AN ASSESSMENT OF FACTORS AFFECTING THE ACCESSIBILITY OF E-COMMERCE IN THE RETAIL INDUSTRY: WINDHOEK NAMIBIA

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ABSTRACT

E-commerce has created a platform where business transactions are conducted over the internet. E-commerce is used to improve efficiency and productivity in many areas of business, therefore, has received significant attention in many countries. However, its adoption has not been as anticipated in some countries. This study therefore sought to assess the accessibility of e-commerce in Windhoek's retail industry. The objectives of the study included: to determine the e-commerce models adopted for use in the Namibian retail industry; to understand the present status and trends in accessibility of e-commerce platforms used by Windhoek-based online retail shops; to establish factors that enhance the adoption of e-commerce and Identify factors that hinder the adoption of e-commerce. In terms of methodology, this study adopted a quantitative method and a descriptive cross-sectional research design. The quantitative method was used because it was easier to analyse numeric data from the questionnaires and the study was aiming to establish the relationship between e-commerce models and performance of online channels. A sample size of 63 respondents was selected through non-probability consecutive sampling while a sample of 100 customers was selected through systematic random sampling. The data was analysed by use of SPSS software. Descriptive statistics, specifically frequencies, cross tabulation and percentages were used to describe the characteristics of the data which was presented in tables and charts. The findings indicate that although e-commerce was accepted as a mode of shopping in other parts of the world, only a small percentage of it has been adopted in Namibia. Features and services connected to e-commerce significantly influenced consumers' decisions to purchase online. Trust is established as a critical factor in the adoption of e-commerce due to the high level of uncertainty and risk involved in virtual transactions. This study recommends that retail owners attempt to build trust with their customers by enhancing privacy and securing consumers' information. Further, that the private sector should help the government and development agencies within Namibia to understand and address the priority challenges faced when it comes to the adoption of e-commerce.

Keywords: E-commerce, Internet, Technology

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LIST OF ABBREVIATIONS

Information and Communications Technology	**-**	**ICT**
Business-To-Consumer	**-**	**B2C**
Business-to-Business	**-**	**B2B**
Consumer-to-Business	**-**	**C2B**
Consumer-to-consumer	**-**	**C2C**
Business-to-Government	**-**	**B2G**
Government-to-Business	**-**	**G2B**
Electronic Data Interchange	**-**	**EDI**
Electronic Commerce	**-**	**E-commerce**
Mobile Commerce	**-**	**M-commerce**
Democracy and Development with Latin America	**-**	**ADELA**
African Continental Free Trade Area	**-**	**ACFTA**
Internet Service Providers	**-**	**ISPs**
Website	**-**	**Web**
Information Systems	**-**	**IS**
Statistical Package for Social Science	**-**	**SPSS**
University of Namibia	**-**	**UNAM**
Technology Acceptance Model	**-**	**TAM**

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DECLARATIONS

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6 OCTOBER 2022

Ruusa Ndinelago Kalambi **Date**

DEDICATION

This work is dedicated to the living memory of my late mother and father, Mr. Vilho Kandalipo Kalambi and Ms. Ruusa Magano Kalambi who did not live long enough to witness this special day in my life.

It is also dedicated to my foster father Mr. Amos Hingashipwa Shiyuka for the continuous inspiration and support that he gave me throughout this project.

CHAPTER ONE

INTRODUCTION

1. INTRODUCTION

Online shopping is becoming increasingly popular for a variety of reasons. External factors such as increasing gas prices, difficulties in accessing traditional stores and hassles often associated with shopping malls and other traditional stores, contribute to the growing interest in online shopping. Consumers can get full information about the product with its reviews being passed by the existing users. If one wants to buy a product, he/she is no longer limited to asking the friends and families because there are many product reviews on the web which give opinions of the existing users of the product (Gnanadhas & Sunitha, 2014).

This chapter introduces the research by providing an overview of the general background of the study. It focuses on the orientation of the study, research problems, research objectives, the significance of the study, limitation and the delimitations of the study. It concludes with an outline of the thesis.

1.1 BACKGROUND OF THE STUDY

Digitalisation has changed society dramatically over the past decades. New opportunities as well as challenges have emerged for both consumers and companies (Eriksson & Tenfält, 2015). Eriksson and Tenfält (2015) further state that development has been rapid and the sale of goods and services via digital platforms has increased tremendously. Shopping can now be conducted through either fixed or mobile data communication.

According to Amwele (2013) Electronic Commerce (e-commerce) has unblocked different settings for businesses. It has set the stage for an open market where business communities are integrated into a digitally enabled global market. Turban (2012) note that e-commerce is fast moving towards becoming one of the most effective means of doing business. Additionally, the innovative nature of e-commerce will eventually build a bridge between divides of those with and without access to e-commerce.

E-commerce allows Namibian organisations to gain a competitive advantage as this could reduce the transaction costs, improve customer service and expand to new markets (Mthembo & Osakwe, 2020). Additionally, Haiyambo *et al.* (2020) stated that e-commerce is exponentially developing and offers various benefits such as international exposure, enhanced company image, competitiveness and, productivity. Hence, e-commerce is widely expected to improve efficiency due to reduced transaction costs and increased competition.

According to the International Trade Administration (2020) e-commerce is still relatively unknown to Namibian consumers. There has not been any research focusing on e-commerce, in the past few years. Mthembo and Dlodlo (2016) added to this by stating that Namibia has an improved Information and Communications Technology (ICT) infrastructure and internet penetration, thus creating an ideal environment for web-based electronic commerce. Many businesses around the world have introduced an electronic commerce channel as part of their operations, seeking the many advantages that the online marketplace can provide (AlGhamdi, Al-Ghaith, & Drew, 2018).

Mishra and Aditya (2011) emphasised that it is not sufficient for an organisation or company to merely have a website, but rather an interactive site that has merchant

solutions as well as consumer mechanisms that facilitate the smooth flow of transactions. The quality of postal services, reachability and awareness is equally critical in accelerating the adoption of e-commerce in Namibia, especially given the unique nature of the country – large and sparsely populated (Obaking & Uusiku, 2021). Obakeng and Uusiku (2021) expanded more on this by stating that, leveraging on existing postal networks would certainly assist in creating an enabling environment for e-commerce. For instance, with about 144 NamPost offices across Namibia, businesses can take advantage of those footprints to sell their products to customers through NamPost's third-party services (Obaking & Uusiku, 2021).

According to Kang and Sohaib (2016) the combination of technology and people in human computer interaction is a vital part of modern society that sanctions a wide range of economic benefits. In particular, the transpiring growth of Business-To-Consumer (B2C) e-commerce allows everyone to put up their own business online, locally, or globally. González (2015) attest to this by stating that e-commerce platforms have emerged as an equalising force between large and small companies and offer the tantalising potential for enterprises from Africa to reach profitable segments in international markets. Additionally, e-commerce holds great promise for enabling buyers and sellers from developing countries to reap the benefits of global markets.

Mthembo and Dlodlo (2016) also indicate that for developing countries like Namibia, e-commerce offers considerable opportunities. E-commerce in Namibia is still in a growing stage, but even the most pessimistic projections indicate a boom. The transition to online purchasing from traditional purchasing has taken a long time in the Namibian market. E-commerce includes not only buying and selling goods over the internet, but also various business processes within individual organisations that support the goal.

Types of E-Commerce

Business-to-Business (B2B): Refers to commercial transactions from one business to other businesses. A transaction can happen online and offline, but B2B transactions mainly happen in online contexts. Business can happen in the company or organisations, and a typical situation in business-to-business transactions consists of purchasing activity, employing activity and re-selling activity (Zhe, 2017).

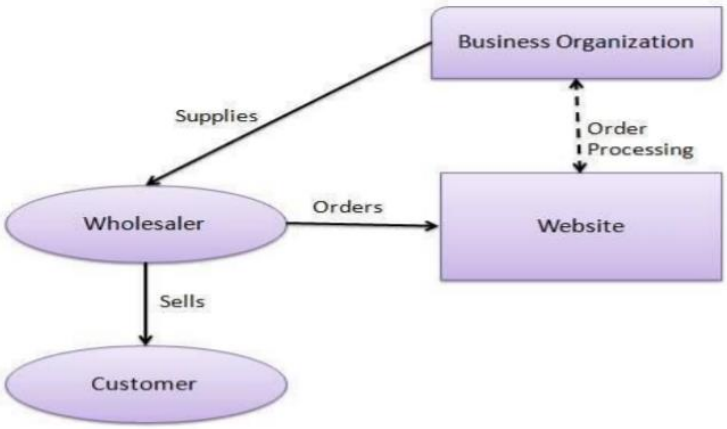

Figure 1.1: Business to Business model (B2B)

Source: Taher (2021)

Business-to-Consumer (B2C): Refers to the process of selling products and services directly between a business and consumers who are the end-users of its products or services. Most companies that sell directly to consumers can be referred to as B2C companies. B2C is among the most popular and widely known of sales models (Kenton & Brock, 2021).

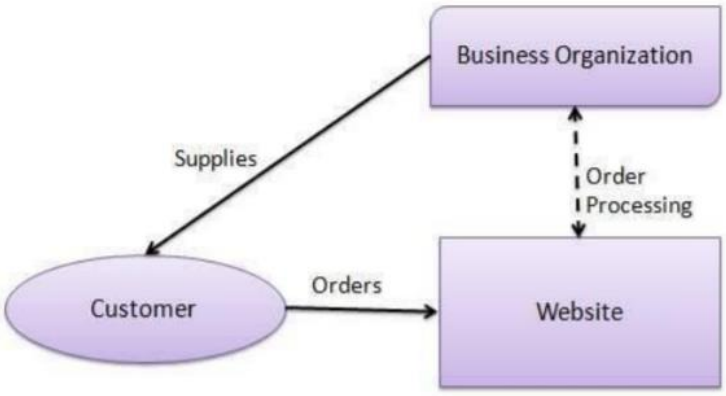

Figure 1.2: Business to Customer Model (B2C) - Taher (2021)

Consumer-to-Business (C2B): Is a business model where an end user or consumer makes a product or service that an organisation uses to complete a business process or gain competitive advantage. With C2B, the seller is an individual consumer, and the buyer is a business or company. Consumer to business differs from the other models because it's the consumers who create product value and business value. It is the opposite of the traditional business to consumer e-commerce model, where businesses sell products or services to consumers (Indeed, 2021).

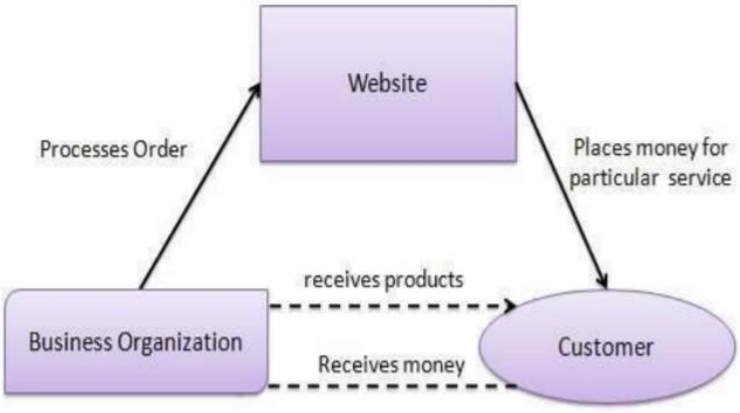

Figure 1.3: Customer to Business Model (C2B) - Taher (2021)

Consumer-to-consumer (C2C): consumer-to-consumer market is not like the traditional market where business/consumer goes to a business to buy the products. Instead, C2C market provides the platform where consumers can interact and do business with each other. With C2C, both the buyer and the seller are consumers who complete a transaction (Indeed, 2021).

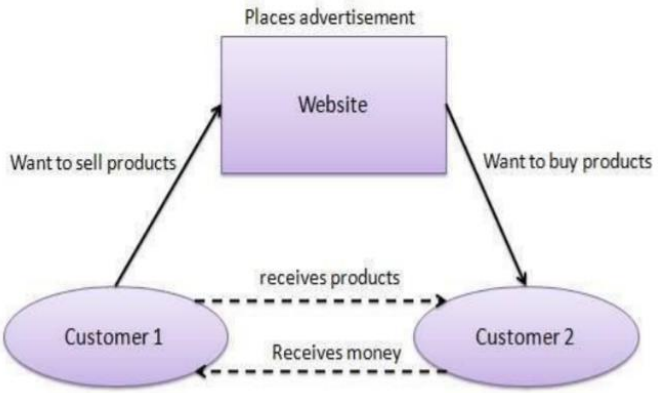

Figure 1.4: Customer to Customer Model (C2C) - Taher (2021)

Business-to-government and government-to-business (B2G/G2B): Represents the ways in which commercial transactions take place between companies and public sector. In the case of B2G, companies carry out activities for the benefit of the public sector (procurement contracts, auctions, et cetera) while through G2B the public institutions are mainly informing the private sector about the legal framework or cooperation opportunities with them (Mirescu, 2020).

Figure 1.5: Business-to-Government (B2G) - Taher (2021)

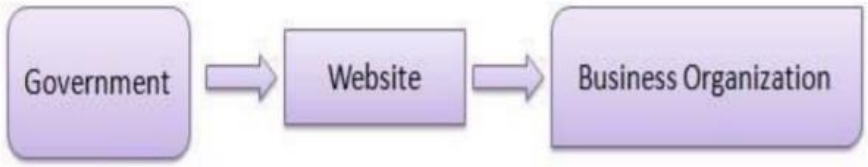

Figure 1.6: Government-to-Business (G2B) - Taher (2021)

Government to government (G2G): is the electronic sharing of data and/or information systems between government agencies, departments, or organisations. The goal of G2G is to support e-government initiatives by improving communication, data access and data sharing. By sharing information and systems, governments can reduce Information Technology (IT) costs. In addition, government offices can be more efficient by streamlining procedures thus allowing citizens to access information over the Internet (TechTarget, 2021).

Acronym	Name	Description
B2B	*Business-to-business*	Transactions between companies.
B2C / C2B	*Business-to-consumer/Consumer-to-business*	Companies making transactions between companies and the end consumer.
C2C	*Consumer-to-consumer*	Transactions between end consumers.
G2C/C2G	*Government-to-consumer/ consumer-to-government*	Transactions between government and end consumers.
B2G/G2B	*Business-to-government/ government-to-business*	Transactions between government and companies.
G2G	*Government-to-government*	Transactions between government departments.

Table 1.1: Types of transactions possible in electronic commerce - (Dos Santos, Gonçalves, Morais, & Leandro, 2017)

Development of E-Commerce

According to Dos Santos *et al.* (2017) the evolution of electronic commerce has been studied and followed up by several researchers and stakeholders in the field. Given the

advances in IT, more precisely with the development of the Internet, from 1990's, a large range of possibilities were perceived, with a noted emphasis onto communication. Additionally, Hermogeno (2019) indicate that in 1991, e-commerce became possible over the web, but didn't truly gain popularity until many of the security issues and modem speeds significantly improved. Between 1999-2000, the main adopters of electronic commerce were e-commerce sites. From 2001 to present, e-commerce enterprises took on the role of taking advantage of mass internet adoption and dominated the market (Shen, 2020). Agarwal, Mittal, and Singhal (2019) concluded on this topic by indicating that while computer as well as internet prices have fallen dramatically over the last decade, they remain beyond the reach of most individual users and enterprises in developing countries.

Evolution of e-commerce

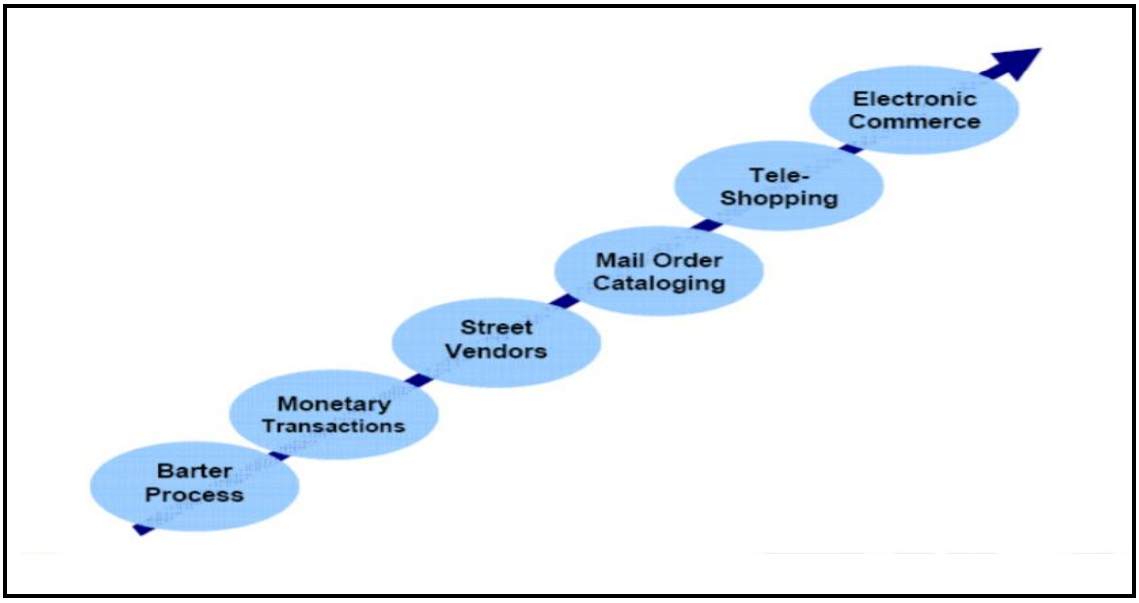

Figure 1.7: The Evolution of e-commerce

Source: Maday (2021)

1.2 STATEMENT OF THE PROBLEM

Chiripanhura (2020) indicates that Namibia has one of the smallest consumer bases in Africa, which has discouraged many international or regional actors in the e-commerce industry from entering the market. During the COVID-19 pandemic, the government of Namibia, following the recording of two positive cases, placed the country under a lock down with effect from 27 March 2020 to minimise the spread of the virus. This resulted in the closure of most businesses that were deemed not to be providing essential services. This highlighted the need for online shops in Namibia.

Highly internet connected country are expected to have higher percentages of online shoppes. However, this is not the case in Namibia, there are concerns that e-commerce being deterred by relatively slow uptake by the consumers. Businesses in Namibia have made effort towards adopting online trading with adoption rate of 39% by firms (Mthembo & Dlodlo (2016). However, slow consumers uptake has rendered to the closure of online retailing services (Amwele, 2013). The lack of e-commerce within the retail industry has thus brought both challenges and opportunities on companies in retail today. Little has been done to investigate factors that prevents Namibian retails from adopting e-commerce despite having access to internet services. This study, therefore, addressed this gap by assessing factors that influences retailer's decision to adopt e-commerce in Namibia.

1.3 OBJECTIVE OF THE STUDY

The overall objective of this research was to determine the e-commerce models adopted for use in the Namibian Retail Industry.

The specific objectives are to:

i. To establish the present status trends in accessibility of E-Commerce platforms used by Windhoek-based online retail shops
ii. To establish factors that enhance the adoption of e-commerce in the retail industry, and
iii. To analyse factors that hinder the adoption of e-commerce within the retail industry.

1.4 RESEARCH QUESTIONS

The overall question for this study was "what e-commerce models have been adopted for use by the Namibian Retail Industry?"

The specific questions include:

1. What are the present status trends in accessibility of E-Commerce platforms used by Windhoek-based online retail shops?
2. What are the factors that enhance the adoption of e-commerce?
3. What are the factors that hinder the adoption of e-commerce?

1.5 SIGNIFICANCE OF THE STUDY

Interactions in the real world of shopping are mainly based on face-to-face activities between consumers and service personnel, but with the emergence of the internet, retailers are beginning to offer consumers a different approach and experience to shopping. This study seeks to illustrate the effect of COVID-19 on selected businesses and how retailers and consumers can adapt to the change. Additionally, this study aims to contribute to the existing literature and to shed light on e-commerce issues in the

context of an African country. This study, therefore, aimed at filling knowledge gap in the literature.

In order to enhance the growth of e-commerce sector, it is necessary to provide retail owners with adequate knowledge on consumers preferences, concerns and perceptions. Consumer's information will enable enterprises to tailor their services to serve the purpose of the consumers thus stimulating acceptance of the trade. The main aim is to provide online businesses with adequate information that they can leverage on.

1.6 LIMITATIONS

These limitations encompassed, amongst others; respondents' availability and reluctance to supply the necessary information and time constraints. The emergence of the COVID-19 pandemic may limit the execution of this research in terms of collecting data in person. The researcher mitigated this risk by incorporating preventative directives and regulations as provided by the Ministry of Health of Namibia into the data collection process and methodology. The sample size may also not be an exact representation of the universe due to the fact that this study was only conducted in Windhoek and only fewer cases were collected.

1.7 DELIMITATION OF THE STUDY

This study was conducted in Windhoek which has large number of internet users; however, due to limited time and resources, only fewer cases where collected. Additionally, this study focused on the clothing sector only and was limited to clothing stores at Maerua and Grove Malls. An alternative could have been to explore e.g., both the clothing sector and electronic sector and make comparisons between the two. However, for this study a consideration was taken that it would have given too wide a

perspective and that it would have been difficult to compare the sectors since there are some similarities but also differences between them. Finally, the research focused on many variables, therefore discussion regarding empirical findings on the variables is limited thus in depth understanding of factors is lacking leading to generalization of information.

1.8 ORGANISATION OF THE STUDY

This study is divided into five chapters

Chapter One: Introduces the thesis by providing the background information to the study. It also discussed the research problem, research objectives, research questions significance of the study, and limitations of the study.

Chapter Two: Chapter covers the literature review around the topic. It discusses prior studies and underpinning theories on overall e-commerce services.

Chapter three: Presents the research methods for this study. The chapter concludes by illustrating the research design, data collection methods; selection of study samples; ethical considerations for the study.

Chapter four: Analyses and discusses the empirical results. The quantitative results are presented as tables, charts, and graphs. Qualitative results are presented as descriptive narration and explanations.

Chapter five: Encompasses the recommendations and conclusions of the study findings. The results are elaborated on, and implications of the study are assessed in this section.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Internet trade has been acknowledged and studied by specialists, students and researchers since it was initiated. There are multiple definitions for e-commerce as defined by scholars, researchers and authors (Taher, 2021). This chapter discusses the literature review around the topic under the study, it deals with the following areas: definition of e-commerce and the future of e-commerce.

2.2 THEORETICAL LITERATURE REVIEW

Theories play an important role in explaining and predicting a phenomenon. Several theories have been used to explain the acceptance and adoption of technologies by individuals. Some of these theories include the diffusion of innovation theory and technology acceptance model, which the study found most suitable to explain and predict the adoption of e-commerce. The study reviews the two theories.

2.2.1 Diffusion of Innovation Theory

The diffusion of Innovation Theory was developed by Rodgers in 1962. The theory offers an explanation as to how, why and what rate innovations and technologies spread in a social system (Rodgers, 1962). The theory is concerned with new products and idea or perceived new ideas and their rate of adoption.

Rodgers (1983) identifies an innovation-decision process through which individuals pass through in adopting an innovation, knowledge, persuasion, decision,

implementation, and confirmation. In the knowledge stage, an individual realizes and acknowledges the existence of an innovation. Persuasion stage takes place when an individual develops a positive or negative attitude towards innovation. In this stage, an individual's perception is influenced by the characteristics associated with the new product. Depending on the individual's attitude towards the product, the individual makes a choice on whether to adopt or reject the innovation. This occurs at the decision stage which is the third innovation-decision (Rodgers, 1983). The most important stage is the implementation stage where an individual is involved in the actual and constant use of an innovation. Finally, in the confirmation stage, an individual seeks the opinion of others in regard to the innovation-decision but reserves the right to make the decision if satisfied or dissatisfied with technology.

Additionally, Rodger (1983) classifies the members of a social system on the basis of innovativeness. The classification includes innovators, early adopters, early majority, late majority and the laggards. Innovators includes individuals who are willing to try out new innovations and ideas and are risks takers. The early adopters are opinion leaders and offer advice and information about a new product; their opinion is considered important. Early majority are hardly leaders, but they adopt an innovation before most people. Late majorities are sceptical and wait until other people have adopted innovation. The laggards are traditional, sceptical and resistant to change. According to Rodgers individuals' characteristics influence their adoption decision and the overall spread of the technology in a society.

Rodgers (1995) identified five elements that determine the rate of adoption of an innovation includes (1) attributes such as relative advantage, compatibility, complexity, trialability, and observability. In this case, the adoption of technology is dependent on its characteristics and how well it is considered user-friendly. (2)

Reinvention; referring to the evolution of an innovation to meet the needs of individuals in a population. (3) Communication channels are considered important impersonal and interpersonal methods which spread information about new innovation. (4) Time which determines an innovation's adoption rate in a given social and time. Lastly, are the social system network connections and norms.

The theory of diffusion has been used and refined by other researchers in their studies. Nutley (2002) for example, considered "routinization of the innovation". He argues that the constant use of a technology should be considered in theory rather than just the acceptance of a technology in a social system. Nutley emphasizes on "infusion" where full utilization of an innovation is included into the model. Nutley further identifies prior conditions that influence the adoption process such as experience, characteristics of the innovation, communication channels as well as the change agents involved. He argues that individual's decision to adopt technology depends on their knowledge and experience with the new product. Greenhalgh (2004) incorporates fuzzy boundaries into the innovation attributes by Rodgers (1995). According to Greenhalgh, organisational structures and system necessary for innovation full implementation. These includes risk, task issues, the knowledge required to use the innovation, and customer care or support.

In this study, the innovation or perceived new product is e-commerce. The theory explains the process through which an innovation is likely to undergo to experience full adoption by individuals. It, therefore, provides an overview of e-commerce metamorphosis in Namibia. Communication channels, such as social media have been of importance in creating awareness on the existence of this trade and in soliciting consumers with the Namibian retail industry. Currently, Namibian media channels are at the forefront in creating awareness on the existence and relative advantage of e-

commerce to retails and consumers. However, only a few people amongst the 1.31 million internet users have adopted the technology. Therefore, based on Rodger's classification on members of social system, the Namibian population can be described as laggards and late majority. However, the theory is limited by the failure to recognize the presence and the roles that implementing institutions should play to ensure a faster adoption rate.

2.2.2 Technology Acceptance Model (TAM)

The adoption and usage of e-commerce can be predicted by the Technology Acceptance Model (TAM) developed by Davis in 1989. TAM is anchored on the Theory of Reasoned Action which was proposed by Fishbein and Ajzen (1975). Davis in his work opined that the use of a system or technology is a reaction that can be predicted by user motivation. This model suggests that three factors that can be used to explain user's decision to accept or reject a technology: Perceived Ease Use, Perceived Usefulness and Attitude towards using a system.

Davis (1989) defined Perceived Ease of Use as the "degree to which a person believes that using technology will be free of effort". In this case individuals tends to adopt a technology when they perceive it to require lesser effort to use and learn. Perceived usefulness on the other hand, is considered as "the degree to which individuals believe that the use of a new technology would improve the performance of their task". Individuals prefer technology that they perceive to make their work easier as well as improve their effectiveness. These two elements of a technology are considered as factors that motivates the intended user to adopt the technology.

On the other hand, even if an individual finds a particular application useful, and at the same time perceives it to be too difficult to use, or efforts needed to use the technology

outweigh the expected benefits then the application might be rejected. Perceived usefulness is therefore influenced by perceived ease of use; thus, a system is considered more useful if it's easier to use (Davis, 2000). Ease use of technology is therefore the key determinant and motivation factor of adoption. According to Davis, these two factors are subjects to external variables that are social, cultural, and political in nature. The proponent further identified actual systems features and capabilities as an external factor that directly influences user motivation.

Perceived ease of use and perceived usefulness also determine and predict the attitude of an individual towards system use and adoption. Attitude referring to an individual's positive or negative feeling about a particular system shaped by specific system's performance (Esmaeilpour, 2016) was hypothesized to a major determinant of whether the user will accept or reject a technology. The ability of an individual to use a technology determines his or her reaction and attitude towards the technology. The easier it is for an individual to learn and use the technology, the more they are likely to develop a positive attitude towards using it. As noted by Davis (1989), capabilities determine ease of use, for example, proficient internet users are more likely to adopt e-commerce. In addition, Davis suggested that the convenience of a technology in terms of enhancing work performance and reducing task force fosters consumers to develop a positive attitude towards the technology which would lead to its adoption.

Later Davis (1989) refined his model to include other variables that directly or indirectly influence the acceptance of a technology. Davis and Venkatesh (2000) refined the model and named it TAM2 which included additional constructs namely: social influence processes, and cognitive instrumental processes. Various other researchers have also modified TAM by adding their variables Lim (2000) for example modified TAM by adding: experience, self-efficacy, perceived risk, and social

influence variables. Celik and Yilmaz (2011) in their study on e-shopping acceptance extended the model by including perceived trust, perceived enjoyment, perceived information quality, and perceived service quality.

E-commerce is technology that attempts to make shopping easier. However, a consumer's intention to purchase or repurchase from a website is determined by how well they are able to use and navigate through the online stores. Individual's characteristics such as literacy level, and self-efficacy determine their ability to navigate and use e-commerce sites. In addition, consumers who desire to make their purchasing experience more convenient are more likely to adopt online purchasing. Perceived ease of use and perceived use of usefulness, therefore, influence consumer's decision to adoption of e-commerce.

2.3 EMPERICAL LITERATURE REVIEW

This section contains the empirical literature review which consist of thematically arranged studies conducted on the subject matter.

2.3.1 CONCEPT OF E-COMMERCE

Shahriari, Shahriari and Ggheiji (2015) define electronic commerce, commonly known as E-commerce, as trading in products or services using computer networks, such as the internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, internet marketing, online transaction processing, electronic data interchange (EDI) inventory management systems, and automated data collection systems.

According to Chanana and Goele (2016) e-commerce pertains to “any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact.” A more complete definition of E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organisations, and between organisations and individuals.

Khan (2016) summed up the theory of e-commerce as the buying and selling of goods and services on the Internet. Other than buying and selling, many people use the internet as a source of information to compare prices or look at the latest products on offer before making a purchase online or at a traditional store (Khan, 2016).

Mola (2012) stated that a framework talks about the detail of how e-commerce can take place. It defines actually how e-commerce is implemented, how online trading or business can be done. It defines important components that should be present to do some transaction. Figure 2.1 shows that the analysis of e-commerce competitiveness should take place at four different but interrelated levels: company level, industry level, country level, and global level.

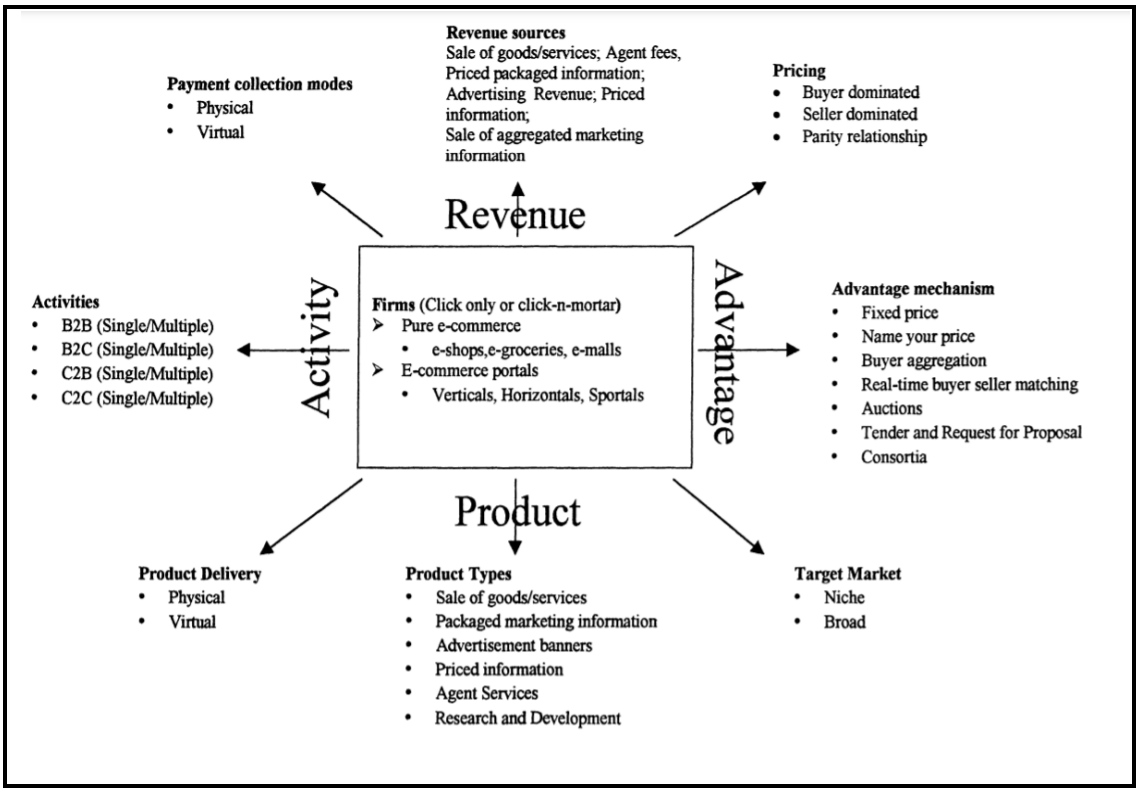

Fig 2.1: E-commerce Framework (Mola, 2012)

E-commerce allows for the automation of routine business procedures and operations and their transfer to a virtual space. This process greatly increases business efficiency and simplifies everyday routine work. Up to now, it has been assumed that most e-commerce transactions are being conducted across the globe, but recent research has shown that businesses are moving fast between local companies (Išoraitė & Miniotienė, 2018).

Khan (2016) indicated that more often, though, e-commerce is used to define a broader process of how the Internet is changing the way companies do business, of the way they relate to their customers and suppliers, and of the way they think about such functions as marketing and logistics.

Furthermore, electronic commerce improves domestic economic well-being through liberalisation of domestic services, it allows for more rapid integration into

globalization of production and leapfrogging of available technology (Mann, 2000). Electronic commerce integrates the domestic and global markets from its very inception and is neither a service, nor a good, but rather a hybrid of both.

According to Jamsheer (2019) e-commerce is the usage of telecommunication networks to automate business relations and workflow. On the other hand, (Taher, 2021) strongly claims that e-commerce is the conduction of trade in products and amenities, under the assistance of telecommunication and telecommunication centred instruments. Moreover, (Rose *et al.,* 2019) contends that e-commerce refers to the exchanging organisation data, preserving business relations, and conducting operational transactions via telecommunication systems. Ultimately, (Kalakota & Whinston, 1997; Abdullah *et al.,* 2021) identified e-commerce as utilizing computer, internet, and shared software technology to exchange merchandise descriptions and illustrations; offers and procurement details; and any other information to be conversed to consumers, providers, staff, or the community.

Defining digital commerce today differs from just a few years ago – there are many more steps and considerations that must be factored into the definition of e-commerce, and one cannot properly explain it without all of them (Kundu, 2019). Simply put, digital commerce provides the ability for consumers to purchase services and products online, without having to speak to or contact anyone – it's an entirely independent experience for the customer (Kundu, 2019). Joseph (2015) added to the definition by stating that electronics commerce is a methodology of modern business which addresses the need of business organisations, vendors, and customers to reduce cost and improve the quality of goods and services while increasing the speed of delivery.

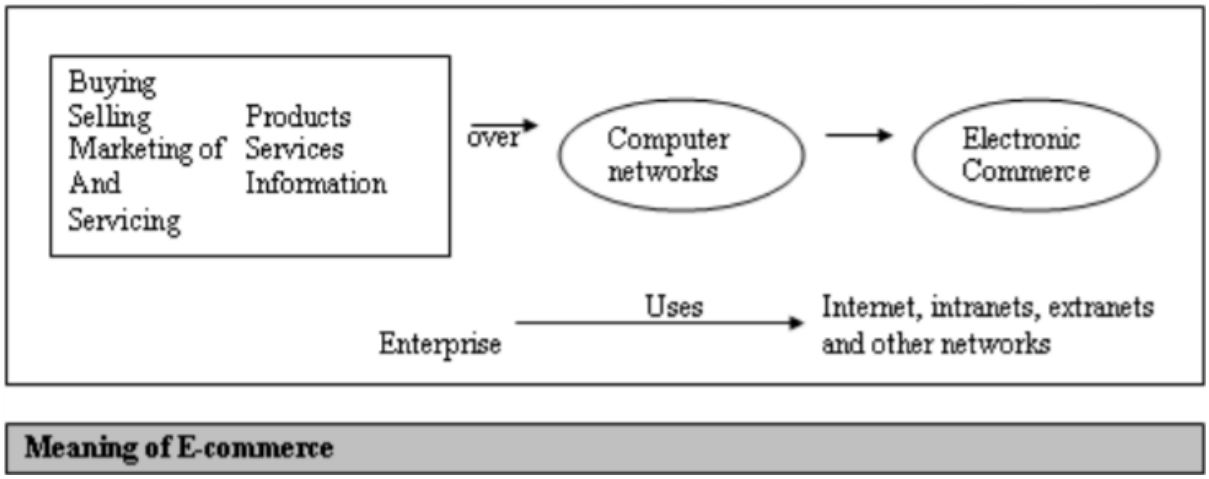

Fig 2.2: Meaning of e-commerce (Lewis, 2015)

As shown in figure 2.2, Lewis (2015) defines e-commerce as a "process of buying, selling, marketing, or exchanging of products, services, and/or information via computer networks, including the internet, intranets, extranets and other networks".

Karthikeyan & Selverajoo (2016) expressed that e-commerce has initiated new ways towards the distribution channels and online shopping tendency to increase the needs and wants of customers. Due to change in information technology, e commerce is emerged and played in industry arena by the way of selling the product and services. E-commerce is the trading the product and services using the network and internet tools. Technology supports the new initiative and attitude of customer buying behaviour.

2.3.2 FUTURE OF E-COMMERCE

Globally, electronic commerce is becoming an increasingly popular form of trade, with majority of shoppers scouting for products, their descriptions, and quality features online before buying a product (Išoraitė & Miniotienė, 2018). Furthermore, Išoraitė

and Miniotienė (2018) added that to provide customers with more convenience, more and more companies and existing stores are setting up their own online stores where a person can buy at a convenient time, even at night when regular stores are no longer working. Online stores allow you to save time spent by searching for a particular product instore or by driving to the shops.

Botha *et al.* (2020) state that despite its popularity, the use of online stores on the African continent pales in comparison to the rest of the world. According to Bansal, Bansal. R, and Gupta (2017) the internet has become an essential part of our daily life, and companies realize that the internet can be a shopping channel to reach existing and potential consumers.

According to Ohidujjaman (2013) internet and e-commerce are closely parcelled towards developed countries. But they can provide enormous benefits to developing countries if it is applicable as an ideal business purpose. E-commerce is a revolution in business practice. Moreover, Agarwal, Mittal, & Singhal (2019) indicated that all of us are aware that E-commerce is used to improve efficiency and productivity in many areas of business, therefore, has received significant attention in many countries. However, there has been some doubt about the relevance of e-commerce for developing countries. The obstacles to reaping the benefits brought about by e-commerce are often underestimated (Agarwal, Mittal, & Singhal, 2019).

Abhijit (2016) suggests that e-commerce has unleashed yet another revolution, which is changing the way businesses buy and sell products and services. New methodologies have evolved. Moreover, the role of geographic distances in forming business relationships is reduced. E-commerce is the future of shopping. With the deployment of 3G and 4G wireless communication technologies compounded by the ever-growing

power of artificial intelligence, the internet economy is destined to continue to grow robustly. Guy and Wen (2019) supported the above by pointing out that the rise of the internet and the boom of the mobile phone usage in Africa offer great opportunities for e-commerce development. Technological disruption is transforming markets and society in Africa very quickly and opening commercial potentials.

E-commerce has been hailed as a disruptive technological innovation that has radically transformed business-to-consumer interactions in both domestic and cross-border retail sales by providing advanced tools for building audience engagement, reaching customers, improving sales, and improving efficiency and productivity. The internet retail landscape is again transforming with the advent of Mobile Commerce (m-commerce). This is the buying and selling of goods and services through wireless handheld devices such as smartphones and tablets (Kang & Sohaib, 2016). Additionally, Kang, Wang, and Ramizo (2021) expressed that this puts shopping literally at consumers' fingertips while creating unprecedented opportunities for businesses and signalling a new era of growth in online retailing. These developments are made possible by the rapid innovation in ICT, particularly rapid advancements in internet technology and tablets and smartphones. However, as fast as these advances occur, they have been limited largely to developed and large economies.

As digital transformation progresses, new business models arise in ways that are difficult to predict and that challenge traditional policy frameworks (OECD, Unpacking E-commerce: Business Models, Trends and Policies, 2019). Regulatory frameworks may preserve artificial distinctions between online and offline commerce, even as firms increasingly pursue business models that combine both elements. Planning and zoning rules can further hinder a swift repurposing of existing brick-and-mortar facilities (e.g., converting store fronts in warehouses or logistics hubs in urban

centers). They can also prevent or slow down the use of innovative, contact-free delivery methods, such as drones or robots. This is particularly relevant in times of the COVID-19 crisis, when firms must adapt to limitations on physical interactions or supply chain disruptions, accommodating new business functions and logistics solutions, to ensure their economic survival (OECD, 2020).

The COVID-19 pandemic has accelerated digital transformations. Digital solutions are increasingly needed to continue some of the economic and social activities remotely. They have been critical for telemedicine, telework and online education and, not least to keep alive our social ties in times of physical distancing. We have also witnessed e-commerce growth in developing countries, with long-term implications. However, unless adequately addressed, existing digital divides are likely to result in even greater inequalities (UNCTAD, COVID-19 And E-Commerce: A Global Review, 2021).

According to Alliances for Democracy and Development with Latin America (ADELA) (2021) the COVID-19 pandemic tested businesses and consumers' skills and competencies to adapt to a digital environment to a higher degree, and available evidence suggests important skills gaps and shortages operate as obstacles in the e-commerce sector, especially in developing countries. Moreover, e-commerce has given opportunities for businesses to remain solvent during the COVID-19 crisis, reaching new markets and consumers not only at home but also abroad. In developing countries, this crisis represented an opportunity to accelerate a digital transformation process and catch up with more modern business and technological practices, which can increase economic integration, productivity, and welfare. Deloitte (2020) accords with the above by stating that the COVID-19 pandemic is rapidly changing our behaviour toward online channels, and the shifts are likely to remain post-pandemic. While many companies are challenged to survive in the short-term, the crisis also

presents opportunity; bold companies that invest ambitiously and timely in their online business are likely to emerge as market leaders.

E-commerce has triggered off major changes which promise to alter the lives of not only consumers, suppliers, and distributors but also of those organisations that have or have not accepted this phenomenon (Bansal, Bansal, & Gupta, 2017). The implementation of the African Continental Free Trade Area (ACFTA) which came into effect in January 2021 is an interesting point of reflection. The Agreement has expanded the envelope of market access opportunity and the e-commerce ecosystem for Namibia, by about 1.2 billion people, with a combined GDP of $3 trillion. This essentially means that an individual in Namibia can now buy goods and services from any of the participating member countries on much preferable terms than before, and vice-versa (Obaking & Uusiku, 2021).

2.3.3 ADVANTAGES OF E-COMMERCE

According to Guy and Wen (2019) the internet has revolutionized the world of business, reducing time and distance. This new tool gives access to a wealth of information and facilitates communication across the globe. It opened the door to a new aspect of trade practice. This kind of transaction are been adopted by many at a sulfurous rate, affecting important sectors of the economy, such as distribution sector, the banking sector and many more. However, due to the lack of basic infrastructure, inadequate socio-economic conditions and the lack of national strategies by governments in developing countries, e-commerce lags behind. This situation is depriving these developing countries from the benefits and contributions of e-commerce on their economy.

Taher (2021) expressed that electronic commerce plays an essential role in advancing information technology as well as communication. According to Aonerank (2019) more customers, this percentage has been increasing as time goes by. Customers, organisations, as well as the society are getting great benefits from E-Commerce. To illustrate, in the past years when traditional marketing systems used to prevail, customers wasted a lot of time and energy commuting to the physical shops to do their conventional shopping. With the advent of e-marketing, customers are spared from the usual exhausting trips to the supermarket to purchase the desired goods. With the web-enabled computers, laptops or mobile devices, shopping is much easier. This unconventional shopping allows customers to do shopping everywhere while sitting in the comfort of their houses or perhaps while attending to other important matters of life.

Joseph (2015) expressed that by becoming e-commerce enabled, businesses now have access to a global consumer base. In effect all e-commerce businesses have become virtual multinational corporations. The cost of creating, processing, distributing, storing and retrieving paper-based information has decreased due to e-commerce. Additionally, enabling e-commerce has allowed the pull-type processing for products and services to be customized to the customer's requirements. A business can reduce the costs of handling sales inquiries, providing price quotes, and determining product availability by using electronic commerce in its sales support and order-taking processes.

Customers not only have a whole range of products that they can choose from and customize, but also an international selection of suppliers (Zhe, 2017). Additionally, consumers other hand can benefit from; 24 hours access, new markets and price comparisons, better prices due to competitive environments, convenience, time saving,

access to extensive information (Kabuba, 2014). E-commerce also allows multiple individual customers to combine their orders together into a single order presented to wholesalers or manufacturers and obtain a more competitive price (Joseph, 2015).

According to Išoraitė and Miniotienė (2018) e-commerce offers the user the opportunity at any time, regardless of where it is located (if the user has access to the Internet) to access information on goods and services, as well as purchasing them. This removes the barriers associated with time and space constraints when acquiring goods or services. The user can personalize purchases and keep himself from subjective criteria for determining the product's choice, such as seller's persuasion, alleged discounts shares.

2.3.4 FACTORS HAMPERING E-COMMERCE ADOPTION IN RETAIL SHOPS IN WINDHOEK, NAMIBIA

While many commentators hold the view that e-commerce has many advantages for developing countries, the African continent has several major challenges to overcome before it can more fully exploit the benefits of e-commerce. These include the low level of economic development and small per-capita incomes, the limited skills base with which to build e-commerce services, the number of Internet users needed to build a critical mass of online consumers and the lack of familiarity with even traditional forms of electronic commerce such as telephone sales and credit card use. However, the most critical barrier can be ascribed to the very limited information and communication infrastructure available in most countries in Africa (UNCTAD, Electronic Commerce and Development, 2000).

Based on studying several literatures on e-commerce adoption, a Framework of barriers hindering e-commerce adoption has been developed (see figure 2.3).

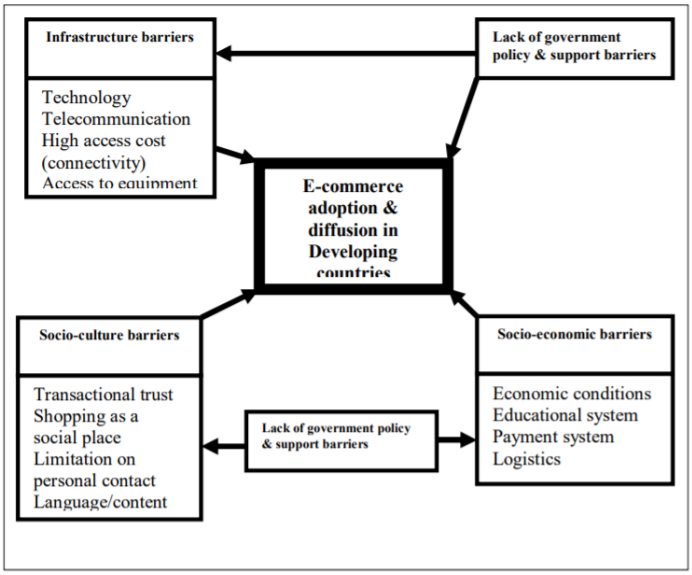

Fig 2.3: Framework of barriers hindering e-commerce adoption in developing countries (Lawrence & Tar, 2010)**.**

The barriers that are provided here are research generated and based on information collected from several studies. These are discussed in the subsequent sections.

A. Technology

There are several possible factors affecting economic growth and B2C online commerce growth. The very existence of B2C online commerce relies on technology infrastructure. Given this, installed computing capacity and internet access are proxy measures of technology adoption because consumers and merchants cannot participate in B2C online commerce without them (Kang, Wang, & Ramizo, 2021).

(i) High access cost

According to Lawrence and Tar (2010) the cost of the internet access makes it inaccessible to most users in developing countries. The precedence for most developing countries is to put in place the necessary infrastructure, a competitive environment and regulatory framework that support affordable internet access. The

monthly connection cost of the internet surpasses the monthly income of a significant portion of the population. The availability of a wide range of internet connections and other communication services, preferably at competitive prices, may affect decisions of customers in developing countries to adopt e-commerce. This result in users choosing different and appropriate services according to their specific needs and expectations from on-line activities.

According to Obaking and Uusiku (2021) data affordability in Namibia remains an issue by global comparison, partly due to the relatively small economic size of the ICT sector (representing less than 2 % of GDP) and raises concerns around insufficient competition. The share of web traffic by device is estimated at 47.3% for mobile phones, reflecting a decline of 8.7 percentage points from 2020. Conversely, the share of web traffic by computer increased by 12 percentage points to 48.7%. The shift in the share of web traffic from mobile phones to computers could be partly attributed to the adoption of a remote working culture due to the COVID-19 pandemic.

(ii) Telecommunication (Network)

The internet connection in most developing countries is unreliable because of the poor telephone communications and the erratic power supply. Most developing countries are not ready for e-commerce, because of their lack of network infrastructure especially among individual users and entrepreneurs. E-commerce success relies heavily on several barriers hindering e-commerce adoption and diffusion in developing countries (Wangari, 2019). Examples of these barriers include but are not limited to lack of universally accepted standards for quality, security, and reliability, communication bandwidth, security, e-commerce software incompatibility with operating system and other applications (Jebur, Gheysari, & Roghanian, 2012).

According to Karthikeyan and Selvaraju, (2016) telecommunication infrastructures are essentials to connect various regions and parties within a country and across countries. In most developing countries, outworn and irregular telephone connections result in narrow bandwidths offered by many Internet Service Providers (ISPs) with consequent low connections. This emerges as major barrier to the development of e-commerce.

B. Socio-cultural barriers

According to Wangari (2019) cultural orientation of individuals determines their attitude towards technology. It conforms an individual's character, behaviour, attitude, response as well as their perception toward the innovation. Shopping in most developing countries is an interactive process, where consumers and sellers build relationships. Additionally, Wangari (2019) stated that even though pre-cursors to e-commerce, such as catalogue and telephone sales, have existed in developed countries and have been used by the public for an extended time, such systems are new and novel approaches in developing countries and are not suitable to the culture and way of conducting business. It is apparent that every culture has developed with its own history, language, and religions creating identities that have been influenced by very different experiences. These experiences clearly affect a country's perspective on the world (Aseri & Morris, 2013).

(i) Transactional Trust (ordered goods will arrive, payment will be made):

Trust is the level of expected reliability that players place on each transaction within the economy. Online trust has been defined as the trust of an individual person toward a specific transactional or informational website. E-commerce involves variety of activities ranging from product or service display, searching for information from a website to giving personal information and online payments. The system should thus

inspire trust. Trust is important when financial transactions and personal information is involved (Makame, Kang, & Park, 2016).

Developed countries have devised ways of extending the basis for trust through the impartial enforcement of the law and its adaptation to a new technological environment. This is the basis of trust that underpins e-commerce in the developed world. Where legal and juridical institutions are underdeveloped in developing countries, businesses find themselves at a disadvantage because of insecurity, whether real or perceived. Most users in developing countries are not willing to provide sensitive financial information over the Website (Web). The reluctance to entrust sensitive personal information like credit card numbers to businesses operating on the web remains strong in developing countries (Agarwal, Mittal, & Singhal, 2019).

(ii) Limitation on personal contact

In most developing countries, people consider shopping as a recreational activity. The idea of buying goods that one cannot see and touch and from sellers thousands of miles away may take some "getting used to" for those who are used to face-to-face transactions (Agarwal, Mittal, & Singhal, 2019).

Online shopping lacks tangibility of goods. Consumers trust and prefer goods that they can see, touch, feel or even try prior purchase. Unlike online stores, traditional stores give consumers the opportunity to confirm the quality of the product they want to purchase (Wangari, 2019). The idea of buying goods from an unknown seller who is miles away is considered as an alien culture. People in developing countries prefer face to face and direct interactions, limited contact in e-commerce hinders its adoption (Lawrence & Tar, 2010). Makame, Kang, and Park, (2016) in their study identified constraints of personal contact as a fence to e-commerce adoption. Personal contact is

believed to creates an ally of trust and a good relationship between the buyer and the seller thus creating a good market system.

C. Socio-Economic Barriers

Agarwal, Mittal, and Singhal (2019) stressed that developing countries need to address several socioeconomic and regulatory barriers before they can participate in electronic commerce. Agarwal, Mittal, and Singhal (2019) identified various socioeconomic characteristics as barriers hindering e-commerce adoption in developing countries. The most pressing are economic conditions, educational systems, payment systems for enabling the transfer of funds, and distribution systems for physical transfer of goods.

i. Economic Condition

According to Cole-Ingait (2021) economic conditions in developing countries are widely recognized as a major hindrance for e-commerce adoption. Economic forces are factors such as inflation, interest rates, labour and government monetary policies that influence levels of production and demand for goods and services. These factors dictate the availability and affordability of production resources, as well as the abilities of consumers to afford your end products. E-commerce involves transacting business using automated information technology applications. Monthly internet access charges are still very high in most developing countries. The inequalities in income distribution means the internet is not affordable for a large proportion of the population in rural areas.

ii. Society Behaviour and Attitude

Wangari (2019) pointed out that social barriers are informal in nature and associated with informal institutions like privacy, internet access difficulty and expense, consumers ability to touch the products and loss in the social interaction. They are

concerned with a consumer or society's behaviour and attitude. These are usually the most difficult and time-consuming barriers to overcome because the involve attitude and behaviour change. Kalin, Kalinich, and Rankovic (2016) added to this by stating that the lack of awareness of the relative advantages of e-commerce is considered hinderance to the adoption of e-commerce.

Consumers' knowledge and attitude towards e-commerce are enhanced by education and social influence. This is supported by a study done by Ahmed (2016) which found lack of knowledge and awareness of e-commerce serves as roadblocks for e-commerce development. Limited access to e-commerce information has hindered its adoption into some. Currently, the mass media has made efforts to create awareness while online enterprises also advertise their businesses online. Of note e-literacy and awareness do not always guarantee adoption of e-commerce (Shahnawaz, 2014).

iii. Payment System

Access to competitive payment systems is an important driver to e-commerce. It allows consumers to make payments over the internet either through ; credit, debit, smart cards as well as online currencies (Lawrence & Tar, 2010). In addition, they noted that e-commerce development requires adequate and convinient distribution and delivery channels that meet consumer's expectations. However, logistical problems are noted as critical obstacles to the development of e-commerce in developing countries (Kalin, Kalinic, & Rankovic, 2016). Most developing countries have inexpert distribution and delivery systems (Lawrence & Tar, 2010) which are likely to crumble in the case of high consumer demand (Kalin, Kalinic, & Rankovic, 2016).

D. Political and Governmental Barriers

According to Agarwal, Mittal, and Singhal (2019) the lack of a policy to guide e-commerce expansion in developing countries is a major hindrance to the adoption of e-commerce. The poor state of most developing countries' telecommunications infrastructure is the major obstacle. The lack of telephone lines, low quality, slow speed and high cost of bandwidth and security concerns needs to be addressed before users and enterprises in developing countries can think of participating in e-commerce. Most developing countries do not have ICT policies to guide the provision of internet services. Additionally, government initiatives are important in the adoption of e-commerce and other ICT in general. Initiatives include the promotion of ICT usage, education, and establishment of adequate regulatory framework for e-commerce (Lawrence & Tar, 2010).

According to Kalin, Kalinic, and Rankovic (2016) changes in government policies are considered as being critical to create an environment for the broad use of the internet in many sectors of developing countries. The commitment and participation of governments in internet service provision and the reduction of import duties will lead to the reduction of costs. This will in turn make telecommunications infrastructure more affordable and encourage connection to the internet.

Agarwal, Mittal, and Singhal (2019) added to the above by stating that governments also urgently need to formulate information policies that will provide a framework for efficient, widespread, and cost-effective use of the internet. Most developing countries have no government policies on internet provision, the future of e-commerce or any comprehensive information policy. Lastly the absence of national information policies in developing countries means that the governments are not involved in internet provision.

2.3.5 OPPORTUNITIES E-COMMERCE OFFERS TO RETAILERS

Mthembo and Osakwe (2020) pointed out that Namibian businesses are aware of the importance of e-commerce in Namibia and are ready to adopt it. These businesses all have a basic understanding of e-commerce, but there are still many areas for them to improve. E-commerce has changed and is still changing the way business is conducted around the world. There is a rising awareness among the businesses in Namibia about the opportunities offered by e-commerce. E-commerce provides a new platform for connecting with consumers and conducting transactions. With virtual stores operating round the clock.

E-business is one of the major factors in the globalization of business. Other factors include decreases in trade barriers and, globalization of capital markets (Joseph, 2015). Adoption of e-commerce offers small enterprises access to greater global markets, lowering transaction costs, facilitates access to potential customers, customization of products and services and effective management of information and exchange processes (Kabugumila, Lushakuzi, & Mtui, 2016). E-commerce assist developing countries in gaining a strong foothold in the current existing multilateral trading system (Kabugumila, Lushakuzi, & Mtui, 2016).

According to Ggheiji, Shahriari, and Shahriari (2015) the internet brings low search costs and high price lucidity. E-business has proved is cost effective for businesses as it cuts down the cost of marketing, processing, inventory management, customer care, etc. This is the main reason why today's online stores are gaining market share. Some online stores have exceptional services and, such as free delivery. When trading online, less time is spent on paperwork as reports are automated. It is opportune for small businesses to go online because they can easily compete with bigger ones. Another

cost-effective measure of e-commerce is the lack of outlet rental costs, and warehousing is not always a necessity.

The move to digital shopping creates opportunities for retailers to leverage additional customer touchpoints across a wide array of platforms and services. Previous interaction with consumers was often limited to short-term, in-store exchanges. Due to today's widespread use of smart phones, retailers have invested heavily in multichannel marketing that can reach customers instantly and continuously through proprietary apps, email, text messages and social media. By engaging with consumers across various media channels, retail brands have unprecedented access to new customers and can build closer relationships with existing patrons (CBRE, 2021).

A research and case study done by CBRE (2021) indicated that e-commerce channels to brick-and-mortar store networks can help a brand grow its customer base and drive revenues. The study found that omnichannel customers (those who shop across multiple channels) spend 4% more in-store and 10% more online than single-channel shoppers. The study also found that the more channels a customer used, the more money that customer spent in-store. This is because consumers are learning to combine the distinct benefits of each channel, such as using online channels to browse and in-store channels to test products. Majority of in-store shoppers (73%) go to the store with the intention of buying something specific; behaviours are very different online, where nearly half of shoppers spend their time just browsing. Combining channels ultimately helps consumers find and purchase products faster. These trends align with retailers' findings that closing a store can drive down online sales in that market by up to 20%. Retailers that can facilitate this channel-surfing process will win in both customer loyalty and sales.

2.4 MARKETING OF E-COMMERCE

E-business is growing exponentially with more than three million new websites appearing on the internet every month. Due to the vast number of websites, it is very difficult for a company to achieve increased visibility and competitive advantage over their rivals, which is a key sales success factor (Grzywaczewski, Iqbal, James, & Shah, 2017). Advertising executed well on the web can get even a small firm's promotional message out to potential consumers in every country in the world. A firm can use electronic commerce to reach narrow market segments that are geographically scattered (Joseph, 2015). Additionally, the web is particularly useful in creating virtual communities that become ideal target markets for specific types of products or services.

A Virtual Community is a network which functions within a social network of individuals by any specific media, and which has geographical area limitations as well as political restrictions. The vital aim of a virtual community is to achieve socialization i.e., a person may share his/her feelings, opinion, and his knowledge without any boundaries (Somani, 2012). Joseph (2015) added to the to this by defining virtual community as a gathering of people who share a common interest, but instead of this gathering occurring in the physical world; it takes place on the internet. Most people are looking for definitive answers in the digital space and one will find that there are not many. It is all about an approach and finding the solution that best suits your company, strategy, and organisational needs. The insights and approach provide a well-structured guide to the channels and approaches that need to be consider as one navigates the digital highway (Stokes, 2017).

The visibility of online marketing is revolutionizing the way in which companies compete with each other. Marketers around the world have realized the importance of online marketing and its advantages compared to traditional marketing. Online marketing has a lot of pros, namely: it can reach customers more effectively; it is cost effective; results can be reliably measured, it can be personalized, etc. However, it has also a lot of cons, the most significant of which is a level of competition that is too high. Therefore, companies should clearly understand what they must do and how they must do it (Grabowska & Schwarzl, 2015).

A. Digital Marketing

With constantly declining smartphone prices and improvements in digital infrastructure, the increasing connectivity among global online audiences is moving along at a steady pace. Many previously underserviced regions have begun to profit from mobile online connections, leapfrogging the desktop PC development phase and starting out as mobile-first societies (Johnson, 2021). Additionally, Johnson (2021) added that despite the growing number of internet users in Africa, the continent still lags behind other regions in terms of online adoption.

Online usage penetration in all African markets was below the global average of 57 percent. The highest on the continent was Southern Africa with a penetration rate of 51 percent, Middle Africa was ranked last worldwide. Middle Africa had an online penetration rate of just 12 percent, highlighting not only the ongoing struggles for connectivity but also the untapped digital potential within Africa. In 2020, East Asia accounted for 1.1 billion of the world's internet users, followed by Southern Asia with 816.9 million. The global digital population in April 2020 amounted to over 4.57 billion internet users in total.

Whether communities accept it or not, the fact remains that all existing business models are steadily undergoing a digital transformation to adopt themselves as e-commerce compatible ventures not just for survival but also to exploit the vast nascent market that the internet is. Even corporate giants and major multinational brands with established base and business in real world traditional consumer channels are investing heavily to enhance their digital presence and create a strong digital communication channel (Bhosale, Raverkar, & Tamondkar, 2020). Digital marketing currently runs the management and promotion of brands, products, or services via digital technologies such as email, search engines, social media, websites, mobile apps, etc. Their implementation will vary according to the marketing campaign chosen, but the goal is always to maximize the bottom line (Cartwright, 2018).

Digital marketing activity is still extending across the world. A study published in September 2018, found that global outlays on digital marketing tactics are approaching $100 billion (Reuters, 2018). Digital media continues to rapidly grow; while the marketing budgets are expanding, traditional media is diminishing (Boryso, 2015). Digital media helps brands reach consumers to engage with their product or service in a personalized way. Seven areas, which are outlined as current industry practices that are often ineffective are prioritizing clicks, balancing search, and display, understanding mobiles, targeting, viewability, brand safety and invalid traffic, and cross-platform measurement (Whiteside, 2021).

Enhancing brand awareness is important in digital marketing, and marketing in general, because of its impact on brand perception and consumer decision-making. Brand awareness, as one of the fundamental dimensions of brand equity, is often considered to be a prerequisite of consumers' buying decision, as it represents the main factor for including a brand in the consideration set. Brand awareness can also

influence consumers' perceived risk assessment and their confidence in the purchase decision, due to familiarity with the brand and its characteristics (Babčanovác, Chovanováa, & Korshunov, 2015).

Recent shifts show that businesses and digital marketers are prioritizing brand awareness, focusing more on their digital marketing efforts on cultivating brand consciousness and recall than in previous years. This is evidenced by a 2019 Content Marketing Institute study, which found that 81% of digital marketers have worked on enhancing brand recognition in 2018 (Beets, 2021).

The fact people can use digital platforms anytime and anywhere, organisations need to change their marketing strategy from traditional to digital. When customers want to buy a product online, they can easily obtain product information and can compare with other products without the need to visit any retail stores or shopping malls. It shows that consumers are more inclined towards online buying rather than visiting a retail store. As consumer's buying behaviour is changing companies also need to change their advertising strategy and embrace digital platforms for marketing (Prajapati, 2020).

2.6 CONCEPTUAL FRAMEWORK

Study conceptualises e-commerce as a great opportunity for businesses to gain access to the global market. E-commerce is also expected to create an avenue for retails to have access to markets thus creating employment opportunities. However, its adoption has been relatively slow. Therefore, this study seeks to establish the factors affecting e-commerce as the independent variable while e-commerce adoption is the dependent variable. The dependent variable is divided into two main categories: factors that

enhances the adoption of e-commerce and factors that hinders e-commerce adoption. Under these two categories subdivisions are made: medium characteristics, Product characteristics, and Process characteristics which according to the study, consist of elements of e-commerce that positively influence the consumers to adopt e-commerce. On the other hand, infrastructural factors, Cultural, Social and Economic factors consist of the external forces that hinders the adoption of e-commerce.

Consumer's characteristics such as gender, age, and self-efficacy are crucial in determining whether an individual's demographic and behavioural characteristics influence their perceptions and attitudes towards e-commerce adoption. These variables according to literature have a direct relationship with the independent variable. They therefore act as the intervening variables of the study.

2.7 SUMMARY

E-commerce industry in Namibia has surely not come of age yet. However, there is significant scope for growth as digitalisation gains traction. Public and private sectors could strengthen Namibia's institutional readiness in terms of e-commerce penetration through instituting capacity-building initiatives. This would entail extending support to small businesses on how to comply with international transparency requirements and work with international specialists to create "e-trust" and enable electronic transactions, while at the same time re-considering its infrastructural logistics capability countrywide.

From the foregoing discussions, several studies on the global stage have been carried out regarding e-commerce. However, limited research has been carried out in Namibia to show the efficacy of such as a service. Evidently, the majority of the literature in this chapter has concentrated on the qualitative aspects of defining e-commerce, the future of e-commerce, advantages of e-commerce, factors hampering e-commerce adoption in developing countries and lastly the marketing of e-commerce. The next chapter focuses on the research methodology and design of the study.

CHAPTER 3

RESEARCH METHODS

3.1 INTRODUCTION

This chapter covers the philosophical assumptions, paradigms and the methodology utilised in this study. It specifies the study population and describes the sample selection criteria, data collection and data analysis tools, reliability and validity, and the ethical issues considered in carrying out the study.

3.2 PHILOSOPHICAL ASSUMPTIONS AND PARADIGM OF E-COMMERCE

Although e-commerce is a versatile field that can be found in other fields such as engineering, marketing, agriculture, and many others; its philosophical beliefs have been safely grounded in information systems (IS) research. Philosophical assumptions in IS have usually concerned themselves with systematic studies of knowledge; what is known, acquired, and appropriated by humans (Shemi, 2012). As such, the study adopted an epistemology assumption and an interpretivist paradigm.

Epistemology refers to the nature of the relationship between the researcher (the knower) and it denotes “the nature of human knowledge and understanding that can possibly be acquired through different types of inquiry and alternative methods of investigation" (Antwi & Hamza, 2015). With the interpretivist paradigm, the nature of inquiry is interpretive, and the purpose of inquiry is to understand a particular phenomenon, not to generalize to a population (Hafsa, 2019).

3.3 RESEARCH DESIGN

A research design is a plan and a structure a study conceives appropriate in its quest to obtain answers to research questions. This research was designed to this research was designed as a cross sectional descriptive study. Cross-sectional studies also known descriptive survey; aim at collecting data for the purposes of answering questions concerning the phenomena under study. It is further concerned with describing the characteristics of individuals or groups (Bryman & Bell, 2015). Descriptive survey was considered appropriate for this study because its objective to collect data that describes the identified phenomena by inquiring from individuals about their perception, attitudes, values or behaviour. It was further considered suitable because it assesses the impacts of accessibility and the performance of e-commerce within the retail industry in Windhoek. Additionally, Kothari (2018) notes that surveys are more efficient and economical in gathering information on respondent's opinions and attitudes.

This study adopted a mixed approach of qualitative and quantitative methods to establish the relationship between e-commerce models and performance of online stores. According to Creswell (2017) a mixed research approach offers more comprehensive evidence for studying a research problem. It encourages the use of multiple views rather than views associated with a quantitative or qualitative research only. The researcher could use all the tools of data collection available rather than being restricted to the types of data collection usually associated with qualitative research or quantitative research methods (Creswell, 2017). It allowed the use of both numbers and dialogue or narratives to address a research problem

The qualitative method applies to research that is explanatory or conceptual and focuses on gathering non-numerical data to help explain or develop a theory about a relationship. This method was used to serve the first objective: to establish the present status trends in accessibility of E-Commerce platforms used by Windhoek-based online retail shops.

A 5-point Likert scale method was used to complete the questionnaires. The quantitative method focused on numbers or quantities and its results are based on numeric analysis and statistics (Akpo, 2016). This method served the objective: to identify factors that hinder the adoption of e-commerce within the retail industry.

3.4 POPULATION

As cited in Mthembo & Dlodo (2017) Neuman (2006) defines a population as a large pool of cases or elements, such as persons, groups of people, organisations, written documents, symbolic messages, or even the social actions under investigation. The target population for this study comprised of online retail companies with official premises within Windhoek's major malls. The Maerua and Grove Malls have a total population of 63 retail shops out of which 30 are at Maerua Mall and 33 at the Grove Mall (Waikato, 2021; GroveMall 2021). This data was also verified by the researcher who went to the malls to count the retail shops. Additionally, this study assumed that 50% of Windhoek's populations are internet users. Thus 50% of 446,000 Windhoek's total population according to Namibia Metro Area Population 1950-2022 is 223,000 which this study considers as the number of internet users.

3.5 SAMPLE SIZE AND SAMPLING TECHNIQUES

Sampling is the process of selecting a subset of the population. The technique utilised in this study was non-probability consecutive sampling. Consecutive sampling entails enlisting all members of the accessible population who match the study's eligibility criteria (Creswell, 2014).

The following sampling formula by Yamane (1976) and D. Isreal (2009) is adopted.

n = N/(1+N(e^2)) where:

n= Optimum sample size

N= Population size

And e= Probability of error

When n is the sample size. N is the population size, which is 63 retail shops and (e) is the margin error, given at 10%: which means that every value obtained from the population and expressed in percentage will be between 10% or less. The confidence level was assumed at 95%. Therefore, a sample size of 54 retail shops and 100 internet users was selected for this research in order to allow a 95% confidence level and 5% margin of error.

For this study the successive samples of the retailers were chosen at the convenience of a researcher in an intentional and sequential manner, targeting retail outlets in Maerua and Grove Malls, to best inform the researcher on the accessibility of e-commerce in the retail industry. The internet user's participants were selected using a systematic random sampling method where members of the population were selected at equal intervals. In the systematic sampling, one unit was selected on a random basis and more elementary units from that population are chosen at evenly spaced intervals until the researcher gets the desired number of units. The researchers systematically selected respondents who were between the ages of 18-70 years regardless of gender. However, in order for the

research to obtain data from the internet users only, a question on whether a responded used internet services was asked, this enabled the researcher to identify her target population. In this regard, every individual along the street who was above 18 years and below 70 years and who confirmed to be an internet user was regarded as a respondent. The researcher began by randomly selecting the first unit of the population as the first respondent. More respondents were selected at equal intervals of every 5^{th} individual who met the criterion until the researcher got a total number of 100 respondents.

3.6 RESEARCH INSTRUMENTS

The researcher used a single instrument within the quantitative approaches of data collection. The research instrument employed was a structured questionnaire. The questionnaire consisted of four sections: Section A: General Information, Section B: E-commerce Platform attributes and online retail shop performance, Section C: Challenges of e-commerce accessibility and Section D: Benefits of e-commerce accessibility.

The questions were based on a Likert scale to get better insights on the impact of e-commerce accessibility on online retail shop performance (See Appendix 1). The instrument used for data collection was a self-administered questionnaire that consisted of structured and non-structured questions that allowed the participants to describe their attitude and perceptions towards e-commerce and provide any other relevant information. The questionnaire was administered using an online administration application (Google Forms), a link of which was electronically delivered via email to the retail managers by the researcher. This method was preferred because it was quicker, cheaper, and allowed the respondents to comfortably respond to the questions at their own convenience.

3.7 DATA COLLECTION PROCEDURES

This study relied on both primary and secondary sources of data. Secondary data of both qualitative and quantitative nature were gathered from existing literature materials including books, government reports, journal articles and websites amongst other sources. Electronics sources were also considered important sources of data.

On the other hand, primary data of both qualitative and quantitative nature was collected from internet users in Windhoek.

Before distributing the questionnaires to the participants, the researcher first sought permission through cover letters and informed consent from participating retail shop operators. The covering letter elaborated on the purpose and objectives of the study and emphasised the importance of the research topic. Questionnaires were used as key data collection tools. This study used open and closed ended questionnaires (refer to appendix A) to collect data from both retail owners and the internet users.

Participants were given 2 days to complete the questionnaires. A structured questionnaire survey was carried out and the data was collected via a combination of telephonic and email follow ups. The researcher encouraged the participants to completely fill in the questionnaire to avoid any issues of missing data. The questionnaires were collected from the respondents three days after distribution. For those with English language challenges, the researcher translated the questions to the participants.

The first part of the questionnaire was a section on the respondent's demographic characteristics. The second part incorporated structured questions which were measured through a 5-point Likert scale this answered the research questions. Finally, the questionnaire had a section with non-structured questions that allowed the respondent to

describe their attitude and insight towards e-commerce and provide any other relevant information.

3.8 DATA ANALYSIS

Data analysis includes examining, sorting, tabulating, testing as well as recombining quantitative and qualitative evidence in order to address the objectives of the study (Yin, 2009). After data collection, the researcher conducted data cleaning and sorting in order to identify incomplete and inaccurate responses, corrections were made to improve the quality of the responses. The data was coded and entered into the computer for analysis using SPSS v25. Both SPSS v25 and Excel were used to analyse and present the data. Quantitative data was analysed through descriptive statistics specifically percentages, frequencies and cross-tabulations. Analysed data was then presented in forms of tables and charts.

To give statistical meaning to the analysis, exploratory factor analysis was undertaken to reduce the number of variables and to detect structure in the relationship between variables, thus allowing the researcher to discover the underlying constructs that explained the variance in the respondents (Pallant, 2016).

3.9 RELIABILITY AND VALIDITY

The degree to which research succeeds in assessing anticipated values and the extent to which differences identified reflect genuine differences among respondents is measured by validity (Gravetter & Forzao, 2012). The degree to which the content of the items accurately represents the universe of all relevant objects under examination is referred to as content validity. The content validity of this study was validated by determining the variables that had previously been developed and utilized in the literature (Bryman &

Bell, 2015). Furthermore, before the questionnaire was pre-tested, the supervisor evaluated it. Respondents were asked to identify any difficulty they encountered in correctly completing the questionnaire in order to elicit comments regarding content validity.

Construct validity is defined by Welman, Kruger, and Mitchell (2014) as the amount to which constructs potentially relate to one another in order to quantify a notion based on the ideas supporting research. In this study, component analysis was used to determine which questions were acceptable for each dimension as well as to assess the dimensions of a concept. The correlation matrix and inter-construct correlation were employed in this study to examine convergent and discriminant validity. While criterion-related validity is concerned with the instrument's capacity to correctly measure and analyse an item. Most of the data in this study was collected using a five-point Likert-type scale. This is a well-known scaling strategy that is commonly employed in management research.

Reliability is defined as a measure of the degree to which an instrument produces consistent results (Bryman & Bell, 2015). An instrument is considered reliable when it is able to measure a variable accurately and consistently over time. To ensure the reliability of the instruments, an analysis of the data from the pre-test was done. Few cases were analysed to test whether the results yielded data that was consistent with the concepts being studied. Results of the analysis indicated the appropriateness of the method of analysis being used.

In addition, the study used a Cronbach's Alpha test to measure the consistency reliability of the questionnaire. The items of the study were scored and individually aggregated in

order to get the total scores of the instrument. The Cronbach's Alpha test results yielded were shown in table 3.1.

Factors	Number of Items	Cronbach's Alpha	Comment
Medium Characteristics	3	0.869	Reliable
Product Characteristics	3	0. 808	Reliable
Process Characteristics	3	0. 852	Reliable
Infrastructural Factors	3	0.604	Reliable
Cultural Factors	2	0.527	Reliable
Economic Factors	2	0. 622	Reliable
Social Factors	3	0.682	Reliable
Overall	19	0.906	Reliable

Table 3.1: Reliability Test Results

Source*: Pilot Study, March 2022*

According to Cooper and Schindler (2010) a Cronbach's Alpha of 0.5 is acceptable and the instrument is considered suitable for data collection. The results of this pilot yielded a reliability of 0.9, indicating that the data collection instrument was reliable and suitable for data collection.

3.10 RESEARCH ETHICS

Research ethics is associated with the appropriateness of the researcher's procedures and behaviours regarding the right of participants, particularly in relation to formulating questions, designing research, obtaining access, collecting data, analysing data and storing the data as well as presenting the findings in a moral and proper way (Bryman & Bell, 2015)

The UNAM Postgraduate Committee reviewed the study's ethical issues. This committee's clearance is necessary before collecting data for either the pilot or main

study, which has been approved for this investigation. Taking ethical considerations into account will improve the study's reliability and trustworthiness (Kumar, 2014).

The main issues regarding ethics were addressed by the researcher and approved by the research ethics committee and these were: the privacy of actual and potential participants; whether the participation was voluntary or not; obtaining consent from participants; confidentiality of data and ensuring anonymity; avoiding harming, embarrassing, stressing, or discomforting participants by any means. In this context, verbal consent from each individual participant was sought before collecting the data, participants were informed about the nature of the study and how their answers were important to the study's contribution, and they were given the option to withdraw from the research without explaining the reason at any time. They were also informed that their participation was voluntary, and the confidentiality of data and anonymity were guaranteed as the information they provided would be treated in the strictest of confidence and stored in a computer protected by passwords known by the researcher only.

The researcher ensured that the respondents participated voluntarily in the study and sought for respondents' informed consent to participate in this research through the provision of consent forms. The participation of respondents will remain anonymous. Data is being kept in a lockable safe for 5 years, and thereafter will be destroyed by shredding with the soft copied on the hard drive being destroyed by formatting the hard drive. The researcher also refrained from plagiarism by honouring the copyrights of work used for this research study.

3.11 SUMMARY

This chapter looked at the research design and methodology used in this research. The basis of this study was to assess the accessibility of e-commerce in the retail industry. The research instrument was a questionnaire which was emailed to the respondents. In this chapter, the research design was presented, and the sample and sampling methods were explained. The questionnaire design and administration were outlined. The questionnaire consisted of Likert type question, which were easy to understand and answer. The Statistical Package for Social Sciences (SPSS) and Excel were used to analyse and interpret the responses. To ensure validity and reliability, pre-testing was carried out before the questionnaire was finalised. The ethical considerations were also presented. In the following chapter, the empirical results are presented, interpreted, and discussed.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

Chapter three presented the research design that was selected, and the sample and sampling method that was used in this study. This chapter presents, interprets, and discusses under literature control, the results obtained from the questionnaires. The questionnaire was the data instrument used to collect data and was distributed to 54 retailers at both the Grove and Maerua Malls. Both Excel and SPSS were used to analyse the data collected from the responses. The results are presented in the form of descriptive statistics in cross tabulations, and in the form of graphs and other figures for the quantitative data that was collected.

4.2 PRIMARY DATA ANALYSIS

The objective of collecting the primary data was to establish the participants' views on the assessment of the effectiveness of the accessibility of e-commerce in the retail industry in Windhoek, Namibia. Also, to utilise the data gathered to determine the composition and eventually draw conclusions pertaining to the effect of e-commerce on retail performance. Questionnaires were used to collect data from the respondents. Data was analysed using SPSS software.

4.2.1 Response Rate

The research sampled 54 respondents drawn from a target population of 63 retailers. The researcher was able to get responses from 54 respondents. However, only 44 questionnaires were duly filled and considered for analysing while 10 were disregarded due to incomplete information. Therein, the researcher was able to analyse data from the 44 respondents which represents a response rate of 83%. According to

Cleave (2020) a response rate of a response rate of 50 percent is adequate for data analysis and reporting; a rate of 60 percent is good and a response rate of 70 percent and over is excellent.

4.3 SOCIO-DEMOGRAPHIC CHARACTERISTICS

This section presents a summary of the respondents' descriptive statistics. Descriptive statistics are techniques used to describe the attributes of the biographical information of the respondents based on the research (Gupta & Gupta, 2011).

4.3.1: Gender distribution

This section is aimed at establishing the gender of the respondents. This information was necessary in order to determine the gender balance and diversity amongst the respondents for the study. The analysis indicates that majority of the responses were obtained from the female respondents. The study found that 86% of the respondents comprised of the male respondents, while 14% comprised of female respondents as shown in Figure 4.1 below:

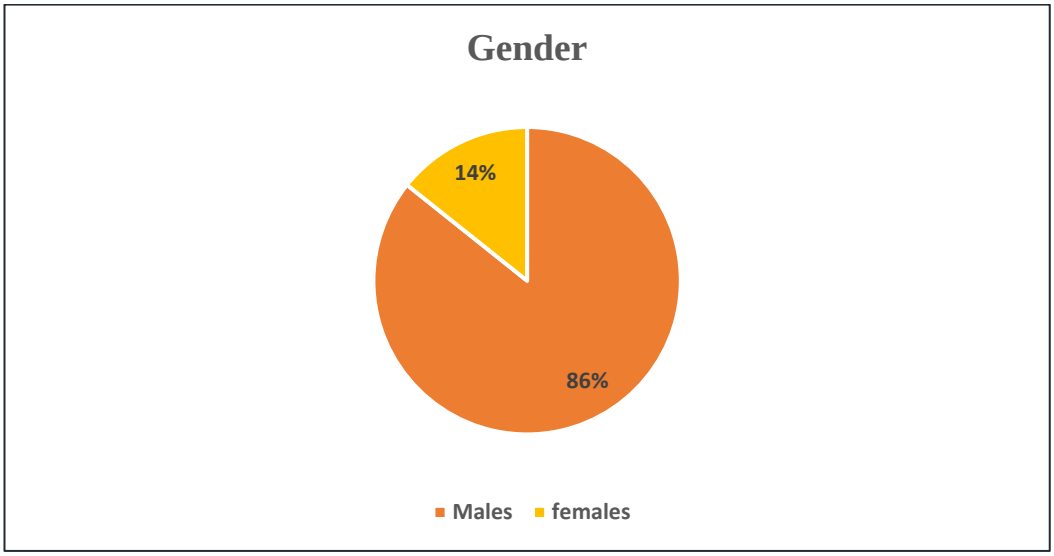

Figure 4.1: Gender Distribution

Source*: Research findings, March 2022*

The results show that more females participated in the study compared to the males. Nonetheless, this number is considered gender representative and unbiased for drawing conclusions as gender representative does not play a major role in the adoption of e-commerce.

4.3.2: Age of the Respondents

This section sought to determine the age distribution of the respondents. This was used as a measure of their maturity and capabilities. The findings are shown and discussed below.

Age	Frequency	Percentage
Less than 18 years	0	0%
18-35 years	36	82%
36-49 years	6	14%
50 years and above	2	5%
Total	44	100%

Table 4.1: Age Respondents

Source*: Research findings, March 2022*

Table 4.1 shows that the age factor is essential in research as it is used to understand respondent's traits especially in terms of behaviour and attitude. Age is also considered as one of the factors influencing the adoption of e-commerce; and therefore, response on respondents age is essential in establishing the relationship between age and e-commerce adoption.

The study found that majority of the respondents were between the ages of 18-35 at 82%, 14% of respondents were between the age of 36-45, 5% were 50 years and above. From these findings, it was clear that the respondents were between the 18-50 years age.

4.3.3: Level of Education

This section sought to establish the level of education for the respondents with aim of inaugurating whether respondents across all the educational level participated in the study. In addition, education is considered an outstanding indicator of literacy levels of individuals which might influence their use of technology. The study asked the respondents to indicate their highest level of education. The results are presented in Figure 4.2 below.

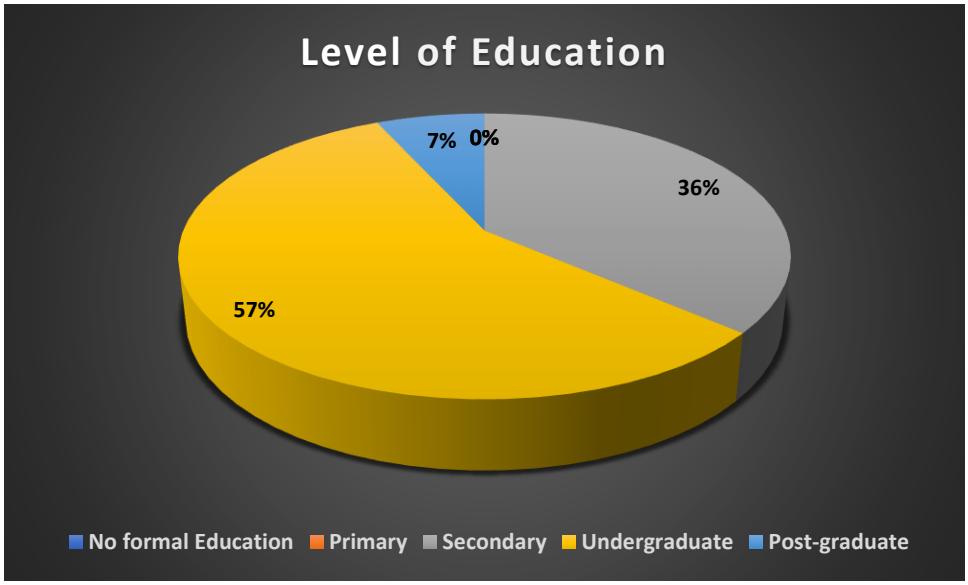

Figure 4.2: Level of Education

Source*: Research findings, March 2022*

Table 4.2 above depicts that the target population contained individuals with different educational qualifications. The bulk of the respondents were literate and hence could

respond to the questions of the study. The study found that 57% of the respondents had undergraduate degrees, 36% had attained high school education, and 7% had attained post-graduate education. These results indicate that the bulk of the respondents had at least middle level education and consequently we are able to effectively contribute to the information sought by this study. These findings also imply that the respondents were educated and knowledgeable in the use of technology. Level of education also determine an individual's insight on the simplicity of the use of technology as well as their attitude toward its use.

4.3.3: Operational Period

This section sought to determine the number of years the respondents were employed at the particular retailers. This was used as a measure of their experience. The findings obtained are shown and interpreted below.

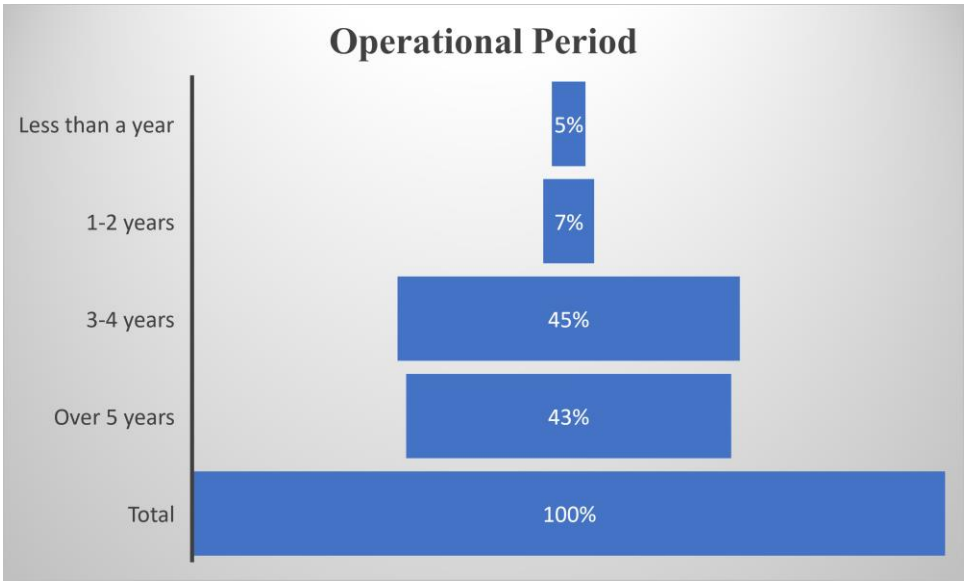

Figure 4.3: Operation Period

Source*: Research findings, March 2022*

The analysis in Figure 4.3 shows that majority of the respondents were in operation for 3-4 years (43%) 45% were in operation for more than 5 years, 7% were in operation for 1-2 years and 5% were in operation for less than a year. These results show that despite the absence of e-commerce in Namibia retailers were still able to remain in operation. With the extreme measures taken to save lives during the COVID-19 pandemic these measures had a profound effect on the livelihoods of both businesses and their employees, as many had to implement equally drastic measures to protect their enterprises.

4.3.3: Type of E-commerce

This sought to determine the types of e-commerce that is adopted by the retailers. This allowed the researcher to determine the e-commerce models adopted for use in the Namibian retail industry.

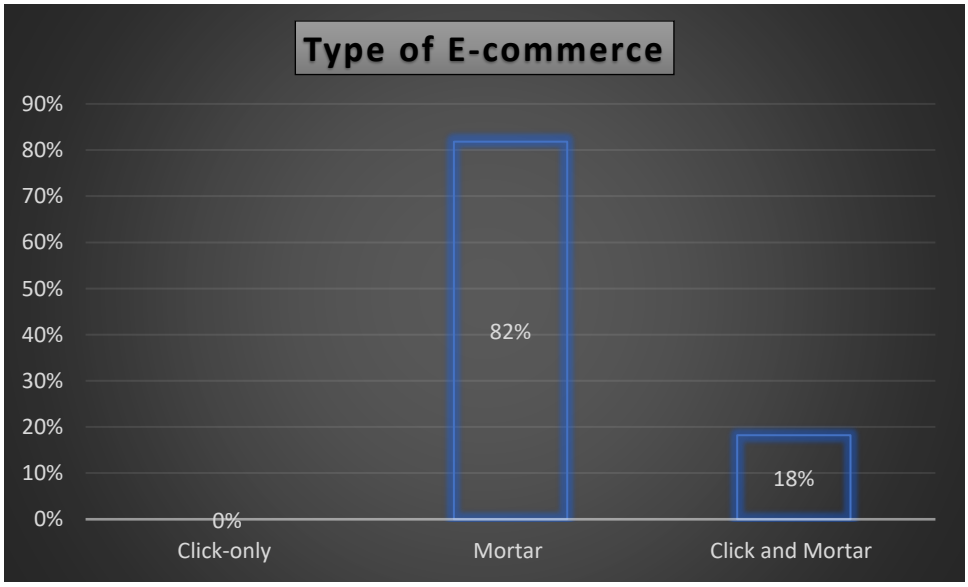

Figure 4.4: The types of E-commerce

Source*: Research findings, March 2022*

The analysis in Figure 4.4 reveals that majority of the retail shops uses the mortar model to conduct business (82%) whilst 18% of the retail adopts both the click and mortar model. This implies that there is room for Namibians within the retail industry to adopt the click model or at least adopt both the click and mortar models and be able to sell online and also have a physical premise. This will give an opportunity for retailers to expand their market to national and international markets with minimum capital investment and this also give retailers the ability to locate more customers, best suppliers, and suitable business partners across the globe. Adopting the click model also offer a huge advantage to both shoppers and stores that aren't located in major urban areas.

This is constituent with Khurana (2019) study which found that when a brick-and-mortar store grows, it needs to consider how it will serve more customers in the same small space. More employees are needed to expedite check-outs, more of the floor gets dedicated to forming lines, shoppers feel more crowded as customer base and inventory grows. Of course, logistics always get tougher as a business grows, no matter how the business operates. With the right choice of a third-party logistics provider, however, e-commerce companies can manage this growth without worrying about the physical store aspects.

4.3.4: Retail Ownership

This section sought to establish the retail ownership with aim of inaugurating whether if Namibian retailers are locally or foreign owned. In addition, retail ownership help indicate if there are any economic and social imbalances between the locals and

foreign participation. We asked the respondents to classify their organisational ownership. The results are presented in Table 4.2 below.

	Frequency	Percentage
Locally Owned	6	13%
Foreign Owned	27	59%
Combination	13	28%
Total	46	100%

Table 4.2: Retail Ownership

Source*: Research findings, March 2022*

The study found that the majority of the respondents were foreign owned at 59%, 28% of respondents indicated that their retailers were owned by both foreign and local investors, 13% were fully owned by locals. The results depict that foreign-owned retailers dominate the market thus showing a high concern when it comes to the outflow of retail capital which can lead to political or economic imbalance.

4.4 BENEFITS OF E-COMMERCE

The purpose of this study was to establish to what extent retailers have experienced the benefits associated with online trading. The study therefore sought to establish whether retailer have adopted e-commerce to what extended they have benefited from e-commerce. By selecting to what extend the retail benefits from each character help the study further demonstrate the need for a wider adoption of in Namibia. The responses on the benefits of e-commerce were obtained as shown in table 4.3 below.

Process Characteristic Variables	Responses in Percentage of Frequency					
Statements	**Not At All**	**To a Small Extent**	**To a Moderate Extent**	**To a Great Extent**	**To a very Great Extent**	**Total**
Cost reduction for the business	9.09	22.73	38.64	20.45	9.09	100
Access to regional and/or global markets	9.09	25.00	29.55	13.63	22.73	100
Ability to reach more potential customers	20.45	22.73	15.91	22.73	18.18	100
Higher sales & profitability	25.00	34.09	22.73	11.36	6.82	100
Offers convenience to customers	25.00	38.64	6.82	11.36	18.18	100
Reduced cost of marketing and advertising	20.45	31.82	31.82	9.09	6.82	100

Table 4.3: Benefits of E-Commerce

Source*: Research findings (2022)*

From the study, the study proves that 70% (9% have not at all, 23% have a small extent and 39% have a moderate extend) of the respondents benefit very little when it comes to cost reduction. 20% of the respondents experience a great extend and the minority of the respondents (9%) gets their cost reduced due to e-commerce. When it comes to accessing regional and global market majority of the respondents (64%) have indicated that due to lack of e-commerce they have been average struggle of tapping into regional and global markets. However, 41% of the respondents indicated that due to e-commerce they have been able to reach out to more potential customers for their businesses.

High sales and profitability are usually the main goal and objective for any business. The success of any business depends on its ability to continually earn profits. Earning a profit is important to a business because profitability impacts whether a company can secure financing from a bank, attract investors to fund its operations and grow its business. Companies cannot remain in business without turning a profit. However, the

study implies that 82% of the respondents indicated that they have not been able to really taste this benefit from an online shopping perspective.

When a company increases productivity, it is able to produce more with the same amount work and equipment, which can lead to several important benefits. A business needs to make a profit to keep its doors open in the long run. Increasing productivity lets a firm make more products without increasing costs. Thus, concluding that the adoption of e-commerce within our retail industry could lead to the retailers reaping from this benefit.

The offer of convenience to customers was regarded as an important benefit of e-commerce. 30% of the respondents agreed with this statement. However, 71% of the respondents implied that due to the lack of e-commerce most customers don't receive the benefit or convenience of e-commerce. On the other hand, although minority of the respondents perceives e-commerce as a tool for reducing cost of marketing and advertising, only 16% agreed to this while the majority of 85% disagreed on the same.

4.5. FACTORS AFFECTING E-COMMERCE ADOPTION

The purpose of the study was to establish the factors affecting the adoption of e-commerce. The study therefore seeks to establish whether the respondents or retailers face any challenges when attempting to adopt e-commerce. In this regard, we asked the respondents to rate which challenges they perceived to have influenced the adoption of e-commerce. They rated the challenges they faced by indicating the extent to which they feel these challenges impacts them most. The results are shown below.

Questions	Total	not at all	To a small extent	To a moderate extent	To a great extent	To a very great extent	No Response %	Total %
Customer Reluctancy	**44**	11%	18%	34%	20%	16%	0%	**100%**
Cost of Running and Maintaing Online Business	**44**	5%	23%	57%	16%	0%	0%	**100%**
Interner Connections	**44**	18%	39%	23%	14%	7%	0%	**100%**
Software Capabilities	**44**	5%	45%	30%	20%	0%	0%	**100%**
Security Breaches And Fraud	**44**	2%	11%	48%	7%	32%	0%	**100%**
Political And Government Barriers	**44**	16%	0%	5%	43%	36%	0%	**100%**
Average Total		9.47%	22.73%	32.58%	20.08%	15.15%	0.00%	**100%**

Table 4.4: Factors Affecting E-Commerce Adoption

Source*: Research findings (2022)*

As shown in Table 4.4, the research established that 70% of the respondents agreed that potential customers are reluctant to shopping online as they wish to touch or interact with the product before making a purchase. Cost of running and maintaining an online business has impacted the adoption of e-commerce to a great extent with 73% of the respondent agreeing to this. However, majority of respondents (57%) perceived that internet connections failure do not play a major role when it comes to the challenges faced when adopting e-commerce, with 23% of the respondents experiencing that there is a moderate extent and the remaining 20% feels that internet connection failure impacts the adoption of e-commerce to a greater extent.

Technology is the backbone of e-commerce. Not only does it help connect sellers and customer on mobile and web platforms, but also enables the effective management of customer orders, deliveries, returns and payments of purchased goods. In fact, technology plays an important role throughout the e-commerce value chain, in areas such as recruitment, marketing, and advertising, among many others (Netscribes, 2018). On the other hand, 75% of the respondents stipulated that there is a small to moderated extent to which software compatibility with existing infrastructures has on

adopting e-commerce. The findings indicate that there is a moderate to high extend that security breaches and frauds are one of the challenges 86% of the respondent's face, whilst the 14% of the respondents face this challenge at a very low moderate.

The role of government in e-commerce is partially dependent on the role that each government perceives it has in commerce itself. Governments adopt differing degrees of intervention within the commercial world, and this directly affects their participation in this world. Political and governmental barriers are considered as one of the challenges faced when adopting e-commerce. The study found that majority of the respondents found government barrier more challenging at 80%, 20% of respondents indicated that political and government barrier has a very small impact on e-commerce.

4.6. DIGITAL MARKETING

This section sought to establish how effective digital marketing has been in the retail industry. This was used as a measure the accessibility to internet within the retail industry. Research by Membrillo (2021) shows that between the year 2018 and 2020, internet usage by adults has increased by at least 5%. Now, more than ever, businesses are tapping into the opportunities the digital world offers. In other words, online marketing plays a very big role in shopping decisions people make. The findings obtained are shown and interpreted below.

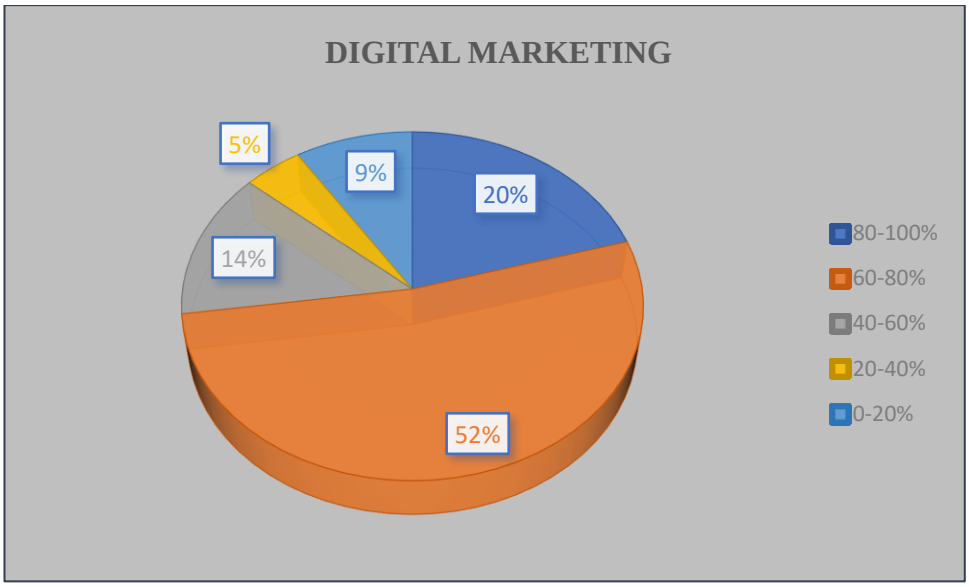

Figure 4.5: Effective digital marketing

Source*: Research findings (2022)*

Figure 4.5 indicates that 52% of the respondents benefited about 60-80% on digital marketing, 20% of the respondents had a high benefit of 80-100%, and 28% of the respondents benefits up to 59% on digital marketing. Regardless of the type of digital marketing a business implements, the overall objective of marketing is to connect with the target audience at the right place and right time, and what better place to connect with your audience than the internet. The study found that bulk of the respondents (72%) have access to internet which shows a high potential for the adoption of e-commerce within Namibia's retail industry.

4.7. CONSUMER CHARACTERISTICS AND E-COMMERCE ADOPTION

4.7.1 Gender of the Respondents

Gender is regarded as a dominant variable when examining technology. Studies by Hawapi *et al.,* (2017) and Sayan *et al.,* (2009) found that gender had a substantial impact on technology adoption. The study sought to establish the influence of gender on e-commerce adoption. The results are presented in Table 4.5

Gender: **E-commerce Adoption**

	YES		**NO**		**TOTAL**	
	Count	**Percentage**	**Count**	**Percentage**	**Count**	**Percentage**
Female	34.00	68.00	16.00	32.00	50.00	100.00
Male	20.00	43.48	26.00	56.52	46.00	100.00
Total	**54.00**	**56.25**	**42.00**	**43.75**	**96.00**	**100.00**

Table 4.5: Relationship between Gender and E-commerce Adoption

Source*: Research findings (2022)*

The findings table 4.5 stipulated that majority of the e-commerce adopters were female respondents at 68% while only 43% of the male respondents had adopted e-commerce. In this regard, the study found that 32% of the female respondents had not adopted e-commerce while a larger 57% of the male counterpart had also not adopted e-commerce. The study therefore established that there exists a gap between the percentage of female respondents that have adopted e-commerce to that of the male respondents. The findings of this study contradict the findings of Akman and Rehan (2016) which argue that gender differences in e-commerce adoption do not exist

especially where individuals are literate in ICT. This study proves that the respondents both male and female were literate and had some background in ICT, nonetheless, their perception and adoption of e-commerce differed.

The study found that the female respondents had a positive response towards e-commerce and considered it as their immediate alternative mode of shopping. On the other hand, the male respondents, were the least adopters of e-commerce. Although, majority of these male respondents were aware of e-commerce activities, they were uneasy in adopting it. Unlike their female counterparts, male respondents did not trust online activities. Thus, this study established that both male and female respondents had different perceptions about e-commerce which influenced their adoption decisions. The female respondents were impressed by the convenience caused offered by online stores while male consumers lacked trust in online transactions. Therefore, the study found that the e-commerce adoption gap that exist between male and female respondents was due to the varying perceptions and attitudes toward e-commerce.

4.7.2 Age of the Respondents

To stimulate the understanding of the influence of consumer's characteristics on e-commerce adoption; the study particularly sought to establish the influence of age on e-commerce adoption. The study therefore sought to analyse the age of the respondents in relation to e-commerce adoption. The findings are as shown in Table 4.6

Age: **E-commerce Adoption**

	YES		**NO**		**TOTAL**	
	Count	**Percentage**	**Count**	**Percentage**	**Count**	**Percentage**
18-25 years	9.00	32.14	19.00	67.86	28.00	100.00

26-30 years	14.00	45.16	17.00	54.84	31.00	100.00
31-35 years	9.00	50.00	9.00	50.00	18.00	100.00
36-40 years	0.00	0.00	3.00	100.00	3.00	100.00
41-45 years	3.00	42.86	4.00	57.14	7.00	100.00
46-50 years	1.00	25.00	3.00	75.00	4.00	100.00
Over 51 years	2.00	40.00	3.00	60.00	5.00	100.00
Total	**38.00**	**39.58**	**58.00**	**60.42**	**96.00**	**100.00**

Table 4.6: Relationship between Age and E-commerce Adoption

Source*: Research findings (2022)*

The analysis of the data from Table 4.6 indicates that the majority of the e-commerce adopters were middle aged respondents between the ages of 31-35 years at 50%. They were followed by respondents between the ages of 26-30 years at 45% and 40-45 years at 43%. A further 40% above 51 years respondents had adopted e-commerce while 32% and 25% of the respondents between the ages of 18-25 and 45-50 years respectively had also adopted e-commerce.

These findings stipulated those middle-aged individuals between the ages of 31-35 years and 26-30 years make up the bulk of the e-commerce adopters. In this regard, the study also found that majority of the respondents in this age brackets were employed hence had a stable income. This implies that they possessed some purchasing power that allowed them to make regular online purchases.

On the other hand, respondents of 18-25 years were the least adopters of e-commerce at 32%. Respondents in this age category indicated a positive attitude towards e-commerce adoption and showed desires to purchase from online stores. However, most

of the respondents in this age category mentioned that they did not have a stable source of income.

Respondents between the age of 36-40 years and 46-50 years were resistant to adopting e-commerce. The study thus showed that they had no interest in making online purchases; rather they mostly considered visiting local stores. In this regard, the study further established that individuals in this age group are resistant to change, thus, their hesitant to purchasing from online stores.

4.7.3 Self-efficacy of the Respondents

According to this study, self-efficacy refers to individual's knowledge in ICT, computer experience and internet skills. The study sought to establish the relationship between an individual's internet skills (by looking at how long an individual has used internet services) and e-commerce adoption decision making. Results are as presented in Table 4.7

Self-efficacy: E-commerce Adoption

	YES		**NO**		**TOTAL**	
	Count	**Percentage**	**Count**	**Percentage**	**Count**	**Percentage**
<6 months	0.00	0.00	1.00	100.00	1.00	100.00
1-2 years	3.00	42.86	4.00	57.14	7.00	100.00
2-3 years	3.00	42.86	4.00	57.14	7.00	100.00

3-4 years	6.00	23.08	20.00	76.92	26.00	100.00
> 5 years	26.00	47.27	29.00	52.73	55.00	100.00
Total	**38.00**	**39.58**	**58.00**	**60.42**	**96.00**	**100.00**

Table 4.7: Relationship between Self-efficacy and E-commerce Adoption

Source*: Research findings (2022)*

The result presented in Table 4.7 illustrate the influence of respondent's internet experience and knowledge on online purchasing decision. The findings indicate that 47% of the respondents with above 5 years of internet experience were the majority e-commerce adopters. This is followed by respondents with 2-3 years (43%) and 1-2 years (43%) of internet experience. On the other hand, only 23% of respondents with 3-4 years of internet experience had purchased from online stores. Finally, respondents with less than 6 months of internet experience had not purchased from online stores.

The study denotes that internet experience generates a sense of confidence in online activities for some respondents, this further motivates them to purchase from online stores. However, further findings indicates that even respondents with lesser internet experience had the capacity and willingness to purchase from online stores. This is portrayed by the 43% of the respondents with 1-2 years who had made online purchases. On the contrary, only 23% of the respondents with 3-4 years of internet experience had purchased online. We therefore established that internet experience was not determent of e-commerce adoption. Both respondents with higher and lesser internet experience had exhibited positive perceptions of e-commerce. Further, the study found that having many years of internet experience did not translate to e-commerce adoption, while lesser experience did not deter adoption. Consequently, the

findings of the of this study indicate that internet skills and experience does not significantly influence a consumer's decision to adopt e-commerce.

4.8. FACTORS THAT ENHANCE E-COMMERCE ADOPTION

4.8.1 Medium Characteristics

E-commerce characteristics/features are perceived to influence an individual's attitude towards e-commerce adoption (Esmaeilpour, 2016). Characteristics associated with e-commerce websites positively or negatively impact consumer's decision to purchase from online stores. This study sought to establish consumer's website preferences that positively influence their adoption decisions. Thus, respondents were asked to rate website characteristics that influence them to adopt e-commerce. Table 4.8 shows the results.

Medium Variables	**Responses in Percentage of Frequency (%)**				
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I prefer a website that is easy for me to use	6%	3%	7%	28%	56%
I look for a website with available and clear information on their products	0%	2%	4%	24%	70%
I look for a site that has high quality e-services	0%	6%	5%	15%	74%
I am attracted to websites that have attractive designs and images	24%	29%	11%	9%	24%

I look for website that likely to make my shopping more effectively	0%	0%	3%	67%	67%

Table 4.8: Medium Characteristics

Source*: Research findings (2022)*

The study found that 84% (56% strongly agreed and 28% agreed) of the respondents preferred a website that is easy to use, this motivates them to shop from online stores. The respondents confirmed that a website's accessibility and individual's ability to navigate through online stores motivated them to purchase or repurchase from the particular store. In this regard, the study found that 6% of the respondents who had not purchased from online stores, perceived them as difficult to use especially while making orders.

This indicates that, having websites that are easy to use is one of the preconditions considered by consumers when making online purchases decisions. Subsequently, 94% of the respondents agreed that adequate and clear information regarding the website services and products was considered an important feature. This shows that consumers need to be appropriately informed on the products available for them to make informed purchased decisions. Additionally, some respondents raised that misleading information regarding the features of the products or use of technical terms rendered them to mistrust the information and products on offer. Thus, the availability of useful and sincere information regarding products is necessary in order to create trust with consumers and assist them to make an informed purchase decision.

The study also found that 89% of the respondents indicated that they made their online purchase decisions based on quality of e-services rendered by online stores. The quality of services is considered as an important aspect of e-commerce, thus when that

quality is extended to online stores to create user-friendly websites that are easy to navigate through, they create an efficient consumer care mechanism. Hence, websites with quality e-services were given preferences and attracted more consumers.

In addition, majority of the respondents (97%) indicated that their preferences for online shopping was attributed to the fact that it made their work easier. According to some respondents, online shopping is easier as it saves time that one would have spent in traditional stores. The efficiency associated with e-commerce is dependent on the ease use of a website, the easier it is to use a website, the greater its efficiency.

On the other hand, although consumers preferred a website with high quality features, only 33% of the respondents agreed to have a website with graphic and attractive features while majority of the respondents 64% disagree on the same. Respondents indicated that some websites have too much attractive features that overshadows the information that respondents might be looking for. Therefore, respondents made preference to websites that are user-friendly with simple designs and languages. These findings therefore concur with Joseph (2015) observation on the need for e-commerce to also allow multiple individual customers to combine their orders together into a single order presented to wholesalers or manufacturers and obtain a more competitive price.

4.8.2 Product Characteristics

Elements of products and services offered on an online store informs the consumer on their adoption decisions. With the accessible option of purchasing from the traditional stores, online stores are expected to offer more than what the traditional stores can offer in order to attract more consumers. This section of the study sought to determine the product-advantage that online stores have in order to enhance e-commerce adoption. Findings are shown and discussed below.

Product Characteristics	**Responses in Percentage of Frequency (%)**				
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I find online products cheaper	4%	30%	38%	15%	13%
Online stores offer different variety of products that I can choose from	0%	0%	9%	25%	66%
Information on the available product help me to make decisions on the product to buy	0%	0%	5%	20%	75%

Table 4.9: Product Characteristics

Source*: Research findings (2022)*

The product characteristics depicted in Table 4.9 shows that 28% of the respondents purchased from online stores because they perceived online products cheaper compared to those in traditional stores. However, 34% of the respondents did not

consider online stores to have any price variance with the traditional stores, while 38% of the respondents were neutral. The study further established that respondent's perceptions on online product's prices differed according to the individual's economic potential.

Additionally, the study established that prices for products offered on online stores were flexible. For this study, prices offered on online stores affected individuals differently and thus influenced their adoption decisions differently. These findings are consistent with study findings by Khan (2016) that online stores have prices that serves both high and low-income populations, therefore, price was dependent on an individual's purchasing power. This gives consumers a chance to efficiently evaluate prices between various stores in order to make their purchase decision. Nonetheless, although price is a relative factor that influences adoption, price information provided by websites is regarded vital in decision making.

The analysis proved that 91% of the respondent's online preference for buying online was attributed by the availability of variety of products offered at the online stores. Respondents indicated that online stores, unlike traditional stores they supply variety of products that catered for their demands. These findings agree with the finding by González (2015) which found that online stores offered consumers the opportunity to ship products (from global stores) that were not readily available in the traditional stores. Additionally, online stores offered the convenience of viewing variety of products without physically visiting stores.

The availability of information is considered as a key determinant of e-commerce adoption. A total of 95% of the respondents indicated that the availability of information on the availability of products help them to make decisions on the product

they buy. This means that respondents preferred that product information was provided in a clear and concise manner. The study therefore established that availability of product information and the wide variety of products offered on online stores enhanced consumer's decision to adopt e-commerce.

4.8.3 Process Characteristics

The method through which an e-commerce site delivers its services to customers determines the site's preference for adoption. Consumers prefer websites that can be relied upon to deliver quality services. This section of the study sought to establish e-commerce process characteristics that influence consumer's decision to purchase online. Findings are presented in the table below:

Process Characteristic Variable	**Responses in Percentage of Frequency (%)**				
Statements	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I prefer to shop from a web store that is quick to respond to my concern	0%	0%	3.70%	36.30%	60.30%
I prefer to shop from a web store that is able to deliver my product faster	0%	0%	0%	25.50%	74.50%
I prefer a website that brands the products it has in store	0%	7.70%	10.70%	25.20%	56.40%

I prefer to shop from a website that has an easy transaction process	0%	0%	2.70%	23.88%	73.44%
I like it when website customer contacts me to confirm order	0%	5.60%	17.80%	15.30%	61.30%

Table 4.10: Process Characteristics

Source*: Research findings (2022)*

Table 4.10 shows that the quality of services provided by an online store is amplified by the quality of the customer care services offered, this study finds that 97% of the respondents appropriated that they considered efficient customer care services offered by a website when making online purchasing decision. Respondents indicated that they preferred sites of which customer care officials responded to their queries and assured them on the product choice they were making. Additionally, to the efficient customer care service, most respondents (87%) indicated that customized customer care services made them feel safe to purchase from online services. In Namibia, online service providers can make direct contact with the customers through phone calls for example to confirm customer's orders or respond to their inquiries. This can enhance buyer-seller relationship and also develop trust that positively influence the adoption decision.

An easy transaction process characterised by easy mode of payment and efficient delivery service were considered highly important (74%) when making online purchases. Further, in order to make the transaction process much easier for the consumer, the study found that responded considered convenient and efficient delivery services as necessary in the transaction process.

E-commerce render convenience as a result of delivery services offered. E-commerce in Namibia offers two major models of delivery services that is, the door-step delivery services or the pickup from postal or courier offices. In this study, 100% of the respondents considered efficient delivery services as an important component of e-commerce that influence their decision to purchase from online stores. Although there can be occasional delays in the delivery services, online buying can be greatly considered because of the door-step delivery service offered. Nevertheless, preference was given to websites that have efficient delivery services.

The findings in this study were that branding is aimed at enhancing consumers trust on the products offered in online stores, this concurred with a study by Babčanovác, Chovanováa, and Korshunov, (2015). As portrayed by 82% of the respondents, selling products with brand names magnify consumer's purchase decision. Branding products, not only empower consumers to efficiently select the products they would like to purchase, but it also guarantees consumers on the authenticity of the product in store. Thus, websites with quality and branded products are trusted and consumers easily consider their product for purchase.

4.9. FACTORS THAT HINDER E-COMMERCE ADOPTION

4.9.1 Infrastructure Factors

The development of online commerce is driven by rapid technological innovations. The availability or unavailability of infrastructure influences consumer's e-commerce adoption decision. In this study, respondents were asked to rate the infrastructural factors that hinder them from adopting e-commerce. The results are presented and discussed below in Table 4.11.

Infrastructural Factors Variable	Responses in Percentage of Frequency (%)				
Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
They took too long to deliver their products	9.6%	14.3%	15.1%	14.6%	46.4%
My internet connection is poor	42.1%	7.1%	29.2%	11.2%	10.4%
I am afraid that my account might get hacked or I get defrauded	4.6%	16.0%	25.2%	43.8%	10.4%
I do not have means to make the payment as they required	10.0%	14.0%	19.0%	36.0%	21.0%

Table 4.11: Infrastructural Factors

Source*: Research findings (2022)*

Consumer's need for safety and protection when transacting online is a necessity. The study found that majority of the responded are afraid that their accounts might get hacked or get defrauded, 61% of these respondents revealed their suspicion on the security of online transactions. Fraud transactions mostly occur when illegal websites were involved.

The fear of being defrauded in most respondents was due to the fact that there are many 'fake' online stores that lure unsuspecting consumers to purchase from their store, eventually, they defraud the consumer after initiating a transaction, they fail to deliver the ordered goods, and take off with the initial payment. Such occurrence and the

concern for the privacy of and security of their information was a major concern amongst the respondents. Thus, this study established that fraud and security concerns led to a mistrust of online services hence hindering the adoption of e-commerce.

From the findings, 61% of the responded strongly agreed that one of the factors that hinders the adoption of e-commerce was due to the fact that online stores take too long to deliver their products. Additionally, purchasing from online stores can be costlier compared to traditional stores due to high delivery charges. This prompts respondents to purchase more from local stores where they would incur less or no cost. Despite the fact that online stores cannot operate without including delivery charges, online businesses should consider lowering their delivery charges to be bargain-basement.

The study further revealed that 49% (42% Strongly disagree and 7% disagree) of the respondents disagree that they experience poor internet connections and that it influenced their adoption decisions. 29% of the respondents were neutral while 22% agreed. Therefore, the study found that poor internet connections did not have a huge impact on the adoption of e-commerce.

4.9.2 Cultural Factors

This section of the study sought to establish cultural factors that hinder the adoption of e-commerce in Namibia. Respondents were therefore asked to rate cultural factors that influenced their decision to adopt e-commerce. The results were discussed and presented in figure 4.6 and 4.7 below.

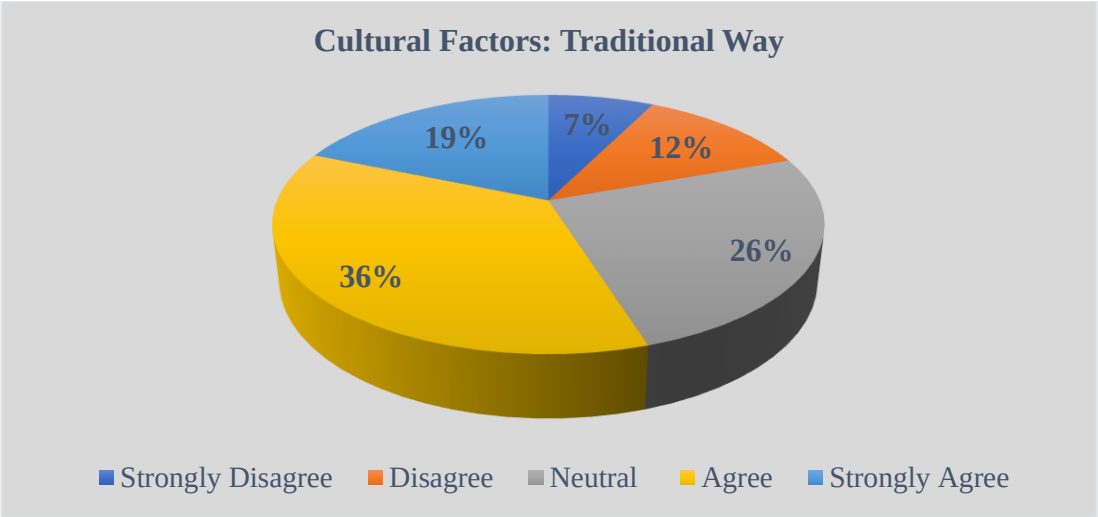

Figure 4.6: Cultural Factors: Traditional Way

Source*: Research findings (2022)*

Figure 4.6 shows that respondents still preferred the traditional way of visiting local stores. 62% of the respondents indicated that they preferred visiting local stores instead of online stores. In this regard, more awareness on online stores is needed in Namibia in order to keep a constant reminder on the availability of online stores or services. This in agreement with a study by Rankovic (2016) which found that the lack of awareness of the relative advantages of e-commerce is considered hinderance to the adoption of e-commerce.

In addition, 46.58% of the respondents were concerned that shopping from online store limited their interactions with vendors. This is shown in figure 4.7 below:

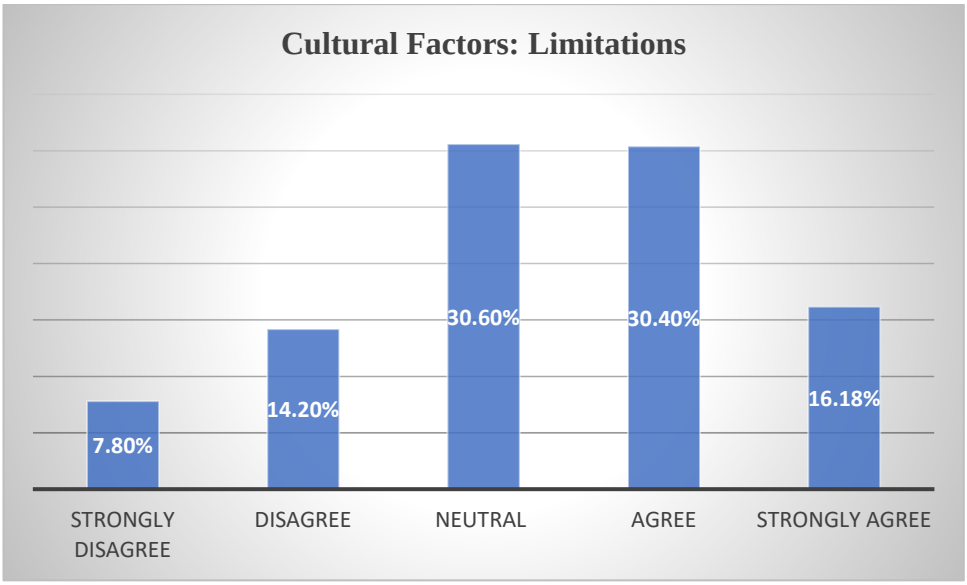

Figure 4.7: Cultural Factors: Limitations

Source*: Research findings (2022)*

Figure 4.7 found that respondents preferred to keep their interactions with the vendors. Further, the results show the lack of trust respondents have with vendors that with whom they did not have physical contact with. This implies that, physical interactions did not only build relations but also develop trust with the vendors. Therefore, this study established that, although online services come with its own benefits, direct communication should be enhanced between sellers and buyers in order to create more relations and build trust between vendors and consumers of e-commerce.

4.9.2 Economic Factors

This section of the study sought to establish the influence of economic factors on the adoption of e-commerce. Economic status of an individual regulates their purchasing power and thus influence their decision making.

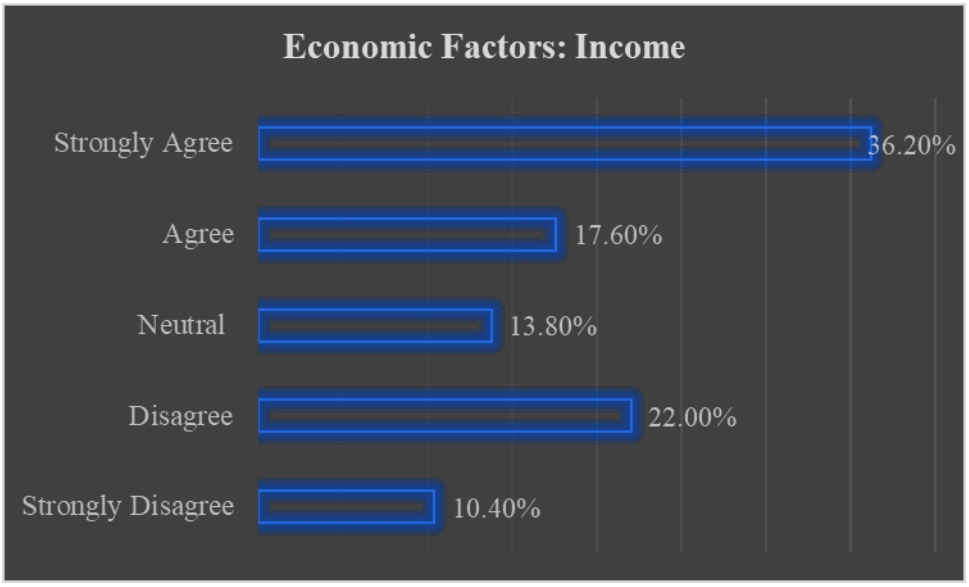

Figure 4.8: Economic Factors: Income

Source*: Research findings (2022)*

As shown in figure 4.8 above, a total of 54% of the respondents indicated that low income hindered them from making online purchases while 32% disagree with the statement. Additionally, the study found that despite respondent's willingness to purchase from online stores, they could not afford to make regular commitment to online shopping because of low income. On the other hand, 32% of the respondents disagree that income hindered them from making online purchases. This could be due to the fact that these respondents do not distinguish the difference between the product prices offered online with those offered in traditional stores. This study found that online stores, offered variety of products with flexible prices that catered for different income brackets. The study further established that low income has a minor influence on the adoption of e-commerce and may not be a major hinderance to e-commerce adoption amongst Namibian consumers as highlighted by Lawrence and Tar (2010) in their study on e-commerce barriers in developing countries.

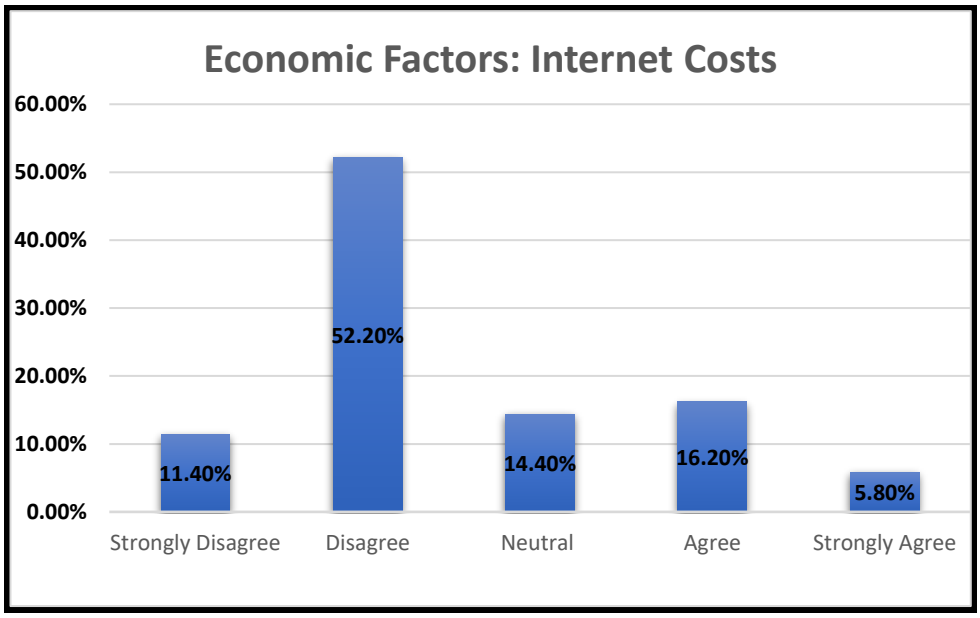

Figure 4.9: Economic Factors: Internet Costs

Source*: Research findings (2022)*

Table 4.9 above shows that the role of broadband services as an enabler of economic and social development is widely recognized in Namibia. In addition, this has created a competitive environment for internet service providers when it comes to providing lower rates to their subscribers. Thus, this study found that 64% of the respondents disagree that high internet charges discourage them from making online purchases. Only 22% of the respondents indicated that high internet charges hinder them from purchasing from online stores. Contrary to findings by Karthikeyan and Selverajoo (2016) that found the idea of internet cost has an influence on the adoption of e-commerce, this concept is not consistent with finding of this study.

4.9.2 Social Factors

Social factors are a consumer or society's behaviour and attitude. These are usually the most difficult and time-consuming barriers to overcome because the involve attitude and behaviour change. This study sought to establish the impact of social factors on e-commerce adoptions. Responses on social factors are presented in the Table below:

Social Factors Variable	Responses in Percentage of Frequency (%)				
Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I don't think they are any advantange of doing my shopping online	8%	10%	20%	29%	32%
I prefer to buy products that I can see and feel	12%	13%	17%	33%	25%
I don't trust their products	2%	13%	15%	30%	40%
I feel my online activities are not well protected and secure	12%	14%	15%	21%	38%

Table 4.12: Social Factors

Source*: Research findings (2022)*

To attract many consumers, there is a need for retail entrepreneurs to inform their consumers on the benefits they stand to experience with online buying. Table 4.12 above shows that 61% of the respondents don't think that they are any advantages in doing online shopping, whilst 18% of the respondents disagree with the statement. Additionally, the result also revealed that about 58% of the responded preferred buying that they can see or touch, while 18% of the respondents disagreed. These shows that majority of the respondents preferred products that they can see and touch. Products such as clothes may require them to try on first in order to confirm their, fit, texture and colour. Therefore, these respondents who preferred tangible goods also preferred visiting traditional stores instead of online stores.

The study further established that trust in online products was a major barrier to the adoption of e-commerce. 70% of the respondents indicated that they could not trust products sold by online stores, lack of tangible good led to lack of trust in product sold by online stores. This study found that respondents perceived online products to be deceptive and of lesser quality than expected. Consequently, such proceedings prevented consumers from purchasing or repurchasing from online stores and instead preferred purchasing from local stores.

CHAPTER 5

CONCLUSIONS AND RECOMMEDATIONS

5.1 INTRODUCTION

This chapter presents the summary, conclusions and recommendations of the study. The numerous sections presented in this chapter are based on the research objectives which include: to determine the e-commerce models adopted for use in the Namibian retail industry; to understand the present status and trends in accessibility of e-commerce platforms used by Windhoek-based online retail shops; establish factors that enhance that adoption of e-commerce and identify factors that hinders the adoption of e-commerce.

5.2 SUMMARY OF FINDINGS

The purpose of the study was to establish the accessibility of e-commerce within Windhoek's retail industry. The specific objectives were to determine the e-commerce models adopted for use, to understand the present status and trends in accessibility of e-commerce platforms, establish factors that enhance adoption of e-commerce and identify factors that hinder the adoption of e-commerce. This was achieved through the use of the descriptive design. Data was collected using semi-structured questionnaires. Descriptive statistics such as percentages, cross tabulations, frequencies, and percentages were used to explain characteristics of the data.

The following discussion indicates how each of the objectives were achieved

i. **To determine the e-commerce models adopted for use in the Namibian retail industry**

The findings of the study revealed that shows that majority of the respondents were in operation for 3-4 years (43%) 45% were in operation for more than 5 years, 7% were in operation for 1-2 years and 5% were in operation for less than a year. These results show that despite the absence of e-commerce in Namibia, retailers were still able to remain in operation.

The study shows that 82% of the respondents adopted a mortar model in their organisations, whilst 18% of the retailers adopted the click and mortar models. This not only gives Namibians within the retail industry room to adopt e-commerce, but it also provides them with an opportunity to expand their market into both national and international markets. The major benefits of e-commerce adoption include improved customer service, better inventory control and lower marketing and distribution costs, reduced cycle time, increased market reach and reduced operational costs (Ahmad, Alam, Ismail, & Khatibi, 2019).

ii. To understand the present status and trends in accessibility of e-commerce platforms used by Windhoek-based online retail shops

The research established that that 70.45% of the respondents benefit very little when it comes to cost reduction. 20.24% of the respondents experience a great extend and the minority of the respondents (9.09%) gets their cost reduced due to e-commerce. When it comes to accessing regional and global market majority of the respondents (63.64%) have indicated that due to lack of e-commerce they have been average struggle of tapping into regional and global markets.

Additionally, 40.91% of the respondents indicated that due to e-commerce they have been able to reach out to more potential customers for their businesses. However, 70.45% of the respondents implied that due to the lack of e-commerce most customers

don’t receive the benefit or convenience of e-commerce. On the other hand, although minority of the respondents perceives e-commerce as a tool for reducing cost of marketing and advertising, only 15.91% agreed to this while the majority of 84.09% disagreed on the same.

The above findings show that although e-commerce was accepted as mode of shopping in other part of the world, only a small percentage of it has been adopted in Namibia. The study established that the accessibility of e-commerce in Namibia has a relatively slow uptake regardless of the area having a large number of internet users and solid internet connections.

iii. To establish factors that enhance that adoption of e-commerce

The findings in this study established that consumer characteristics such as gender, age and respondent’s internet experience, perceptions, attitude had an influence on the adoption of e-commerce. Furthermore, findings showed the significance of gender in e-commerce adoption were female respondents at 68% while only 43.48% of the male respondents responded to the adoption of e-commerce.

The study findings further indicate that middle aged respondents between the ages of 26-30 year and 31-35 years (at 45.16% and 50% respectively) were the majority e-commerce adopters. The study also established that 47.27% of the respondents had more than 5 years internet exposure. However, the study established that self-efficacy did not have significant influence on the adoption of e-commerce, more respondents with lesser internet experience had also adopted e-commerce.

The study further sought to establish the factors that had a positive influence on consumer’s adoption decision. The study highlighted the factors that are associated

with e-commerce characteristics and features that enhance e-commerce adoption decision making. This study established that website features of an online store (explored as medium characteristics) are shown to have a serious influence on consumer's adoption decision. Additionally, respondents indicated that features such as the availability of adequate website information and high-quality services offered by online stores enlightened consumers' decisions to purchase online.

Furthermore, respondents preferred websites that were easy to use and had the ability to make their shopping experience effectively. The study further established, that elements of products offered on online stores positively influence consumer's decision to purchase from online stores, this was greatly influenced by the availability of variety of products offered as well as the information provided on those products.

In addition, the study established that the technique in which e-commerce conducts its activities enhanced respondent's adoption decision. Further, the respondents considered the efficient delivery services as a significant component of e-commerce that influence their decision to purchase from online stores. Additionally, respondents favoured online stores that had efficient customer care services as well as an easy transaction process. The study established that features and services connected to e-commerce significantly influenced consumer's decision to purchase online. Therefore, enhanced online services and its usability create a positive attitude towards e-commerce adoption.

iv. To identify factors that hinder the adoption of e-commerce

The study sought to establish the factors that hinders the adoption of e-commerce within Windhoek's retail industry. Amongst them are the infrastructural factors which the study found to have a major impact on e-commerce adoption. In this case, the study

established that majority of the responded are afraid that their accounts might get hacked or get defrauded. This prevented consumers from transacting online. Delivery services are the vital components of e-commerce, however, when slow it was considered as one of the factors that hinders the adoption of e-commerce. Majority of the respondents indicated that they preferred visiting traditional or local stores in comparison to online stores. This cultural orientation has influenced consumer's shopping habits and decision making. These respondents demonstrated resistance to change and preferred visiting local stores because online shopping limited their interactions with vendors.

The study further found that economic status of the respondents influenced their purchasing decision. This study found that low income hindered them from making online purchases. Although, the study found that the price factor was relatively to most individuals, respondents with lower income lacked the purchasing power to make regular purchases. Finally, the study established that amongst the factors that hinder the adoption of e-commerce, social factors had the most significant impact on the adoption. With majority of the respondents indicating that they neither trusted online products nor the transactions. Lastly, respondents indicated that the lack of trust in trust in online products and lack of tangibility of goods were a major barrier to the adoption of e-commerce.

5.3 RECOMMENDATIONS

5.3.1 Retail Owners

E-commerce involves online transactions where buyers and sellers normally complete the transactions without having any physical contact. Trust therefore becomes an essential element because it helps consumers overcome their fear and perceptions of

risks and uncertainties. Retail owners should attempt to build trust with their customers by enhancing privacy and securing consumer's information. Additionally, retail owners should guarantee consumers on the quality of the products they offer by ensuring that they offer consumers warrantees that can be accompanied by flexible and customer friendly policies. Furthermore, retail owners should strive to deliver quality products to consumers in order to reduce product uncertainty and enhance trust in their products.

This study found that 39.58% of the consumers had previous online purchase experience. This stipulates that, while consumers have made attempts to purchase from online stores, only a few of the respondents repurchased from online stores. Therefore, retail owners should create a platform for interactions with their customers in order to identify areas that not only increase customer satisfaction but also boost their sales and increase in retail profit.

This study further disclosed that demographic characteristics of individuals influence e-commerce adoption. In this study, gender and age of consumers influence their decision to adopt e-commerce. Consumers from different age groups had different perceptions and attitudes toward e-commerce. Therefore, this study recommends that retail owners and web developers should take into consideration the needs of all moderating factors such as age, gender, and education when designing their websites. Retailers in Namibia should consider creating more awareness on their existence and services as well as educating customers on e-commerce.

Retail owners should aim to inform consumers on the advantages they stand to experience in making advertisement that are aimed to marketing their services and also provide consumers with e-commerce purchasing guides and procedures. Finally,

retailers should consider charging low delivery service fees which makes their products costlier that those in local stores. High prices hinder consumers from purchasing from online stores and prefer traditional stores where they do not incur extra charges.

5.3.2 The Government

The government plays a major role in encouraging the adoption of e-commerce by ensuring trust and security. This can be done by raising more awareness on cybercrime or avail methods in which consumers can report cases of cybercrime as well as online fraud.

This study recommends that the government formulate a legal framework with laws and regulations drawing on consumer protection, privacy, and cybercrime in order to increase consumer's trust in online transactions. Consumers worry about their security while conducting online transactions, they fear that their information can be hacked. Thus, the government should not only establish cybercrime units but should also ensure that their efficient and fully functional when it comes to dealing with cybercrime cases. Finally, the government should license and legalize online trading in Namibia. The government should provide license and create a trademark that can help consumers to distinguish legit online stores from the fraudulent ones thus preventing consumers from being defrauded.

Finally, the study recommends that private sectors help the government and development agencies within Namibia to understand and address the priority challenges faced when it comes to the adoption e-commerce. This can be done by informing and guiding policymaking on e-commerce issues as well as by developing new solutions to unlock e-commerce markets and cross-border e-commerce.

5.4 LIMITATIONS ENCOUNTERED IN CARRYING OUT THE STUDY

The researcher encountered several limitations in the quest to assess the accessibility of e-commerce in the retail industry. The respondents were reluctant to give information, fearing that the information sought would be used to intimidate them or paint a negative image about their institution. The researcher managed the problem by assuring them that the information they gave would be treated confidentially and it would be used purely for academic purposes.

The researcher also overcame the limitation by making prior arrangements with the respondents as the researcher had to remind the respondents to fill in the questionnaires. The available time to carry out this study also posed a limitation as more time would have been helpful to the study. Despite this, the researcher ensured comprehensive and well-planned data collection, as the findings are discussed effectively and efficiently.

5.5 AREAS FOR FURTHER RESEARCH

Despite the study's objective being accomplished, there are certain areas which require further research. To begin with, future studies should include qualitative research focusing on street interviews to be conducted in order to expedite the in-depth discussions and understanding on the factors that influence their e-commerce adoption decision. Secondly, future research can discuss the strategies that were adopted by retailers in order to overcome the identified barriers. Finally, a comparative study on e-commerce adoption should be carried out in the suburban areas of Windhoek in order to explore the gap between the factors affecting adoption in these two areas.

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APPENDIX A

QUESTIONNAIRE

(To be completed by Retail Employees)

SECTION A: BACKGROUND INFORMATION

Please cross (x) in the most appropriate box

1. **Gender**

Male	
Female	

2. **Kindly indicate your current age bracket**

Less than 18 years	*18-35 years*	*36-49 years*	*50 years and above*

3. **Kindly indicate with your highest level of education attained**

No formal education	Primary	Secondary	Undergraduate	Post-Graduate

4. **Kindly indicate how long you have been operating?**

Less than a year	1 – 2 years	3 – 4 years	Over 5 years

5. **What type of e-commerce firm is your business?**

[ ] Click-only (conduct 'most' of your business online)

[ ] Mortar (Only have a physical premises)

[ ] Click and Mortar (sell online and also have a physical premises)

6. **How would you classify your organisation regarding ownership?**

Locally owned	Foreign owned	Combination of local and foreign	other: Please specify

7. **How effective is the Digital Marketing in your company?**

80-100%	60-80%	40-60%	20-40%	0-20%

SECTION B

8. **To what extent would say you have experienced the following perceived benefits associated with online trading?**

Indicate according to the scale shown below:

1	2	3	4	5
= not at all	= To a small extent	= To a moderate extent	= to a great extent	= To a very great extent

Please cross (x) in the most appropriate box

	OPINION	**1**	**2**	**3**	**4**	**5**
A	Cost reduction for the business					
B	Access to regional and/or global markets					
C	Ability to reach more potential customers					
D	Higher sales & profitability					
E	Offers convenience to customers					
F	Reduced cost of marketing and advertising					

9. **To what extent would you say the following perceived challenges have influenced your online trading activities with potential customers?**

Kindly rank the aspects below (from 5 being lowest and 1 being the highest)

		5	**4**	**3**	**2**	**1**
A	Potential customers reluctant to shop online as they would wish to touch/ interact with the products before making a purchase					
B	Cost of running and maintaining an online business					
C	Internet connection failure					
D	Software compatibility with existing infrastructure					
E	Security breaches and fraud					
F	Political and Governmental Barriers					

SECTION C

10. What is the present status and trends in accessibility of E-Commerce platforms used by Windhoek-based online retail shops?

11. Which E-commerce models can be adopted by Namibian online retail shops to improve the accessibility and patronage?

Thank you very much for your cooperation!

QUESTIONNAIRE II

(To be filled in by customers)

SECTION A: BACKGROUND INFORMATION

Please cross (x) in the most appropriate box

1 Gender

Male	
Female	

2 Kindly indicate your current age bracket

18-25 years	*26-30 years*	*31-35 years*	*36-40 years*	*41-55 years*	*46-50 years*	*51 years and above*

3 Kindly indicate with your highest level of education attained

No formal education	Primary	Secondary	Undergraduate	Post-Graduate

SECTION B: ONLINE ACTIVITIES

4 Do you use Internet?

[ ] YES

[ ] NO

5 What type of e-commerce firm is your business?

Less than a year	1 – 2 years	3 – 4 years	Over 5 years

6 What type of e-commerce firm is your business?

Less than 30 Minutes	1 – 2 hours	3 – 4 hours	More than 5 hours

7 Have you ever bought anything online?

[ ] YES [ ] NO

8 How often do you shop online?

[ ] Never [ ] Rarely [ ] Sometimes [ ] Very Often [ ] Always

SECTION C

For the questions below, please choose number 1-5, by indicating how much you agree or disagree with the statement.

Indicate according to the scale shown below:

1	2	3	4	5
= Strongly Disagree	= Disagree	= Neutral	= Agree	= Strongly Agree

9 What are the advantages of online shopping that encouraged you to consider buying online? Please choose number 1-5, by indicating how much you disagree or agree with the statement.

	OPINION	**1**	**2**	**3**	**4**	**5**
A	With online shopping I'm able to shop anytime of the day or night					
B	Online buying saves money					
C	It allows me to compare the price of a product from different online stores					
D	Online shopping saves me time.					

10 What website features do you consider when selecting a site to purchase from?

		5	**4**	**3**	**2**	**1**
A	I prefer a website that is easy for me to use					
B	I look for a website with available and clear information on their products					
C	I look for a site that has high quality e-services					

D	I am attracted to websites that have attractive designs and images					
E	I look for website that likely to make my shopping more effectively					

11 What motivates you to buy product online?

		5	**4**	**3**	**2**	**1**
A	I find online products cheaper					
B	Online stores offer different variety of products that I can choose from					
C	Information on the available product help me to make decisions on the product to buy					

12 Which website services do you prefer when you are making online purchases?

		5	**4**	**3**	**2**	**1**
A	I prefer to shop from a web store that is quick to respond to my concern					
B	I prefer to shop from a web store that is able to deliver my product faster					
C	I prefer a website that brands the products it has in store					
D	I prefer to shop from a website that has an easy transaction process					
E	I like it when website customer contacts me to confirm order					

13 What prevents or would prevent you from doing online shopping?

		5	4	3	2	1
A	They took too long to deliver their products					
B	My internet connection is poor					
C	I am afraid that my account might get hacked or I get defrauded					
D	I do not have means to make the payment as they required					
E	I don't think they are any advantage of doing my shopping online					
F	I prefer to buy products that I can see and feel					
G	I don't trust their products					
H	I feel my online activities are not well protected and secure					
I	I prefer visiting local stores					
J	My monthly income does not allow me to make regular online shopping					
K	Online shopping incurs a lot of internet charges					
L	I feel online activities are not secure and protected					

14 What is your perception on online shopping?

15 What would you prefer online stores to include or not include in their services to motivate you to shop from their stores?

Thank you very much for your cooperation!

APPENDIX B: RESEARCH PERMISSION LETTER

NBS
NAMIBIA BUSINESS SCHOOL
UNIVERSITY OF NAMIBIA

12 November 2021

TO WHOM IT MAY CONCERN

Re: MBA Management Strategy , Student – Ms. Ruusa Kalambi Student Number 200610601

As part of our Masters Programme, students are expected to submit a research report after completion of their course-work. They need to explore in detail, some concepts and issues pertaining management strategies. To do that effectively, they need to conduct interviews and obtain practical examples.

Ms. Kalambi has chosen your organization to approach for information. It is against this background that I wish to kindly request you to assist Ms. Kalambi with the information she requires. Accept our assurance that the data will be used for academic purposes only. A copy of the completed document will be available at the Namibia Business School for perusal. Her research synopsis indicates that her topic touches on *"An assessment of the accessibility of e-commerce in the retail industry in Windhoek: Namibia"*.

Your kind assistance is highly appreciated.

Yours sincerely

NAMIBIA BUSINESS SCHOOL
NBS
17 NOV 2021
ACADEMIC SERVICES
UNIVERSITY OF NAMIBIA
Inspiring Minds & Shaping the Future

Greenfield Mwakipesile. Dr
Senior Research Co-Ordinator
Namibia Business School
University of Namibia
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Fax: +246 61 413 512
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APPENDIX C: SIMILARITY REPORT

Curiginal

Document Information

Analyzed document	Thesis – 2021 – Ruusa Kalambi – 200610601.docx (D135314452)
Submitted	2022-05-03T10:48:00.0000000
Submitted by	
Submitter email	rskalambi32@gmail.com
Similarity	3%
Analysis address	mwakipg.unam@analysis.urkund.com

Sources included in the report

SA	**University of Namibia / NBS Research Seminar - Submission for April 2022 Seminar - 220018561 Yongsheng Zhuang - Thesis.docx** Document NBS Research Seminar - Submission for April 2022 Seminar - 220018561 Yongsheng Zhuang - Thesis.docx (D134233717) Submitted by: yzhuangnamibia@gmail.com Receiver: mwakipg.unam@analysis.urkund.com	4
W	URL: http://erepo.usiu.ac.ke/bitstream/handle/11732/6722/Okoth%20Patrick%20Odinga%20MBA%202020.pdf?sequence=1&isAllowed=y Fetched: 2022-03-05T03:27:12.7530000	1
W	URL: https://www.wisdomjobs.com/e-university/e-commerce-concepts-tutorial-7/introduction-to-e-commerce-11845.html Fetched: 2019-10-29T12:09:31.1900000	2
SA	**University of Namibia / New Microsoft Word Document.docx** Document New Microsoft Word Document.docx (D31227608) Submitted by: florence.katyavala45@gmail.com Receiver: amutorwa.unam@analysis.urkund.com	3
W	URL: https://janetpanic.com/when-did-e-commerce-start-in-china/ Fetched: 2022-05-03T10:47:57.4300000	1
W	URL: https://en.wikipedia.org/wiki/E-commerce Fetched: 2019-09-25T01:46:38.9930000	1
W	URL: https://www.businessmanagementideas.com/e-commerce/what-is-e-commerce/20814 Fetched: 2020-06-07T19:22:21.9730000	1
W	URL: https://www.researchgate.net/publication/313037920_Literature_From_Geographic_Commerce_To_Mobile_Commerce Fetched: 2019-11-01T07:14:44.8830000	1
W	URL: https://voxeu.org/article/unpacking-e-commerce Fetched: 2021-04-17T19:38:23.1970000	1
SA	**RM PPT.pptx** Document RM PPT.pptx (D44117162)	1

1/44

APPENDIX D: LANGUAGE EDITING CERTIFICATE

Dr.GM

The Rev. Dr. Greenfield Mwakipesile
ThD, MBA, HBS | mwakipg@outlook.com

CONTACT

PO Box 99539,
UNAM,
Namibia

LANGUAGE & COPY-EDITING CERTIFICATE

7th of May 2022

RE: LANGUAGE, COPYEDITING AND PROOFREADING OF RUUSA NDINELAGO KALAMBI's THESIS FOR THE MASTER OF BUSINESS ADMINISTRATION DEGREE OF THE NAMIBIA BUSINESS SCHOOL OF THE UNIVERSITY OF NAMIBIA

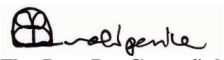
This certificate serves to confirm that I copyedited and proofread **RUUSA NDINELAGO KALAMBI's** Thesis for the **MASTER OF BUSINESS ADMINISTRATION DEGREE** entitled: **AN ASSESSMENT OF THE ACCESSIBILITY OF E-COMMERCE IN THE RETAIL INDUSTRY IN WINDHOEK NAMIBIA**

I declare that I professionally copyedited and proofread the thesis and removed mistakes and errors in spelling, grammar, and punctuation. In some cases, I improved sentence construction without changing the content provided by the student. I also removed some typographical errors from the thesis and formatted the thesis so that it complies with the University of Namibia's guidelines.

I am a trained language and copy editor and have edited many Postgraduate Diploma, Masters' Thesis, Dissertations and Doctoral Dissertations for students studying with universities in Namibia, Zimbabwe, Eswatini, South Africa and abroad. I have also copy-edited company documents for companies in the region and abroad.

Please feel free to contact me should the need arise.

Yours Sincerely,



The Rev. Dr. Greenfield Mwakipesile

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