (H&M, 2015).

In the 2017 annual report, H & M stated: “We are integrating our physical stores and digital channels to give customers an easy, inspiring and convenient shopping experience no matter where, when and how they shop.” H&M have focused on building an omnichannel shopping experience for their customers by integrating ICTs in store and online. In 2017 H & M launched a mobile application which allows the user to upload a photo and matches the items in that images as closely as possible to H & M products. In store, H&M have implemented ICTs such as mobile payment technologies and Radio Frequency Identification (RFID) to enhance the consumer experience (H & M, 2017).

2.12.3 Yuppiechef

Founded in 2006, Yuppiechef is a kitchenware e-tailer based out of Cape Town. Yuppiechef sells primarily third-party products and in 2013 was rated as South Africa's leading online store (Carstens, 2013; Naser, 2013). Being an e-tailer, the use of ICTs is a critical component in the operation of the business. In addition to the online store, Yuppiechef relies heavily on social media channels such as Facebook, Twitter and Instagram to interact with its consumers (Carstens, 2013; Naser, 2013).

In terms of market expansion, Yuppiechef has taken a fairly low risk approach by enabling delivery of the Yuppiechef products into a limited number of other African countries, namely; Namibia, Zambia, Botswana and Mauritius (Yuppiechef, 2018). The website also allows for consumers of those regions to view the products in their local currencies. Although this is not a full investment into these regions, it does allow access to the brand in African countries outside of South Africa (Yuppiechef, 2018).

In the past year, Yuppiechef have moved away from their purely e-tail approach and have opened two brick-and-mortar stores in the Cape Town area, it has been noted that in South Africa the physical presence of a brand is still of value to the general consumer (September, 2017; Simpson & Lappeman, 2017). These stores incorporate the use of ICTs to enhance the customer experience in store, such as QR codes that shoppers can scan on their mobile devices to see more product information and bespoke point of sale system that allows transactions to happen anywhere in the store, eliminating the need for shoppers to queue (Simpson & Lappeman, 2017). QR codes have also been integrated into the click and collect method of shopping in which a consumer purchases online and goes in store to collect. The customer would show the QR code to a sales assistant who would scan it and use it to find their package (Simpson & Lappeman, 2017). Yuppiechef have reversed the traditional evolution of brick-and-mortar to online by using ICTs in addition to taking a low risk approach to market expansion.

2.13 Conclusion

The role of this literature review was to give the reader theoretical background to the study through discussing the current literature around the topic to then find the existing gaps in the literature to develop a context for future research to be conducted. The theoretical model discussed was the ICT Development Index (IDI) which shows that

ICT development is particularly slow in African regions. The concept of slow ICT adoption throughout African nations led to the introduction of the digital divide. The digital divide was defined in this study as a barrier in access ability and use of ITCs. The digital divide was then discussed in the context of ICT's use in expansion activities and the development of ICTs throughout Africa.

Throughout investigation, this study has uncovered how retailers use ICTs in their expansion strategies and the importance of aligning ICT strategy to organisational strategy. The growing importance of cyber security regulation was also highlighted and it is shown that African countries outside of South African tend to lack formal legislation, which has been an area identified for further investigation. Three organisations having utilised ICTs in their expansion into Africa have been discussed throughout the literature review, each of which having taken a slightly different approach to their strategy, proving that ICTs can be utilised in a number of ways to enable African expansion. The literature evaluated in this chapter showed that there continues to be a strong trend of South African retailers expanding further into the African continent, using ICTs to enable their expansion. As ICT and marketing blend in the new digital economy it is imperative to discover to what extent retailers are using ICTs in their expansion strategies, with specific regard to the African continent which faces the challenge of slow ICT adoption and the digital divide.

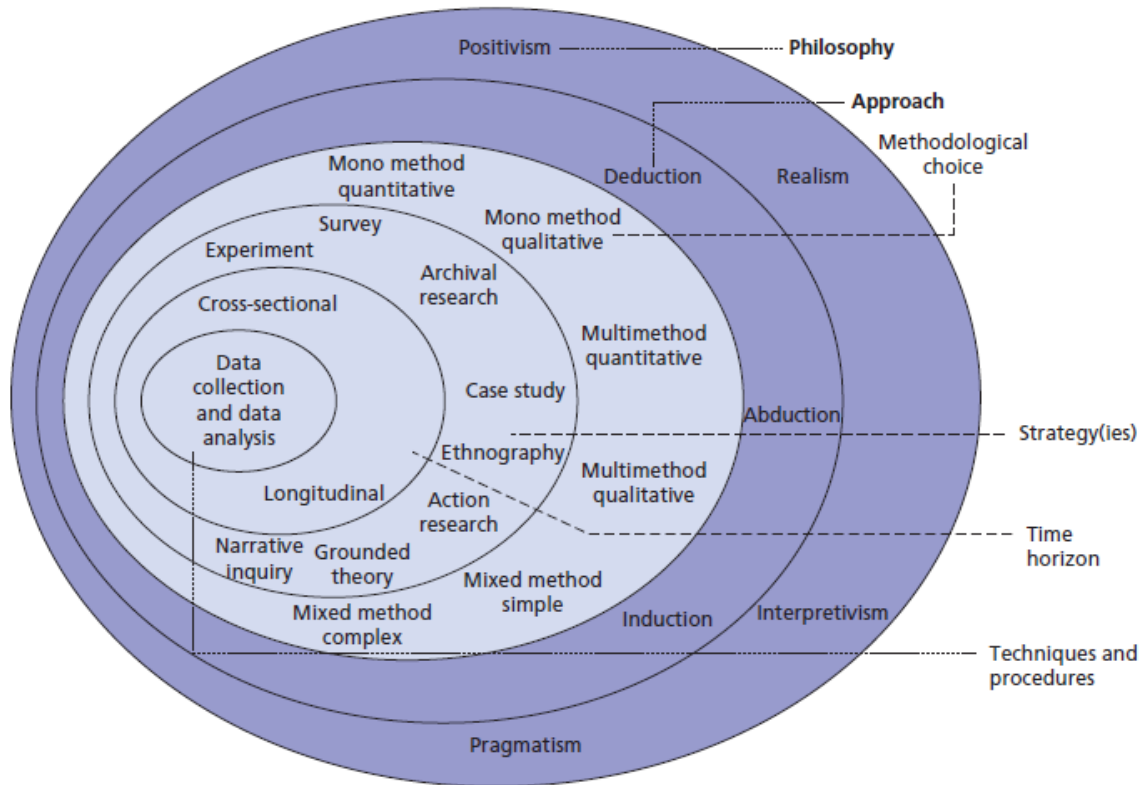
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology used in the study. Giving a detailed account on how a study was conducted provides the reader with transparency and context for how to interpret the findings. A methodology refers to the organising philosophies providing the process informing the research procedures and research design (Eriksson & Kovalainen, 2015). The philosophical approach that underpins this study is discussed in the present chapter. The target population and sampling techniques used have been detailed, followed by an explanation of the research instrument used and approach to data analysis. Following this, the trustworthiness and authenticity of the study has been assessed, the limitations have been explained, ethical considerations have been detailed and finally a conclusion of

the research design and methodology has been drawn. Figure 6 below will be used to guide the process used in gathering, analysing and interpretation of data in this study.

Figure 6 Research Methods



Source: Bryman (2010)

3.2 Research Philosophy

A research philosophy details the concepts or beliefs held by a researcher and can also be referred to as a research paradigm (Rahi, 2017; Patel, 2015). With reference to Figure 6, there are multiple research paradigms positivism, interpretive, realism and pragmatism however, for the purpose of this study two research paradigms are to be discussed, namely, are positivism and interpretivism (Bryman, 2010; Rahi, 2017).

3.2.1 Positivist paradigm

A positivist paradigm is informed by the belief that the world is believed to be external and objective and that observation and experiment provide true knowledge (Easterby-Smith, Thorpe & Jackson, 2012; Rahi, 2017; Dudovskiy, 2018). Philosophical assumptions of a positivist paradigm include; the independence of the observer from that being observed, explanations demonstrate causality, the research process occurs through hypothesis and deduction, reduction of elements to simplest form and

generalisation which can be achieved through large, randomly selected sample sizes (Easterby-Smith *et al.*, 2012; Dudovskiy, 2018). In considering Figure 6, it is evident that this school of beliefs can lead to a quantitative research approach (Bryman, 2010; Rahi, 2017). Some criticisms of the positivist paradigm include; the reliance on experience as a valid source of information, which cannot always be applicable, and the lack of depth of insights in the findings as the research findings will on be descriptive in nature (Dudovskiy, 2018; Rahi, 2017). Considering these characteristics and criticisms, this paradigm was not an appropriate philosophy to inform this research and therefore an interpretivist approach was adopted.

3.2.2 Interpretive paradigm

An interpretivist paradigm is concerned with the unique nature of a specific phenomenon and is focused on providing context and depth. Interpretivism is based on the belief of multiple interpretations of reality and a deep understanding and exploration of concepts, encouraging the significance of qualitative research (Chowdhury, 2014; Rahi, 2017; Dudovskiy, 2018). An interpretivist philosophy is a flexible approach to the research process, because it gives the researcher the ability to uncover insights not previously predicted which provides depth and context into the research topic. This characteristic was deemed important by the researcher for the type of research that was conducted in this study. The kind of information expected from following this approach included; what some people think and do, what kind of problems they are confronted with, and how they deal with them (Dudovskiy, 2018). This study investigated the approaches and challenges of retailers using ICTs in the expansion strategies, and this type of investigation suited the information expected from following an interpretivist approach. Common criticisms of interpretivism include the lack of generalisability of data due to the personal point of view of respondents during the data collection process, undermining the reliability of the data, whereas the benefits of interpretivism include a great level of depth in research (Dudovskiy, 2018). This system of beliefs was a suitable choice for this study as the research topic needed further exploration and examination. To ensure the reliability of the data in this study, an approach of triangulation was taken in the collection of data. Triangulation is a method in which more than one approach is taken to data collection to further ensure the reliability and validity of the data collected (Easterby-Smith *et al.*, 2012).

3.3 Research Design

A research design is a blueprint for the research to be conducted and can be defined as the plan connecting the conceptual research problem to the empirical research (Chigada, 2014). The research design discusses the data required, methods used to collect and analyse this data and how the research question is answered using this approach (Malhotra, 2010 & Bryman & Bell, 2015; USC, 2018). In deciding on an appropriate research design to use, the researcher needs to; define the information needed, decide on whether the design will be descriptive, exploratory or causal, design the measurement techniques, construct an appropriate method of data collection, specify sampling techniques and sample sizes and develop a plan for data analysis (Malhotra, 2010; Bryman & Bell, 2015; Expert Journals, 2017).

The research design used by a researcher depends on whether the researcher is looking to find insights or definitive answers. Generally, research can either be exploratory, looking to provide insights and understanding of a marketing phenomenon; or conclusive, looking to test specific hypotheses and measure relationships (Malhotra, 2010; Bryman & Bell, 2015). The two approaches most widely used in research designs are a qualitative approach, using inductive analysis and guided by analytical principles rather than rules; and quantitative approach, emphasizing, numerical, mathematical and statistical analysis of data (Denzin, 2005; Babbie, 2010; Malhotra, 2010). For exploratory research a qualitative approach is suitable as the goal is to uncover insights and to understand a certain phenomenon, which lends towards a more open, unstructured approach (Malhotra, 2010; Yilmaz, 2013). For conclusive research, a quantitative approach is appropriate as the goal is to test a specific hypothesis and therefore requires a structured, data driven approach (Malhotra, 2010; Yilmaz, 2013).

3.1.1 Exploratory research design

The objectives of this study were to explore and uncover insights into a phenomenon which are difficult to achieve through descriptive or causal research designs. In considering the research paradigm having informed this study, an exploratory research design was deemed the most appropriate research avenue by the researcher

to achieve the goals set out. Exploratory research is often used in cases where little is known about a topic or when further definition is required. The investigative nature of exploratory designs lends to the uncovering of insights and gaining new information around a specific topic. A qualitative approach allows for an in-depth, lesser structured data collection process, and small sample sizes, further aiding in this goal and motivating this choice being made.

For a research problem seeking further definition, an exploratory design has been seen to be most fitting and hence has been selected by the researcher for this study (Sekaran & Bougie, 2016; Drammeh & Karlsson, 2017). Exploratory research designs have the characteristics of a flexible, unstructured research process and small sample sizes of respondents (Malhotra, 2010; Yilmaz, 2013). These characteristics lend kindly to uncovering insights as they allow for unforeseen information to be revealed from the respondents, further justifying the use of an exploratory design in this research (Malhotra, 2010; Bryman & Bell, 2015; Drammeh & Karlsson, 2017). Exploratory research tends to be selected as a design for studies in which little is known about the research problem and when the research problem needs to be defined further (Malhotra, 2010; Drammeh & Karlsson, 2017). Having considered these aspects of exploratory research, it concurs that an exploratory research design was an appropriate selection.

3.4 Research Strategy

A research strategy introduces and explains how a research plans to answer the research question and how the researcher will implement the methodology (The Open University, 2018). Research methods can be either quantitative or qualitative in nature (Malhotra, 2010; Yilmaz, 2013). Quantitative research lends to a positivist method while qualitative research speaks to an inductive method (Malhotra, 2010; Yilmaz, 2013). Quantitative research explains marketing phenomena using numerical data, mathematics and statistics (Malhotra, 2010; Yilmaz, 2013). Quantitative research has been described as a positivist paradigm looking to explain phenomena through explicitly formulated hypotheses (Carson, 2005; Yilmaz, 2013). Advantages of a quantitative approach include the large sample of randomly selected data required for collection, resulting in the findings being broad and generalisable for the researcher (Carson, 2005; Yilmaz, 2013). Another advantage of this method is that the questions are highly structured and closed-ended, allowing researchers to identify patterns in

responses (Carson, 2005; Yilmaz, 2013). Some disadvantages of this method include the inflexibility of data collection and respondent expression which can result in missing valuable insights (Malhotra, 2010; Yilmaz, 2013).

Due to the nature of this study being exploratory, a qualitative method was selected. Qualitative research differs from quantitative as it allows more flexibility in the research process using observation and respondents experience to understand marketing phenomena (Carson, 2005; Malhotra, 2010, Yilmaz, 2013). Qualitative research is informed by an interpretivist paradigm, and as such, recognises the possibility of multiple interpretations of a reality (Malhotra, 2010). Considering this point, further justification for a case study approach is recognised, as it is an attempt to collect multiple interpretations regarding the digital divide and its effects on technologically assisted regional expansion. Malhotra (2010) states that particular situations in which a qualitative approach would be used is when the topic in question cannot be measured quantifiably and also in which a problem requires a more precise definition, both of which are the case in this particular research. Advantages of a qualitative approach include, flexibility in the research process, uncovering of unforeseen insights and more in-depth responses (Carson, 2005; Malhotra, 2010; Yilmaz, 2013). Disadvantages of this approach include the possibility of the respondent not answering in the required manner due to lack of structure, researcher bias and error in interpretation and the inability to generalise findings due to a smaller sample population (Carson, 2005; Malhotra, 2010; Yilmaz, 2013). Considering these limitations, this approach was deemed the most appropriate avenue and measures were taken to limit the impact of possible errors and biases on the research findings.

A case study approach was deemed an appropriate research strategy in business research (Bryman & Bell, 2015; Drammeh & Karlsson, 2017). The case study approach requires the researcher to select a single business case, such as a single organisation, person, event or location to analyse and investigate (Bryman & Bell, 2015). The researcher performed an in-depth analysis of this case to bring to light understanding of the research objectives and in some cases, new areas of unknown phenomena to put forward for further investigation. The definition of a case study is, “it is an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment” (Merriam-Webster, 2018

To look back to where the case study began, Harrison, Birks, Franklin & Mills, (2017) developed a paper on the origins of the case study methodology to prove its validity and reliability in the research space. An interesting insight into case study research which comes through in this is the early work of Stake (1995) who differentiated between different types of case studies as being either intrinsic or instrumental in nature. An intrinsic case study would be a case in which there is a particular interest in the specific case at hand and one would need to learn about that particular case. An instrumental case, on the other hand refers to a need for general understanding, for example, a research question, and the researchers feel that they would gain insight into the research question through studying that particular case. The case used in this study can be defined in this manner as instrumental as the investigation of this case is what allows the researcher to uncover insights into the integration of ICT and marketing in continental expansion. The result of the analysis by Harrison et al., (2017) in investigating the origins of the case study is that they deduce that the complex evolution of the case study approach has led to a sophisticated methodology which is viewed as a valid method of research to explore a wide scope of phenomena.

An instrumental case study approach has been taken as the research strategy, using a major South African retailer with a large footprint on the African continent as the case in question. The reason a case study approach was selected was to allow the researcher to gather information from a major player in the retail space, with much success in expansion, to gain in-depth insights into their experience of the integration of ICT and marketing in expansion strategies. The case study data collection included both secondary and primary data. The secondary data included an in-depth review and analysis of relevant literature as well as industry reports and articles specific to the business case selected. The primary data used was open ended semi structured interview questions which took the form of in-depth interviews with key respondents and were voice recorded for record keeping. One disadvantage of a case study approach of this scale is that it is industry and location specific and therefore the results cannot be generalised to all contexts. Considering the abovementioned strategy, a fitting research method has been selected.

3.5 Target Population

A target population is a definition of an entire group of elements, sharing specific characteristics, which are to be generalised by the findings of the study (Malhotra, 2010; Asiamah, Mensah & Oteng-Abayie, 2017). The target population for data collection was key employees heading the IT, Strategy and marketing departments of a large South African retailer with a strong presence throughout the African continent. Additionally, fulfilling the criteria of being directly involved in decision making regarding the continental expansion strategies of the retail organisation throughout the African continent. The ideal sample size would have been 5-10 employees, however due to lack of resources, connection and time constraints, three key individuals were selected from a large South African retailer. These three individuals spanned across marketing and IT, with departments somewhat overlapping, and were influential in the organisation's expansion efforts throughout Africa.

3.6 Sampling

Sampling entails selecting viable respondents from a target population to participate in a study (Malhotra, 2010). In sampling respondents there are two main methods used, probability and non-probability sampling (Bryman & Bell, 2015; Malhotra, 2010).

3.6.1 Probability sampling

Probability sampling involves the sample units being selected randomly, or by chance, using a pre-defined probability for each sample unit and is generally used in quantitative methods (Malhotra, 2010; Bryman & Bell, 2015; Drammeh & Karlsson, 2017). There are a variety of probability sampling methods available to researchers, namely: simple random sampling, systematic sampling, stratified random sampling and multi-stage cluster sampling (Malhotra, 2010; Bryman & Bell, 2015). A probability sampling technique was not used in this study as the nature of this study was qualitative, requiring the informed selection of respondents.

3.6.2 Non-probability sampling

Non-probability sampling involves relying on the judgement of the researcher to reliably select sample units meaning that the samples are not randomly selected (Malhotra, 2010; Drammeh & Karlsson, 2017). Non-probability sampling is generally used in qualitative research and there are four main methods of this; purposive sampling, convenience sampling, snowball sampling and quota sampling.

Purposive sampling is a method in which respondents are selected due to their ability to answer the research questions. Convenience sampling refers to respondents who are easily available to the researcher. Quota sampling is a technique in which respondents are selected on certain criteria such as demographics. Snowball sampling refers to a method in which potential respondents are suggested to the researcher by other respondents (Malhotra, 2010; Bryman & Bell, 2015).

Non-probability, convenience purposive sampling was used initially by the researcher to select and contact key respondents. The reason for using a purposive technique was that the respondents required specific knowledge and experience and needed to be selected based on these requirements. Therefore, a random sampling technique could not be used to find the appropriate respondents. Non-probability, convenience purposive sampling was an appropriate method to use by the researcher as the researcher was well versed the topic of the data to be collected and was therefore able to successfully select key respondents fitting the requirements of knowledge and experience necessary. Eventually a snowballing technique was used after the first respondent suggested the other two respondents' participation. For situations in which the respondents require specific knowledge and experience, a snowballing technique is fitting, as the initial respondent will be aware of other respondents with similar knowledge and experience who will be able to successfully contribute to the data collection.

3.7 Research Instrument

Case study research allows for a variety of data collection methods. The particular methods used vary due to numerous reasons including the purpose and design of the research and access granted to the researcher (Harrison, Franklin & Mills, 2017). The most commonly used methods for case study research include interviews, focus groups, observation and exploration (Yin, 2002; Harrison *et al.*, 2017). Yin (2002) suggests that more than one data collection approach be taken in order to triangulate the findings, further validating the outcome of the research.

For the purpose of this study, the data collection approach took three forms. Secondary data was collected by means of accessing industry reports of the case in question and conducting an in-depth review of relevant literature. Primary data was collected in the form of semi-structured, open ended interview questions with three

key individuals in the case organisation. The rationale for combining the three methods of data collection was to be able to triangulate the data collection process and minimise researcher and interviewer biases such as confirmation bias.

Prior to the interviews, respondents were provided with the interview protocol, a background to the study and a consent form via email. These documents were additionally printed and provided to the respondents on the days of the interviews. The interviews were conducted face-to-face at the premises of the case study organisation and were voice recorded by the interviewer and later transcribed to eliminate interviewer errors. In this case the interviewer and researcher were the same individual and therefore said individual both conducted and transcribed the interviews.

The interview protocol followed the following format:

Table 1 – Interview Protocol

Question 1	Motivations behind expansion into specific regions
Question 2	Market entry strategies
Question 3	Use of ICT in expansion
Question 4	Challenges in expansion from a marketing perspective
Question 5	Challenges and benefits of slow ICT development
Question 6	Challenges and benefits of the Digital Divide
Question 7	Protection of privacy of consumer data

3.8 Data Analysis

Data analysis is defined as making valid inferences from a very large amount of data (Sekaran & Bougie, 2016). Data analysis involves taking what has been said and observed of the participants to exploring the underlying themes or meanings and explaining these meanings (Sliverman, 2015). In qualitative data analysis there is no set structure of conducting analysis (Ngulube, 2015; Drammeh & Karlsson, 2017; Harrison *et al.*, 2017). Ngulube (2015), states that there is a common thread in data analysis procedures which is described as inductive qualitative data analysis. This common thread takes the form of data reduction, data display, conclusion drawing and verification. This idea is further developed by Braun and Clark (2012) who have

suggested a six-phase approach to thematic data analysis. This six-phase approach is as follows:

Phase 1: Familiarising yourself with the data.

Phase 2: Generating initial codes

Phase 3: Searching for themes

Phase 4: Reviewing potential themes

Phase 5: Defining and naming themes

Phase 6: Producing the report”

The common thread mentioned by Ngulube (2015) of data reduction, data display, conclusion drawing and verification was followed in this study whilst additionally using the framework of Braun and Clarke’s (2012) six-phase approach. In combination with this approach, Nvivo 12 software was used by the researcher as the main means of coding and thematic analysis.

The first step in the data analysis was transcribing the interview data. The process of transcription not only transforms the data into a useable format but it also solidifies the information in the mind of the researcher, reminding them of the respondents exact words, clarifying items that were not fully understood or recognised in the initial data collection process and allowing the researcher to begin to gain a better understanding of the data (Bryman & Bell, 2011; Braun & Clarke, 2012). The interviews were initially transcribed word for word to mitigate loss of meaning of the respondents’ answers and to provide the researcher with a holistic understanding of the data. Braun and Clarke (2012) suggest that the researcher listen to the interview recordings and read the interview transcripts at least once which has been achieved through the transcription process.

After compiling the transcripts, the second step of the data analysis was to begin coding the data. The transcript data was uploaded onto Nvivo 12 plus. Nvivo 12 has a function called auto code in which the software attempts to create codes from the data.

In thematic data analysis, codes are used to provide labels or categories for items in the data that could be essential to answering the research question (Braun & Clarke, 2012; Ngulube, 2015). The process of coding data is what Ngulube (2015) refers to as data reduction. Although it is possible for a researcher to code the data manually,

this method could result in a kind of confirmation bias which is why the researcher chose to use the auto code function before defining the codes manually.

The third step of the data analysis involved refining these codes manually and searching for themes. Braun and Clarke (2006) define themes as “*capturing something important about the data in relation to the research question, and representing some level of patterned response or meaning within the data*”. The initial search for themes involved looking at the visual Nvivo 12 output which groups the Nvivo codes output into themes. Following this, the fourth step involved a review of the potential themes. Some of the Nvivo output separates data with similar meaning or groups of data that should be separate themes. Reviewing the themes included the restructuring of the Nvivo output into themes in line with the research question. These themes were then properly defined and labelled being the fifth step in the analysis (Braun & Clarke, 2012).

In addition to interviews, integrated annual reports from the case study organisation were analysed and a further review of the literature was conducted considering the themes which had emerged from the transcript data. The final step of the data analysis was to compile the findings of this data analysis into a report, comparing these findings to the initial literature review (Drammeh & Karlsson, 2017; Braun & Clarke, 2012).

3.9 Trustworthiness and Authenticity

The concept of validity and reliability has been criticised in its use in qualitative research and an alternative evaluation criterion has been suggested by researchers such as Guba and Lincoln (1994). This alternative criterion is based on the concepts of trustworthiness and authenticity (Bryman and Bell, 2015). Trustworthiness can be measured through four criteria; credibility, transferability, dependability and confirmability (Bryman & Bell, 2015). Yardley (2000) expands upon Guba and Lincoln’s authenticity criterion and has suggested authenticity be measured through; sensitivity to context, commitment and rigour, transparency and coherence and impact and importance.

3.9.1 Trustworthiness

The first element of trustworthiness is credibility. Credibility refers to the extent to which the researcher’s interpretation of the data represents the perspective of the respondents (Bryman & Bell, 2015; Drammeh & Karlsson, 2017). Credibility

determines whether the research findings represent credible information drawn from the data collected and is a valid interpretation of the participants' opinions (Anney, 2014). To ensure the credibility of this study, the interviews were voice recorded, transcribed and analysed using qualitative software. This process helped to eliminate any preconceived ideas the researcher may have had towards the data results as it gave a non-human interpretation of the themes present. Another technique suggested by Anney (2014) is to ensure credibility is through triangulation. Triangulation is a technique in which multiple methods and sources are used to collect data (Onwuegbuzie & Leech, 2007). Triangulation reduces bias and compares the responses of the respondents to other sources of information (Denzin & Lincoln, 2005; Lincoln & Guba, 1994).

The next element to consider was transferability described as the degree to which the results of qualitative research can be transferred to a new context with new respondents (Anney, 2014). In considering that qualitative data tends to be specific and unique in terms of context, it may not be possible to easily replicate the study in another setting, therefore Guba and Lincoln (1994) argue that researchers produce a "thick description" in their findings and purposive sampling. A thick description entails finding rich detail and depth rather than breadth. This was achieved through the open-ended nature of the interview questions and the questions being general in nature and left to interpretation to an extent to ensure freedom in the answers given. Dependability entails keeping complete records of all data for auditing purposes to ensure the soundness of the study (Anney, 2014). As such, the interviews of this study were all voice recorded and transcribed for complete records. The final element of trustworthiness is confirmability, which means to prove that the researcher has acted in good faith and has not tainted the research with personal values or theoretical inclinations (Bryman & Bell, 2015). Through following a triangulation approach to the collection of data, conducting an in-depth review of literature and industry reports, the researcher has been able to prove good faith in the research process conducted.

3.9.2 Authenticity

The concept of authenticity is concerned by the wider impact of the study and proving the ability and knowledge of the researcher (Bryman & Bell, 2015; Easterby-Smith *et al.*, 2012). Sensitivity to context refers to the social setting and ethical issues involved in the data collection process (Bryman & Bell, 2015). Commitment and rigour refers to

the abilities and diligence of those responsible for data collection (Bryman & Bell, 2015). Since the researcher played the part of the interviewer in the data collection process, it was known that the interviewer had a thorough knowledge of both the research approach and the research topic, enabling the successful conduction of the interview process. This study also contributes to retailers looking to expand into African content, giving context into the environments and challenges for retailers.

3.10 Limitations of the Study

This section discusses the limitations faced throughout the duration of this study from three perspectives. Firstly, the resources and ability of the researcher, secondly the limitations of the research approach taken and finally the limitations of general application. The main limitations encountered by the researcher were time and resource constraints. One challenge the researcher faced in finding the correct respondents arose in willingness or availability to participate stemming either from an organisation as a whole or from an individual level. Due to these constraints a relatively small sample sized had to be used for the data collection process. Only three respondents were available for the data collection which limited the scope of information obtained, however the three selected were directly involved in the processes to be discussed and therefore were the most suitable respondents at the time. Much of the researcher's time was spent trying to form connections with appropriate respondents and to find those willing to participate in the study, with various setbacks encountered. Another limitation of time was that further, in-depth information was not able to be gathered leaving much room for additional future research. Limitations resulting from the choice of a qualitative research method included the lack of structure in the data collection process and the possibility of researcher bias and error in interpretation.

The choice of a single case study also presented limitations in the ability to generalise findings. The case study data was collected from a South African retailer to gain insights with regard this retailer's use of ICTs in their expansion throughout Africa. This limited the generalisability of the findings to retailers and to expansion within Africa. Although the findings could be found useful to an organisation looking into Africa from outside of the continent, the data collected was not representative of that scenario. The data collected could also not be generalised to describe every region of the African continent as the case study organisation had a presence in just 16 countries on the

continent with none of those being Northern African nations. The findings of this study cannot be said to represent any Northern African nations for this reason. The case study organisation was an enterprise sized, multi-national organisation, and for this reason, the findings might not be applicable to small to medium sized organisations.

3.11 Elimination of Bias

An interpretivist paradigm takes the approach of the researcher being involved in the data collection and exploration which can lead to bias in data collection and interpretation (Bryman & Bell, 2015; Easterby-Smith *et al.*, 2012). Open interview questions as used in this study help to eliminate interviewer bias as it enables the respondents to answer questions freely. An additional method to eliminate bias was to conduct all data collection in the same language, English, rather than a mix of English and Afrikaans. This was to avoid using interpreters who could create a bias or confusion. To eliminate bias in the data analysis process, the method of triangulation of data was followed (Eriksson & Kovalainen, 2015). Triangulation refers to multiple methods being used to validate the data collected. In this case, three techniques were used for data collection which were, face-to-face interviews, industry reports and an in-depth review of relevant literature.

3.12 Ethical Considerations

There are several ethical considerations taken into account when conducting data collection in marketing research (Bryman & Bell, 2011). To protect the privacy of the participating organisation and the individuals who participated in the data collection process, the name of the organisation and the names of the individuals have been left out of the study and not shared by the researcher to any outside parties. In addition to this, the voice recordings and transcripts of the voice recordings have been kept confidential by the researcher, only to be shared, if necessary, with the supervisor of the researcher. Further ethical considerations taken were ensuring no harm to the participants, informed consent of the participants, protection of personal information and ensuring proper permission was obtained.

3.12.1 Ensuring no harm to participants

Cozby and Bates (2012:23) define harm as both emotional and physical injury suffered by a person. Emotional harm might be caused by asking sensitive questions which may evoke emotions, therefore, the questions were reviewed by the UCT ethics

committee to ensure that all sensitive questions were removed before conducting the interviews. Physical harm might include exposing respondents to unhealthy interview conditions which might injure or inflict injuries to them. Interviews were conducted at participants' offices to mitigate travel and punctuality challenges.

3.12.2 Informed consent of participants

Bryman and Bell (2010:278) define informed consent as the right granted by one to partake in a study or use one's information. Before conducting interviews, the participants were approached and requested for their willingness to partake in the study. Consent was granted verbally, via email, and in writing.

3.12.3 Personal information

Ngulube and Mathipa (2014:101) state that failure to protect participants' personal information can lead to lawsuits. Therefore, it is important for researchers to assure participants that their personal information will be kept safe. In this study, participants' personal information was used solely for research purposes, was not shared with any third parties.

3.12.4 Ensuring that permission is obtained

Before conducting research, permission was granted by the UCT ethics committee which involved a thorough review of the research proposal and interview protocol. In addition to this, the participants were provided with full disclosure regarding the nature and purpose of the study and written consent was obtained from the participants for their participation in the interviews, the voice recording of these interviews and their holistic participation in the study.

3.13 Conclusion

This chapter provided a detailed account of the research design and methodology used in this study. The philosophical approach informing this study was that of an interpretivist paradigm. This allowed for flexibility in the research process and depth of findings. The target population of the study was 3-5 executives of a large South African retailer involved in the African expansion of their business from both an IT and marketing perspective. Due to various limitations, three respondents were selected from the case study organisation to participate in the interviews. The sampling

technique used was non-probability convenience purposive sampling to find the initial respondent and snowball sampling for the remaining respondents. The research instrument used was a semi-structured open-ended interview questions, which were conducted face-to-face and voice recorded. These recording were then transcribed and analysed through Nvivo12 software in addition to manually through researcher analysis. The trustworthiness and authenticity of this study have been discussed in full, including the various criterion of these concepts. The limitations of this study have been described by category being; researcher ability, research method selected and the generalisability of the study. Finally, insights have been given into the elimination of bias in the study through triangulation and the ethical considerations of the study have been detailed in full.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter analyses, interprets and presents the data collected using the methodology detailed in the preceding chapter. To begin with, themes that emerged from the data collection have been given. Following this, a thematic data analysis was conducted considering the objectives of this study. This analysis is then interpreted by the researcher and finally conclusions are drawn. The data collected serves the purpose of answering the objectives of this study. The research question was

“To what extent a South African retailer has used ICTs in its expansion strategies, throughout the African continent which faces the challenge of slow ICT adoption and the digital divide”.

The secondary questions that guided the above question are restated as follows:

1. What are the challenges faced in using ICTs in South African retailer’s expansion strategies throughout the African continent?
2. What intervention strategies have been used to overcome the challenges?
3. What are the benefits of using ICTs in South African retailer’s expansion strategies throughout the African continent?
4. To what extent does the digital divide effect South African retailer’s ICT driven expansion across the African continent?

5. How do differences in Cyber Security legislation in different regions effect an organisation's ICT policies and protocols in different regions?

The next section presents the themes that emerged from the data.

4.2 Emerging Themes

The six-phase approach to thematic data analysis suggested by Braun and Clark (2012) was used by the researcher as a guide for the data analysis process. The themes identified by the researcher came about through using this six-phase approach. Firstly, the researcher transcribed the interview data which was a process with the purpose of allowing the data to be uploaded into the software but also to refresh the researchers mind and give more depth and understanding to the data collected (Braun & Clark, 2012). Following this, the transcripts were uploaded to Nvivo12 and the auto code function. The codes developed by this function were then further refined and reviewed to create the following eight themes:

- a) South Africa vs Africa: The differences in the retail environment, infrastructure and ICT development between South Africa as a country of origin and other African countries.
- b) Entry Modes and Motivations: Reasons and methods for expanding throughout Africa
- c) African markets: Non-South African market characteristics and consumer behaviour, informal markets.
- d) Challenges: Challenges in expansion inherent to African marketplaces
- e) Retail technology and ICTs: the use of ERP systems, POS systems and cloud based centralised systems
- f) The Digital divide: the multitude of divides separating South African retail from other African countries
- g) Mobile Technology: The mobile revolution in Africa and how retailers have adapted to this
- h) Cyber Security: South African regulation and legislation vs other African nations

4.3 Thematic Data Analysis

Braun and Clark (2012) define thematic data analysis as *“a method for systematically identifying, organising, and offering insight into, patterns of meaning (themes) across a dataset.”* Further describing thematic data analysis allowed the researcher to see and understand shared meanings and experiences which contribute to identifying what is common about a topic. This section presents a thematic data analysis of the data collected by the researcher in alignment with the research objectives. The African continent as a whole has been characterised as having slow ICT development and to be lacking in ICT infrastructure. Considering this, organisations still choose to use ICTs in their expansion strategies in Africa and beyond. Although this approach is subject to multiple challenges, overcoming these challenges and following this approach provides an organisation with several benefits.

4.3.1 What are the challenges faced in using ICTs in South African retailer’s expansion strategies throughout the African continent?

Many challenges were mentioned by the respondents during the data collection process, and therefore lead to the formation of theme *d*: challenges in expansion inherent to African marketplaces. The data comprising this theme included barriers to trade, skills shortages, available infrastructure and resources. Barriers to trade emerged in two forms, firstly “red tape” or legislative barriers, and secondly local competition. Legislation can cause challenges to entry, by prohibiting entry completely or by causing difficulty of operation. For example, in Kenya, respondent 3 states that:

“Food retailers must stock 95% local produce and employ a high percentage of local staff.” [Respondent 3]

These kinds of regulations are common in developing countries as there is a focus on legislation on the protection of the local population and the local economy. The challenges that this can cause for a retailer is to be able to offer a uniformity in the quality of the shopping experience to the consumer of that region to what it would to the consumer of its country of origin. One existing regulatory barrier discussed in detail by respondent 3 was that of the Lottery Board’s regulation of competitions and promotion which contributed to theme *c*: African markets.

“In every African country, we need to get a Lottery license prior to running any competition. The license comes to 10% of every million rand you spend”.

In terms of local competition, the barrier to trade is significant, respondent 3 elaborates on this point:

“Entering a market, our main concern is local retailers. In some instances, the barrier of local competition is enough to outweigh the potential benefit entering the region.”

Other challenges mentioned by respondent 3 included skills shortages, high staff turnover and a lack of available transportation, infrastructure and resources. These ideas further contribute to theme c.

“Many times our biggest challenges are number 1 the locals, the local infrastructure, the local competitors ... Also staff turnover is high in African countries due to a number of factors”

Respondent 1 further contributed to this theme by highlighting the logistical, infrastructural and various other challenges:

“There are logistics problems there are legislation problems, working problems, infrastructure problems, monopolies ... IT infrastructure is one of those (problems)”

The challenges in African expansion mentioned in literature include those such as barriers to trade, legislative barriers, skill shortages, resources and infrastructure (Fletcher & Crawford, 2014; Cavsugil *et al.*, 2015; Boso *et al.*, 2016). These specific challenges were additionally mentioned by the respondents through data collection. Another challenge, which was a recurring theme with all three respondents, was that of theme a: which is the differences between the retail environment in South Africa and the retail environments in other African nations. Respondent 1 mentioned:

“People think of South Africa as being part of Africa and that Africa is like South Africa, but it is not”.

The differences between the retail markets mentioned by respondents causing challenges included the difference in incomes and shopping habits of consumers outside of South Africa. Respondent 3 explained

“They are so used to frequenting markets, so they will go to a market... and even though it might not be cheaper, they perceive it as being cheaper”.

Although very prominent in South Africa, with 12% of the labour force being employed by the informal sector the informal marketplaces cause massive barriers to formal retail in further African markets (StatsSA, 2017).

Other differences noted were the lack of retail ICTs outside of South Africa with specific mention to point of sale integrations, the lack of fixed line infrastructure and reliance on mobile outside of South Africa. The latter two of these issues contributed to the emergence of another theme, theme e: Retail technology and ICTs: the use of ERP systems, POS systems and cloud based centralised systems. Respondent 3 explains:

“For example, the campaigns where you can win a car... are integrated directly into the point of sale ... We do not have that infrastructure in Africa.

The ICT Developments Index notes many countries on the African continent as lagging behind South Africa in ICT development (ITU, 2016), which was a point that was further emphasized in a retail context by the respondents. Furthermore, a challenge mentioned by the respondents was not only the difference between South Africa and the rest of Africa but the difference between other African countries from a retail perspective and contributing to theme c with respondent 3 stating:

“You have your more experienced customer in Zambia, Kenya and Nigeria who know what retail speak is, they know what retail incentives are and they understand what we tell them. But when you go into a market like DRC or Uganda we really have to adapt our messaging to be so self-explanatory that there is no doubt or ambiguity or uncertainty when it comes to our message.”

One of the challenges noted by Dakora and Bytheway (2014) is that South African retailers struggle to sufficiently understand the differences between African markets with consumer tastes and preferences differing widely throughout the continent. Dakora and Bytheway (2014) go on to mention only 41% of African countries use English as their main business language and mention the lack of infrastructure and underdeveloped retail landscapes as challenges to expansion. Spangenburg (2017) describes African markets as having weak local currencies and lacking in market diversification.

4.3.2 What intervention strategies have been used to overcome the challenges?

The lack of ICT infrastructure and differences in market characteristics call for retailers to develop strategies in their expansion activities to overcome these challenges. One strategy mentioned by respondent 1 was to use alternative technologies such as satellite technology when on the ground infrastructure is lacking, respondent 1 also mentioned the benefits of implementing centralised cloud-based ERP systems, stating:

“Because of the nature of our cloud computing solutions, as long as you have an internet connection, you can theoretically start trading.”

These responses contributed to the emergence of theme e: Retail technology and ICTs: the use of ERP systems, POS systems and cloud based centralised systems. Another contribution to this theme was given by respondent 3 outlining the challenges of not having integration into point of sale systems outside of South Africa. This response also contributes to theme a: South Africa vs Africa: The differences in the retail environment, infrastructure and ICT development between South Africa as a country of origin and other African countries. Respondent 3 mentioned that the only way to overcome the lack of POS integration was to develop very costly, manual processes to run promotions and competitions, however additionally mentioned that the technology will eventually be available in the other regions.

Noted benefits of utilising cloud-based instead of on premise ERP systems are lower investment costs and the ability to access and store data in real time from any geographic location (Continelli, 2017). Literature suggested that in a situation where infrastructure is lacking, an equity entry strategy can be used in which the retailer invests heavily into the market. Dakora and Bytheway (2014) and Game (2008) note that many South African retailers have used the wholly owned approach due to lack of ability to find suitable local partners or acquisition targets and an underdeveloped marketplace.

4.3.3 What are the benefits of using ICTs in South African retailer's expansion strategies throughout the African continent?

The benefits of using ICTs in expansion mentioned by the respondent were that certain technologies can ease and speed up the expansion process. These responses were

categorised into theme e: Retail technology and ICTs: the use of ERP systems, POS systems and cloud based centralised systems.

Respondent 1 explains in further detail:

“In the last few years we have standardised our ICT infrastructure. What that allows us to do is to switch on certain countries much quicker than we would have been able to with bespoke development systems. It has been a heavy investment into technology for us which is not starting to come to fulfilment.”

Rozzio (2018) lists the benefits of utilising ICTs in business as; the ability to reach new markets and improve product and service delivery through multiple connection capabilities. Respondent 1 also explains how this kind of technology results in standardising ICTs across the organisation and assists in expansion.

“We have got a well-defined internal method of working with IT and combining that in advances in our cloud computing makes a lot of those things very standardised.”

Some of the key benefits noted in literature for implementing ERP software are: increased productivity, more efficient flow of data, improved communication and collaboration, lower operating costs, and better decision-making capabilities with real time access to data (Continelli, 2017; Gratch, 2017; Totka, 2017).

4.3.4 To what extent does the digital divide effect South African retailer’s ICT driven expansion across the African continent?

Throughout the data collection process, it began to become apparent the reality of the digital divide in Africa is far more complex and intricate than has been defined and discussed in literature and therefore resulted in the formation of theme f: The Digital Divide: the multitude of divides separating South African retail from other African countries. Various factors arose as causing a digital divide in African nations. Firstly, the divide in basic infrastructure. While mobile data seems to override the need for things such as ADSL lines, mobile to many consumers is an additional solution over and above an ADSL or fibre line, if they run out of mobile data or lose mobile signal, they will have a back-up connection.

Respondent 1 explains this concept giving an example:

“For example, in Nigeria, most of the infrastructure is located around major cities ... Also, in these countries the issue is that they do not have the traditional fall back because they don’t have the infrastructure (Asymmetric digital subscriber lines, ADSL, and telephone lines). And then cell phones came in ... and if that fails, guess what they are going back to. Sometimes in another African country there is no alternative”.

Another apparent divide goes beyond the access, ability and use to method of usage. Method of usage speaks to a person who uses ICTs but not in the intended methods of the device capabilities. An example of this given by respondent 1 was that of an iPhone user in Africa which additionally falls into theme g: Mobile technology.

“The divide is apparent in the sense that, someone might have an iPhone but that doesn’t mean they have an Apple or iTunes account. They have an Apple device because they want to be seen by their peers as successful for having an expensive device, it is an aspirational device. They might use Unstructured Supplementary Service Data (USSD) Codes or go to a mobi site instead of an app because of the data is too expensive.”

Respondent 2 adds to themes e and g by stating that:

“Mobile devices and ICTs are not as clearly linked to income as they were in the past.”

Respondent 2 also spoke about the leapfrog effect of Mobile technology in Africa over the development of fixed line infrastructure due to low cost and ease of access adding to theme g.

“When cell phone networks started rolling out there was a leap frog effect where they were years of lack of development and then suddenly when these Long Term Evolution (LTE) networks and cheap android devices rolled out we noticed a very clear jump in the savviness of our consumers ... people are getting savvy and they want to deal with brands an businesses on mobile devices but the biggest issue for them now is the cost of data.”

Adding the benefit mobile technology has had in opening up the African markets “You can do more on a handset these days that you could do even 3 years ago.”

To add to this, respondent 2 mentioned the benefits from a business perspective:

“For a business, a benefit you have is that, in the past you had to be somewhat evangelical in saying let’s make a mobile first experience instead of focusing on the desktop whereas these days everything is mobile first.”

The next divide that became apparent in data collection, specific to retailers, was the divide in integrations of ICTs and this came about in two forms. Firstly, with the point of sale systems. The retailers were unable to integrate the same systems into their POS systems in other African countries as in South Africa limiting the ability of the retailer to run promotions, competitions and collect consumer data.

Respondent 3 mentioned some key points relating to theme e in this regard:

“In other African nations we do not have this automated integration with point of sale systems ... These kinds of this especially are developing at a slower pace.”

The absence of collecting consumer data also creates a divide in communication to consumers as without this kind of technology, the retailer is unable to personalise their messaging to individual consumers based on their shopping habits. Respondent 3 adds:

“... in Africa, we cannot speak to one specific customer because I don’t have the infrastructure or technology that allows me to speak to a certain customer, I am speaking to a country.”

The second divide in integration was that of mobile network service providers. In South Africa, if a retailer wants to use USSD codes to run competitions or promotions, it is possible to have this USSD across all mobile providers. In other African countries, this is not always possible as there is a lack of integration in the services of the Mobile Network Operators. This response contributes to theme e.

Respondent 3:

The divide is most definitely there. Not that we won’t get there, it just takes longer. There are country specific challenges that we have to face, for example the MNOs that don’t communicate with each other. Banking is quite integrated in South Africa whereas in Africa it isn’t. Customers also are not exposed to the

ICT systems we have here so they do not always have the ability to understand certain retail operations.

Another digital divide exists in banking and online payments, with respondent 3 stating:

“Bank cards are still very rarely used in Africa”

There are many divides present when it comes to retailing in the digital world. These divides are not limited to lack of infrastructure but also pertain to consumer behaviours. The literature surrounding this concept refers to the divide in access ability and use of ICTs (Fink & Kenny, 2003; Ayanso *et al.*, 2013; Ohemeng & Ofosu-Adarkwa, 2014). The literature defines the divide in access as meaning access to devices and also to internet or data, noting that rural areas suffer lack of access and that the high cost of data in South Africa creates a barrier (Ayanso *et al.*, 2013; van Zyl, 2016). The divide in ability is defined as the populations’ skills and abilities in using ICTs (Ayanso, Cho & Lertwachara, 2013; Ohemeng & Ofosu-Adarkwa, 2014). The final divide is actual use which is not clearly defined in literature.

The themes and information which arose from the data collection added further detail to what had previously been explained and defined in the literature regarding the digital divide.

4.3.5 How do differences in Cyber Security legislation in different regions effect an organisation’s ICT policies and protocols in different regions?

South Africa is governed by POPI, the Protection of Personal Information Act, while many African nations do not have these kinds of regulations in place. The respondents suggested that eventually all countries will copy something such as GDPR and that it in theory it would make sense to adopt global regulation rather than have country specific regulation. Respondents also noted that all South African organisations should already have their ICT structures compliant to POPI regulations even if operating in other African nations in anticipation of forthcoming regulation. These topics formed theme *h*: Cyber Security: South African regulation and legislation vs other African nations.

Respondent 1 explained:

“We use best practice so we tend to, if it is law in South Africa for a South African company, we apply that to the rest of Africa. We don’t say, oh this is

country x, now we have got an opportunity to do what we weren't permitted in South Africa."

With reference to South African regulation, respondent 2 added:

"South Africa has had a history where our over regulated approach stifles innovation in a lot of cases. Things like that we must be careful of because if there is enough regulation in place it actually doesn't help anyone. In terms of ethical business practice, we apply the maximum regulatory body to our business in all countries as this is how we are governed."

The purpose of regulations such as GDPR and POPI attempt to limit the collection of and access to personal data to the minimum required, along with giving citizens' rights around their data (POPI, 2013; EUGDPR, 2018). The implementation of such regulations has been encouraged by the ITU, who state that improving cyber security is essential for the modern economy to succeed (ITU, 2012).

4.4 Interpretation of findings

The purpose of this section is to interpret the data presented in section 4.3. and give meaning to the data in the context of the research objectives. As in 4.3 this section follows the structure of the research objectives outlined.

4.4.1 What are the challenges faced in using ICTs in South African retailer's expansion strategies throughout the African continent?

The major challenge facing retailers in using ICTs in their expansion strategies in Africa is the slow rate of ICT development on the continent and further to this, the vastly different stages of ICT development in different African countries and regions within those countries (ITU, 2016). The ICT Development Index was created to identify the different stages of ICT development in developing countries and these relative to other countries (ITU, 2009; Jeremic & Markovic, 2012; Ayanso, Cho & Lertwachara, 2013). Whilst the rankings of specific African countries tended to correlate with the data collected in terms of ICT advancement, the use of this model to estimate the potential of a specific market should be followed with caution. There are multiple reasons for this, firstly the model generalises countries without looking into regions of countries. For a retailer wanting to access the larger markets, this model does not indicate the level of ICT development and infrastructure in rural areas or the disparity

between rural and urban. Secondly, the model is most widely criticised, because of measurement factors. The IDI measures ICT access using telephone line penetration and proportion of households with computer as factors (Dobrota, Jeremic & Markovic, 2012). Including these factors to measure access in African countries would not necessarily lead to an accurate result as much of the population access the internet via mobile networks and mobile devices (Ayanso, Cho & Lertwachara, 2013).

This lack of telephone line penetration and computer access in household however, should not be overlooked entirely as there are challenges that arise from the heavy reliance on mobile devices for internet access. While in South Africa, a mobile device or network may be secondary to an ADSL line, fibre connection and a laptop or desktop computer, for many other African countries, mobile is the only option. The reason for this is because the investment into infrastructure of ADSL or computers was out of reach for many African consumers when the infrastructure was first available, and the investment was not made. Then smart devices came about with mobile network connectivity at a much lower cost and consumers leapfrogged past the old technology to this method (Kiveu, 2013; Ponelis & Holmner, 2015; Deloitte, 2016; KPMG, 2016; Law, 2016). Although this is a positive development for mobile's powers of inclusion for the individual internet user, there is still a huge lacking in basic ICT infrastructure which is necessary for large organisations to operate efficiently and in the way that they can in their country of origin and to be able to offer the same experience to their foreign consumer that they can to their local consumer.

For retailers, generally they would expand by opening retail stores in new locations while keeping their base operations and headquarters in their country of origin. This then requires frequent communication between the staff in the country of origin and the staff in the entrant countries and creates a heavy reliance on ICTs. If the employees of the entrant country are using mobile devices and mobile networks the employees in the country of origin need to either adapt their communication channels to accommodate this or need to invest in bringing their home infrastructure into their new regions. Further to this, the same logic applies to the retail stores. The retail infrastructure available in South Africa is not available in other African countries. The integrations into the point of sale systems available in South Africa are not available in other regions and this requires either the retailer to build it in themselves which would be very costly and time consuming, or to run promotions and competitions

manually, which is also costly and time consuming. Another obstacle to South African retailers using ICTs in Africa is that posed by the Mobile Network Operators. South African often use USSD codes and it is a technology, whilst old, is very successful in reaching the population because of the ability to provide a USSD code that works across all network providers. Outside of South Africa this is not possible as there is not centralised system in which all the MNOs can communicate with each other.

4.4.2 What intervention strategies have been used to overcome the challenges?

The major challenge in Africa is the slow development of ICTs and lack of infrastructure (ITU, 2016). A common strategy when entering African markets is to use the Greenfield approach in which the organisation invests fully into the market bringing in its own resources and infrastructure. While this approach solves the problem of lacking in infrastructure, it requires a huge investment which may be too expensive to justify (Dakora & Bytheway, 2014; Dakora & Manson, 2016). In some cases, what is lacking in on the ground infrastructure can be solved using alternative methods, for example, if there is no fibre or ADSL line, satellite technology can be used. Another development in technology that can ease regional expansion is cloud computing (Rozzio, 2018). Having a centralised cloud-based system allows for an organisation to “switch on” new locations more efficiently and open communication channels (Continelli, 2017; Gratch, 2017; Totka, 2017).

Technologies such as the integrations into the POS systems however cannot be so easily adapted and to be able to use this technology in a new region would require self-development. In cases such as these it can be expected that the technology will eventually become available in other African countries and therefore, other measures are taken to “go around the system” and develop manual processes to achieve the desired result until such time that the technology becomes available. In other cases, the necessary investment into infrastructure may be too heavy, especially in rural areas which tend to be far less developed than urban areas. In this case the organisation would need to evaluate the value of serving this market through thorough research before making a decision to enter as it is a high risk, high resource decision.

4.4.3 What are the benefits of using ICTs in South African retailer's expansion strategies throughout the African continent?

The use of cloud computing has been a great benefit to retailers in their expansion strategies (Deloitte, 2018; Rozzio, 2018). Centralised cloud computing systems have significantly reduced the investment and the time required by the retailer to open operations in new locations. It also allows for reach into regions which beforehand would have require too heavy of an investment to enter. Another benefit of this is the alignment of the ICT strategy to the business strategy across all regions and standardising ICT protocol and regulations across all regions.

4.4.4 To what extent does the digital divide effect South African retailer's ICT driven expansion across the African continent?

The various types of digital divides across the African continent effect retailers' expansion efforts in several ways. The various divides identified in the findings were a divide in shopping habits, divide in payment methods and banking, divide in POS integrations, divide in the mobile revolution, divide in mobile network operators, divide in methods of using technologies and the divide between various African regions.

The divide in shopping habits is a divide between formal and informal retail (Charman *et al.*, 2016; Rogerson, 2016). In many African countries, for example Nigeria, there is a huge demand for informal retail markets whereas formal retailers with ICT infrastructure may be viewed as too expensive or be intimidating for shoppers who are used to shopping in informal markets. The challenge for the retailer here is to educate consumers on formal retail and change learned shopping behaviours. Although consumer may believe that formal retail would be more expensive than informal market, often this is not the case, so it is a change in perception that the retailer needs to achieve amongst the population. This divide generally occurs due to consumers not having experienced formal retail and in such an instance a retailer would have a first mover position in the market. Following this, another aspect of formal retail that African consumers are divided from is payment methods.

Throughout Africa, there are very few consumers who have bank accounts or credit cards, the general African consumer has been somewhat excluded from the formal banking system as it operates today. For this reason, African consumers prefer to pay either with cash or by using mobile money. Mobile money came about as a way for

African consumers to have a way to manage their money and make payments, giving them the inclusion into the world of banking that they did not have before. The most prominent mobile money service provider across Africa is M-Pesa with 32 million users across the continent (Deloitte, 2016; KPMG, 2016; Law, 2016; Opudo, 2018). Another example of this would be EcoCash used in Zimbabwe with around 6 million registered users (EcoCash, 2018). The payments divide is especially apparent for online retailers or e-tailers which usually require credit cards for payment. The major African online retailer Jumia, allows M-Pesa payments and cash on delivery as payment methods which has contributed significantly to its success. This is a massive consideration to be considered because if consumers cannot physically pay for your products, you will not succeed in the marketplace.

The next divide for retailers to expanding throughout Africa is the technology available for integrations into the point of sales systems. The same technology available in South Africa is not available in all other African countries and this has an effect on the offering retailers can provide their consumers in terms of promotions, competitions and personally tailored offerings based on shopper data. A retailer in this instance needs to decide if they want to offer the same value to their foreign consumers as they do to their local consumer, and if so, how they will go about solving this. Creating a bespoke system to build into the POS is one option, however this requires a huge amount of time and resources, and one consideration in doing this is that the technology may become available in the market in due time.

The mobile revolution is another type of digital divide across the African continent (Kiveu, 2013; Ponelis & Holmner, 2015; Deloitte, 2016; KPMG, 2016; Law, 2016). While there are positive aspects of the mobile revolution, such as inclusion in the marketplace and the ability to have platforms such as M-Pesa, it does not solve the issue of the lack of basic infrastructure that had never been originally implemented. This means that if a mobile network is down or if a mobile network does not cover all regions within a country, such as rural areas, there is no backup infrastructure to support consumers or organisations. The other issue to consider here is that as the consumers across Africa are mobile first and for an organisation expanding into African countries they would need to adapt all their digital and social communications to be mobile first but also to consider the way in which consumers are using these

mobile devices, which also tends to differ from a South African or a European consumer (Ayanso, Cho & Lertwachara, 2013).

This poses another divide which has been labelled in this study as the method of use divide. This divide is a result of consumer behaviour. Consumers in African countries have been seen to purchase expensive smartphones or mobile devices for the aspirational value rather than for the actual features and functionalities of the device. This could mean that 80% of your consumers have the latest iPhone or Samsung but use technologies such as mobi sites and USSD codes to communicate with brands. This means that in building your mobile first communications, you would need to take this into consideration along with the data needed to load your site or complete the intended activity.

USSD codes are still widely used in South Africa across numerous industries and prove to be very successful due to the high costs of data in South Africa. As an organisation experienced in using this method in South Africa, it would perhaps seem to be a good idea to use across the continent which has high mobile use across consumers. The divide presented here is that there is a lack of communication between the MNOs in various African countries. To be able to provide consumers with a USSD code, you would need the cooperation of all MNOs to be able to provide the USSD code to all consumers regardless of their mobile network. This is not always possible in countries outside of South Africa as the MNOs of those countries do not have a central communication platform. There are of course differences between different African countries with some more advanced than others and this leads to another divide which is expressed by the IDI, differences in ICT infrastructure between different countries (ITU, 2016).

When expanding throughout Africa, it is important to note that while the continent tends to be generalised into one market, there are great differences between countries in the technologies and infrastructure available (World Statistics, 2018). The countries noted to be most advanced and most in line with South Africa in terms of ICT development are Kenya, Zambia and Nigeria. Those noted to be least advanced and furthest away from South African infrastructure have been DRC and Uganda. For an organisation expanding, this information is highly relevant for country selection, strategy development and the consideration of ICT protocols and regulations. For

countries less advanced in ICT infrastructure and development, there also tends to be an issue of lack of regulation and legislation around cyber security and protection of information. Organisations expanding into these regions need to take these kinds of things into account when developing their strategies.

4.4.5 How do differences in Cyber Security legislation in different regions effect an organisation's ICT policies and protocols in different regions?

Many African countries with slow ICT development also exhibit a lack in emphasis on cyber security regulation. For a South African retailer looking into other African countries, they would find that South Africa tends to have many more restrictions, regulations and formal legislation in place. South Africa is the most strictly regulated African country in this sense and has been said to be overregulated to a point which can stifle innovation and create barriers to new technologies. In considering this, an organisation may want to use the lack of legislation in other nations as an opportunity, however, this approach has been criticized for its lack in integrity and misalignment to organisational goals and values.

Aligning ICT strategy to organisational strategy is emphasised in literature as a key factor in an organisations' success. This concept was further emphasized in by the case study organisation who confirmed the importance of alignment. A method assisting in achieving this alignment would be incorporating a centralised system governed by a fixed ICT protocol and regulations. For a multinational organisation, a key concern is offering the same value to customers in every region it operates in to uphold the brand perception in each region. By using loopholes in regulations and compromising protection of consumer data or consumer trust, an organisation would be offering a lesser value to the consumers of that region. Therefore, the differences in cyber security regulation should only influence the organisations policies and protocols across regions if there are stricter rules in a certain region and the lack of regulation should not affect organisational policy or protocol.

4.5 Conclusion

The responses given in the data collection process were representative of one organisation and were found to corroborate one another. Certain areas were best answered by certain respondents, with respondents 1 and 2 specialising in ICT and respondent 3 specialising in brand management. The concepts of slow ICT

development and high use of mobile technology across the African continent suggested in the literature review were reaffirmed by the responses given, along with a more in depth understanding of the retail environment both in South Africa and other African countries. This chapter has answered the research objectives using the data collected throughout the research process. ICT use in regional expansion can both assist and cause challenges in the expansion process, with the African marketplace being full of ICT development challenges. There are opportunities for South African retailers to expand throughout African despite these challenges and with the benefits of cloud technologies, the expansion process can be made easier. The conclusions, recommendations and final conclusion of the study are presented in the next chapter.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The focus of the final chapter is to provide conclusions of the primary and secondary data presented in this study. These findings have been presented in point form and combined into conclusions. The conclusions drawn from the findings have then been used to form recommendations for industry and future research. Following this, the final conclusion of the study will be presented. The structure of discussions in this chapter is as follows: the researcher presents a summary of findings followed by conclusions, recommendations and the final conclusion.

5.2 Summary of Findings

The findings are divided into primary and secondary data findings and presented below.

5.2.1 Findings from literature review

The purpose of the literature review was to give a theoretical background to the study by thoroughly reviewing all relevant literature and highlighting the gaps currently existing in literature. In doing so, a well-rounded and in depth understanding of the topic was presented and the gaps noted in literature formed the argument and the context of the remainder of the study.

A theoretical framework was presented in the literature with the purpose of informing the researcher on how to conduct and build a case for their research. The model presented was the ICT Development Index which was originally developed in 2009 by the International Telecommunication Union as means to measure the progress of

countries in becoming information societies. Using this model to depict how African nations' ICT development compares to other developing nations, shows that the African continent is falling behind other developing nations in ICT development.

The South African retail environment is characterised by market saturation and high levels of competition, especially international competition and the large presence of informal markets and retailers. In addition, the retail industry in South Africa has been largely dominated by a few key players, namely, Shoprite, Woolworths, Pepkor, Pick n Pay and Mr Price. A slowing in local spending and difficult economic conditions paired with an increased presence of international and local competition constitute motivation for local retailers to focus on their regional expansion strategies.

With the growth of globalisation and the rapid pace of technological developments, retailers are facing bigger and far more intricate challenges. These challenges include increasing pressure from international retailers, finding the balance between brick and mortar and online with every brick and mortar retailer essentially now competing directly with online retailers and in South Africa specifically, changing consumer preferences, rising food prices, rising costs of transport and electricity and skills shortages.

Many South African retailers have looked to Africa for expansion opportunities. These retailers have focused on the SADC regional bloc for ease of entry with the major countries outside of this bloc selected for entry being Ghana, Nigeria and Kenya due to greater market potential.

International expansion presents various risks which have been categorised into commercial risks, financial risks, country risks and cross-cultural risks. With reference to African expansion, one of the biggest challenges confronted by firms is the major differences between the 54 African countries. Particular risks outlined in this study, relate to the economic structure of African countries which tend to be characterised by weak local currencies and large government debts and the tendency to lack market diversification and have an overreliance on exports.

The concept of the digital divide is highlighted in literature and there are different definitions between access, ability and actual use of ICTs. In considering the digital divide as an expansion strategy, it is important to note that different countries not only make use of different technologies inside businesses, but their customers may also

use social media differently. For example, Kenya has the highest internet penetration rate in Africa while Mozambique has the lowest. Two major insights stemming from literature regarding the digital divide were that WhatsApp has been labelled the most popular communication platform across Africa and many African customers do not have credit cards and conduct transactions using mobile money vendors such as M-pesa.

Developments in ICTs have changed the way in which businesses operate worldwide, providing opportunities for improvement and enabling global expansion. The benefits of utilising ICTs in business include the ability to reach new markets and improve product and service delivery.

Organisational and ICT alignment is a major concern for businesses in local operations and is even more vital to achieve before expanding operations regionally or internationally. The alignment of the business and IT strategies ensures that there is a common goal. The benefits of integrating a technology focused strategy into the consumer journey include easing the process and delighting the customer, communication and understanding of the customer and the ability to develop strategies around product and service innovation.

In order to mitigate cyber-attacks, companies need to adopt information security rules and regulations that are adhered to and understood by all employees. The business and IT strategies need to account for this from two perspectives, firstly, the IT structure and procedures and secondly by educating employees on cyber security. Regulations such as GDPR and POPI are in place to guide and regulate organisations cyber security activities. Although compliance with such legislation is not required in many African nations, for a South African organisation expanding through Africa, POPI should at this time already be implemented into the ICT structure of the organisation.

Empirical studies of three South African organisations established that retailers are using ICTs in multiple different way in order to expand throughout Africa, proving that ICTs can be utilised in a number of ways to enable African expansion.

5.2.2 Findings from primary study

The major challenge facing retailers in using ICTs in their expansion strategies in Africa is the slow rate of ICT development on the continent and further to this, the vastly different stages of ICT development in different African countries and regions

within those countries. Research of the International Telecommunications Union shows the slow rate of development of UCTs in African countries and also shows the differences between different nations using the ICT Development Index previously discussed (ITU, 2016). Another challenge is that there is still a huge lacking in basic ICT infrastructure which is necessary for large organisations to operate efficiently and that for many other African countries, mobile is the only option Kiveu (2013) and Ponelis & Holmner (2015) both discuss that mobile is the first screen for many African consumer and mobile technology is to be utilised in these areas to ensure success. Retail specific challenges include the lack of integrations into the point of sale systems that are available in South Africa and challenges involved in the Mobile Network Operators.

To overcome these challenges alternative technologies such as satellite technology can be used. Having a centralised cloud-based system allows for an organisation to “switch on” new locations more efficiently and open communication channels. In cases where alternative technologies are not an option, retailers have to develop manual processes to achieve the desired result until such time that the technology becomes available. Continelli (2017) discusses the benefits of using centralised cloud-based systems for retailers requiring mobilisation, operating in multiple geographic locations.

Centralised cloud computing systems have significantly reduced the investment and the time required by the retailer to open operations in new locations. It also allows for reach into regions which beforehand would have require too heavy of an investment to enter. Another benefit of this is the alignment of the ICT strategy to the business strategy across all regions and standardising ICT protocol and regulations across all regions.

The various divides identified in the findings were a divide in shopping habits, divide in payment methods and banking, divide in POS integrations, divide in the mobile revolution, divide in mobile network operators and divide in methods of using technologies and the divide between various African regions. Research by Deloitte (2016) and KPMG (2016) show that credit cards are not widely used on the African continent and that methods of payment such as mobile money are preferred.

Many African countries with slow ICT development also exhibit a lack in emphasis on cyber security regulation. ITU (2018) Global Cybersecurity Index shows the level of

commitment to cyber security regulations with many African nations demonstrating low commitment. For a South African retailer looking into other African countries, they would find that South Africa tends to have many more restrictions, regulations and formal legislation in place. South Africa is the most strictly regulated African country in this sense and has been said to be overregulated to a point which can stifle innovation and create barriers to new technologies.

5.3 Conclusions

The utilisation of ICTs in retailer's expansion strategies throughout Africa poses many challenges, the majority of which are a result of the underdeveloped ICT infrastructure in many African nations. This lack in ICT development goes further than literature suggests and is present inside the retail stores with the retail technology such as POS integrations which is available in South Africa, not yet available in many other African nations. A common characteristic throughout African nations is the use of mobile technologies, which, while provides some positive aspects, does not always provide retailers with the full assembly of infrastructure needed to carry out their operations, posing further challenges. While the literature presented many of these challenges, the retail specific challenges emerged through the primary study.

Circumventing the various challenges posed can be approached using two strategies, firstly alternative technologies such as satellite and cloud-based ERP systems, then secondly using manual processes which are time consuming and costly. The idea of building bespoke systems was entertained in the literature however was written off in the primary study as too heavy on resources and unnecessary given that technologies would eventually become available in all regions.

In addition to the challenges, benefits of ICT enabled expansion were also presented. The benefits of using ICTs in expansion were confirmed in both the literature and primary study as allowing for quicker easier entry into new locations through ERP systems and cloud software. Another benefit of using ICT that was highlight was that it allows certain work to be remote such as a headquarters in the country of origin while retail operations are conducted in various location.

The use of ICTs in expansion highlighted the many digital divides present across the continent. The digital divide outlined in the literature was a broad and basic concept which was greatly expanded upon throughout the primary study. There are many

forms of digital divides throughout the African continent, including retail technology, mobile technology, banking technology and methods of use of technological devices.

Another consideration in utilising ICTs is that of cyber security legislation. While many African nations lack formal cyber security legislation, it is recommended to use the highest regulator at all times and apply standardised regulation throughout all regions of an operation. These points were emphasised both in literature and the primary study findings.

5.4 Recommendations

The recommendations suggested in this section were a culmination of the conclusions presented in the preceding section. The following recommendations were suggested:

5.4.1 Research and Development

For a South African retailer looking for expansion opportunities in further Africa, the most important factor to consider is that each African country is very different and thorough market research needs to be conducted into each market. The organisation needs to determine the potential growth and needs of a market in addition to the shopping habits of the consumers and conditions in the marketplace.

5.4.2 Assessing technological requirements

There are various challenges to be aware of when using ICT as an enabler for expansion. Before entering a new location, some key considerations to be made are what technologies will be available and whether alternative technologies would be available if the standard technologies are not available. Giving a uniform quality and shopping experience across all regions should be the goal of any organisation expanding into different regions. To keep the brand perception intact, it is important that the quality of products and services is not compromised in new regions. This becomes extremely difficult when expanding throughout Africa, especially for an ICT heavy investment, as many African countries suffer slow ICT development and do not yet have the technology and infrastructure that is available in South Africa.

5.4.3 Investing in SADC

If the investment is ICT heavy, an organisation would be more suited to expansion into the more ICT developed countries such as Kenya, Nigeria, Zambia and Botswana. If

the organisation is South African however, it may be more beneficial to start expansion into the SADC region where there are less barriers to trade, in which case, Zambia and Botswana would be ideal targets for expansion. These nations however more advanced would not always have the same ICT structure or ICT technologies used in retail that are available in South Africa such as integrations into POS systems. When there is a lack in ICT infrastructure the entrant organisation needs to weigh up cost and benefits of bringing in or building their own infrastructure or working around what is available with the key consideration of offering same value to consumers in all countries. An investment into bespoke systems can be extremely heavy on resources and if it is anticipated that the technology will in time become available, it is recommended that the organisation work around what is available until such time that the new technology can be implemented. Some adaptations that an organisation would need to consider when expanding throughout Africa are in consideration of the overwhelming use of mobile. If the organisation does not already have a mobile first communications approach this would need to be considered. In addition to this, the enablement of mobile money transactions is vital. If the entrant country uses M-Pesa then the integration of M-Pesa payments is highly recommended to succeed in the market.

5.4.4 Greenfield Strategy

Greenfield methods have been noted as a popular approach for expanding into African nation because of this lack of infrastructure and also due to the difficulty in finding suitable local partners. This method however is extremely resource heavy and would only be recommended if there is a lacking in suitable acquisition opportunities. By using technologies such as centralised cloud-based systems, it significantly reduces the time and resources required for expansion and lessens the need for a greenfield approach. The use of centralised cloud-based systems is recommended not only for ease of entry but also to allow the organisation to better standardise processes, policies and procedure to enable the organisation to offer uniformity in their offering across borders. Standardising operations in this way also allows for alignment of ICT strategy and organisational strategy which is a key success factor in expansion especially with regulations such as GDPR and POPI coming into play.

5.4.5 Aligning ICT to organisational strategy

Although many African nations do not yet have legislation in place regarding the protection of information, it is recommended that the highest regulation be applied across all regions. This ties into both alignment of ICT and organisational strategy as well as giving consumers a uniform experience across regions. Another reason the most regulated approach is recommended is that eventually all countries will implement legislation such as GDPR or POPI and it is advantageous to be compliant before these legislations come into play than to have to drastically change operations a few years down the line.

5.5 Recommendations for Future Research

The process of conducting this study has given rise to many topics for further research. In the case of ICT technology, future research will always be applicable as the ICT landscape is constantly changing, and it is important to continue to research what is changing, the effects of this and how the theory matches up to this.

For a South African retail, it has been noted that expanding into SADC countries is a good approach due to ease of access and similarity of market characteristics. Future research could be conducted into the true benefits of regional blocs and the disadvantages that come with them. At present, a regional economic agreement is in process for the African continent as a whole and the formation of this would be an interesting topic for study.

One of the big pieces of the puzzle for those expanding into African countries is the presence of informal markets. Informal markets are notoriously difficult to collect data from however the impact of these markets on new entrants into a marketplace is a topic requiring further discussion. Further to this, from a literature point of view, categories of retailers defined for academia are largely representative of an American retail landscape. Future research can be conducted into categorising types of retailers found in an African marketplace and the characteristics thereof.

Other sections of literature that can be reproduced for an African perspective include the measurement factors of the ICT development index and the LSM model. The IDI has been criticised previously for its measurement factors. In many African countries, older technologies such as telephone lines were never implemented and much of internet access is reached through mobile networks. African consumers also tend to

use mobile devices rather than desktop computers to access the internet. Therefore, by using the IDI model, access to internet may be perceived as less than the true figure. Additionally, an overall figure does not account for huge disparities between urban and rural areas within a country and perhaps there could be an additional model to rate the access inequality within countries. The LSM model also requires an update in its measurement factors which was a point that came up many times during the data collection, it is no longer a suitable means of classification. Consumers habits these days range vastly from the time at which this model was developed and this was expressed in the sense that people of any income level could own a high-end smartphone with these kinds of technologies become more easily and widely available.

Due to changing consumer habits and the mobile revolution taking place across the African continent, there is also an opportunity for researchers to investigate the effects of mobile across Africa. Whilst mobile technology has made huge strides in inclusion, especially with technologies such as mobile money, there are also various disadvantages for mobile being the main source of connectivity for a country. Research could be conducted into whether mobile technology alone is a viable future for Africa or whether African countries need to have further infrastructure such as fibre to support their markets.

This same approach can be taken towards the topic of mobile money. Can mobile money replace the need for a banking system? What are the benefits and disadvantages of adopting mobile money? For South Africa, mobile money was not a successful venture as much of the population have access to banking. Is the real issue due to restrictions in access to banking and is mobile money a temporary solution or a long-term solution? Mobile money also needs to be evaluated for its security aspects as banking institutions have suffered from various cyber-attacks in recent times, especially in Africa. To what extent is your mobile money protected?

With the current focus on data protection and cyber security regulation another interesting avenue for study is the effects of overregulation on innovation and access to new technologies. South Africa has been criticized for its over regulated approach slowing the adoption of new technologies.

5.6 Conclusion for the study

The purpose of this study was to discover to what extent retailers were using ICTs in their expansion strategies throughout the African continent which faces the challenges of slow ICT adoption and the digital divide. This chapter presents conclusions drawn from the research conducted throughout this study to answer the objectives of this study.

The initial step of this research was the conduction of a literature review investigating current literature on the topic of South African retailers using ICTs in their expansion strategies throughout Africa. Key topical areas outlined throughout this literature review comprised of a theoretical model, the ICT Development Index, the retail landscape in South Africa and categories of retailers, challenges in the retail industry, global expansion for retailers – regionally, international and globally, challenges in the global village, the presence of the digital divide, information communication technologies and cyber security regulation.

Resulting from the exploratory nature of the research question, a qualitative research method was taken with a single case study used as the research strategy. Benefits of this approach include flexibility in the research process and the ability to uncover in-depth insights from respondents. The data was collected through industry reports, literature and through face-to-face interviews using semi-structured, opened ended questions to guide the respondents but also to allow them to speak freely. The interview data was transcribed and analysed using both NVivo 12 software and researcher interpretation and analysis. Through this process various findings came to light and conclusions have been drawn.

Retailers worldwide are experiencing saturated local markets with highly competitive international entrants which has been a motivational factor for them to look outside their country of origin for profit maximising opportunities. For South African retailers, the retail market is dominated by a few key local and international players saturating the market. In addition to this the South African economy has experienced a slowing in growth and spending which has caused many retailers to look outside of South Africa for opportunities. The first step taken in expansion for many South African retailers has been into the African continent. As can be seen from the case study organisation, a common strategy for South African retailers is to focus their African

expansion on the SADC region due to the freer movement of resources enabled within regional blocs. Of the 15 African nations the case study organisation has opened operations in outside of South Africa, 12 are SADC member countries. The African Union has planned to further integrate the continent to form an African Continental Free Trade Area to encourage freer movement of resources and promote investment within the continent.

South African retailers experience many challenges in expansion due to the retail landscapes of other African countries. Many African nations share the characteristic of a large informal marketplace. This poses direct competition to retailers entering the market due to the shopping habits of local populations. The other main presence of competition facing expanding retailers is the local retailers of the entrant regions. African consumers are said to be extremely brand loyal to local retailers, making local retail a major competitive consideration. Other challenges for South African retailers in other African retail landscapes can be attributed to the slower development of ICT infrastructure in other African countries. The ICT Development Index looks to measure the differences in ICT development in developing nations. While this index yielded similar suggestions on ICT development to the findings of the study, the model has been widely criticised for its measurement factors. Both the IDI and the findings show that Kenya, Nigeria, Zambia and Botswana exhibit more developed ICT infrastructure and are closer to South Africa in development, while countries such as Uganda and Democratic Republic of Congo are lagging in development. The criticisms of the model from the findings refer to the vastly different methods of internet access and communications experienced in Africa which are not accounted for in the measurement factors. These different methods are a result of the mobile revolution occurring across the continent.

Due to the lack of fixed line infrastructure and the developments in and accessibility to mobile technology, mobile devices and mobile networks have become a main source of internet access and communications across the continent. While this has provided economic inclusion for much of the African population, it also provides challenges for organisations in their expansion efforts. For retailers opening operations in African regions with limited infrastructure there is the option of taking a greenfield approach and developing self-built, bespoke systems. Alternatively, there is the option of finding ways to work around the current available infrastructure until new technology becomes

available in the region. Often the investment into self-development of systems is too large to justify and in the case of POS systems and integrations used by retailers in South Africa, it is a matter of time before this technology is available in other African markets. In such a case it would not be recommended to invest in bespoke developments. Technological advancements such as cloud computing have assisted in retailers' expansion efforts by reducing the reliance on local infrastructures for operation and significantly reducing the time and resources required for expansion. Combined with this, the use of satellite technology can enable retailers too access internet where fixed line or mobile infrastructure is not available.

One of the main contributions this study offers is the expansion definition of the digital divide from an African perspective. A divide not discussed in previous literature refers to the way in which consumers chose to use ICTs. The example given in the case study referred to a customer purchasing an iPhone purely for aspirational motivations rather than functionalities and using more basic technologies such as USSD codes and mobi sites which are created for more basic devices. A reason suggested for this type of divide has been the combination of aspirational consumer behaviour and the lowering costs of mobile devices paired with the high data charges present on the African continent. Another great divide between South Africa and other African countries is that of mobile money transactions, the banking divide. South Africa's banking sector has been more successful in inclusion of the population than other African countries which has led to regions such as Kenya developing mobile money technologies such as M-Pesa. M-Pesa allows for consumers who do not have access to formal banking to manage their finances via their mobile phone. In both divides there is a common theme of African consumers finding innovative methods to participate in the economy in a way that they previously could not. The struggle here is then for organisations expanding out of more developed nations to embrace this different way of using ICTs to enable their successful operation in these African countries.

The African continent is made up of many countries with vastly different markets boasting different levels of ICT development. This study has given insights into these differences and how to approach an ICT enabled expansion strategy throughout the continent. The research met the needs of the researcher because of the well-defined methodology detailed which guided the research process. This study has also

provided more depth for literature around the topic whilst having providing avenues for future research.

REFERENCES

- Anney, V. (2014). *Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria*. *Journal of Emerging Trends in Educational Research and Policy Studies*. 5(2).
- Alam, S., & Noor, M. (2009). *ICT adoption in small and medium enterprises: an empirical evidence of service sectors in Malaysia*. *International Journal of Business and Management*, 4(2), p. 112-125.
- Angwin, D. (2001). *Mergers and acquisitions across European borders: National perspectives on preacquisition due diligence and the use of professional advisers*. *Journal of World Business*. 36(1):32-57.
- Ashrafi, R., & Murtaza, M. (2008). *Use and impact of ICT on SMEs in Oman*. *The Electronic Journal Information Systems Evaluation*, 11(3), p.125 – 138.
- Asiamah, N., Mensah, H. K., & Oteng-Abayie, E. (2017). *General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling*. *The Qualitative Report*, 22(6), 1607-1621.
- Ayanso, A., Cho, D. & Lertwachara, K. (2013). *Information and Communications Technology Development and the Digital Divide: A Global and Regional Assessment*. *Information Technology for Development*. 20(1):60-77.
- Babbie, Earl R. (2010). *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage, 2010; Muijs, Daniel. *Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications, 2010.
- Bizcommunity (2018). *Yuppiechef extends physical offering with second store opening*. Available: <http://www.bizcommunity.com/Article/196/182/178525.html> [4 October, 2018].
- Braun, V. & Clarke, V. (2006). *Using thematic analysis in psychology*. *Qualitative Research in Psychology*. 3(2):77-101.
- Braun, V & Clarke, V. (2012). *Thematic analysis*. *APA Handbook of research methods in psychology*. American Psychological Association, 57-71.
- Brown, J. (2017). *H&M increases local footprint*. Available: <http://www.fastmoving.co.za/news/retailer-news-16/h-m-increases-local-footprint-10568> [19 September, 2018].
- Brown, J. (2017). *Retail environment remains tough*. [online] Fin24. Available: <http://www.fin24.com/Companies/Retail/retail-environment-remains-tough-20170519> [25 May, 2017].
- Bryman, A., & Bell, E. (2015). *Business research methods*. 4th edition. Oxford: Oxford University Press.

Bulgurcu, B., Cavusoglu, H., & Benbasat, I. (2010). *Information security policy compliance: An empirical study of rationality-based beliefs and information security awareness*. *MIS Quarterly*, 34(3), 523-548.

Business Connections. 2018. *ICT Solutions to Drive Competitive Advantage*. Centurion: BCX. Available: https://www.bcx.co.za/wp-content/uploads/2018/09/Retail_IndustryWP_V4.9_eVersion.pdf [08 May, 2019].

Business Dictionary (2017). *What is global expansion? definition and meaning*. [online] Business Dictionary. Available: <http://www.businessdictionary.com/definition/global-expansion.html> [2017, April 17].

Cambridge University Press. (2018). *Paradigm Meaning in the Cambridge English Dictionary*. Available: <https://dictionary.cambridge.org/dictionary/english/paradigm> [6 September, 2018].

Carson, D. (2005). *Qualitative marketing research*. 1st ed. London: Sage.

Carstens, M. (2013). *The Yuppiechef cult: how a startup sparked a religion – Ventureburn*. Available: <http://ventureburn.com/2013/03/the-yuppiechef-cult-how-a-startup-sparked-a-religion/> [3 October, 2018].

Cavusgil, S., Knight, G. & Riesenberger, J. (2015). *International business*. 2nd ed.

Melborne: Pearson. Czinkota, M. & Ronkainen, I. 2013. *International marketing*. Mason, OH: South-Western Cengage Learning. 370-390.

Cavusoglu, H., Cavusoglu, H., Son, J., Benbasat, I. (2015). *Institutional pressures in security management: Direct and indirect influences on organisational investment in information security control resources*. *Information & Management*, 52(4), 385-400.

Chan, A. P., & Chan, A. P. (2004). *Key performance indicators for measuring construction success*. *Benchmarking: an international journal*, 11(2), 203-221.

Charoensuk, S., Wongsurawat, W., & Khang, D. B. (2014). *Business-IT alignment: A practical research approach*. *The Journal of High Technology Management Research*, 25(2), 132-147.

Charman, A., Petersen, L., Piper, L., Liedeman, R. & Legg, T. (2016). *Small Area Census Approach to Measure the Township Informal Economy in South Africa*. *Journal of Mixed Methods Research*. 11(1):36-58.

Chen, D., & Zhao, H. (2012). *Data security and privacy protection issues in cloud computing*. In *Computer Science and Electronics Engineering (ICCSEE)*, 2012.

Chigada, J.M. (2014) *The Role of knowledge management in enhancing organisational performance: A case of selected South African Banks*. Published PhD thesis, university of South Africa. Pretoria.

Chigada, J.M. (2018) *Evaluating factors contributing to misalignment of the South African National Cybersecurity policy framework, CONFRIM, 2018*. (4) Available at: [www.http://aisel.aisnet.org/confirm2018/4](http://aisel.aisnet.org/confirm2018/4).

- Chowdhury, M. (2014). *Interpretivism in Aiding Our Understanding of the Contemporary Social World*. Open Journal of Philosophy. 04(03):432-438.
- Continelli, A. (2017). *ERP Industry Trends to Watch - business.com*. Available: <https://www.business.com/articles/managing-resources-erp-industry-trends-that-impact-bottom-line/> [16 September, 2018].
- CNBC Africa. (2013) *Understanding Woolworths' dramatic exit from Nigeria – CNBC Africa*. Available: <https://www.cnbc.com/news/africa/2013/11/13/e-commerce-is-the-way-forward-for-retailers-in-nigeria/> [21 August, 2018].
- Creswell, J. W. (2009) *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Dahir, A. (2018). *WhatsApp is the most popular messaging app in Africa*. Available: <https://qz.com/africa/1206935/whatsapp-is-the-most-popular-messaging-app-in-africa/> [8 September, 2018].
- Deloitte and Touché. (2016). *African Powers of Retailing - New horizons for growth*. Johannesburg: Deloitte.
- Deloitte and Touché. (2016). *Trends and characteristics of the African retail market*. Available: <http://www.deloitteblog.co.za/trends-and-characteristics-of-the-african-retail-market/> [18 October, 2017].
- Deloitte and Touché. (2018). *2018 Insights about Digital Transformation and ICT Opportunities for Brazil*. Deloitte. Available: <https://www2.deloitte.com/content/dam/Deloitte/br/Documents/technology-media-telecommunications/ICT-insights-report-eng.pdf> [13 September, 2018].
- Department of Agriculture, Forestry and Fisheries (DAFF). (2015). *SADC*. Available: <http://www.nda.agric.za/daaDev/topMenu/interEngagements/SADC.htm> [2017, October 17].
- Denzin, N. K. and Lincoln, Y.S. (2005). *“Introduction: The Discipline and Practice of Qualitative Research.”* In *The Sage Handbook of Qualitative Research*.
- Dobrota, M., Jeremic, V. & Markovic, A. (2012). *A new perspective on the ICT Development Index*. *Information Development*. 28(4):271-280.
- Douglas, K. (2016). *Africa expansion: Massmart maintains an ‘optimistic but measured approach’*. Available: <https://www.howwemadeitinafrica.com/africa-expansion-massmart-maintains-optimistic-measured-approach/55548/> [18 September, 2018].
- Drammeh, A. and Karlsson, F. (2017). *Electrolux and Scania in Africa: A qualitative study of how two Swedish companies; Electrolux and Scania adapt their business culture when operating in African Markets*. Ph.D. Umeå School of Business and Economics.

- Dudovskiy, J. (2018). *Interpretivism (interpretivist) Research Philosophy - Research-Methodology*. Available: <https://research-methodology.net/research-philosophy/interpretivism/> [4 September, 2018].
- Easterby-Smith M, Thorpe R, Jackson, P.R. (2012). *Management research*: Sage.
- Edcon Holdings Ltd. (2016). *Annual Report 2016*. Edcon.
- Effective Measure. (2016). *South Africa Ecommerce 2016 Report*. Effective Measure.
- Eriksson, P. & Kovalainen, A. (2015). *Qualitative Methods in Business Research: A Practical Guide to Social Research*. 2nd ed. London: Sage publications.
- European Commission. (2018). *2018 reform of EU data protection rules*. Available: https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules_en [2018 , September 16].
- EUGDPR. (2018). *EUGDPR – Information Portal*. Available: <https://eugdpr.org/> [16 September, 2018].
- Expert Journals. (2017). *How to Write a Research Methodology for Your Academic Article - Expert Journals*. 2017. Available: <http://expertjournals.com/how-to-write-a-research-methodology-for-your-academic-article/> [21 March 2018].
- EY. (2017). *EY - South Africa's retail sector: An overview of 2016 trade*. [online] EY. Available: <http://www.ey.com/za/en/newsroom/news-releases/ey-south-africas-retail-sector-an-overview-of-2016-trade> [2017, June 22].
- FDi Intelligence. (2017). *The FDI Report 2017 Global Greenfield Investment Trends*. London: The Financial Times Ltd. [online] FDi Intelligence. Available: http://forms.fdiintelligence.com/report2017/files/FDIReport2017_WEB.pdf [2017, May 05].
- Fin24. (2013). *Woolworths pulling out of Nigeria*. Available: <https://www.fin24.com/Companies/Retail/Woolworths-pulling-out-of-Nigeria-20131107> [21 August, 2018].
- Fin24. (2016). *Retailers look to Africa to survive volatile SA market*. [online] Available: <http://www.fin24.com/Companies/Retail/retailers-look-to-africa-to-survive-volatile-sa-market-20160523> [2017, October 19].
- Fin24. (2017). *Woolies and other SA retailers under increasing pressure*. [online] Available: <http://www.fin24.com/Companies/Retail/woolies-and-other-sa-retailers-under-increasing-pressure-20170711> [2017, October 19].
- Fink, C. & Kenny, C. (2003). *W(h)ither the digital divide?* The Journal of Policy, Regulation and Strategy for Telecommunications, 5(6):15-24.
- Fink, A. (2014). *Conducting research literature reviews*. 4th ed. Thousand Oaks: SAGE, pp.3-30.

- Fletcher, R. & Crawford, H. (2014). *International marketing*. 6th ed. Australia: Pearson.
- Forbes. (2017). *Is Africa The Next Emerging Market?*. Available: <https://www.forbes.com/sites/quora/2017/07/13/is-africa-the-next-emerging-market/#6ee16b09576f> [4 September, 2018].
- Fraser, A. (2017). *Revealed: the real source of SA's massive data breach – TechCentral*. [online]. Available: <https://techcentral.co.za/revealed-real-source-sas-massive-data-breach/77626/> [2017, October 19].
- Frynas, J. & Mellahi, K. (2011). *Global strategic management*. 2nd ed. Oxford: Oxford University Press.
- Fulantelli, G. and Allegra, M. (2003). *Small company attitude towards ICT based solutions; some key elements to improve it*. *Journal of Educational Technology and Society*, 6(1): 45- 49.
- Games, D. (2004). *The Experience of South African Firms Doing Business in Africa A Preliminary Survey and Analysis*. The South African Institute of International Affairs.
- Gauteng Province Provincial Treasury. (2012). *The Retail Industry on the Rise in South Africa*. Pretoria: Gauteng Province Provincial Treasury. [2017, October 18].
- Gerow, J. E., Thatcher, J. B., & Grover, V. (2015). *Six types of IT-business strategic alignment: An investigation of the constructs and their measurement*. *European Journal of Information Systems*, 24(5), 465-491.
- Ghemawat, P. (2005). *Regional Strategies for Global Leadership*. [online]. Available: <https://hbr.org/2005/12/regional-strategies-for-global-leadership> [5 April, 2017].
- Gratch, O. (2017). *What ERP Means for Your Small Business* - business.com. Available: <https://www.business.com/articles/erp-what-it-means-for-you-and-your-small-business/> [16 September, 2018].
- H & M. (2017). *Annual Report 2017*. Available: <http://about.hm.com/content/dam/hmgroup/groupsite/documents/en/Annual%20Report/Annual%20Report%202017.pdf> [4 October, 2018].
- H & M. (2018). *H & M group announcing new cutting-edge technology features*. Available: <http://about.hm.com/en/media/news/general-news-2018/hm-group-announcing-new-technology-features.html> [4 October, 2018].
- Hanafizadeh, M., Saghaei, A. & Hanafizadeh, P. (2009). *An index for cross-country analysis of ICT infrastructure and access*. *Telecommunications Policy*. 33(7):385-405.
- Harrison, H., Birks, M., Franklin, R. & Mills, J. (2017). *Case Study Research: Foundations and Methodological Orientations*. Available: <http://www.qualitative-research.net/index.php/fqs/article/view/2655/4079> [10 July 2018].

- Hill, C. (2012). *International business*. 14th Edition, New York: McGraw-Hill Professional: 2-500.
- Hofstede, G. (1980). *Culture and Organizations*. *International Studies of Management & Organisation*. 10(4):15-41.
- Huang, Y. & Sternquist, B. (2007). *Retailers' foreign market entry decisions: An institutional perspective*. *International Business Review*. 16(5):613-629.
- Huxtable, M. (2018). *Massdiscounters Enables Omnichannel Model with SAP – SAP Africa News Center*. Available: <https://news.sap.com/africa/2018/06/massdiscounters-enables-omnichannel-model-with-sap/> [18 September, 2018].
- Internet World Statistics. (2018). *Africa Internet User Stats and 2018 Population by Country*. Available: <https://www.internetworldstats.com/africa.htm> [14 August 2018].
- ITU. (2015). *Measuring the information society report 2015*. Geneva: ITU.
- Kalish, I. & Eng, V. (2018). *Global Powers of Retailing | Deloitte | Consumer Business industry reports*. Available: <https://www2.deloitte.com/global/en/pages/consumer-business/articles/global-powers-of-retailing.html> [04 October, 2018].
- International Telecommunications Union. 2018. *Global Cybersecurity Index (GCI) 2018*. Geneva: International Telecommunication Union. Available: https://www.itu.int/en/ITU-D/Cybersecurity/Documents/draft-18-00706_Global-Cybersecurity-Index-EV5_print_2.pdf [09 May, 2019].
- Kane, G., Palmer, D., Phillips, N., Kiron, D. & Buckley, N. (2017). *Achieving Digital Maturity*. Available: <https://sloanreview.mit.edu/projects/achieving-digital-maturity/> [15 September, 2018].
- Kemp, S. (2018). *Digital in 2018: World's internet users pass the 4 billion mark. We are Social by Hootsuite*. Available: <https://wearesocial.com/blog/2018/01/global-digital-report-2018> [10 September, 2017].
- Kiveu, M. (2013). *Enhancing market access in Kenyan SMEs using ICT*. *Global Business and Economics Research Journal*. 2 (9): 29 - 46.
- KPMG. (2017). *Notable Changes In Retail Spending During December - KPMG South Africa Blog*. [online] KPMG. Available: <https://www.sablog.kpmg.co.za/2016/12/notable-changes-retail-spending-december/> [2017, May 02]
- Lynch, R. (2014). *What is a Global Strategy and Why is it Important?* [online] *Global Strategy*. Available: <http://www.global-strategy.net/what-is-global-strategy/> [2017, April 15].
- Malhotra, N. (2010). *Marketing research*. 6th ed. Upper Saddle River, NJ: Prentice Hall.

Market Research Engine. (2017). *ERP Software Market by Verticals, by Deployment and by Function– Global Industry Analysis and Forecast 2017 - 2024*. Market Research Engine. Available:

<https://www.marketresearchengine.com/reportdetails/erp-enterprise-resource-planning-software-market> [16 September, 2018].

Merriam-Webster. (2018). *Definition of CASE STUDY*. [online] Available at: https://merriamwebster.com/dictionary/case%20study?utm_campaign=sd&utm_medium=serp&utm_source=jsonld [11 July 2018].

Modiri, N., & Sobhanzadeh, Y. M. (2011). *Information security management. Computational Intelligence and Communication Networks (CICN)*, 2011 International Conference on, 481-484.

MSG. (2013). *Types of Retail Outlets*. Management Study Guide. [online] Available: <http://managementstudyguide.com/types-of-retail-outlets.htm> [2017, October 13].

Mr Price Group Limited. (2016). *Annual Integrated Report 2016*. Mr Price Group Limited.

Naser, A. (2013). *Yuppiechef case study*. Available: <http://www.bizcommunity.com/Article/196/423/99895.html> [3 October, 2018].

Ngalonkulu, M. & Mwendera, K. (2018). *'Moving Towards Omni-Channel'*. Available: <https://www.forbesafrica.com/interview/2018/09/04/moving-towards-omni-channel/> [18 September, 2018].

Ngulube, P. (2015). *Qualitative data analysis and interpretation: systematic search for meaning. Addressing research challenges: making headway for developing researchers*. Mosala-MASEDI Publishers & Booksellers cc: Noordyk, 131-156.

NTIA. (1995). *FALLING THROUGH THE NET: A Survey of the "Have Nots" in Rural and Urban America* | NTIA. [online] NTIA. Available: <https://www.ntia.doc.gov/ntiahome/fallingthru.html> [2017, May 19].

Ohemeng, F. & Ofosu-Adarkwa, K. (2014). *Overcoming the Digital Divide in Developing Countries: An Examination of Ghana's Strategies to Promote Universal Access to Information Communication Technologies (ICTs)*. Journal of Developing Societies. 30(3):297-322.

Omarjee, L. (2017). *Massmart: 6 years after Walmart acquisition*. Available: <https://www.fin24.com/Companies/Retail/massmart-6-years-after-walmart-acquisition-20170830-2> [18 September, 2018].

Opudo, D. (2018). *Tech In Africa. How M-Pesa Is Revolutionizing the African Banking Infrastructure*. [online] Available: <http://www.techinafrica.com/m-pesa-revolutionizing-african-banking-infrastructure/> [16 August, 2018].

Paliwoda, S. and Slater, S. (2009). *Globalisation through the kaleidoscope*. International Marketing Review, 26(4/5): 373-383.

- Patel, S. 2015. *The research paradigm – methodology, epistemology and ontology – explained in simple language*. [online] Available: <http://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language/> [8 May, 2019].
- Pick n Pay. (2017). *Pick n Pay Investor Relations | This is Pick n Pay: Store footprint and format*. [online] Available: <https://www.picknpay-ir.co.za/store-footprint-format.php> [19 October, 2017].
- Pick n Pay. (2018). *Our footprint and formats | THIS IS PICK N PAY | Pick n Pay Integrated Annual 2018*. Available: <http://picknpayinvestor.co.za/financials/annual-reports/2018/our-footprint-and-formats.php> [21 August, 2018].
- Ponelis, S. & Holmner, M. (2015). *ICT in Africa: Enabling a Better Life for All*. Information Technology for Development. 21(1):1-11.
- POPI. 2013. *Protection of Personal Information Act. 2013. (4.)*. Cape Town: The Presidency.
- Prinsloo, D. (2015). *Omni-channel retailing changes, trends and strategies*. South African Council of Shopping Centres. [online]. Available: <http://urbanstudies.co.za/wp-content/uploads/2016/07/SACSC-Onmi-channel-report-2015.pdf> [2017, October 16].
- Rahi, S. (2017). *Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development*. International Journal of Economics & Management Sciences. 06(02). DOI: 10.4172/2162-6359.1000403.
- Roberts, D. 2017. *How will you seize the upside of disruption?*. Available: https://www.ey.com/en_gl/health/how-will-you-seize-the-upside-of-disruption [2019, May 08].
- Rogerson, C. (2016). *South Africa's informal economy: Reframing debates in national policy*. Local Economy. 31(1-2):172-186
- Rozzio, D. (2018). *Robust ICT sector vital for digital economy*. Available: <https://www.fin24.com/Entrepreneurs/News/robust-ict-sector-vital-for-digital-economy-20170411> [8 September, 2018].
- September, L. (2017). *Yuppiechef to open first walk-in retail store in Cape Town – Eat Out*. Available: <http://www.eatout.co.za/article/yuppiechef-open-first-walk-retail-store-cape-town/> [2, October, 2018].
- Shi, S. (2018). *Literature Review: An Overview*. Web.cortland.edu. Available at: <http://web.cortland.edu/shis/651/LitRevOverview.pdf> [10 September, 2018].
- Shoprite. (2017). *Shoprite Holdings | Our Group*. Available: <https://www.shopriteholdings.co.za/group.html> [19 October, 2017].
- Simpson, J. & Lappeman, J. 2017. *Marketing in South Africa*. 4th ed. Pretoria: Van Schaik Publishers.

- Smith, C. (2017). *SA e-commerce growing by leaps and bounds*. [online] Fin24. Available: <http://www.fin24.com/Companies/Retail/sa-e-commerce-growing-by-leaps-and-bounds-20170222> [2017, March 19].
- Smith, M., & Proctor, P. E. (2015). *The Gartner Business Value Model: A Framework for Measuring Business Performance*, Gartner Group Inc. Stamford.
- Spangenburg, H. (2017). *Economic Insights | Deloitte Africa*. Available: <https://www2.deloitte.com/za/en/pages/deloitte-africa/articles/economic-insights.html> [2 September, 2018].
- Stake, R. (1995). *The art of case study research*. 1st ed. London: Sage, pp.3-5.
- Statistics Solutions. (2017). Theoretical Framework. Available: <http://www.statisticssolutions.com/theoretical-framework/> [2017, October 10].
- StatsSA. (2017). *Quarterly Labour Force Survey (QLFS), 2nd Quarter 2017*. Pretoria: StatsSA.
- Steinhoff International. (2017). Steinhoff International | Our Group. [online] Available: <http://www.steinhoffinternational.com/02-our-group.php> [2017, October 19].
- Taruté, A. & Gatautis, R. (2014). *ICT Impact on SMEs Performance. Procedia – Social and Behavioral Sciences*. 110:1218-1225. DOI:10.1016/j.sbspro.2013.12.968.
- The Foschini Group Limited. (2016). *Integrated Annual Report 2016*. The Foschini Group Limited.
- Thompson, A. (2018). *Why Most of Africa's Data is Used on WhatsApp*. Available: <https://theculturetrip.com/africa/articles/why-most-of-africas-data-is-used-on-whatsapp/> [5 September, 2018].
- Totka, M. (2017). *ERP & Digital Transform Businesses* - business.com. Available: <https://www.business.com/articles/revamp-your-business-through-erp-and-digital-transformation/> [16 September, 2018].
- Trading Economics. (2017). *South Africa Retail Sales YoY | 2003-2017 | Data | Chart | Calendar*. [online] Trading Economics. Available: <https://tradingeconomics.com/south-africa/retail-sales-annual> [2017, April 10].
- Truworths International Ltd. (2016). *Integrated Annual Report 2016*. Truworths International Ltd.
- University of Southern California (2018). *Research Guides: Organizing Your Social Sciences Research Paper: 5. The Literature Review*. Libguides.usc.edu. Available at: <https://libguides.usc.edu/writingguide/literaturereview> [10 September, 2018].
- van Zadelhoff, M. (2017). *The Biggest Cybersecurity Threats Are Inside Your Company*. [online]. Available: <https://hbr.org/2016/09/the-biggest-cybersecurity-threats-are-inside-your-company> [2017, October 19].

- van Zyl, G. (2016). *Data prices: How SA compares to the rest of the world*. [online] Fin24. Available: <http://www.fin24.com/Tech/Multimedia/data-prices-how-sa-compares-to-the-rest-of-the-world-20160930> [12 March, 2017].
- Whelan, E., Anderson, J., van den Hooff, B., & Donnellan, B. (2015). *How IT and the rest of the business can innovate together*. *Communications of the Association for Information Systems*, 36, 261-271.
- Woolworths. (2016). *Integrated report 2016*. Woolworths Holdings Limited. Available: <http://www.woolworthsholdings.co.za/downloads/2016/WHL-Integrated-Report-2016.pdf> [2017, June 02].
- World Wide Worx. (2017). *SA online retail to pass 1% of total - World Wide Worx*. [online] World Wide Worx. Available: <http://www.worldwideworx.com/retail2016/> [2017, April 04].
- WRSETA. (2015). *An analysis of new international competitors in the SA retail sector implications for SA retailers and possible responses*. Pretoria: WRSETA. [2017, June 02].
- Yilmaz, K. (2013). *Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences*. *European Journal of Education*. 48(2):311-325
- Young, C. M. (2016). *Fusing IT With the Business: The Value- Optimizing IT Delivery Model*. Gartner Group Inc. Stamford.
- Yin, R. K. (2002). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications.
- Yuppiechef. (2018). *We've switched on Africa*. Available: <https://www.yuppiechef.com/spatula/international-shipping-to-african-countries/> [2 October, 2018].