

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**



**FACULTY OF COMMERCE**

**GRADUATE SCHOOL OF BUSINESS**

**MASTER OF SCIENCE IN ENTREPRENEURSHIP AND INNOVATION**

**FACTORS IMPEDING ADOPTION OF E-COMMERCE BY ZIMBABWEAN**

**SMALL TO MEDIUM ENTERPRISES: THE CASE OF BINDURA URBAN**

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*A dissertation submitted to the Bindura University of Science Education in partial fulfilment of the requirements for a Master of Science in Entrepreneurship and Innovation Degree qualification.*

**BINDURA ZIMBABWE**

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## APPROVAL FORM

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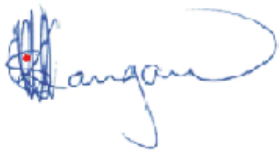
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## DECLARATION

I **Victor Mukanganise** do hereby declare that this dissertation is a result of my own investigation and research, except to the extent indicated in the Acknowledgements, Bibliography and comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.



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STUDENT SIGNATURE

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DATE

## **DEDICATION**

This research is dedicated to my wife Catherine Mukanganise my daughter Chiedza who is my study partner and the rest of the family and friends, for the support they rendered during the period of my studies and particularly in this research.

## **ACKNOWLEDGEMENT**

I acknowledge the divine intervention which gave me the wisdom, knowledge, mercy, and love that enabled me to pursue my studies. I wish to thank my research supervisor, Dr M. Matambo for his unwavering guidance during the entire duration of my dissertation. He spared his time, extended his patience, supported, and encouraged me throughout my studies. He has always been providing valuable insights, suggestions and advice whenever needed. My gratitude also goes to the colleagues at work and at the university who gave the moral support to carry on with the studies.

## **ABSTRACT**

This study focused on issues that impede adoption of e-commerce by Small and Medium Enterprises (SMEs) in Zimbabwe, the case of Bindura urban. Literature review has shown that technology is always developing and changes ways in which business is conducted, e-commerce is part of these technological developments that SMEs take advantage of the increase their earnings and expand their businesses. E-commerce enables SMEs to reach a wider customer base both on the local and international markets and that this mode of doing business helps in reducing costs such as advertising and travelling so that they can increase their contribution to the Zimbabwean economy. The process of adopting e-commerce has challenges that may deter SMEs even if this may be beneficial to their businesses. This research analysed these challenges and provided information on problems that are being faced by SMEs when they attempt to embrace e-commerce. The recommendations from this study will assist the Government and other stakeholders in providing the environment necessary to enable application of e-commerce by SMEs in Zimbabwe. This study looked at issues that discourage SMEs from using e-commerce in their businesses looking at the case of Bindura Urban SMEs by specifically examining SMEs perception of e-commerce, SMEs organisational and cultural factors, SMEs managerial factors, Infrastructural and economic factors as well as the legal factors. This study found out that most SMEs do not understand what e-commerce is and what benefits it can bring, some of the knowledge they have is hearsay and inaccurate, they therefore would not adopt something that they do not understand. The study also revealed that SMEs have limited financial resources to implement and maintain e-commerce. The infrastructure is not an impediment but the cost of accessing internet keeps on going up. Cultural and social factors are also barriers to implementation of e-commerce by SMEs, most SMEs and their customers are used to face-to-face transactions and do not trust paying money to someone you have never met or paying for something that they have not physically touched or tried. This study found out that although management is prepared to embrace e-commerce, they are unwilling to commit financial resources for the adoption. There is also a gap in the technical and management skills making e-commerce adoption unfavourable. The study also found out that SMEs feel that the legislature is not favourable enough for them to implement e-commerce, they do not feel protected by the law and fear that they will be swindled or will not be able to get redress when a dispute arises. The study recommends e-commerce awareness to be done especially by the SMEs, to empower the SMEs with this technology. Putting in place laws that protect SMEs when dealing on-line is recommended sine his will give these SMEs confidence. Lastly there is need to understand the extent of lack of knowledge on e-commerce by the SMEs, so a study in this area will be much helpful to the SMEs.

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## **CHAPTER ONE**

### **1.1 Introduction and Background**

#### **1.2 Introduction**

This study examined the challenges faced by small and medium enterprises when they attempt to move to e-commerce. The development of technology has also introduced new ways of doing business and reaching many wide domestic and international markets. To expand the markets and have a wider source of inputs, Small and Medium Enterprises (SMEs) need to adopt e-commerce, and any impediments they face must be known and possible solutions put forward. There are various models of e-commerce that SMEs can adopt depending on their operations. This study critically looked at these models to determine how the SMEs in Zimbabwe can easily adopt them as a way of doing business.

This chapter started with the Introduction which stated what the dissertation seeks to do, and this was followed by the Background of the study. This section will analyse the origin of e-commerce and provide information on its emergence and development to the present day.

The problem statement, research questions and the significance of the study also looked at in this chapter. Assumptions, delimitations and lastly the dissertation structure will conclude this chapter.

#### **1.3 Background of the study of SMEs in Bindura Urban**

Technological developments are taking place to make life easy for people and information technology has evolved and has turned the world into a global village through the internet and other communication channels and this era is now referred to as the digital era (Fazlollahi and Ph 2011).

The developments in digital technology have given birth to many changes in how people work, interact and how business is conducted. Electronic Commerce commonly known as e-commerce is a product of the developments in digital technology, it is the buying and selling of products and services using computers, mobile devices, computer networks and the internet (Momboisse and Ham 2017).

The first era of e-commerce was in the 1980s and was mainly used for order processing (Holmberg 2016). This was mainly for processing invoices and for electronic data interchange. This was the first development in the e-commerce. The need for companies to process orders

quickly and accurately and share information with suppliers and gave birth to the early e-commerce business model. The early model was the business-to-business model also known as B2B model.

The second phase started in the US with the commercial internet in the 1990s and this opened the opportunities for on-line market (Holmberg 2016). (Sirurmath, 2004) states that in addition to business-to-business model, the business to consumer model, also known as B2C, was introduced in the second phase of in the development of e-commerce. Companies could now sell their products direct to consumers over the internet or on-line. The internet penetration was increasing, and the number of on-line customers were increasing. (Al-Qirim, 2004) also states that on-line stores, banking, and e-commerce emerged by 1997 in the United States of America. Apart from buying and selling, the ability to make on-line payments was introduced to compliment the process of buying and selling.

Since then, many larger businesses are moving away from the traditional brick and mortar businesses to e-commerce whilst others are employing both the traditional and digital mode of business. E-commerce revolutionized how business and trade was done locally and internationally (Whiteside, 2017), it broke boundaries brought by distance, language, discrimination, and time.

Worldwide the rapid growth in digital technology and the acceptance of internet by the population has driven businesses to adopt various e-commerce models available as a way of reaching many domestic and international customers quickly and at a lower cost The popularity and availability of the internet as the major source of communication, information and entertainment has created a virtual market because that is where most people spend their time daily, and the number is increasing daily.

E-commerce is becoming the way to do business the world over by providing competitive and productive advantages in both developing and developed countries (OECD, 2002). This form of business has resulted in the economic growth of those countries that have adopted this model of business. (Fazlollahi and Ph, 2011) argue that there are enormous benefits in adopting e-commerce and companies should take advantage of these benefits.

E-commerce business was estimated at \$15 trillion for business to business and \$1 trillion for business to consumer per annum (Impact and Good, 2015) and the main players are Alibaba, Amazon, eBay, and many others. These are all owned by Asians, Americans, and Europeans, but they are now operating at international level. Ecommerce is set to expand very fast globally

(Impact and Good 2015), this was achieved especially during the COVID-19 pandemic. Some countries achieved high economic growth during the pandemic era due to e-commerce whilst others' economies declined during the same period.

According to (Rouibah, Khalil, and Hassanien 2009), the number of companies adopting e-commerce in developing countries has been on the rise, it is estimated that more than 26.5% of Africa's population have access to the internet in one form or the other (Impact and Good 2015). They continue to state that it is estimated that Africa's share of e-commerce is estimated to be 2%.

With the availability of internet, there is an opportunity for businesses in Africa to implement e-commerce strategies and grow on the international market. Hopes are high that African countries will be able to take the opportunity presented by the rise in e-commerce to improve its economic situation (MacGregor and Vrazalic, 2007). The Mckinsey and company report of 2014 predicts that by 2025 e-commerce will account for more than 10% of all the retail sales in Africa's largest economies and this will translate to \$75 billion revenue per annum (MISA, 2017). They further indicated that the development of e-commerce in Africa will outpace the development of traditional retail (MISA, 2017).

The oldest e-commerce site in Africa is eShopAfrica.com which was established in 2001 (Sirurmath, 2004) and is still operational.

The Zimbabwean economy has been on an up and down trend since 2008 and this has resulted in many big companies closing and the rise of Small and Medium Enterprises (Bvirindi, 2021). The Zimbabwean economy is now dependent on the Small and Medium Enterprises and hence there is need to promote and support their activities (Magaisa and Matipira, 2017). With the onset of COVID-19, organizations have learnt that they cannot only rely on the traditional mode of business, they have learnt that they can work from anywhere and do business with anyone anytime over the internet. Many Small and Medium businesses have the potential to expand their markets worldwide if they can adopt e-commerce business models.

According to (Holmberg 2016), e-commerce enables SMEs to take part in the international trade, he further states that companies adopt e-commerce increase sales and flexibility and reduce costs especially marketing costs.

On the other hand, some businesses are still stuck with the traditional way of doing business, where business must be conducted physically, customers must walk into shops, buy goods,

make payment, and take the goods away. Most of these are the ones referred to as the small or the traditional businesses.

According to (Holmberg, 2016), many businesses want to move to e-commerce business models, but they are not moving. This study would like to analyse why these businesses, with special focus on Small and Medium Enterprises, are not moving given the various advantages associated with e-commerce.

According to the International Trade Administration report of 22 August 2022, Zimbabwe's digital expenditure proportional to consumer spending was 0.3% as compared to that of Africa which averaged 1.3%. The same report also states that internet penetration was at 41.7% in 2020 and has increased to above 56% in 2022. The rise in internet penetration is an opportunity for Small and Medium Enterprises to reach a wide domestic virtual market and claim a reasonable share of the total on-line business. The Small and Medium Enterprises need to access the international market, the lessons from COVID-19 pandemic and the shrinking domestic market due to cash shortages so that they can keep afloat and contribute to the growth of the national economy (Bvirindi, 2021).

#### **1.4 Problem Statement**

Against the background in the preceding section, the problem is why small and medium enterprise are failing to implement e-commerce business models, or why are they reluctant to adopt at all. Many people from teenagers to adults now own mobile devices and computers and have access to internet. They spend more time on social media and on the internet, presenting a market ready for business locally and internationally (Holmberg, 2016). According to (PORTRAZ 2021), the same report also states that there were 130 million social media users in Zimbabwe in 2021, the number of social media users increased by 320 000 between 2020 and 2021 and represents 7% of the total population in January 2021.

There were 14,76 million connections in Zimbabwe in January 2021 and the number of mobile connections increased by 1.6 million between 2020 and 2021. The number of mobile connections was equivalent to 98.5% of the total population. This huge number of Zimbabweans on the internet has created a marketplace for businesses.

Financial institutions have also made available payment platforms that enables domestic and international payments to be made through VISA Cards, Electronic Funds transfers and many other means that allow money to be paid to or received from anywhere in the world (Holmberg 2016).

Pandemics like COVID-19 which causes traditional businesses to be closed are a reminder that businesses need to adopt e-commerce business models. Many Small and Medium Enterprises closed shop and some even failed to open during the pandemic shutdown period. If they had adopted E-commerce, they would have continued doing business even during the shutdown period.

Previous studies have been made on general adoption of e-commerce and on the impact of e-commerce on businesses and the economy (Holmberg, 2016). This statement is supported by (MacGregor and Vrazalic 2007) who state that most governments view the SME sector as a major driver of the economy and a source of employment opportunities.

This research's focus is to analyse the benefits of e-commerce and why SMEs are not fully embracing this technological development to expand their businesses. The research will also analyse the challenges faced by those SMEs who have already adopted e-commerce business models.

By identifying the advantages, the research seeks to persuade SMEs to embrace e-commerce and by identifying the challenges in adopting e-commerce business models, the research seeks to make recommendations that will assist SMEs to transition to on-line way business. The benefits of e-commerce for SMEs have been a concern for governments and researchers alike due to the significance of this sector to their national economies (OECD, 2004).

According to (MacGregor and Vrazalic, 2007), ultimately, most businesses will have little choice but to accommodate the spread of e-commerce. As electronic and Internet-based transactions become the dominant way of doing business (Al-qirim and Zealand 2004).

## **1.5 Main Research Question**

This section looks at the main research questions, after the previous section which looked at the problem statement.

- What conditions should be in place to encourage adoption of e-commerce business models by SMEs in Bindura urban?

## **1.6 Secondary research questions**

- (i) What do other theorists say about the use of technology in business?
- (ii) What are the economic conditions that impede the adoption of e-commerce by SMEs?

- (iii) How do traditional and organizational structures impede SMEs from adopting e-commerce business models?
- (iv) What are the social factors and beliefs that impedes the adoption of e-commerce by SMEs?
- (v) What are the contributions of key stakeholders to e-commerce adoption?
- (vi) How does the telecommunication infrastructure impede the adoption of e-commerce by SMEs?
- (vii) How do the country laws contribute to the adoption of e-commerce by SMEs?
- (viii) What recommendations can be proffered with regards to factors impeding SMEs' adopting e-commerce business models?

### **1.7 Main research objective**

After considering the research questions, this section will look at the main objective as well as secondary objectives.

The aim of this study is to analyse negative challenges that discourage SMEs from fully adopting and implementing e-commerce business models.

### **1.8 Secondary research objectives**

These are as follows.

- (a) To explain theoretical and conceptual frameworks that determine e-commerce business models.
- (b) To analyse the extent to which the state of the economy impedes the adoption of e-commerce by SMEs.
- (c) To evaluate how tradition and organisational structures of SMEs impede adoption of e-commerce by SMEs.
- (d) To examine if socio-cultural beliefs impede adoption of e-commerce by SMEs.
- (e) To evaluate the telecommunication infrastructure and how this impedes the adoption of e-commerce by SMEs.
- (f) To examine the country laws and their effect SMEs adoption of e-commerce.
- (g) To give recommendations on challenges faced by SMEs when adopting e-commerce.

### **1.9 Significance of the Study**

This study is important to the stakeholders below;

**(a) SMEs**

SMEs will gain more understanding of e-commerce so that they make informed decisions on whether to adopt e-commerce or not.

**(b) Government**

The Government plays a regulatory role. The findings of this study will assist the Government in amending or crafting new laws that will address the concerns of SMEs regarding adoption of e-commerce.

**(c) Academia**

This study provides more information on e-commerce and SMEs. This will add more information on e-commerce and provides an opportunity for further research on e-commerce.

**(d) Researcher**

The researcher will gain more knowledge and understanding of SME functions and e-commerce.

**1.10 Assumptions**

The following assumptions apply for this study,

- (a) Some SMEs have not implemented e-commerce.
- (b) Some SMEs are already using e-commerce.
- (c) SMEs will benefit a lot by adopting e-commerce.
- (d) There is a huge market available on the on-line business.
- (e) Walk-in or traditional business will decline with technological advancements.

**1.11 Limitations**

The study will be limited to a few SMEs that will be used as a representative sample. The unavailability of financial resources and time restricts the study to cover the whole country, time is also limited for the research.

**1.12 Dissertation structure**

The dissertation is broken down into various chapters. The introduction and background to the research are stated in Chapter 1. The statement of the research questions, and objectives are also discussed in this chapter. Chapter 1 also includes the significance of the study, assumptions, limitations and the lastly this section which covers the dissertation structure. The subsequent chapters are stated below.

<b>STAGE</b>	<b>CONTENTS</b>	<b>STATUS</b>
Chapte-1	Introduction and Background	Submitted
Chapter-2	Literature Review	Submitted
Chapter-3	Research Methodology	Submitted
Chapter-4	Data Presentation and Analysis	Submitted
Chapter-5	Summary of findings, Conclusion and Recommendations	Submitted

### **1.13**

#### **1.14 Chapter Summary**

This chapter introduced the study and gave the background to the topic of e-commerce. The research objectives, research questions, significance of the study were also looked at in this chapter. The study assumptions, limitations and dissertation structure then concluded Chapter One. The following chapter will be looking at Literature review.

## **CHAPTER TWO**

### **1. Literature Review**

#### **2.1 Introduction**

This chapter presents what other authorities have said concerning issues impeding the adoption and implementation of e-commerce by SMEs. Different views about adoption of technology are discussed in this chapter. Concepts related to SMEs are also discussed and then followed by the theories on e-commerce business models, benefits, advantages, and disadvantages of e-commerce are also discussed. The infrastructure and conditions required for the smooth adoption of ecommerce are also discussed here.

The theories that are used as a basis for this study are also discussed in this chapter under the theoretical and conceptual frameworks. These give the basis on which the variables in the adoption of e-commerce by SMEs is based. Finally, this chapter will conclude with a summary and plan for the next chapter.

#### **2.2 General Theories**

##### **(a) Small and Medium Enterprises (SMEs)**

According to (Al-Qirim, 2004), the common criterion used to define an SME is usually the number of employees, as this is a more reliable. Most SMEs tend to be unwilling to divulge their sales revenue for confidentiality reasons and so the number of employees will be used to define SMEs in this study (Al-qirim and Zealand 2004).

Some have suggested that defining SMEs is difficult like (MacGregor and Vrazalic 2007) who states that the lack of a formal means of defining an SME has led to diverse approaches by governments and other organizations in different countries. Therefore, several sources have defined SMEs in different ways and some of these definitions are based on quantitative measures, while others employ a qualitative approach (MacGregor and Vrazalic 2007).

Others have used ownership structure as a way of defining SMEs. SMEs comprises of a wide spectrum of businesses, ranging from a single part-time owner business to those professionally managed organizations employing up to 199 people (Al-qirim and Zealand 2004).

Any definition of an SME must include a quantitative component that considers staff levels, turnover, and assets together with financial and non-financial measurements, but that the description must also include a qualitative component that reflects how the business is organized and how it operates (MacGregor and Vrazalic 2007).

According to (Acts 16/1983, 17/1988, 24/1990, 3/1997, 22/2001 (s. 4) 2013), SME is any business entity which meets the criteria for classification as a micro-enterprise, small enterprise or medium enterprise or any other criteria relating to maximum employees, maximum total annual turnover or maximum gross value of assets excluding immovable property as may be pre-scribed generally or for the purpose of any scheme; and qualifies as a micro-enterprise, small enterprise or medium enterprise by application of the formula set out in the Fifth Schedule to the criteria specified in the Fourth Schedule (Parliament of Zimbabwe, 2013).

According to the Small and Medium Enterprises ACT CHAPTER 24:12, the formula for use in classifying micro-enterprise, small enterprise, or medium enterprise operating within a sector or subsector of the economy specified in the first column of the Fourth Schedule shall be construed as meaning any enterprise of such a size as is determined in accordance with the following formula—  $A+B+C$  (Parliament of Zimbabwe, 2013). The factors “A”, “B” and “C” represent respectively the average maximum total number of full-time employees during any calendar year of an enterprise, the maximum total annual turnover of an enterprise and the maximum gross value of the assets (excluding immovable property) of an enterprise (Parliament of Zimbabwe, 2013). Intended result of formula Each of the factors “A”, “B” and “C” is assigned a predetermined number of points, such that if the total sum of the formula as applied to any particular enterprise is nine (9) points or less, the enterprise in question shall, in accordance with paragraph 6, be deemed to be a “micro-enterprise”, “small enterprise”, or “medium enterprise”, as the case may be (Parliament of Zimbabwe, 2013).

According to the new amendments on the Zimbabwean SMEs Act Chapter 24:12 FOURTH SCHEDULE (Section 2) Classification of SME’s is as listed below: -

- The average number of employees per year ranges between 5 to 75
- The maximum annual turnover for the SMEs ranges between \$30 000.00 and \$1 000 000.00
- Maximum gross value of assets (excluding immovable property) \$10 000.00 to \$2 000 000.00

The following formular given by the ACT is then used to classify SMEs.

- Ten points or more disqualifies the enterprise concerned for the purposes of this Act (Parliament of Zimbabwe, 2013);
- Eight or nine points qualifies the enterprise concerned as a “medium enterprise” (Parliament of Zimbabwe, 2013);

- Five, six or seven points qualifies the enterprise concerned as a “small enterprise (Parliament of Zimbabwe, 2013);
- Three or four points qualifies the enterprise concerned as a “micro- enterprise” (Parliament of Zimbabwe, 2013).

It then follows that in Zimbabwe for an organisation to qualify as an SME, it must be between six and eight points. These are the organisation being referred to as SMEs and will be dealt with in this study.

**(b) What is e-commerce?**

E-commerce refers to all types of electronic transactions between organizations and stakeholders whether they are financial transactions or exchanges of information or other services, these e-commerce transactions are either the buying-side e-commerce or selling-side e-commerce and the management issues involved with each aspect (Chaffey 2009).

To many people, the term electronic commerce means shopping on the Internet and includes many other activities, such as businesses trading with other businesses and internal processes that support buying, selling, hiring, planning, and other activities (Sirurmath 2004). Hence E-commerce and e-business, in modern practice, these two terms are often used interchangeably, and have become almost like synonyms (Radovilsky 2015).

According to (Chaffey 2009) Electronic Commerce is often thought as simply referring to buying and selling using the Internet, people immediately think of consumer retail purchases from companies such as Amazon or Alibaba or eBay. In essence e-commerce involves much more than electronically mediated financial transactions between organizations and customers (Holmberg, 2016). They go on to explain that e-commerce should be considered as all electronic transactions between an organization and any third party it deals with including non-financial transactions such as customer requests for further information.

(Radovilsky 2015) defines e-commerce as the use of a computer network, primarily the internet, to buy and sell products, services, information, and communication, however, e-commerce may also be considered as an application of technology using the Internet. According to (Al-qirim and Zealand 2004), the term e-commerce or doing business online or are being used interchangeably because they both relate to changes in business practices (Al-qirim and Zealand 2004)

From the definitions above e-commerce must comprise of an organisation or individual, computer network, products or services, on-transactions and there must be some buying and selling or on-line shopping.

**(c) E-commerce – Business models**

Click-and-mortar or traditional organizations are companies that conduct some e-commerce activities, for example, selling computers, printers, or software through e-commerce channels like HP or Gateway, but provide their primary business in the physical world (Radovilsky 2015).

E-commerce organizations are also differentiated by the transactions and interactions they make, in general, selling and buying electronically can be either business-to-consumer (B2C) or business-to-business (B2B)(Whiteside, 2017). He further explains that online transactions are made between businesses and individual consumers in B2C (Whiteside 2017).

**(i.) Business to Business(B2B)**

One of the common types are the Business- to-Business e-commerce organizations that provide transactions, communication, and interactions between business partners(Sirurmath, 2004). B2B transactions may include selling products and services to businesses, outsourcing from suppliers, logistics, and distribution of products to companies, financial transactions, and others (Radovilsky 2015), refers to transactions between and among organizations and today about 85% of all e-commerce volume is B2B (Whiteside 2017) adds that since the beginning of the e-commerce era, both B2B and B2C transactions have experienced consistent growth in revenues.

B2B has developed quickly in the past ten years and continues to grow at a high rate(Rouibah, Khalil and Hassanien, 2009). Before 2007, information services were the main content in the B2B arena(Sirurmath, 2004). B2B has turned to transaction and services since 2007, not only servicing SMEs within China, but also the large-sized Chinese enterprises (Rouibah et al. 2009). In other countries e-commerce business models started in SMEs and were later adopted by corporates after they had seen the benefits. This shows how other countries have adopted e-commerce as a way of doing business.

**(ii.) Business to Consumer (B2C)**

Another very common type is Business-to-Consumer e-commerce organizations which provide transactions, communication, and interactions with consumers(Fazlollahi and Ph, 2011). These

organizations can be manufacturing, distribution, retail, or other companies that sell their products or services to consumers online (Sirurmath, 2004). B2C transactions and interactions are done on the downstream of the organization's supply chain (Radovilsky 2015). Business-to-consumer (B2C) includes retail transactions of products or services from businesses to individual shoppers (Whiteside 2017). B2C includes all online transactions between businesses and consumers using desktop computers, laptops and tablets (Momboisse and Ham 2017)

### **(iii.) Consumer to Business(C2B)**

In consumer-to-business, people use the internet to sell products or services to individuals and organizations, alternatively, individuals use C2B to bid on products or services (Whiteside 2017).

### **(iv.) Consumer to Consumer (C2C)**

Consumer to consumer e-commerce is used in organizations that provide private sales and auctions between individual consumers, individual consumers sell to or buy from other consumers(Impact and Good, 2015). Examples of C2C include individuals selling computers, musical instruments, or personal services online, eBay sales and auctions are mostly C2C (Whiteside 2017). Social commerce (SC), also known as social business, refers to e-commerce transactions delivered via social media and is considered a subset of e-commerce by some (Whiteside 2017). This is usual among consumers on social media and is very common nowadays.

### **(v.) E-Government**

In e-government e-commerce, a government agency buys or provides goods, services, or information from or to businesses (G2B) or from or to individual citizens (G2C)(Whiteside, 2017). Governments can deal also with other governments (G2G) (Whiteside 2017). Government-to-Business and Government-to-Consumer e-commerce enables governmental organizations to provide information, interaction, business, and services to companies and consumers respectively(Rouibah, Khalil and Hassanien, 2009).

Government-to-Business (G2B) and Government-to- Consumer (G2C) e-commerce enables government organizations to provide information, interaction, business, and services to companies and consumers respectively(Sirurmath, 2004).

These are e-commerce that can be adopted by SMEs depending on the type of business they are doing, they can order raw materials from manufacturers and wholesalers through B2B and they can sell directly to customers through B2C. Customers can also sell to other customers through C2C, and Governments can provide services such as tax services through e-government.

#### **(d) Requirements for e-commerce**

According to (Rouibah et al. 2009), the following issues must be addressed for e-commerce to be successful. Requirements is looking at mainly the infrastructure, services and policies that need to be in place for e-commerce to work effectively (Al-qirim and Zealand, 2004) and some of these conditions are national and cannot be narrowed down to the case being studied.

##### **(i) National factors**

Telecommunications infrastructure and Government regulations need to be in place to support e-commerce. Telecommunication companies should put in place the telecommunications infrastructure. The Government should regulate internet access, domain name registration, data privacy and security, educate enough people in business issues and information technology issues and cater for consumer protection (Al-Qirim, 2004).

##### **(ii) Related and supporting industries**

This includes payment and logistics systems to allow a decent banking and payment infrastructure to develop and to see to the infrastructure of physical distribution (Sirurmath, 2004).

##### **(iii) Firm strategy, structure, and rivalry**

For managing and organizing e-commerce to develop incentives for companies to engage in e-commerce (Sirurmath, 2004).

##### **(iv) Demand conditions**

Covers consumer demand for e-commerce and business demand for e-commerce to cater for internet access by private persons (Sirurmath, 2004).

#### **(e) Benefits of e-commerce**

The competition between enterprises is always furious and enterprises are always trying to save costs and improve efficiency in their business to survive (Al-Qirim, 2004). Applying e-commerce in their business is one of the business strategies due to the benefits and advantages

of e-commerce in cost-saving and high efficiency (Rouibah et al. 2009). Adoption of e-commerce has been advocated as a way of reducing transaction costs, gaining market share, streamlining business processes, achieving competitive advantage (Al-qirim and Zealand 2004). This point is also supported by (Radovilsky 2015) who says it may also represent another aspect of being a tool for increasing efficiency and lowering costs in organizations

Although SMEs generally adopt technologies at a lower rate than average, they are adopting Internet technologies at a new pace. The most connected SMEs will be in strategic business services, followed by finance, community services, wholesale trade and manufacturing sectors (OECD 2002).

Business-to-business and business-to-consumer electronic commerce offer SMEs the opportunity to broaden their national and international markets and remove the constraints of time and location (OECD 2002).

Electronic commerce can be a powerful vector for improving SME performance and expanding markets (OECD 2002). Access to regional and international markets will enable SMEs to expand their businesses and earn more forex for themselves and for the Government, thus most areas of the SME sector, except for those organisations involved in the industrial market, would benefit from e-commerce (MacGregor and Vrazalic 2007).

As we look at the benefits of e-commerce, (Al-qirim and Zealand 2004) warns that in SMEs, the owner's management and orientation influence the firm, thereby making a very heterogeneous group. Their perception, orientation and experience and success of e-commerce is different

#### **(f) Adoption of e-commerce by SMEs**

As technology is developing, the number of “brick- and-mortar” companies have significantly shrunk over the years as e-commerce proliferation has grown in a variety of traditional companies (Radovilsky 2015).

(MacGregor and Vrazalic 2007) is of the opinion that the adoption and use of e-commerce cannot be based on the same criteria as was used for other technology adoption. They further explain that physical location is a determinant factor by stating that recent studies have examined SMEs in terms of location and have suggested that those SMEs in rural or regional locations often report lower levels of success with IT adoption when compared to those in capital cities or large economic centers (MacGregor and Vrazalic, 2007). They further support this point by saying, unlike previous technological initiatives, however, e-commerce is a

“disruptive” innovation that is radically changing the way organisations do business (MacGregor and Vrazalic 2007).

On the other hand, (GRAY 2018), explain that the adoption of information and communications technology (ICT) among small firms, including broadband access and Internet connectivity, is increasing, also online purchasing is growing and playing a significant role in companies. This is also collaborated by (MacGregor and Vrazalic 2007), who says that typically regarded as innovators, SMEs have been known to adopt new technologies as soon as they are available. (MacGregor and Vrazalic, 2007) also state that these studies found that the manufacturing and retail sectors tended to adopt IT far more quickly than professional or service-related businesses.

The rationale is that when e-business becomes more widely adopted, company and industry service models become more alike and standard, hence, e-business systems will become prerequisites for doing business and competitive advantage will be derived from the exploitation of knowledge to gain customers’ attention (GRAY 2018)

To achieve this, SMEs would go through a six-stage process toward full e-commerce, starting with, messaging or e-mail, online marketing, ordering, and payments, followed by online sales support and finally, a full-fledged e-commerce strategy (MacGregor and Vrazalic 2007). Ecommerce adoption is an evolving theme and is different from adoption of other IT functions such as personal computers and other desktop applications which have already reached the maturity stage (Al-qirim and Zealand 2004) because it has some cultural and financial connotations on the business.

#### **(g) Factors Affecting adoption of e-commerce**

##### **(i.) Security**

Security is one barrier driven both within an organization’s e-commerce system and business practices and from the trading partner the organization is trading with and government policies, taxes, and audit procedures (Al-qirim and Zealand 2004). But e-commerce is not a risky activity only for consumers. Also, small firms are reluctant to adopt e-commerce because of, for instance, perceived financial risks associated with the lack of commercial benefits or legal concerns associated to domestic and cross border transaction (Gray 2018).

##### **(ii.) Lack of Trust**

Lack of trust is another sizeable barrier in B2B e-commerce, since commercial fraud always occurs (Rouibah et al. 2009).

### **(iii.) Technical Knowledge**

SMEs have a lack of technical knowledge and specialist staff and provide little IT training for staff (MacGregor and Vrazalic 2007). It should be noted that existing knowledge about e-commerce adoption by SMEs in the traditionally disadvantaged, regional view of the relevant literature about SMEs and e-commerce (MacGregor and Vrazalic 2007).

### **(iv.) Initial Implementation Costs**

Start-up costs for implementing e-commerce applications can be high, they include connection costs, hardware, software, set up, training and maintenance costs (Al-qirim and Zealand 2004). Thus, high costs may create initial barriers to e-commerce participation among adopters who lack the financial resources, costs of access to and use of ICT, which continue to vary widely across countries, also present barriers (OECD 2002). At the same time SMEs are more reluctant to spend on information technology and therefore have limited use of technology (MacGregor and Vrazalic 2007).

### **(v.) Lack of IT Infrastructure.**

IT infrastructure refers to IT connectivity, which is the extent SMEs are IT connected, it also to IT compatibility, telecommunication infrastructure, and the extent of internal integration (Al-qirim and Zealand, 2004). Internet-based e-commerce was in its formative stages in developing countries, while the U.S. and Europe were many years ahead (Al-qirim and Zealand 2004).

### **(vi.) Uncertainties**

According to (Al-qirim and Zealand, 2004), the proliferation of e-commerce applications has left most trading partners uncertain of e-commerce operations and unaware of the full potential of e-commerce technology. Uncertainties may arise when SMEs encounter barriers in communication, such as incompatible e-commerce systems or lack of uniform standards, which may lead to conflicts and these vulnerabilities are classified as task, environment, and partnership uncertainties (Al-qirim and Zealand 2004).

### **(vii.) Lack of Management Commitment**

With poor internal management and a lack of top-level management commitment, implementing e-commerce even with the most advanced products becomes challenging especially if management is unwilling to provide adequate financial resources, poor business

practices might follow (Al-qirim and Zealand, 2004). Successful e-commerce adoption requires full top-level commitment, as many potential adopters are ignorant about the potential use of e-commerce technologies (Al-qirim and Zealand 2004).

#### **(viii.) Customer relationships**

Relationships with customers are also vital and the small-business use of e-commerce to maintain these relationships is not well addressed by focus on market expansion or electronic customer relationship management (Al-qirim and Zealand 2004).

### **2.3 Specific Theories**

This study will explain the technology adoption frameworks that address the technological related determinants of e-commerce adoption and diffusion at individual levels (Rouibah et al. 2009). These theories will explain the factors affecting embracing of e-commerce by some SMEs in Bindura urban area.

#### **(a) Technology Acceptancy Theory**

One of the widely used information technology adoption theory is the Technology Acceptancy Model (TAM) which was developed by Davis (1989). The theory is used to explain how organizations adopt technology for their operations. According to Davis (1989), TAM is based on two main principles namely the ease of use and usefulness of the technology to the users. If these two are met, then the users will adopt the technology. According to (Lee 2013) was particularly introduced to establish a model that describe the user acceptance of information systems.

This theory has been used by both academics and practitioners to measure the system's success whether the system is used (Rouibah et al. 2009). They also support the notion that acceptance of any technology is based on the user's perception of ease of use and usefulness and TAM theories also state that the perceived ease of use of any technology will increase its perceived usefulness by the users (Rouibah, Khalil and Hassanien, 2009).

It is therefore important to understand SMEs perception on e-commerce's usefulness in their businesses and how technically is it to adopt. These factors will affect the adoption of e-commerce by the SMEs. The variables in the TAM theory are ease of use and usefulness of the system (Rouibah, Khalil and Hassanien, 2009). The factors impeding adoption of e-commerce by SMEs can be applied to this theory to determine if the technology will be accepted, the

easier it is to implement and use the more useful it will be to SMEs and its adoption will be at a larger scale.

**(b) Network externality theory**

This theory was used to explain the increased value of telecommunication adoption by many subscribers in the 1970s (Lee 2013). Network externality describes the increase in the value of a product or service to a user, not because of the inherent quality of the product or service, but because of the increasing numbers of other users adopting it (Katz & Shapiro, 1985), they further state that the basic premises of the theory are;

- (i) That the value to a user from joining the network is an increasing function of the total number of users who join the network,
- (ii) That users perceive this value and
- (iii) That they make their joining decision based on this perceived value.

According to (Lee, 2013), social networking services such as Facebook and LinkedIn are good examples of the network externality, since the more members that join those services, the more beneficial the services will be to the members. Network externality applies to social shopping for both merchants and consumers, merchants have the incentive of using social shopping sites that have many members, and members have the incentive of using a social shopping site where many merchants are providing deals and this is applied in B2B models (Lee, 2013).

This is also applicable to the study of factors impeding adoption of e-commerce by SMEs, the more they join e-commerce platforms, the more the business they can get from other members, adoption of e-commerce also depends on the number of those joining the network (Lee, 2013).

**(c) Diffusion Innovation Theory**

In 1962, E. M. Rogers introduced the Diffusion of Innovation Theory which concentrates on the conditions and characteristics that affect the adoption of a new idea, product, or practice (Lee 2013). According to (Lee, 2013), the theory explains how, why and at what rate does the new technology or new ideas spread. The theory defines technology to be anything that is seen as new and can be an idea, system, or object.

Diffusion can be defined as the process by which an innovation is communicated through certain channels over time among the members of a social system (Lee 2013). According to the theory, the four main elements of the diffusion process are, innovation, communication

channels, time, and social system (Fazlollahi and Ph 2011). (Lee, 2013)states that the theory supports the existence of five characteristics perceived by adopters, and these are relative advantages, compatibility, complexity, triability and observability, these will give the users the confidence in adopting the technology basing on the results.

The same will apply to the SMEs, they want the technology to fit in their system and must not be difficult to use, should have been tried and tested and they should have seen it working elsewhere (Fazlollahi and Ph 2011). These factors would contribute to how e-commerce is accepted or rejected by the SMEs.

**(d) Conceptual Framework**

The conceptual framework describes the relationship between variables that are under study(Kothari, 2018). The variables are independent and dependent variables.

**Technology-Organizational-Environment framework** (Tornatzky and Fleischer,1990)

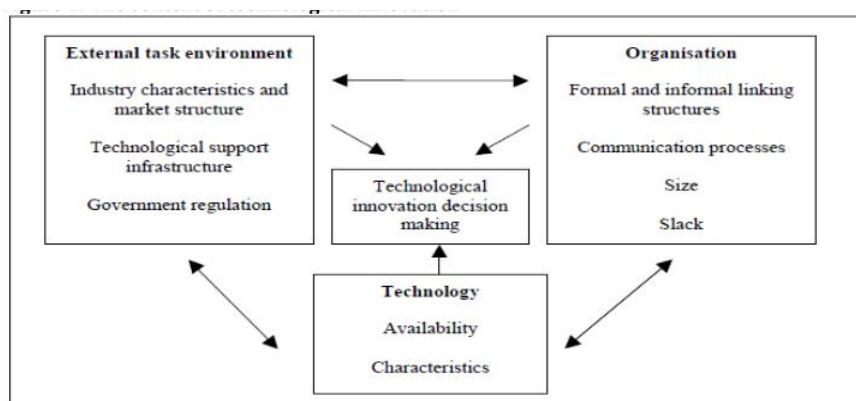


Fig 2.1: Adapted from Tornatzky and Fleischer

(Tornatzky and Fleischer,1990) proposed a Technology-Organizational-Environment framework (TOE) model, which consists of three elements of technological, organizational, and environmental context. These explain an enterprise's context that influences the process adopting and implementing a technological innovation, technological context focused on a firm's current and new technology that could influence the firm's ability to conduct E-business or other technology implementation, organizational context referred to descriptive measures of organizations for instance internationalization scope, size of organization and managerial beliefs and environmental context focused on the environment of the business or the industry's

external factors that might affect the firms for instance legal protection and government's regulation(ريزولا and بينار عشلا, 2006).

The TOE framework provided a useful conceptual framework that can be used for studying the adoption and assimilation of different types of IT innovation and has a solid basis, being used extensively as theoretical foundations in studies on technology usage or adoption or implementation (Halawani et al. 2013). This framework can be used to determine the factors that impede the adoption of e-commerce by SMEs in Bindura urban by considering their environment, technology, and organizational factors as the main basis. For SMEs adoption of e-commerce depends on the technological and organizational contexts (Radovilsky, 2015).

#### **2.4 Conclusion**

The concepts of SMEs and e-commerce were discussed in this chapter. Literature from various sources was reviewed, compared, and contrasted to lay a foundation for the understanding the factor impeding adoption of e-commerce by SMEs in Bindura urban. Various theories were put forward to further clarify these concepts.

This chapter has provided information that will be used in the next chapter. The next chapter will look at the research methodology.

## **CHAPTER THREE**

### **2. RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this chapter, the research design, philosophy and how the research approach are discussed. The research methodology outlines the techniques that are to be used to determine the sample, sample size and sampling procedure. Data collection, methods and instruments are also described in this chapter.

The chapter will conclude by describing the methods and tools that have been put in place to analyse and present the data collected for the study. The research methodology is guided by the research problems identified in Chapter 1 and the research theories outlined in Chapter 2.

#### **3.2 Research Philosophy**

According to (Saunders, Lewis, and Thornhill 1997), there are four types of research philosophies namely positivism, realism, interpretivism and pragmatism. They further state that the research philosophy you adopt contains important assumptions about the way in which you view the world, and these assumptions will underpin your research strategy and the methods you choose as part of that strategy (Saunders, Lewis and Thornhill, 1997).

If the research reflects the philosophy of positivism, then you will probably adopt the philosophical stance of the natural scientist (Creswell, 2015). The study will be working with an observable social reality and that the product of such research can be law-like generalisations like those produced by the physical and natural scientists (Saunders et al. 1997). Realism is another philosophical position which relates to scientific enquiry and the essence of realism is that what the senses show us as reality is the truth: that objects have an existence independent of the human mind (Saunders et al. 1997). (Beech, 2000) further qualifies that realism is a branch of epistemology which is like positivism in that it assumes a scientific approach.

Interpretivism advocates that it is necessary for the researcher to understand differences between humans in our role as social actors (Saunders et al. 1997). Interpretive research, which is the most common type of qualitative research, assumes that reality is socially constructed, that is, there is no single, observable reality (Sharan B. Merriam 2016). (Briony J Oates 2006) states that interpretivism aims at studying phenomenon and how it affects and is affected by its social settings. On the other hand, (Djamba and Neuman 2002) states that access to reality is only through social constructions such as language, consciousness, shared meanings, and instruments.

Linked to research philosophies are research paradigms. These are a set of beliefs and feelings about the work and how it should be understood and studied (Durdella 2019), goes on to state that they are central to understanding any study, its research problem, questions and/or hypotheses, and design and making sense of a study's results and findings. (Saunders et al. 1997) defines a paradigm as a way of examining social phenomena from which understanding of these phenomena can be gained and explanations attempted.

Interpretivists focus on the specific contexts in which people live and work to understand the historical and cultural settings of the participants (Creswell 2015), goes on to elaborate that the researcher's intent is to make sense of or interpret the meanings others have about the world, rather than starting with a theory (as in positivism), inquirers generate or inductively develop a theory or pattern of meaning.

SMEs are business settings that exist in a social setting and cannot exist independent of the social settings therefore positivism will not be appropriate for this study. They are mainly owned and managed by human beings who make decisions by observing the environment and then make decisions basing on their thoughts and beliefs, in this case realism is also not applicable for this study. According to (Saunders et al. 1997) interpretivism views phenomena as socially constructed, subjective, may change and is subjective, this describes the SMEs in Bindura urban. They are in their natural social setting and the environment is dynamic and each SME sees this change differently and reacts differently. So, for this study, the interpretivist philosophy is used.

### **3.3 Research Approach**

The two main approaches to research are the deductive approach, in which a theory and hypothesis are developed, and a research strategy is designed to test the hypothesis, or the inductive approach, in which data is collected and a theory is developed because of data analysis (Saunders et al. 1997). (Creswell, 2014) further clarify that insofar as it is useful to attach these research approaches to the different research philosophies, deduction owes more to positivism and induction to interpretivism. This is supported by (Creswell 2015) who state that social constructivists or interpretivists believe that individuals seek understanding of the world in which they live, and work and these individuals develop subjective meanings of their experiences and meanings directed toward certain objects or things.

In that case, the deductive approach will be used in this study. The deduction approach has its origins in research in the natural sciences (Saunders et al. 1997), they were critical of an

approach that enabled a cause–effect link to be made between variables without an understanding of the way in which humans interpreted their social world and gaining an understanding of the meanings, humans attach to events. In this case the study aims at gaining an understanding on how much understanding and importance SMEs in Bindura urban attach to e-commerce and this will also contribute to factors that affect its adoption. The

### **3.4 Research Design**

Research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research study, others have called them strategies of inquiry (Creswell 2015). A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure, it is the conceptual structure within which research is conducted, it constitutes the blueprint for the collection, measurement, and analysis of data (Kothari 2004). According to (Tracy 2020), research design ensures that all evidence collected enables the study to effectively address the research problem in a clear and unambiguous manner.

Considering information from (Sharan B. Merriam, 2016), the research philosophy is interpretivism, the research approach is deductive, then the research design for this study is the qualitative design and a case study of SMEs in Bindura urban will be used.

According to (Kothari 2004), qualitative research is concerned with phenomena relating to or involving quality or kind. For instance, when we are interested in investigating the reasons for human behaviour i.e., why people think or do certain things (Kothari, 2004). This study is on factors impeding adoption of e-commerce by SMEs in Bindura urban, it is about investigating the reasons why they are not adopting this technology and the reasons why they still want to continue the traditional way. (Sharan B. Merriam 2016), affirms that qualitative research design can be phenomenology, grounded theory, ethnography, or case study. He goes on to add that these designs often have similar approaches in terms of data collection, but the focus is different on data analysis. This also supported by (Creswell 2015) who says that social constructivism, often combined with interpretivism, is such a perspective, and it is typically seen as an approach to qualitative research.

(Sharan B. Merriam 2016) defines a case study as an in-depth description and analysis of a bounded system, it is an empirical inquiry that investigates a contemporary phenomenon (the ‘case’) within its real-life context, especially when the boundaries between phenomenon and

context may not be clear. This is supported by (Creswell 2015) who states that case studies are a design of inquiry found in many fields, especially evaluation, in which the researcher develops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period(Creswell, 2015).

The case study strategy also has considerable ability to generate answers to the question ‘why?’ as well as the ‘what?’ and ‘how?’ questions, although ‘what?’ and ‘how?’ questions(Kothari, 2004). For this reason, the case study strategy is most often used in explanatory and exploratory research(Kothari, 2004). The researcher wants to generate answers on why SMEs in Bindura urban are not adopting e-commerce business models. The study also seeks to find answers on what is impeding SMEs in Bindura urban from adopting e-commerce business models and how are they growing and maintain their businesses in this era of technology. Therefore, the study of SMEs in their natural setting makes a case study more appropriate method(Kothari, 2018).

### **3.5 Sampling and Target Population**

According to (Djamba and Neuman 2002), a sample is a selected small collection of cases or units that closely reproduces or represents features of interest in a larger collection of cases, called the population. (Tracy 2020) defines sampling as choosing people or participants to interview or participate in the study and choosing specific locations, times of days, various events, and activities to observe in fieldwork. (Tracy, 2020) further stresses that the logic of the qualitative sample is to sample aspect or features of the social world and the goal is to deepen understanding about a larger process, relationship, or social scene.

A good sample design must be a truly representative sample, results in a small sampling error, viable in the context of funds available for the research study, such that the results of the sample study can be applied, in general, for the universe with a reasonable level of confidence (Kothari 2004).

There are other sampling methods like the quota sampling which is an acceptable nonprobability substitute method for producing a quasi-representative sample (Beech 2000). In quota sampling, we first identify relevant categories among the population we are sampling to capture diversity among units and then we determine how many cases to get from each category or quota(Beech, 2000).

### **3.6 Sampling Strategy**

The sampling strategy must avoid sampling in a sloppy or improper manner and not choose a type of sample inappropriate for a study's purpose (Beech 2000). The sampling design or strategy is the way researcher selects the sample(Tracy, 2020). It refers to the techniques or procedures the researcher would adopt in selecting some sampling units from which inferences about the population are drawn (Umesh Kumar, Bhayyalal Dubey 2022)

(Yin 2010) states that in qualitative research, the samples are likely to be chosen in a deliberate manner known as purposive sampling. The goal or purpose for selecting the specific study units is to have those that will yield the most relevant and plentiful data, given your topic of study(Size, 2008).

### **3.7 Sampling technique**

According to (Briory J. Oates 2006), there are two types of sampling namely probability and non-probability sampling and in probability sampling is representative and give each element a chance of being selected whilst in non-probability, the researcher does not know whether the sample is representative or not. Probability sampling includes random, systematic, stratified and cluster sampling whilst non-probability includes purposive, snowballing, self-selection, and convenience sampling (Briory J. Oates 2006).

#### **(a) Purposive sampling**

Purposive sampling involves the use of the researcher's knowledge of the population in terms of research goals, that is, elements are selected based on the researcher's judgment that they will provide access to the desired information(Oates, 2006). Purposive sampling also can be used to select participants based on their willingness to be studied or on their knowledge of a particular topic (Size 2008). Purposive or judgmental sampling was used, which means that they purposefully choose data that fit the parameters of the project's research questions, goals, and purposes (Tracy 2020).

#### **(b) Snowball sampling**

This is described by (Size 2008), as sampling from a known network and is used to identify participants when appropriate candidates for study are difficult to locate. This is selecting new data collection units as an offshoot of existing ones and can be acceptable if the snowballing is purposeful, not done out of convenience(Tracy, 2020). The snowballing occurs when you follow such a lead and let those new ones result in identifying yet other possible interviewees,

and the snowballing procedure can be followed, but only if you take the time beforehand to think about your reasons for choosing the subsequent interviews (Yin 2010).

### **(c) Random sampling**

According to (Yin, 2010) this is selecting a statistically defined sample of units from a known population of units and can be done if your study intends to generalize its findings numerically to the entire population of units. Such a numerical rationale, along with the assumptions about the properties of the population, are not usually relevant in qualitative research, hence the rarity of finding random samples in qualitative studies (Yin 2010).

### **(d) Convenience sampling**

The sample is selected basing on the convenience and/or judgment of the researcher or field interviewer, the selection process is subjective, it is not possible to make an estimate of sampling error, as the sample is not representative of population (Kothari, 2018). Also, we cannot say whether our sample estimates are correct or not (Umesh Kumar, Bhayyalal Dubey 2022). This sampling method involves purposive or deliberate selection of units of the universe for constituting a sample which represents the universe. (Kothari 2004).

In this study, the qualitative approach is adopted, then qualitative sampling techniques will also be used. Snowballing and Purposive sampling will be used in this of factors impeding adoption of e-commerce by SMEs. Most of the SMEs may not be willing to be involved, so the researcher will target those that he perceives to be willing and then ask them to refer to their colleagues and friends. The SME network is closely knit and players in the sector know one another, so references make it easy to expand the sample. As stated by Size (2008), snowballing is purposeful, which means these two techniques can be used together.

## **3.8 Sample size**

A sample size is the number of selected individuals from whom you obtain the required information, it is usually denoted by the letter (n) (Umesh Kumar, Bhayyalal Dubey 2022). In this study, the number of SMEs in Bindura urban selected for this study.

For many qualitative researchers however, the ability to generalize their work to the whole research population is not the goal(Dawson, 2009). Instead, they might seek to describe or explain what is happening within a smaller group of people (Dawson 2009). (Dawson, 2009) goes further to explain that if your research requires the use of purposive sampling techniques, it may be difficult to specify at the beginning of your research how many people you intend to contact. Instead, you continue using your chosen procedure such as snowballing or theoretical

sampling until a saturation point is reached (Dawson 2009). According to (Dawson, 2009) the saturation point as that time of your research when you really do think that everything is complete and that you're not obtaining any new information by continuing.

Since the snowballing and purposive sampling are used in this study, the sample size for each of the five categories will be determined as the study progresses. Data collection will be done until the saturation point is reached, given that the entire population of SMEs in Bindura urban might be small.

In non-qualitative research, the term sample size would refer to the same concept as instance, as used here, but for reasons discussed in the text, the concept of sample in the term sample size is not likely to be relevant in qualitative research (Yin 2010).

### **3.9 Sampling units**

At some stage of the sampling process, a sampling unit is that element or elements considered available for selection and the elements are same in single-stage sampling (Umesh Kumar, Bhayyalal Dubey 2022). In this The SMEs are categorized into retail including clothing, manufacturing, engineering and agriculture and services. This study is looking at SMEs in Bindura urban, the first stage sampling (Umesh Kumar, Bhayyalal Dubey 2022), include a list of a sample of SMEs categories and then the second and final stage sampling will involve sample list of SMEs in each category.

### **3.10 Sampling frame**

A sampling frame is the list, index, or records from which the sample will be drawn, which might not be totally inclusive of the study population (Size 2008). (Umesh Kumar, Bhayyalal Dubey 2022) defines a sampling frame as a list of all sampling units belonging to the population to be studied with their proper identification and available for selection. The actual sample is drawn from the sampling frame, therefore, the sampling frame contains all the sampling units of the population under consideration(Size, 2008). In this study, the sampling framework is the list of all selected SMEs in the retail, manufacturing, engineering and agriculture and services categories.

### **3.11 Data Collection Tools and Procedure**

In-depth face to face interviews and questionnaires is used in this study to identify factors affecting adoption of e-commerce by SMEs. An interview is a conversation between people

where the person undertaking the interview wants to gain information from the other one (Briory J. Oates 2006), this conversation is planned and has an agenda about issues to guide the discussion in a particular direction.

Qualitative methods in community-based research typically involve observing, listening, and engaging with people in their natural settings to learn about phenomena in their lives (Leonard A. Jason 2016). (Leonard A. Jason, 2016) further state that data collection is usually accomplished through observations and interviews but could also involve photographs, video, personal or public historical records and other extant data, or data created with participants.

According to (Briory J. Oates 2006), structured interviews use standard, pre-determined and have identical questions for every interviewee, whilst semi-structured interviews contain a list of areas to be covered but the interviewer can ask them in any order and can also ask follow-up questions. Unstructured interviews give the research less control, he introduces the topic and allows the interviewee to develop their ideas freely uninterrupted (Briory J. Oates 2006).

Interviews can be categorized according to structure or by theoretical stances (Sharan B. Merriam 2016). If placed on a continuum, the range of structure varies from highly structured, questionnaire-driven interviews to unstructured, open-ended, conversational formats (Sharan B. Merriam 2016). (Briory J. Oates 2006) concurs by stating that interviews can be structured, semi-structured or unstructured.

#### **(a) Structured or standardized interviews**

According to (Sharan B. Merriam 2016), the wording and order of questions in this type of interview is predetermined, interview represents the oral form of a written survey. In qualitative studies, usually used to obtain demographic data (age, gender, ethnicity, education, and so on)

#### **(b) Semi-structured interviews**

This is described by (Sharan B. Merriam 2016) as interview guide which includes a mix of more and less structured interview questions and all questions used flexibly. (Sharan B. Merriam, 2016) further explains that they are used when specific data is required from all respondents and the largest part of interview guided by list of questions or issues to be explored, there is no predetermined wording or order in the questions.

#### **(c) Unstructured or informal interviews**

This uses open-ended questions which are flexible and exploratory(Sharan B. Merriam, 2016). It is more like a conversation, used when researcher does not know enough about phenomenon to ask relevant questions (Sharan B. Merriam 2016). One of the goals of the unstructured interview is, in fact, learning enough about a situation to formulate questions for subsequent interviews and this type of interview is used primarily in ethnography, participant observation, and case study(Sharan B. Merriam, 2016).

### **3.12 Sampling Procedure**

The key to getting good data from interviewing is to ask good questions and this takes practice, different types of questions will yield different information. (Sharan B. Merriam 2016).

Using words that make sense to the interviewee, words that reflect the respondent's world view, will improve the quality of data obtained during the interview (Sharan B. Merriam 2016)

According to (Patton 2015) there are six types of questions that can be asked to help the interviewee respond properly. These questions are;

- (i.) Experience and behavior questions, this type of question gets at the things a person does or did, his or her behaviors, actions, and activities(Patton, 2015).
- (ii.) Opinion and value questions, they aimed at understanding the cognitive and interpretive processes of people asking about opinions, judgments, and values, the answers will tell what people think about an issue(Patton, 2015).
- (iii.)Feeling questions, aim at eliciting emotions and feeling responses of people to their experiences and thoughts(Patton, 2015).
- (iv.)Knowledge questions, inquire about the respondent's factual information ie what the respondent knows(Patton, 2015).
- (v.) Sensory questions, they ask about what is seen, heard, touched, tasted, and smelled, technically, they are a type of behavioral or experiential data that capture the experience of the senses(Patton, 2015).
- (vi.)(Patton, 2015) describes these as background or Demographic questions, they identify characteristics of the person being interviewed and answers to these questions help the interviewer locate the respondent in relation to other people. Asking these questions in an open-ended rather than closed manner elicits the respondent's own categorical worldview(Patton, 2015).

Semi-structured interviews will be used in this study. The interviewees must state the factors that are inhibiting them from adopting e-commerce business models, therefore the interview needs to be guided in that direction. The guiding questions will be structured in the manner suggested by Patton (2015) but there will be flexibility in exploring further depending on responses from the interviewees by asking open-ended questions.

Less-structured formats assume that individual respondents define the world in unique ways and your questions thus need to be more open-ended (Sharan B. Merriam 2016). Totally unstructured interviewing is rarely used as the sole means of collecting data in qualitative research and most studies the researcher can combine all three types of interviewing so that some standardized information is obtained (Sharan B. Merriam, 2016). This opinion further supports the choice of semi-structured interviews in studying the factors inhibiting SMEs adopting e-commerce business models.

(Creswell 2015) also supports this choice by stating that in qualitative interviews, the researcher conducts face-to-face interviews with participants, telephone interviews, or engages in focus group interviews with six to eight interviewees in each group. (Creswell, 2014) further states that these interviews involve unstructured and generally open-ended questions that are few and intended to elicit views and opinions from the participants.

### **3.13 Data Presentation and Analysis**

Data analysis is the computation of certain indices or measures along with searching for patterns of relationship that exist among the data groups (Kothari 2004). All qualitative data analysis is inductive and comparative in the service of developing common themes or patterns or categories that cut across the data (Patton, 2015). Qualitative data analysis should also be conducted along with (not after) data collection (Sharan B. Merriam 2016). This view is also supported by (Dawson 2009), who states that for those at the highly qualitative end of the continuum, data analysis tends to be an on-going process, taking place throughout the data collection process.

According to (Durdella 2019), there are three stages that make up the analytical process include preliminary data analysis, thematic data analysis, and interpretation. (Dawson 2009) infers that examples of qualitative data analysis include thematic analysis, comparative analysis, discourse analysis and content analysis.

#### **(a) Thematic analysis**

This is when data is analysed by theme and this type of analysis is highly inductive, themes emerge from the data and are not imposed upon it by the researcher and analysis, data collection and analysis take place simultaneously, even background reading can form part of analysis (Dawson 2009).

#### **(b) Comparative analysis**

Using this method, data from different people is compared and the process continues until the researcher is satisfied that no new issues are arising (Dawson, 2009). Comparative and thematic analyses are often used in the same project, with the researcher moving backwards and forwards between transcripts, memos, notes, and the research literature (Dawson 2009).

#### **(c) Content analysis**

This technique is described by (Dawson 2009), as a process which is more mechanical with analysis being left until the data has been collected. (Dawson, 2009) goes on to say that perhaps the most common method of doing this is to code data by content and this is called content analysis, the researcher systematically works through each transcript assigning codes. This type of analysis can be used for open-ended questions which have been added to questionnaires in large quantitative surveys, thus enabling the researcher to quantify the answers (Dawson, 2009).

#### **(d) Discourse analysis**

(Dawson 2009) states that this technique is also known as conversational analysis, this method looks at patterns of speech, such as how people talk about a particular subject, what metaphors they use, how they take turns in conversation, and so on. These analysts see speech as a performance, it performs an action rather than describes a specific situation or specific state of mind (Dawson, 2009). Much of this analysis is intuitive and reflective, but it may also involve some form of counting, such as counting instances of turn-taking and their influence on the conversation and the way in which people speak to others

### **3.14 Ethical Considerations**

The Code of Ethics supplies them with details about what you intend to do with the information they give, and it shows that you intend to treat both them and the information with respect and honesty (Dawson 2009). For this study, the following ethics will be observed.

People have the right to opt out of the research, even if they had initially agreed to be part of the research (Briory J. Oates 2006), they could also decline to answer any questions. Voluntary participation means the absence of coercion, so you can use specific steps to protect participants from feeling that they must participate (Durdella 2019). No one will be forced to participate in

in this study. The aim of the study will be explained to the SMEs owners, and they can answer those questions which are comfortable to them.

Right to give informed consent, the participants must be made fully aware of the nature of the research and their involvement before they give their consent (Briory J. Oates 2006). They must also be informed that they have the right to participate and withdraw at any time(Oates, 2006). Interviews must not be forceful or aggressive to alienate the participants, they will be held in a friendly and professional manner(Oates, 2006).

Participants have the right to have their identity and location protected (Briory J. Oates 2006). If there is need to use names, pseudonyms shall be used, and the participants will also be disguised to hide their identities. All personal information about participants will not be requested, the participating SMEs will remain anonymous.

Data provided by participants must be confidential, it should not be disclosed to anyone else and should be kept safe and secure (Briory J. Oates 2006). Avoid disclosing information that would harm participants (Creswell 2015). The findings should be kept disguised and should not be linked to specific people or organisation (Durdella 2019) and all data collected will not be obviously linked to a specific participant SME, no specific names will be used.

Do not plagiarize. Researchers should give credit for the work of others and quotation marks should indicate the exact words claimed from others, the key idea is to not present the work of another as your own, all work from other sources will be cited and acknowledge appropriately(Creswell, 2015).

### **3.15 Chapter Conclusion**

The chapter outlined the research design methodology that used in this study. Research philosophy, design, sampling, research instruments, were discussed, ethical considerations, data presentation and analysis tools employed in this research are also discussed.

The next section, which is Chapter 4 presents the analysis and discussion of the data obtained from questionnaires and conducted semi-structured interviews with sampled SMEs. The critical purpose is examining the factors the impede adoption of e-commerce by SMEs by using the case of Bindura urban.

## **CHAPTER FOUR**

### **4. Data Presentation and Discussion**

#### **4.1 Introduction**

This study focuses on the factors impeding the adoption of e-commerce by SMEs focusing on Bindura urban was discussed in the previous chapter. The data that has been collected from respondents through face-to-face interviews and questionnaires will then be presented, analysed, and interpreted in this chapter.

The owners of SMEs are the main target for the interviews and questionnaires because most SMEs are managed by the owners and all decisions depend on the owners. The research questions presented in chapter 1, will guide the data analysis for this study. This study is following the qualitative approach, so qualitative data collection will be followed and will be based on the theories discussed in Chapter 2.

This chapter will mainly be made up of presentation and analysis of data collected from interviews and questionnaires.

#### **4.2 Objectives revisited**

##### **(a) Main research objective**

After considering the research questions, this section will look at the main objective as well as secondary objectives.

The aim of this study is to analyse negative challenges inhibiting SMEs from fully adopting and implementing e-commerce business models.

##### **(b) Secondary research objectives**

These are as follows.

- (i.) To explain theoretical and conceptual frameworks that determine e-commerce business models.
- (ii.) To analyse the extent to which the state of the economy impedes the adoption of e-commerce by SMEs.
- (iii.) To evaluate how tradition and organisational structures of SMEs impede adoption of e-commerce by SMEs.
- (iv.) To examine if socio-cultural beliefs impede adoption of e-commerce by SMEs.
- (v.) To evaluate the telecommunication infrastructure and how this impedes the adoption of e-commerce by SMEs.

- (vi.) To examine the country laws and their effect SMEs adoption of e-commerce.
- (vii.) To give recommendations on addressing challenges faced by SMEs when adopting e-commerce.

**4.3 Response rate**

	<b>Frequency</b>	<b>Percentage</b>
Responded	35	81.3%
Did not respond	8	17.4%
Total	43	100%

**Table 4.1: Response rate**

Response rate is the number of people participating in the study divided by the number selected in the sample, in the form of a percentage, this is also called the completion rate, or the percentage of questionnaires sent out that are returned (Babbie 2010). Total response rate is the percentage of all respondents in the initial sampling frame who were located, contacted, eligible, agreed to participate in the study (Djamba and Neuman 2002).

According to (Babbie, 2010), the overall response rate is one guide to the representativeness of the sample, if a high response rate is achieved, there is less chance of significant non-response bias than with a low rate. Conversely, a low response rate is a danger signal, because the nonrespondents are likely to differ from the respondents in various ways (Babbie 2010).

Thus, self-report measures require notably high response rates, greater than 80%–90% (Leonard A. Jason 2016).

*The response rate for this study is  $(35/46) \times 100 = 81.2\%$ , this is within the recommended range.*

**4.4 Demographic distribution of respondents**

The study is about factors impeding adoption of e-commerce by SMEs in Bindura urban, so all respondents were selected within the Bindura urban. This study is mainly concerned with SMEs, so other elements like gender, age and race were not considered. The focus was on the operating category of the SME, those that were selected and interviewed are in the retail, manufacturing, engineering and agriculture and services categories, they are represented in Fig 4.1 below.

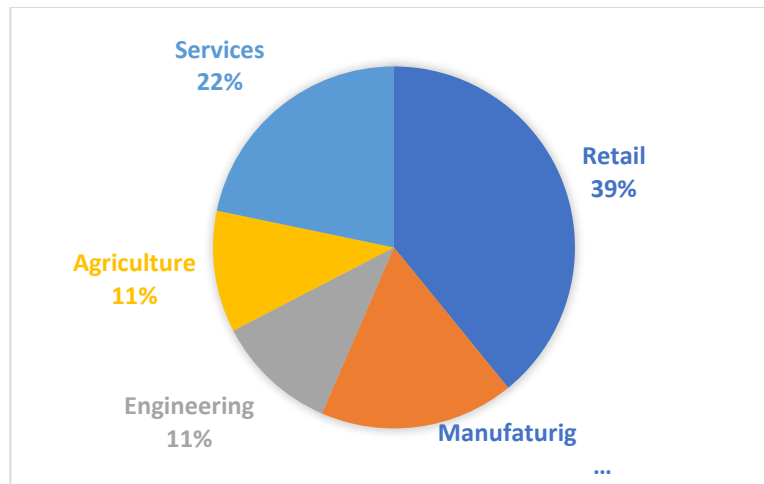


Fig 4.1 shows SMEs who were interviewed represented as 11% in the agricultural sector, 11% in engineering, 17% in manufacturing, retail had 39% and services had 22%. The data is represented in Table 4.2 below showing the frequency.

SME Category	Frequency	Percentage
Agriculture	5	11%
Engineering	5	11%
Manufacturing	8	17%
Retail	18	39%
Services	10	22%

**Table 4.2: Frequency of respondents**

The majority of SMEs in Bindura urban are in the retail section which is represented by 39%, followed by Services which is represented by 22%. Services include real estate, transport, consultancy, hotels and lodges, private schools, and colleges, and does not include professional services such as legal services and accounting services. Engineering and agriculture have the lowest response with 5% each, whilst manufacturing has an average of 8%.

#### **4.5 Analysis and discuss of research findings as per study objectives**

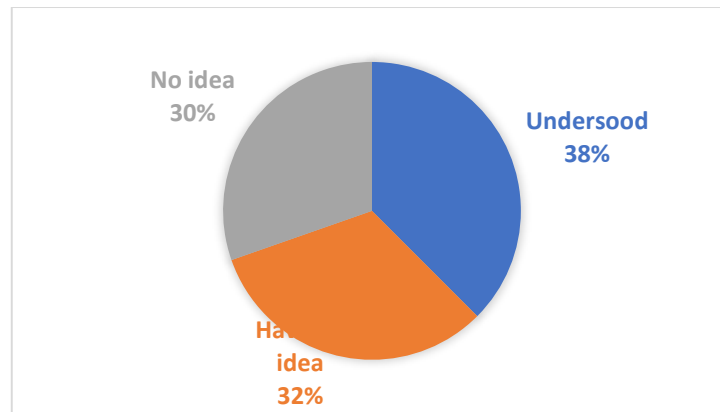
##### **(a) Objective one**

This objective examines how perception impedes the adoption of e-commerce by SMEs. It examines if there is there is any relationship between perception and the adoption of e-

commerce by SMEs. The following variables were used to collect information from respondents.

**(i.) Perception of e-commerce**

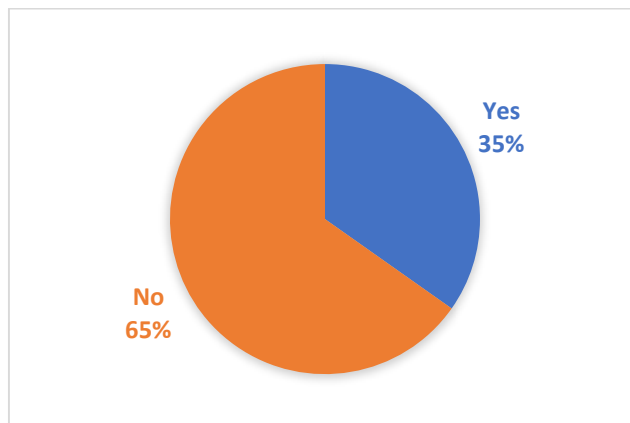
When asked about their understanding of e-commerce or on-line business, findings are represented in Figure 4.2 below.



From the summary above 38% understand what e-commerce or on-line business is, 32% have an idea and 30 percentage have no idea.

**(ii.) E-commerce adoption**

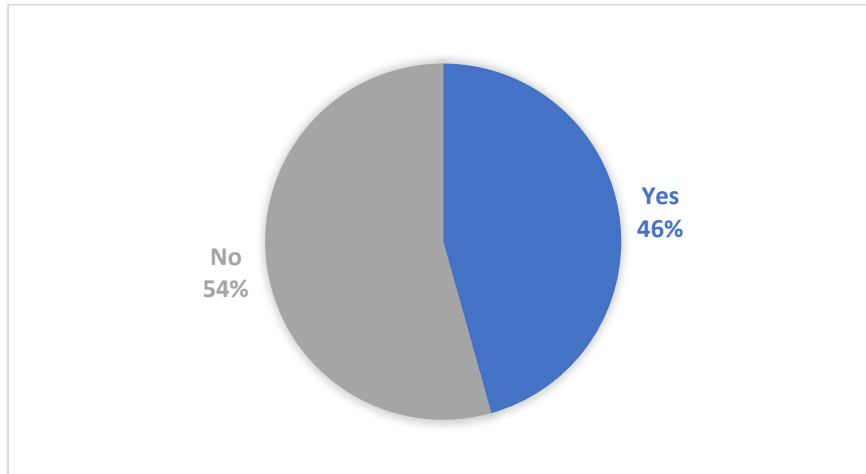
When asked if they had adopted e-commerce, most of the respondents showed that they have not yet done so. The data is represented in Figure 4.3 below



From the summary above, 65% indicated that they have not yet adopted e-commerce whilst 35% indicated that they have already adopted e-commerce in one form or the other. Those who have adopted e-commerce indicated that they are now buying from Chinese suppliers and paying through VISA cards and having their goods shipped to their businesses.

**(iii.) Recommend e-commerce**

When asked if they would recommend e-commerce to fellow businesspersons, most of the respondents indicated that they have not yet done so. The findings are represented in Figure 4.4 below.



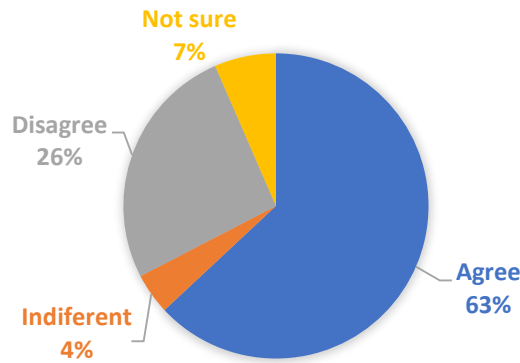
From the findings above 54% indicated that they would not recommend e-commerce to their fellow businesspersons, whilst 46% indicated that would. Those who indicated that they would not recommend, cited lack of adequate knowledge as the main reason for not recommending.

**(b) Objective two**

This objective analyses the respondents' opinions on how economic factors impede the adoption of e-commerce by SMEs. This objective involves other variables elements such as limited financial resources, costs of acquiring and maintaining e-commerce.

**(i.) SMEs have limited financial resources to implement e-commerce.**

This was mainly focusing on the capability of SMEs to fund the implementation of e-commerce. The objective tested if funding was an impediment to adoption of e-commerce. The data is represented in Fig 4.5 below.

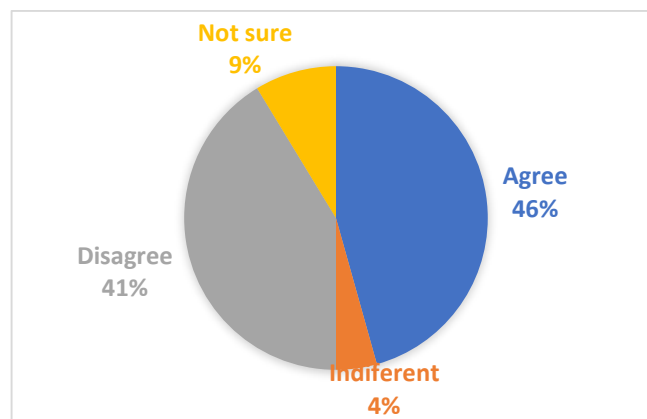


From the summary presented in Fig 4.1, there is a unanimous agreement that SMEs have limited financial resources to implement e-commerce. At the same time 26% of the respondents disagree whilst 7% are not sure and 4% are indifferent. During the interview, one respondent indicated that,

*“I am just starting to establish my business and I need all the money to buy stock and pay employees. I cannot afford to divert the money to establish e-commerce now. I do not have enough”*

**(ii.) Costs involved in setting up e-commerce are manageable.**

This objective sought to check if SMEs can afford the costs of implementing e-commerce. There are costs of setting up, include the computers, internet connection and on-applications. Data from respondents is summarized in Fig 4.6 below.

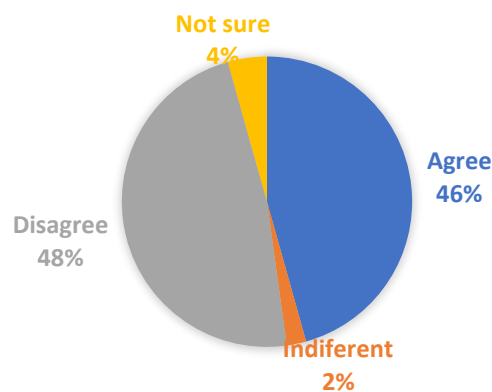


From the summary, 46% agree that the costs are manageable, meaning that with their limited financial resources, they can afford the costs, however, a significant 41% indicated that the costs were not manageable, whilst 9% were not sure and 4% were indifferent. Most of the respondents disagreed with the statement. When asked why he was not sure, one respondent said,

*“We have laptops and smartphones which are once off expenses. But I am not sure if that is all needed, or more costly facilities will be needed for me to start on e-commerce.”*

**(iii.) SMEs can afford maintenance costs of e-commerce.**

There is a possibility that they can implement e-commerce but the costs of maintaining it functioning well may affect the decision to adopt. Costs associated with hardware maintenance, data base updating, and consulting are also considered when making the decision to adopt e-commerce. Data from respondents is represented in Fig 4.7 below.

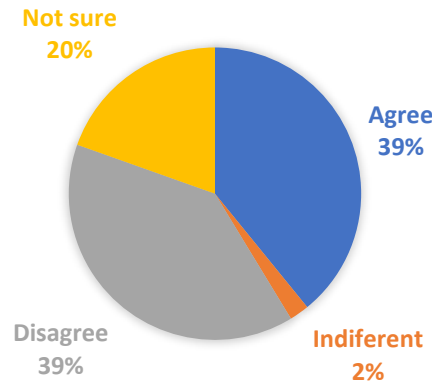


Of all the respondents, 48% disagreed, whilst 46% agreed that they can sustain the costs of maintaining e-commerce, 4% were not sure and 2% were indifferent. The 4% who were not sure, did not know what will be involved in maintaining e-commerce working once they had adopted it. Those who disagreed cited rising costs and were concerned about their profits as indicated by one of the respondents when he said,

*“The costs are always going up, look at the internet charges, they are always going up and we don’t know if we will continue to afford. We may be forced to cut the internet if they continue to eat into our profit”*

**(iv.) On-line prices are low.**

The study checked the respondents’ view on on-line pricing as compared to in-store prices. The pricing can deter SMEs from adopting e-commerce if they are too competitive. On-line prices may include shipping or delivery logistics. This can complicate e-commerce and can be an impediment to its adoption by SMEs who want simple and straight forward things. The data is represented in Fig 4.8 below.



There was an equal number of those who agreed and those who disagreed, whilst a significant 20% was not sure. This shows a diversified opinion on the on-business pricing. The respondents were not sure, they were mainly comparing the local prices and not considering the whole international on-line market. One respondent said that,

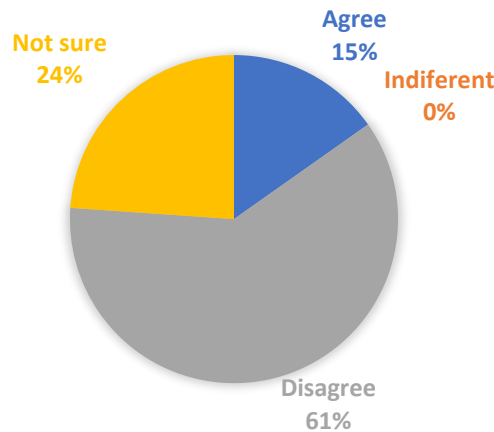
*“I sell my goods both in my shop and I also use Facebook and WhatsApp. My prices are not different, the price that I put on Facebook or WhatsApp is the same that I sell in my shop. I keep the goods in the shop where I pay rent. I also compare my prices to others, and they are also doing the same, same price on Facebook and in the shop”*

**(c) Objective three**

To evaluate how tradition and organizational structures of SMEs impede the adoption of e-commerce by SMEs. Tradition could be an impediment if people resist change because of the unknown, when they are afraid of giving up what they are used to. To address this objective, five variables were considered.

**(i.) On-line customers are not loyal.**

SMEs have some traditional customers with whom they have built trust and loyalty. Due to this relationship, customers visit specific businesses if they want to purchase something. This objective assessed how SMEs feel about on-line customers’ loyalty. The lack of customer loyalty can be an impediment to the adoption of e-commerce by SMEs. Findings are represented in Fig 4.9 below.

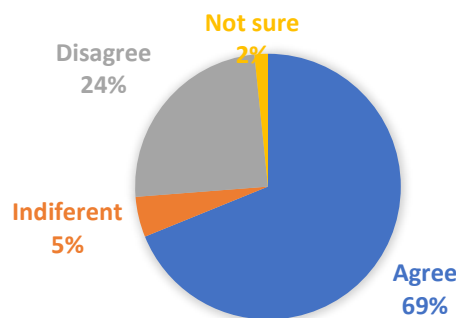


The majority of 61% agreed that on-line customers are not loyal, whilst 15% agreed and 24% were not sure. Those not sure are probably those who have not yet adopted e-commerce and do not have enough knowledge. One respondent who disagreed with this statement stated that,

*“Customers can go to Google search, and this will reveal thousands of the same product from different suppliers and can choose any of the supplier. the next time, he will buy from a different one. There is no loyalty on the internet”*

**(ii.) Traditional businesses offer more personalized services**

The idea that customers there is no personalised service on on-line business can be an impediment to adopting e-commerce by SMEs. Personalised service increases customer satisfaction and it brings loyalty and increases business. The feelings from respondents are summarized in the following Fig 4.10 below,

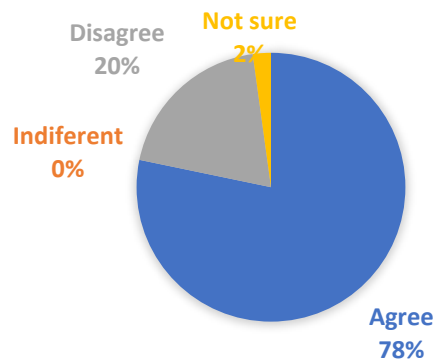


The total of 69% agreed that traditional businesses offer more personalised service, whilst 24% disagreed, 2% were not sure and 5% were indifferent.

**(iii.) Online business reduces fame and authority of businessmen.**

Traditional businessmen are known by their fame and status in the community. Customers know them and they are given a high social standing in the community all the time and this

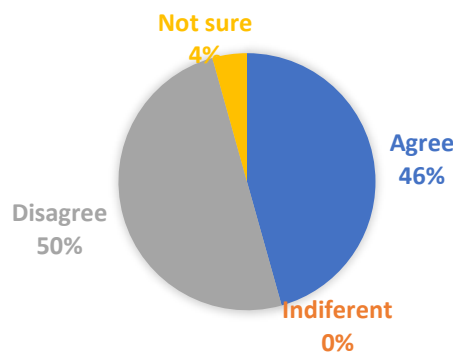
gives them some authority which they use to gain some favours personally. If this is reduced or eradicated, then this will discourage the adoption of e-commerce. Fig 4.11 below represents the summary of findings,



A total of 78% agreed, whilst 20% disagreed and 2% are not sure. This shows the importance placed on this objective by SMEs, because of some favours and privileges that come with it.

**(iv.) I trust on-line transactions**

On-line transactions are an integral part of -commerce, payments are made through VISA cards, electronic funds transfers, internet banking and through mobile money. This study sought to collect data on the trust the SMEs have trust in on on-line transactions. The summary of data is presented in Fig 4.12 below.



Half the population does not trust on-line transactions whilst 46% trust this method of payment and 4% are not sure. This shows that lack of trust in on-line transactions is one of the main reasons for the relatively low electronic commerce adoption today (Whiteside 2017). One respondent said,

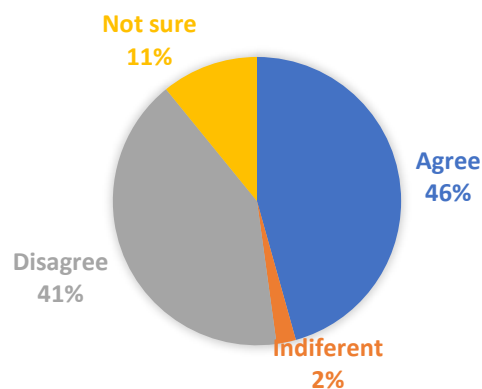
*“How can I pay money to someone I do not know, what happens if the person just disappears, where would I find him, maybe he is in America or Britain. How will I recover my money if he fails to honour the deal.”*

The other respondent said,

*“When you make a payment, you need to get a receipt as evidence that you have paid, in case you want to return the goods.”*

**(v.) E-commerce will replace traditional businesses**

As indicated in chapter 2 by the provided evidence, e-commerce is growing and will eventually become the way of doing business. This objective sought to solicit the view of SMEs on technology advances, their opinions on this objective have a bearing on the adoption of e-commerce by SMEs. The data is represented in Fig 4.13 below



A total of 46% agrees, 41% disagrees whilst 11% are not sure and 2% are indifferent. The fact that only less than half of the population agrees that e-commerce will replace traditional businesses shows that the majority still believe that their existence is guaranteed and there is no need of adopting e-commerce.

*“These businesses have always been here, we have seen many changes come and go but we have maintained our businesses. What is important is to understand what customers want, once you do that you cannot go wrong. This technology things will pass.”*

Another respondent indicated that,

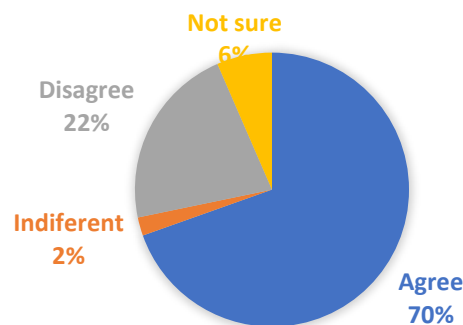
*“Nowadays most people have smart phones and laptops, social media is very active, and this has created a marketplace for us. Instead of advertising in newspapers, I just throw my advert in different social media groups. Eventually people will start looking for goods and services on-line”*

**(d) Objective four**

This objective gathered information on the relationship between the SMEs and their customers or suppliers. The aim is to see if this relationship is an impediment to the adoption of e-commerce. To address this objective, the following variables will be discussed and analysed.

**(i.) E-commerce will change how I interact with my customers/suppliers.**

This object sought to find out the opinions of SMEs on the changes they see being brought by embracing e-commerce. One of the major changes is how they will be interacting with their customers, and this could be an impediment to the adoption of e-commerce by SMEs. The findings are in Fig 4.14 below,



The 70% majority agree that adoption e-commerce will change how they will interact with their customers, 22% are of the opinion that nothing will change whilst 6% are not sure and 2% are neither here nor there. Whether they adopt e-commerce basing on this objective depends on the change and how the SMEs view them. One respondent indicated that and is quoted here saying,

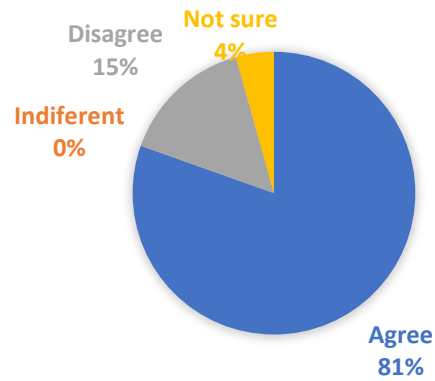
*“When a customer comes in, I can tell the mood he is in, and I know how to approach and talk to him. I have empathy with my customers and can see how they are feeling. How will I know how the internet customer is feeling? There is no way.”*

The other respondent is quoted saying.

*“Usually on weekends, some of my customers come here and we have drinks together whilst doing business. We can talk about different issues and even personal ones. We are like a family now with some of my customers.”*

**(ii.) I believe in know your customer/supplier tradition.**

The study sought to identify if the customer relationship is an impediment to the adoption of e-commerce by SMEs. The results indicates that most respondents agree with this statement, the results are shown in Fig 4.15 below



A sounding 81% of the SMEs believe in knowing their customer whilst 15% do not agree and 4% are not sure. From the interviews, one responded is quoted saying.

*“Our businesses are sustained by our customers, we should know what they want, and tailor make our products according to their needs. Customers must be free to say what they want without me feeling offend. If something is not in order, they should say so. Meeting their personal needs and addressing their concerns will create loyal customers.”*

Another interviewee said,

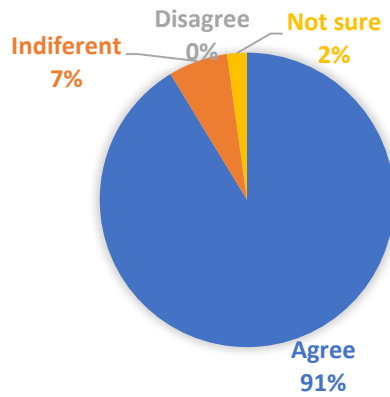
*“I now know that there are some customers who do not want to be coerced, they want to take their time in analysing the products before deciding. So, when they come in, we let them take their time examining the products until they make their decisions. Some are the opposite, they want to be assisted and if an assistant is not at hand, they will be cross.”*

Another respondent said,

*“I have learnt that there are other customers who are never satisfied, they are always complaining and shouting, so we just apologize and do not talk back. These customers always come back.”*

**(iii.) Customers must see what are buying first before paying.**

This study showed that the majority agreed with this statement, they want to see what they are buying before making the payment. The data is represented in Fig 4.16 below.



Almost all the respondents agree with the statement, 91% agreed, 7% do not care and 2% are not sure. There is no one who is disagreeing. Respondents were saying,

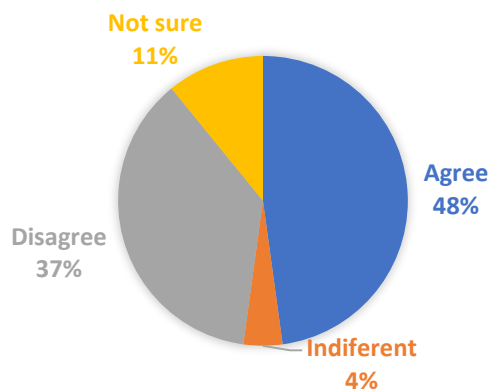
*“Of course, I must see what I am buying and check if all the specifications are correct. What if I order goods and different items are delivered. If possible, I want to pay, check, and then personally collect my items. That way, I am sure.”*

One supplier in the B2B model indicated that,

*“Customers must check if their goods are in order before leaving the shop, once they leave, we do not accept any returns and we do not refund.”*

**(iv.) Customers/suppliers have no confidence in doing business on-line.**

The study sought to check if confidence is an impediment to the adoption of e-commerce by SMEs. A large number agreed that they do not have confidence in on-line business. The summarised data is shown in Fig 4.17 below.



From the summarised data above, 48% agreed that they do not have confidence, 37% have confidence and 11% are not sure whilst 4% are indifferent. From the interviews, one respondent said,

*“How can you have confidence in paying someone who you don’t know and have never seen before. You don’t give your money to strangers, what if they disappear?”*

Another interviewee was quoted saying,

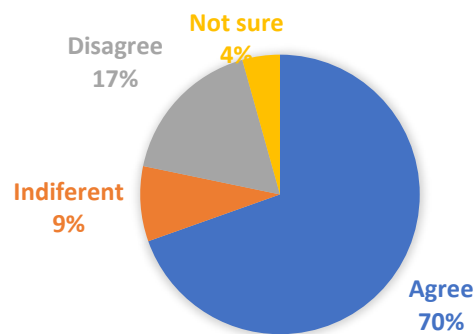
*“I have dealt with customers from other towns, even as far as Bulawayo, they pay using mobile money and when the money reflects in my account, I send the goods. Mobile money payments show the person who is receiving money and can be tracked, and this gives my customers confidence.”*

Yet another respondent indicated that,

*“I have heard of instances of people who paid for orders from China, and they never received the goods. Their money disappeared; I cannot deal with that.”*

#### **(v.) Traditional businesses provide the best service**

The study wanted to find out the SMEs compare traditional businesses to e-commerce. It tested if the wish to provide the best service is an impediment to the adoption of e-commerce. The summary of findings is indicated in Fig 4.18 below.



From the chart above 70% agree that traditional businesses offer the best service, 17% disagree whilst 9% are indifferent and 4% do not agree. The following are some of the responses from interviews carried out,

*“We offer the best service, we even deliver to our customers and install for free. Customers can call us for after-sales services, and we still assist them. We also demonstrate how the appliances are used safely.”*

*“We have fitting rooms here, customers can fit the clothes and go on the mirror to check if the clothes fit. We even do adjustment in-store for customers for free”*

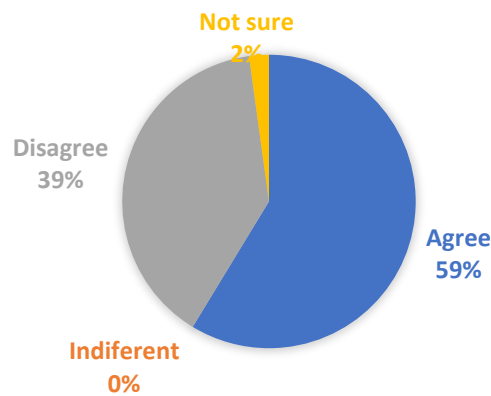
*“Nowadays most customers are learned, goods bought on-line come with instruction manuals on how to use or assemble them. The instructions languages include English and by following these instructions, one can do the assembling without any assistance.”*

**(e) Objective five**

To evaluate how telecommunication infrastructure impedes the adoption of e-commerce by SMEs. To further explain this objective, the following six related variables were discussed.

**(i.) I have easy access to internet.**

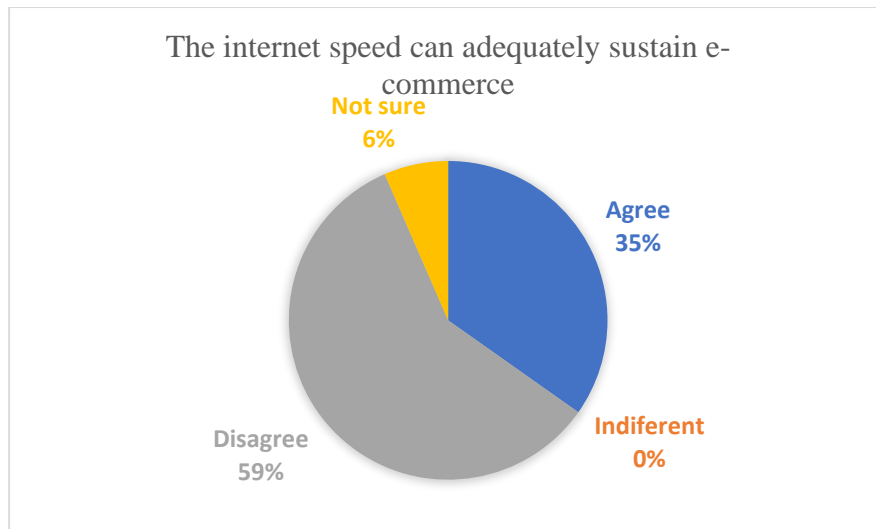
When asked if the respondents had easy access to internet, the majority agreed. The majority of the sample indicated they have easy access to internet. The results are shown in Fig 4.19 below.



The results indicate that 59% concurred, whilst 39% did not agree, whilst 2% were not sure if they had easy access to internet.

**(ii.) The internet speed can adequately sustain e-commerce**

When asked about the internet speed, less than half of the population agreed that the speed was sustainable. The analysis of the results is indicated in Fig 4.20 below.



The analysis shows that 35% of the sample agreed that internet can sustain ecommerce, 59% disagreed whilst 6% were not sure. The following are some of the responses from some interviewees.

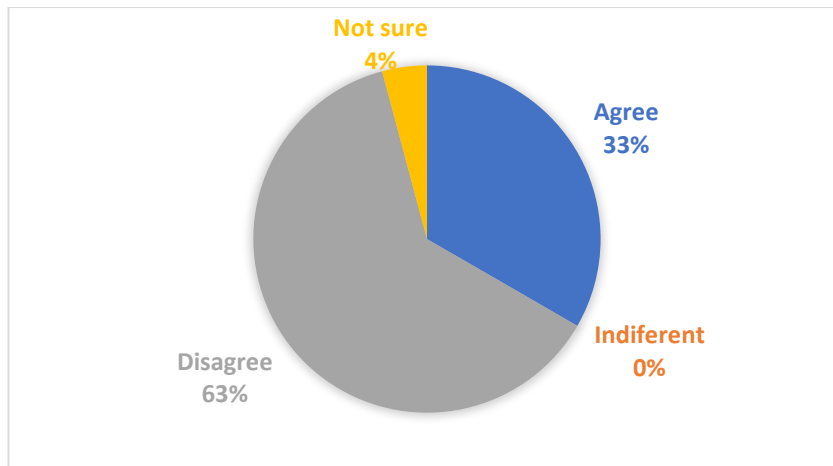
*“I use portable Wi-Fi bundles on my smart phone and the speed is not that good. The internet is always on and off and freezes at times. It usually improves in the evening. The other problem is with the ZESA power cuts, they affect speed and availability of internet. So, I don’t know if this will sustain e-commerce.”*

*“Our internet speed is ok, we have a fiber connection, and I am satisfied with the speed, I believe it can carry e-commerce transactions without problems.”*

*“We are currently using internet for emails, surfing and social media, nothing serious, so the speed is fine. I am not sure how the speed will behave when we add e-commerce, probably there will be need to upgrade if the speed goes down.”*

**(iii.) Internet costs are affordable.**

When asked about their opinion on the costs of internet there was a unanimous agreement that the costs are not affordable. The analysis is represented in Fig 4.21 below.



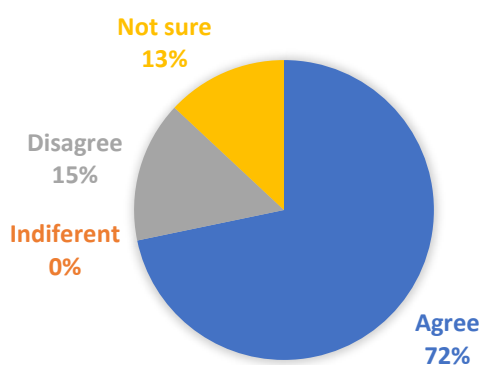
The data analysis shows that 63% do not agree with the statement that internet costs are affordable, 33% agree whilst 4% are not sure of the affordability. The following views were expressed during the interviews.

*“We pay ZWL\$16000 per month for our internet and get 60G, this is enough for us, and the cost is affordable so far. The problem is that the prices keep going up monthly. If this trend continues in future, we may not be able to afford internet costs.”*

*“If one requires internet for business, then one needs proper internet connection and not the data bundles we use on our phones for social media. That internet for business is expensive and some of us cannot afford it. Now we are having difficulties buying these Wi-Fi bundles, I am afraid we the costs are just not affordable for some of us.”*

**(iv.) Financial institutions can support e-commerce**

Asked about their opinion on the support from financial institutions on the adoption of e-commerce, there was a unanimous agreement that they can support e-commerce. The data analysis is shown in Fig 4.22 below.



The data analysis shows that 72% agree that financial institutions can support e-commerce whilst 15% disagree and 13% are not sure. Some interviewees gave the following views on this point.

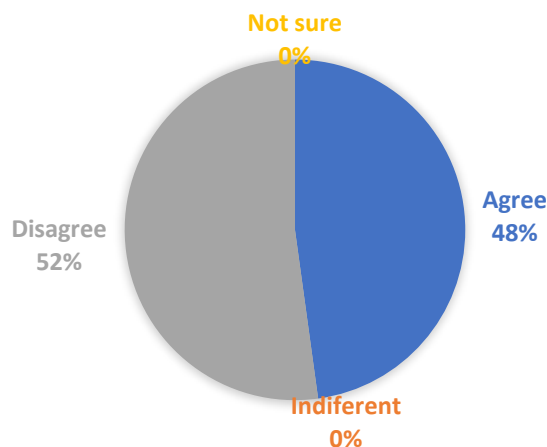
*“Most banks are now on-line we can now do almost everything from home and visiting banks is now rare, except when one wants to withdraw hard cash. Internet banking means you can pay your suppliers on-line, check balances transfer money from one account to the other. I think banks can support e-commerce, my worry is the internet availability and speed.”*

*“If banks can make real-time transaction, then I can say they are able to support e-commerce but as long as it takes hours to process payment, as is the case with some banks now, then I think they cannot support.”*

*“Some banks are always off-line, their internet banking is not consistent. I think for e-commerce to work, the banks must always be on-line. So, the banks need to upgrade their systems for them to be able to support e-commerce transactions.”*

**(v.) We have adequate computers/tablets/smartphones.**

Asked if they have the necessary devices to use when adopting e-commerce, most respondents indicated that they do not have appropriate devices. Their responses are analysed in Fig 4.23 below.



For this statement, there were only two responses, 52% indicated that they do not have devices to use with e-commerce whilst 48% indicated that they have. Some of the responses to the question are below.

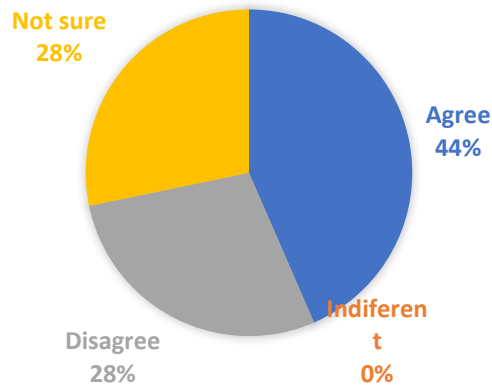
*“We have laptops and smartphones that we are using for business, so we will not need to buy any computer in the near future, we are covered.”*

*“A smart phone does not work properly for business transactions, we need a proper computer. Currently we don't have any and if we are to adopt e-commerce, we will have to buy one.”*

*“You need a proper computer not just any computer otherwise nothing will work so we don't have computers at the moment.”*

**(vi.) The customers/suppliers are ready to do business on-line**

Asked of their opinion on the readiness of customers or suppliers to adopt e-commerce, many respondents believed they were ready. This is represented in Fig 4.24 below.



From the data presented above, 44% believed customers and suppliers are ready for e-commerce, whilst 28% disagreed and another 28% were not sure. Some of the responses to this statement are as follows,

*“I am not sure if they are ready, how could I know.”*

*“They should be, I can see from some of the social media groups, there is a lot of advertising going on there. There is some level on on-line business already taking place, so it just needs to be upgraded.”*

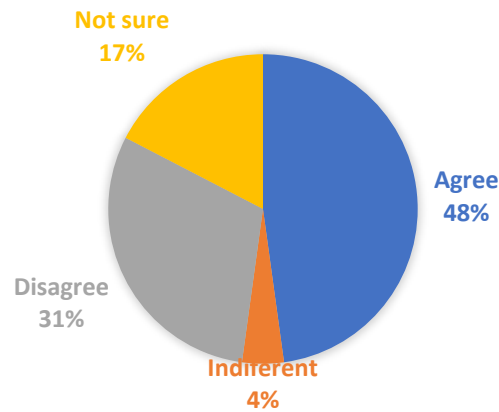
*“Currently all my customers are walk-in customers, I don't have any online customers, so I don't know if they are ready. I also buy physically from my suppliers, and I am also not sure about their readiness.”*

**(f) Objective six**

The objective sought to find out how management decisions and actions impede the adoption of e-commerce by SMEs. This objective is analysed through the following five variables.

**(i.) Management is committed to adopting e-commerce.**

When asked this question, many agreed with the statement as shown in Fig 4.25 below.



The data analysis indicates that 48% of the respondents agreed that management is committed, whilst 31% did not agree, 17% were not sure and 4% were indifferent. From the interviews carried out, some of the responses were as follows.

*“It is not that we not committed but we must know exactly how this will improve our profitability, otherwise we would rather remain with our current systems.”*

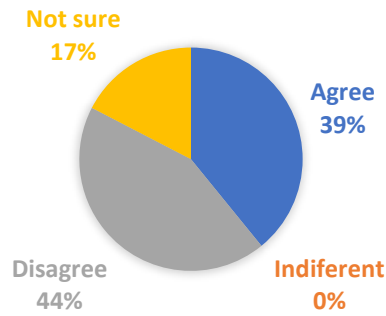
*“We have been advertising on some social media platforms and the response is encouraging, so the commitment is there. With how technology is moving, it’s not surprising to find out that one day all business will be done on-line”*

*“We leant the hard way during the COVID-19 pandemic. We had to close shop and had no income. Those who were doing on-line business survived, that’s when we became committed to go on-line.”*

*“Commitment alone is not enough, we must have resources in place.”*

**(ii.) My business has a clear vision on e-commerce.**

This question sought to find out if management had any vision on the adoption of e-commerce. Fig 4.26 shows the presentation of data that was collected.



From data presentation above 44% disagreed that they have a clear vision on roadmap to e-commerce adoption, 39% agreed and 17% were not sure if they have a clear vision on e-commerce. Some of the responses from interviewees are as follows.

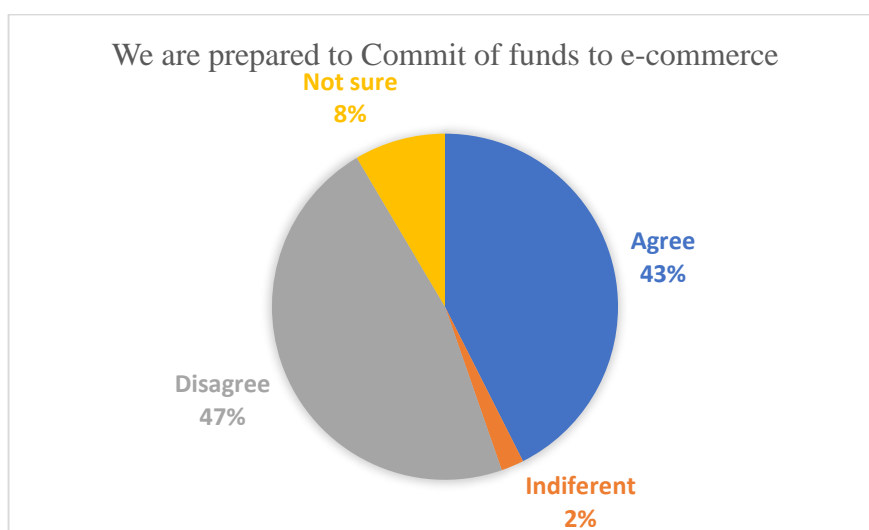
*“I need to understand what it is all about first before we can formulate a strategy on the adoption.”*

*“In future we want to be able to export our product to global markets. Sourcing raw materials from other countries may be cheaper so we also want to try it.”*

*“The hospitality industry relies on local and international customers, we need to be fully on-line so that customers can locate us on the internet and make their bookings and payments online. We are very clear of where we want to be.”*

**(iii.) Management is prepared to commit funds to implementation of e-commerce.**

When asked if they are prepared to commit funds for the implementation of e-commerce, most of the respondents agreed. The data is represented in the Fig 4.27 below.



The data presentation shows that 43% of the respondents are prepared to commit funds for the implementation of e-commerce, 47% are not prepared to whilst 8% are not sure and 2% are indifferent. Some responses from the interviewees are as follows.

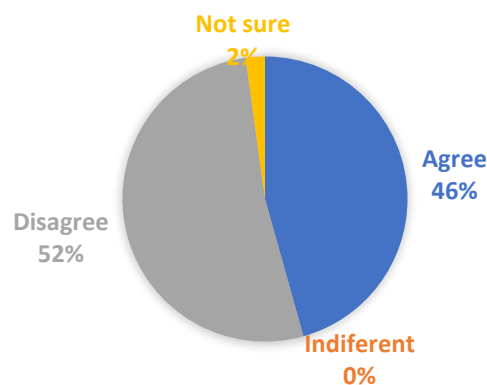
*“We are prepared to commit funds, only when we have a clear understanding of how it works and the benefits we will get.”*

*“Currently we cannot make any commitment now because we don’t have the funds available. We do not have any savings or reserves somewhere.”*

*“We have seen the benefits of e-commerce and we are prepared to set aside some funds, we may not have all the required money, but we are into this and will find the way out.”*

**(iv.) We have technical and managerial skills to implement e-commerce.**

When asked if they have the required technical and management skills, most of the respondents indicated that they do not have these skills. The data is presented in Fig 4.28 below.



A total of 52%, of the respondents indicated that they do not have the required technical skills require to implement e-commerce, 46% indicated that they have and 2% were not sure. From the interviews, the following came up.

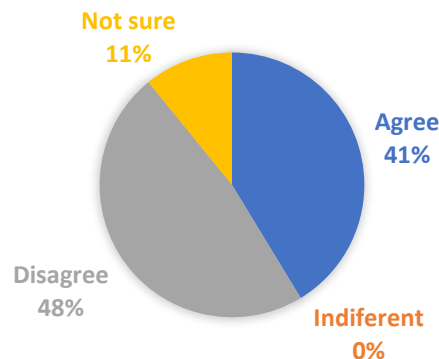
*“We have been using computers for other things like point of sale, e-mails, and general office work. So, we have people who can use computers and internet.”*

*“If this requires specialized skills then we don’t have, but if it requires general computer knowledge, then we have the capacity.”*

*“We do not have computer technicians, most the computer work is done by the secretary. I am not sure if she can deal with e-commerce. Probably some form of training is required.”*

**(v.) Adopting e-commerce will not change our systems and structures.**

When asked to give their opinion on whether e-commerce will change their organizational structures and systems, many agreed. The data is represented in Fig 4.29 below.



Of all respondents 48% disagreed with the statement that adopting e-commerce will not change organizational structures and systems, 41% agreed with the system whilst 11% were not sure. Responses from some interviewees are as follows.

*“Of course, some people and some posts will have to be abolished, that the nature of adopting technology.”*

*“We may need to create a post or department that will be dedicated to e-commerce only.”*

*“We currently have people working with on-line booking systems and nothing is going to change.”*

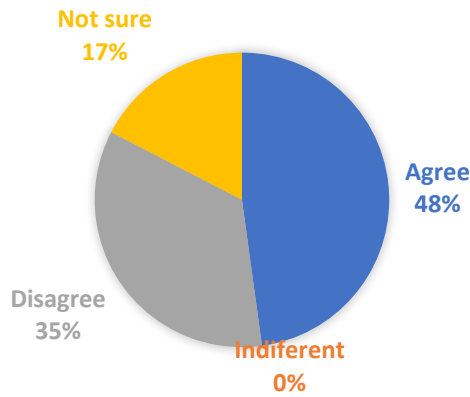
*“Adopting this technology is expensive, this must take over some functions being done by other workers to compensate for the costs”*

**(g) Objective seven**

To examine how the country laws impede SMEs adoption of e-commerce and what legal instruments exist to protect the privacy and ensure confidentiality of those engaging in on-line business.

**(i.) Government supports e-commerce adoption by SMEs**

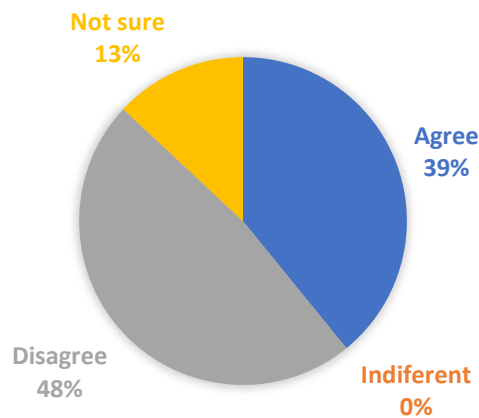
When asked for their opinions on whether they see the Government supporting e-commerce or not, most of the respondents agreed but not the majority. He analysed data is represented in Fig 4.30 below.



From the data summary above, 48% agreed that there is Government support for SMEs, 35% disagreed whilst 17% were not sure of the support.

**(ii.) We are aware of existing laws that support on-line business.**

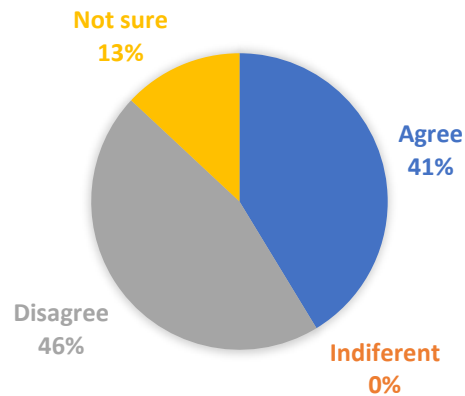
When asked about the existing laws that support e-commerce, most of the respondents did not know any. The data is represented in Fig 4.31 below.



(iii.)Of all he respondents, 48% did not know of any laws in place that protect them when they engage e-commerce, 39% were aware of the laws and 13% were not sure if there are any laws.

**(iv.) There are laws to protect customer/supplier privacy, confidentiality, and redress.**

When asked if there are laws to protect customers/suppliers' privacy and confidentiality and redress in the case of a dispute, most respondents did not agree. The data analysis is represented in Fig 4. below.



Of all the respondents, 46% did not believe that there are laws to protect their privacy and confidentiality on-line and they also did not agree that there are laws to allow for redress in the event of a dispute, 41% acknowledged the existence of the laws and 13% did not know if such laws existed.

#### **4.6 Discussion of results per research objective**

##### **(a) Objective one**

Research objective one checked on the SMEs' understanding of e-commerce and how this affects its adoption. When the technology is understood, SMEs will look at it objectively and deny or accept it objectively, rather than following the crowd.

The first question was just to get the demographic distribution of SMEs across the industries to see how the different industries related. The comparison does not work because some industries are easy to start whilst other are difficult to start, so the numbers of SMEs in these different industries is not the same. There are more SMEs in retail than there are in engineering. The objective also analysed the extent to which SMEs understand the concept of e-commerce. This is to check if the understanding or failure to understand is an impediment to its adoption by the SMEs. Only 38% of the population knew what e-commerce is, the rest had an idea or did not know at all. Not having an understanding or appreciation of e-commerce would be an impediment to its adoption by SMEs. Lawrence (2011) supports this finding by stating that lack of familiarity with the tools provided for e-commerce and their use is common among

SMEs in general, surveys have shown that a lack of awareness of the benefits and use of e-commerce is a common obstacle to its adoption(Lawrence, 2011).

Asked if they had adopted e-commerce, the majority 65% indicated that they had not. This is expected because the majority also do not understand it so it follows that they cannot adopt something that they do not understand. This finding is also supported by Lawrence (2011) who says that uncertainty regarding the benefits tends to delay the adoption and development of e-commerce by SMEs. Most SMEs did not understand what e-commerce was all about, they thought it was only paying through mobile money like ECOCASH, this is collaborated by (MacGregor and Vrazalic, 2007) who said that implementing e-commerce is not a simple and straightforward process requiring the installation of hard- ware and software. Instead, it is a complex and time-consuming activity that may involve a complete re-design of the business strategy and an integration of organizational systems at multiple levels(Impact and Good, 2015).

The same concept follows that if they do not understand what e-commerce is, they will not adopt it and they will not recommend it to their peers. When asked if they could recommend e-commerce to their fellows, 54% said no and 46% said yes. The majority said no because they did not see any benefits or advantages, and this was also found out by MacGregor and Vrazalic (2007) who said another major barrier was a failure to see any advantages in using e-commerce and they found out that many SME owners felt that e-commerce did not suit either their day-to-day business procedures or the product mix offered by their business.

#### **(b) Objective two**

This objective analysed how the economic factors impede the adoption of e-commerce by SMEs. There was an agreement that economic factors do impede the adoption of e-commerce by SMEs. This was shown by the majority 65% of the respondents who agreed that SMEs have limited financial resources to implement e-commerce. These findings are supported by MacGregor and Vrazalic (2007) who stated that SMEs face difficulties obtaining finance and other resources, and as a result have fewer resources to spare for technological innovations like e-commerce.

Furthermore, it was found out that the cost of maintaining e-commerce after adoption present another challenge for most SMEs, resulting in the reluctance to adopt the technology. This is shown by 46% who indicated that the costs of maintaining e-commerce are not manageable.

Closely are the 41% who agreed that maintenance costs are manageable, this group of SMEs are those who have adopted e-commerce and seeing getting the benefits. This view is supported by (Whiteside 2017) who indicated that as experience accumulates and technology improves, the cost–benefit ratio of e-commerce will increase, resulting in even greater rates of e-commerce adoption.

Pricing is a major factor when considering adopting e-commerce, the profit margin is determined by the prices. From the findings, those in agreement and those in disagreement were equal, 39% agreed that the prices are low and 39% disagreed that the prices are low. This shows that SMEs pricing is not standard, and they cannot agree on a standard pricing formular. (Impact and Good, 2015), further support this finding by saying that small businesses, which make up the majority of businesses in Africa, are insufficiently supported through favourable pricing and protection from fierce competition in developing e-commerce, they proceed to say that while it is relatively easy to create a website to showcase goods and services, it is a very different and more challenging proposition to enable sales transactions or deals to be completed online because of competition.

### **(c) Objective 3**

The third objective sought to analyse how traditional factors impede SMEs' adoption of e-commerce. The study found out that the traditional practices among SMEs have a great role to play on how they decide on the adoption of e-commerce.

The findings reveal that SMEs have traditional customers who are loyal to them and there is fear that on-line customers are not loyal and there is fear of losing business. The findings revealed that the majority of 61% indicated that on-line customers are not loyal. These are the ones that have cultivated a group of loyal customers in their traditional businesses.

Small-business owners, however, depend on these relationships for repeat customers, business intelligence, and advice and any business methods that undermine these relationships not only disrupt the traditional routines of small-business operators, but threaten a valuable, though hidden, resource (Al-Qirim 2004), this confirms this finding.

The other 24% were not sure, showing that they do not know how the on-line business works. Those in agreement are 15% and these are the ones who have already adopted some form of e-commerce and have built a brand and customers who are now loyal.

The objective also revealed that SMEs believed that the traditional businesses offer more personalised services as compared to on-line businesses, the majority 69% agreed with this statement. They believe that the personalised service has enabled them to maintain the loyal customers and to keep their businesses going. SMEs fear loss of business by adopting e-commerce because of competition from both local and international competitors.

Most SMEs owners are community leaders and have influence in their areas of abode, they are given preferential treatment and favors in the community. By losing their customers and businesses due to e-commerce, they will become nonentities, and this alone will impede the adoption of e-commerce. The SMEs owners are very much worried about losing their fame and authority, and this is reflected by 78% who indicated so. Only 20% disagreed and these are probably those who are more concerned about doing business and less worried about traditional statuses of business owners.

Trust has been a tradition between the SMEs and their customers or suppliers, this have been built and cultivated over some time. Asked if they trust on-line transactions, 50% indicated that they do not trust them whilst 46% indicated that they trust on-line transactions. On-line transactions are the basis for e-commerce and if SMEs do not trust this method of transacting, then they will not embrace e-commerce. The finding of trust is supported by MacGregor and Vrazalic (2007) who indicated that SMEs perceive any technology that supports doing business online as being high risk due to the increase in online security breaches and incidents in recent years. Traditional businesses and customers want evidence in hard cash that payment has been made, they do not want to someone they do not see or know. Fazlollahi (2011) supports this statement by stating that lack of trust in on-line transactions is one of the main reasons reported for the relatively low electronic commerce adoption today.

Having the knowledge about developments in technology enables SMEs to make decisions on the adoption of ecommerce. If they believe that their traditional businesses are not threatened by e-commerce, then this influences their decision to adopt the technology. This objective found out that 46% agreed that e-commerce will replace traditional businesses, 41% disagree whilst 11% were not sure. Those who agree do believe that this will happen, but not soon and those who disagree are content with the current state and will not take any steps to adopt e-commerce, they believe that this technology will pass, and they will continue with their traditional businesses. This finding is reinforced Lawrence (2011), who indicated that the success of doing traditional business depends heavily on the quality and sometimes the quantity of personal

relationships. (Lawrence, 2011) states that a strong individual relationship and long-term association between the parties provide a sense of community and enhances social bonding and he adds that in many societies, especially in the developing world, trust is established and reinforced through family association, repeated personal contact and interaction. This is what give some SMEs confidence that no other form of business will replace the way they are currently doing business.

#### **(d) Objective Four**

This study objective sought to get opinion from SMEs on social and cultural beliefs and how they can be an impediment to the adoption of e-commerce. Al-Qirim (2004) states that relationships with customers are also vital and the small-business use of e-commerce to maintain these relationships is not well addressed, this is in tandem with the finding of this research were 70% agreed that there will be a change on how SMEs interact with customers or suppliers indicating that they want to maintain the status and anything that changes it will be an impediment. The SMEs still want to have the physical interaction with their customers. The previous research by Fazlollahi (2011) also confirm this finding by stating that, internet is an “isolating technology” that could seriously damage the social fabric of communities as users interact physically with other people less.

Many SMEs believe in knowing their customers personally, so that they provide the appropriate goods or services. On-line business is one size fits all, so 80% indicated that they want to know their customers personally, they know how to talk to them in a manner that will make them come back tomorrow. To support this finding, Lawrence (2002) also found out that the e-commerce causes decrease in human interaction with customers that could lead to less understanding of the customers’ needs, as they are not always able to express comments, criticisms or request for new products while interacting with machines.

The objective also tested the if the absence of testing or trying the physical goods or services impede the adoption of e-commerce by SMEs. In traditional businesses, the customers physical try and test the goods and services and then make physical payment to the supplier whilst on-line stores do not allow customers to feel or test the goods or services and the payment is done virtually. This is shown by the findings from this study where 91% of the respondents agreed to the statement. This is an indication that traditional businesses are afraid of getting wrong

goods than those ordered, or the suppliers do not want to have the problem of returns. As per tradition, a customer comes in the shop, identifies the goods he wants, make sure that they are in good condition, pays for them and then takes them home, and the transaction is completed. Lawrence (2011) agrees with this finding when he says, 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.

To further analyse if the factor of tradition does impede the adoption of e-commerce by SMEs, this study analysed the confidence of doing business on-line. Confidence can be an impediment, if the SMEs do not have confidence, then they will not adopt e-commerce. 48% agreed that they have confidence in doing business on-line and these could adopt e-commerce if everything else remains the same, those who disagreed amounted to 37%. In his study, Lawrence (2011) also found out that most people in developing countries prefer to shop directly from known merchants, this helps to reduce uncertainty regarding product quality and maximize product value. (Lawrence, 2011) further says that there is a fear that merchants might sell products with defects; that merchants could be disguised thieves; and that online payments cannot be recovered even if the product is not delivered, thus fermenting a culture of trust in products and merchants. Those in agreement are probably the ones who have adopted e-commerce in some form and have seen the benefits, they have made repeated successful on-line transaction.

When SMEs think that they offer the best service, this can be a negative factor in the adoption of e-commerce. If they feel that the services, they are offering are currently the best and that on-line business cannot offer better service, they will not move to on-line business. Doing so, in their opinion will result in offering poor service and losing customers. This study confirmed the tradition that on-line businesses offer the best service with 70% of the respondents agreeing whilst only 17% disagreed. The SMEs sighted services like assisting the customers by answering their questions, fitting, and assembling, demonstrating how the product works and warranty services. To support this finding, it is argued in Lawrence (2011) that e-commerce causes a decrease in human interaction with customers could lead to less understanding of the customers’ needs, as they are not always able to express comments, criticisms or request for new products while interacting with machines.

**(e) Objective five**

In this study, this objective looked at the technical infrastructure required to implement e-commerce that can be an impediment when it comes to the adoption of e-commerce by SMEs. According to Rouibah, Khalil and Hassanien (2009), developing countries have a difficult task to create an e-commerce environment because of many reasons such as poor and limited access to telecommunications infrastructure and services (Rouibah et al. 2009). There was a general agreement that SMEs have easy access to internet, 59% agreed that they can access internet in one way or the other. This finding is confirmed by the PORTRAZ third quarter of 2021 report, which stated that the total number of active Internet and data subscriptions increased by 1.2% to reach 9.3, the Internet penetration rate increased from 62.3% to 62.6% recorded in the previous quarter (PORTRAZ, 2021). Showing that more people have internet capable devices. This shows that the majority have access to internet.

Whilst many have access to internet, internet speed is a factor to consider when considering adopting e-commerce, it can be an impediment to SMEs. Of the respondents only 35% agreed that the internet speed is adequate and 59% disagreed whilst 15% were not sure. Internet speed is need for e-commerce transactions to be smooth, so poor speed can be a deterrent to the adoption of e-commerce. Transactions could hang, freeze, or even just cut before completion. Nazir (2019) is in support of this finding by stating that due to the poor IT infrastructure, the speed of the internet to manage an online business in developing economies is very slow preventing SMEs in developing economies from adopting e-commerce. Slow internet speeds do not only affect ordering and payment (Nazir 2019).

For e-commerce to work consistently, SMEs need to be constantly connected to the internet and this means constantly paying the monthly subscriptions or paying for the data bundles. If the cost is high and SMEs are not able to pay, then this can be an impediment to the adoption of e-commerce. From the findings, 63% disagreed that he costs are affordable whilst 33% agreed with the statement. This shows that this is a deterrent to the adoption of e-commerce by SMEs. This finding is supported by Lawrence (2011) whose finding was that the cost of access to internet makes it inaccessible to most SMEs in developing countries. According to (Lawrence, 2011)'s findings, these costs inevitably affect the use that SMEs can make of the Internet as well as the business model that they will adopt based on its use. He further indicated that the cost of accessing the infrastructure influences the growth and usage of e-commerce.

Financial institutions are also major players in e-commerce, the handle the electronic payment system by providing the required infrastructure required, they also clear payments and provide

security for on-line transactions. There was a general feeling that financial institutions are ready to support e-commerce as shown by 72% of the respondents who agreed with the statement. Most SMEs have been involved in electronic banking and ECOCASH and have also been using VISA cards to pay for goods and services online, they have experienced it and are aware that the financial institutions can support e-commerce. This finding is corroborated by Bvirindi (2021), who concluded that the fact that one transacts or has transacted online, even using internet banking, shows that they are likely to buy online and are most disposed to buying online. (Bvirindi, 2021) stated that this also shows a trust or confidence that that person has in online transactions and buying online. He goes on to say that Econet Mobile Broadband alone had 1.8 million customers within a year and that is on the mobile broadband front, this same broadband is used to access the internet, meaning it can also be used to access online stores(Bvirindi, 2021).

The ability to access hardware such as laptops, tablets or smart phones that are capable of handling e-commerce transactions can also deter SMEs from adopting e-commerce. This finding reveals that 52% do not have the appropriate hardware whilst 48% have the required hardware. Most SMEs use their mobile phones for doing transactions and if they are going to adopt e-commerce, they will need a dedicated computer with the appropriate specifications. This is required as a readiness pre-requisite for e-commerce adoption and this finding is also collaborated by Nazir (2019) who found out that, adoption of e-commerce has often been positively linked to the condition of electronic preparation of ICT infrastructure for SMEs.

The infrastructure must also be able to support customers to do on-line business. If the customers are not ready, then SMEs will not adopt e-commerce because there will be no customers on-line. The results show that 43% of the respondents agree that the customers are ready whilst 28% disagree and another 28% are not sure. Of note is the significant 28% who are in doubt and if they are in doubt, they will not adopt e-commerce. This finding is corroborated by Magaisa and Matipira (2017) who argue that since local factories have fallen silent most of the goods sold online are imported goods which are sold at a premium, it would be cheaper to purchase the items directly from China rather than buy from a local dealer who is selling them at a premium. If there are no middlemen the goods would be cheaper on-line, and customers will follow.

**(f) Objective six**

This objective looked at the management perceptions and how their decisions and business philosophy affect the adoption of e-commerce by SMEs. Findings reveal that most SMEs are owner managed and decision making is a one man show and is influenced by the perception and experience of the manager. MacGregor and Vrazalic (2007) stated that the decision-making process in SMEs is intuitive, rather than based on detailed planning and exhaustive study, meaning decisions are personal and not objective. The decision to adopt e-commerce depends on the perception of the owner who is also management. From the findings, 48% are committed to adopting e-commerce and 31% are not committed. Having management commitment means there must be no reason not to adopt e-commerce. Others even mentioned how e-commerce assisted them during the COVID-19 pandemic era, how they continued to do business on-line whilst others were closed.

Management must have a clear vision on the adoption and implementation of e-commerce, this must be done in a planned manner. Having a vision in place is another sign of management commitment to the adoption of e-commerce. As much as 48% of management is committed to adopting e-commerce, 43% have a vision on its adoption and 43% do not have the vision. This finding tells us that failure by the management to have a vision means that the adoption of e-commerce will not succeed because it is not on their plans. To support this finding, (Shemi 2012), found out that managers of small and medium-sized firms determine not only the business vision and objectives, but also what type of markets and ICT tools their firms should employ. SMEs have small and centralized management with a short-range perspective (MacGregor and Vrazalic 2007).

The objective also tested SMEs management's commitment to the adoption of e-commerce by their willingness to commit financial resources. This study found out that 47% are not prepared to commit funds, whilst 43% are prepared to commit funds. This is contradictory to the sub-objective on management commitment where 48% of SMEs managers are committed to the adoption of e-commerce but only 43% are willing to commit funds. This may be caused by SMEs' lack of adequate financial resources to adopt and implement e-commerce as shown in objective one. They may not want to commit financial resources to the adoption of e-commerce because they do not understand the benefits of doing so. The committal of resources is supported by Al-Qirim (2004) who states that the higher the level of management understanding on the relative advantage of e-commerce, the more the likelihood of the allocation of the managerial, financial, and technological resources necessary to adopt and implement e-commerce.

Technical and managerial skills can be an issue to the adoption of e-commerce by SMEs, when asked if they have these skills, 52% indicated that they do not have the skills and 46% have the skills. If SMEs do not have these skills, they will not adopt e-commerce. In their research, (Impact and Good, 2015) support this finding by stating that several barriers ranging from a lack of digital skills, and knowledge of how to set up an e-commerce business, too expensive or inadequate payment solutions and logistics continue to impede the development of e-commerce. Even when SMEs are aware of the potential benefits of adopting e-commerce as a business tool, they need experienced and knowledgeable innovation staff. (Nazir 2019) also supports this finding by stating that SMEs that have already adopted the internet and e-commerce as technology are likely to be part of the business market because they employ skilled employees and have a reasonable knowledge (Nazir 2019). This statement is in support of the findings and implies that technical and managerial skills are even for those who have already adopted e-commerce.

SMEs like any other organisation, have structures and systems. These are traditional structures, and they would like to maintain them, these show the hierarchy of authority and represent the management philosophy of the SME owners. When asked their opinion on whether adopting e-commerce will not change their systems and structures, 52% disagreed and 46% agreed. This means that most SMEs see their authority and some of their activities being taken over or being changed by adopting e-commerce. Shemi (2012) supports this finding by stating that SMEs fear the organisational structures will change whilst they want to maintain the status quo. Thus, once a business strategy has been mapped out by senior management, it becomes difficult for lower-level managers to implement ICT innovations without seeking approval from senior management (Shemi, 2012).

#### **(g) Objective seven**

The objective analyses how the legal environment impedes the adoption of e-commerce by SMEs. The legal framework provides the rules and laws that regulates how e-commerce is conducted and provides redress solutions in case of a disputes. The presence of such laws indicates Government's commitment to assisting SMEs with adopting technologies that give them competitive advantages. Asked about their opinion on Government support, 48% agreed that the Government supports e-commerce adoption by SMEs, 35% disagreed and 17% were not sure. The ones who agreed are probably aware of some Government initiatives and programs that assist SMEs in enhancing their businesses. Lawrence (2011) supports the finding of uncertainty by stating that, with respect to several regulatory issues, particularly in the

absence of a clear international regulatory framework, can inhibit to some extent the operation of SMEs in a global environment.

Asked about their awareness of any existing laws that support and regulate on-line businesses, 48% indicated that they were not aware of any such laws, 39% are aware of these laws and 13% were not sure if any such laws existed. The fact that the SMEs are not aware of laws such as the Cyber Security bill and Data Protection bill means that they do not feel protected when dealing on-line. To support this finding, Rouibah, et al (2009) in their findings, also concluded that the Cyber Law Bill is getting passed in a few developing countries but for most developing countries, cyber laws do not exist. While lack of a legal framework under which Internet transactions take place is a real impediment, it is not going to stall e-commerce (Rouibah, Khalil and Hassanien, 2009).

This study also aimed at analysing if the absence of laws to protect consumer or supplier privacy are an impediment to the adoption of e-commerce by SMEs, 46% indicated that there are no laws to protect the privacy and confidentiality of those involved in on-line business, whilst 41 agreed that there are such laws. This scares SMEs from adopting e-commerce as a way of business. This finding is confirmed by Shemi (2012) who confirmed that most SME managers in the study have noted the lack of e-commerce regulation or policy to guide e-commerce transactions in the Botswana business environment. The formulation of e-commerce regulation has been slow and businesses and individual users do not have adequate policies that can guide business transactions (Lawrence, 2011).

#### **4.7 Summary of chapter**

This chapter started by looking at the research objectives to see if they are still applicable after the literature review. The data that was collected was presented in this chapter and analysed. The results were discussed to show what the respondents were saying were impediments to the adoption of e-commerce SMEs. The data analysis and discussion were done per each research objective. The next chapter is now going to look at conclusions and recommendations.

## **CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This study sought to analyse factors impeding the adoption of e-commerce by Zimbabwean Small and Medium Enterprises and was focusing on Bindura urban SMEs. Chapter 5 is the final chapter of the study, and it summarizes the findings, conclusions of this study are also provided, and these are based on the findings from the previous chapter which were in line with the research objectives. Recommendations based on the findings are also provided in this chapter.

### **5.2 Summary of major findings**

- (i.) The study concluded that most SMEs lack knowledge and benefits of adopting e-commerce as a business model.
- (ii.) The study also revealed that although the Government supports SMEs through SMEDCO and Ministry of Small and Medium Enterprises, there is no support through the laws that protect SMEs when they are engaging in e-commerce.
- (iii.) The study revealed that most SMEs are not ready to migrate to e-commerce because of lack of financial resources, lack of trust and inadequate information they get from the public domain.
- (iv.) The study revealed that the telecommunication and financial payment infrastructure can support e-commerce, it is the cost of maintenance and internet subscription which keep going up.
- (v.) There is a strong association between understanding e-commerce and its adoption.

### **5.3 Conclusions**

The findings revealed that most SMEs face impediments when trying to adopt e-commerce. Many factors have been found to be impediments to the adoption of e-commerce for SMEs who desire to do so. According to the findings, these factors are categorised as SMEs financial factors, SMEs organisational readiness, SMEs lack of knowledge, SMEs traditional and cultural factors, trust and privacy factors, SMEs customer relations and legal factors.

According to the findings, these stated factors are the major reasons that impede the adoption of e-commerce by most SMEs. The study revealed that there is lack of general understanding of e-commerce functions, some SMEs do not understand the advantages of adopting e-commerce business models. The costs of setting up and maintaining e-commerce are high, but SMEs need to carry out a cost benefit analysis to determine the competitive advantage on the global market that they will gain by adopting e-commerce.

#### **5.4 Recommendations**

This section provides recommendations that relate to the research objectives, the research questions, and research findings after discussion and analysing the views from the respondents.

The study recommends that through the Ministry of Small and Medium Enterprises, through the department of Small and Medium Enterprises Corporation (SMEDCO), whose motto is “Promoting SME growth and stability” should carry out a vigorous awareness campaign on the benefits of e-commerce to SMEs. This will enable them to make informed decision on whether to adopt e-commerce or not.

The findings and analysis revealed that the finances present an impediment in the adoption of e-commerce by SMEs. Having seen the importance of e-commerce in expanding into global markets and especially its usefulness in times of pandemics when there is total are lockdowns. This study recommends that the Ministry of Small and Medium Enterprises must set aside a budget for technological enhancements in SMEs and especially for equipping them with resources to implement and maintain e-commerce.

The study recommends that the Government treat SMEs as a special group and negotiate with internet service providers to providers special data packages as a way of encouraging them to adopt e-commerce. The constantly rising cost of internet access is an impediment to the adoption of e-commerce by SMEs.

The justification and literature review in this study showed that SMEs are playing an important role in employment creation and contribution to the national economy. They should be encouraged, and favourable conditions must be created for them to go on the global market and earn foreign currency for the country by adoption e-commerce. This study recommends that legal instruments that regulate e-commerce on the national and international platforms be put in place to protect the SMEs when dealing on-line. Procedures for seeking redress in the event of a dispute should also be put in place and so that SMEs will have confidence and feel protected.

Most SMEs are owner managed and decision making depends on the owner and is subjective most of the time. SMEs need to be professional and have structures and proper business ethics. This study further recommends the SMEDCO carries out regular refresher courses for SMEs

owners so that they are exposed to new business trends and technologies that can be beneficial to their businesses.

### **5.5 Direction for future research**

This study focused on the factors impeding the adoption of e-commerce by SMEs, one of the findings was lack of knowledge by SMEs. I would recommend a study on the perception of SMEs on e-commerce.

Pandemics like COVID-19 caused total shutdown of businesses in Zimbabwe, I would recommend a study that would assess how e-commerce assisted the survival of businesses during the COVID-19 era in Zimbabwe.

### **5.6 Chapter Conclusion**

This chapter presented the conclusions made from the research findings and presented recommendations for those who have the role to play in ensuring that SMEs adopt e-commerce. As such, this chapter is the last one in this study and marks the end of this research.

## REFERENCES

1. Acts 16/1983, 17/1988, 24/1990, 3/1997, 22/2001 (s. 4), 6/2011. ARRANGEMENT. 2013. "Small and Medium Enterprises." *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* 2001:1638–1638. doi: 10.1007/978-1-4614-3858-8\_100861.
2. Al-Qirim, Nabeel A. Y. 2004. *Electronic Commerce in Small to Medium-Sized Enterprises*. London: Idea Group Publishing.
3. Al-qirim, Nabeel, and New Zealand. 2004. *Electronic Commerce in Small to Enterprises: Frameworks, Issues and Implications*. Melbourne: IDEA GROUP PUBLISHING.
4. Babbie, Earl. 2010. *The Practice of Social Research*. Twelfth Edi. Belmont, CA: Wadsworth, Cengage Learning.
5. Beech, Nic. 2000. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2ndedn*. Vol. 31.
6. Chaffey, Dave. 2009. *E-Business and Management E-Commerce, Strategy, Implementation and Practice*. Fourth Edi. England: Prentice Hall.
7. Creswell, John W. Creswell. David J. 2015. *RESEARCH DESIGN: Qualitative, Quantitative, and Mixed Methods Approaches*. Vol. 3. Fifth Edit. Los Angeles: SAGE Publishing.
8. Dawson, Catherine. 2009. "Introduction to Research Methods: A PRACTICAL GUIDE FOR ANYONE UNDERTAKING A RESEARCH PROJECT." *HowTOBOOKS* (9):1–177.
9. Djamba, Yanyi K., and W. Lawrence Neuman. 2002. *Social Research Methods: Qualitative and Quantitative Approaches*. Vol. 30.
10. Durdella, Nathan. 2019. *Qualitative Dissertation Methodology*. Vol. 7.
11. Fazlollahi, Bijan, and D. Ph. 2011. *Strategies for ECommerce Success*.
12. GRAY, SALVATORE ZAPPALÀCOLIN. 2018. *Impact of E-Commerce on Consumers and Small Firms*. Burlington, VT 05401-4405.
13. Halawani, Firas, Muhammad Madi, Bin Abdullah, and Muhammad Sabbir Rahman. 2013. "A Proposed Framework for E-Commerce Usage and Competitive Advantage on Small and Medium Tourism Enterprises (SMTES) in Lebanon." 258–67.
14. Holmberg, Sara. 2016. "E-Commerce in Sub-Saharan Africa: Overcoming Barriers to Succeed in an Online Environment E-Commerce in Sub-Saharan Africa: Overcoming." (January).
15. Impact, Trade, and F. O. R. Good. 2015. "International E-Commerce in Africa: The Way Forward."
16. Kothari, C. R. 2004. *Research Methodology, Methods and Techniques*.

17. Lee, In. 2013. *Trends in E-Business, e-Services, and e-Commerce: Impact of Technology on Goods, Services, and Business Transactions*.
18. Leonard A. Jason, David S. Glenwick. 2016. "HANDBOOK OF METHODOLOGICAL APPROACHES TO COMMUNITY-BASED RESEARCH, Qualitative, Quantitative and Mixed Methods." 409.
19. MacGregor, Robert, and Lejla Vrazalic. 2007. *E-Commerce in Regional Small to Medium Enterprises*.
20. Momboisse, François, and Marlene ten Ham. 2017. "Global & Ecommerce Report&2017." *Global Ecommerce Report 2017* 1–145.
21. Nazir, Muhammad Arsalan. 2019. "Factors Affecting E-Commerce Adoption Among SMEs . A Case Study Investigation of a Developing Economy – Pakistan." (November).
22. Oates, Briony J. 2006. "Researching Information Systems and Computing." *Inorganic Chemistry* 37:341. doi: 10.1016/j.ijinfomgt.2006.07.009.
23. Oates, Briory J. 2006. "Researching Information Systems - Briony J Oates.Pdf."
24. OECD. 2002. "OECD Small and Medium Enterprise Outlook 2002." 252.
25. Patton, Quinn. 2015. *Qualitative Research and Evaluation Methods*. Fourth Edi. Washington DC: SAGE Publications.
26. PORTRAZ. 2021. "POSTAL AND TELECOMMUNICATIONS REGULATORY AUTHORITY OF."
27. Radovilsky, Zinovy. 2015. *36 Application Models for E-Commerce Zinovy Radovilsky Application Models for E-Commerce*. California: Cognella Academic Publishing.
28. Rouibah, Kamel, Omar Khalil, and Aboul Ella Hassanien. 2009. *Emerging Markets and E-Commerce in Developing Economies*. Hershey PA 17033: British Cataloguing in Publication Data.
29. Saunders, Mark, Philip Lewis, and Adrian Thornhill. 1997. *For Business Students Fifth Edition REVISAR*.
30. Sharan B. Merriam, Elizabeth J. Tisdell. 2016. *Qualitative Research, A Guide to Design and Implementation*. Fourth Edi. San Francisco: Jossey-Bass A.
31. Shemi, Alice Phiri. 2012. "Factors Affecting E-Commerce Adoption in Small and Medium Enterprises : An Interpretive Study of Botswana." (December).
32. Sirurmath, Sangayya S. 2004. *Electronic Commerce*. Vol. 29. Ninth Edit. Massachusetts 02210: Cengage Learning products.
33. Size, Determining Sample. 2008. *Determining Sample Size, Balancing Power, Precision and Practicality*. New York: Oxford University Press.

34. Tracy, Sarah J. 2020. *QUALITATIVE RESEARCH METHODS*. Second Edi. Medford: Wiley Blackwell.
35. Umesh Kumar, Bhayyalal Dubey, Kothari D. P. 2022. *Research Methodology, Techniques and Trends*. London: A Chapman & Hall.
36. Whiteside, Judy. 2017. *Introduction to Electronic Commerce and Social Commerce*. Fourth Edi. Gewerbestrasse: Springer International Publishing.
37. Yin, Robert K. 2010. *Qualitative Research from Start to Finish*. New York: The Guilford Press.
38. Acts 16/1983, 17/1988, 24/1990, 3/1997, 22/2001 (s. 4), 6/2011. ARRANGEMENT. 2013. "Small and Medium Enterprises." *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* 2001:1638–1638. doi: 10.1007/978-1-4614-3858-8\_100861.
39. Al-Qirim, Nabeel A. Y. 2004. *Electronic Commerce in Small to Medium-Sized Enterprises*. London: Idea Group Publishing.
40. Al-qirim, Nabeel, and New Zealand. 2004. *Electronic Commerce in Small to Enterprises: Frameworks, Issues and Implications*. Melbourne: IDEA GROUP PUBLISHING.
41. Babbie, Earl. 2010. *The Practice of Social Research*. Twelfth Edi. Belmont, CA: Wadsworth, Cengage Learning.
42. Beech, Nic. 2000. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2ndedn*. Vol. 31.
43. Chaffey, Dave. 2009. *E-Business and Management E-Commerce, Strategy, Implementation and Practice*. Fourth Edi. England: Prentice Hall.
44. Creswell, John W. Creswell. David J. 2015. *RESEARCH DESIGN: Qualitative, Quantitative, and Mixed Methods Approaches*. Vol. 3. Fifth Edit. Los Angeles: SAGE Publishing.
45. Dawson, Catherine. 2009. "Introduction to Research Methods: A PRACTICAL GUIDE FOR ANYONE UNDERTAKING A RESEARCH PROJECT." *HowTOBOOKS* (9):1–177.
46. Djamba, Yanyi K., and W. Lawrence Neuman. 2002. *Social Research Methods: Qualitative and Quantitative Approaches*. Vol. 30.
47. Durdella, Nathan. 2019. *Qualitative Dissertation Methodology*. Vol. 7.
48. Fazlollahi, Bijan, and D. Ph. 2011. *Strategies for ECommerce Success*.
49. GRAY, SALVATORE ZAPPALÀCOLIN. 2018. *Impact of E-Commerce on Consumers and Small Firms*. Burlington, VT 05401-4405.

50. Halawani, Firas, Muhammad Madi, Bin Abdullah, and Muhammad Sabbir Rahman. 2013. "A Proposed Framework for E-Commerce Usage and Competitive Advantage on Small and Medium Tourism Enterprises (SMTES) in Lebanon." 258–67.
51. Holmberg, Sara. 2016. "E-Commerce in Sub-Saharan Africa: Overcoming Barriers to Succeed in an Online Environment E-Commerce in Sub-Saharan Africa: Overcoming." (January).
52. Impact, Trade, and F. O. R. Good. 2015. "International E-Commerce in Africa: The Way Forward."
53. Kothari, C. R. 2004. *Research Methodology, Methods, and Techniques*.
54. Lee, In. 2013. *Trends in E-Business, e-Services, and e-Commerce: Impact of Technology on Goods, Services, and Business Transactions*.
55. Leonard A. Jason, David S. Glenwick. 2016. "HANDBOOK OF METHODOLOGICAL APPROACHES TO COMMUNITY-BASED RESEARCH, Qualitative, Quantitative and Mixed Methods." 409.
56. MacGregor, Robert, and Lejla Vrazalic. 2007. *E-Commerce in Regional Small to Medium Enterprises*.
57. Momboisse, François, and Marlene ten Ham. 2017. "Global & Ecommerce Report&2017." *Global Ecommerce Report 2017* 1–145.
58. Nazir, Muhammad Arsalan. 2019. "Factors Affecting E-Commerce Adoption Among SMEs. A Case Study Investigation of a Developing Economy – Pakistan." (November).
59. Oates, Briony J. 2006. "Researching Information Systems and Computing." *Inorganic Chemistry* 37:341. doi: 10.1016/j.ijinfomgt.2006.07.009.
60. Oates, Briory J. 2006. "Researching Information Systems - Briony J Oates.Pdf."
61. OECD. 2002. "OECD Small and Medium Enterprise Outlook 2002." 252.
62. Patton, Quinn. 2015. *Qualitative Research and Evaluation Methods*. Fourth Edi. Washington DC: SAGE Publications.
63. PORTRAZ. 2021. "POSTAL AND TELECOMMUNICATIONS REGULATORY AUTHORITY OF."
64. Radovilsky, Zinovy. 2015. *36 Application Models for E-Commerce Zinovy Radovilsky Application Models for E-Commerce*. California: Cognella Academic Publishing.
65. Rouibah, Kamel, Omar Khalil, and Aboul Ella Hassanien. 2009. *Emerging Markets and E-Commerce in Developing Economies*. Hershey PA 17033: British Cataloguing in Publication Data.

66. Saunders, Mark, Philip Lewis, and Adrian Thornhill. 1997. *For Business Students Fi Fth Edition REVISAR*.
67. Sharan B. Merriam, Elizabeth J. Tisdell. 2016. *Qualitative Research, A Guide to Design and Implementation*. Fourth Edi. San Francisco: Jossey-Bass A.
68. Shemi, Alice Phiri. 2012. "Factors Affecting E-Commerce Adoption in Small and Medium Enterprises: An Interpretive Study of Botswana." (December).
69. Sirurmah, Sangayya S. 2004. *Electronic Commerce*. Vol. 29. Ninth Edit. Massachusetts 02210: Cengage Learning products.
70. Size, Determining Sample. 2008. *Determining Sample Size, Balancing Power, Precision and Practicality*. New York: Oxford University Press.
71. Tracy, Sarah J. 2020. *QUALITATIVE RESEARCH METHODS*. Second Edi. Medford: Wiley Blackwell.
72. Umesh Kumar, Bhayyalal Dubey, Kothari D. P. 2022. *Research Methodology, Techniques and Trends*. London: A Chapman & Hall.
73. Whiteside, Judy. 2017. *Introduction to Electronic Commerce and Social Commerce*. Fourth Edi. Gewerbestrasse: Springer International Publishing.
74. Yin, Robert K. 2010. *Qualitative Research from Start to Finish*. New York: The Guilford Press.

## **APPENDICES**

### **Appendix 1; Interview Guideline**

#### **Title of research**

**Factors impeding the adoption of e-commerce by Zimbabwean Small to Medium Enterprises: The case of Bindura urban.**

#### **Interview Procedure**

1. Introduce self to interviewee.
2. Go over the purpose of the interview and the interview guidelines with the interviewee.
3. Confirm if the participant is ready to proceed with the interview or withdraw.
4. If the participant is willing to proceed, continue otherwise terminate the interview.
5. Get the permission to record from the interviewee, if permission is granted then proceed with the interview.
6. Ensure that the participant has the right to ask for clarifications where necessary.
7. Start recording, if required, and start the interview.
8. Use a pseudo name to introduce the interviewee to protect his identity.
9. Start the interview until the last question. Ask follow-up questions as the need arises.
10. When the interview is complete, validate the interviewee's responses.
11. Thank the interviewee for his cooperation.
12. Terminate the interview

#### **Interview Guidelines**

##### **E-commerce perception and understanding**

1. What kind of business are in?
2. What do you understand by on-line business or e-commerce?
3. Have you adopted it or not? Why? (For both Yes or No).
4. If yes, what form of e-commerce are you using?
5. What are the benefits/disadvantages of using e-commerce?
6. Would you recommend your fellow businesspersons to use e-commerce? Why?

##### **Organisational readiness**

1. Is your organisation aware of e-commerce business models that are applicable to your organisation?
2. Does your organisation have the necessary technical, managerial and other skills needed to implement e-commerce?
3. Do you have the necessary funding to implement and support e-commerce?

### **Ease of using e-commerce**

1. How difficult or easy do think using e-commerce would be?
2. How flexible do you think interacting with e-commerce would be?
3. How easy would it be to become a skillful e-commerce user?

### **Infrastructure**

1. Does your organisation have computers, tablets or smart phones and have access to internet?
2. How would you describe your internet speed, good, very good or not good?
3. How is your experience with the internet and online applications?

### **E-Commerce integration**

1. How will e-commerce impact on your organizational and cultural beliefs and practices?
2. Would you need to change anything in your organisation when you adopt e-commerce?
3. Are your suppliers already using e-commerce?

### **Customers**

1. Do you think that your customers are prepared to do business on-line?
2. Do you think you suppliers and other business partners are ready to do business on-line?

### **Management Support**

1. As management are you interested in the use of e-commerce in your business?
2. Do you support online business in your operation?
3. Does your business have a clear understanding on how to implement on e-commerce?
4. Is your vision on e-commerce clearly communicated and understood by everyone?

### **Supporting industries**

1. Are the telecommunication service providers reliable and efficient?

2. Do you think that commercial and financial institutions have adequate infrastructure to support e-commerce transactions?
3. Are there efficient and affordable skills from the local IT industry to support e-commerce?

### **Government and Legal support**

1. Do you think that the current laws provide adequate protection to businesses and customers privacy when doing business on-line?
2. Do you believe that existing laws are effective in combating cybercrime in Zimbabwe?
3. Do you think that Government has demonstrated strong commitment in promoting e-commerce?

## Appendix 2; Questionnaire

### SMEs Questionnaire

#### Title of research

**Factors impeding the adoption of e-commerce by Zimbabwean Small to Medium Enterprises: The case of Bindura urban**

#### Instructions to respondents

- (a) To be filled in by the SME owner or manager.
- (b) Please do not write your name anywhere.
- (c) Use bold ticks (✓) or cross(x) to indicate your response or fill-in the provided spaces.

#### Section A: Perception on e-commerce

1. State the nature of business you are in.....
2. What do you understand by e-commerce?.....  
.....  
(a) Have you adopted it or not? Yes  No   
Give your reasons for the above.....
3. If yes, what form of e-commerce are you using?.....
4. State the benefits/disadvantages of using e-commerce?.....  
.....
5. Would you recommend your fellow businesspersons to adopt e-commerce.  
Yes  No   
Give your reasons for the above .....  
.....

#### **Section B**

1. The following statements relate to some economic factors which impede adoption of e-commerce by SMEs. Please indicate your answers by ticking (✓) the appropriate box whereby, *Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4*

	1	2	3	4
SMEs have limited financial resource to implement e-commerce				
Costs involved in setting up e-commerce are manageable				

SMEs can afford the maintenance costs of e-commerce				
Online prices are low				

2. The following are some of the traditional impediments to e-commerce adoption by SMEs. indicate your thoughts by ticking (✓) the appropriate box whereby,

***Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4***

	1	2	3	4
On-line customers are not loyal				
Traditional businesses offer more personalised service				
On-line business removes the authority and fame of businessman				
I trust online transactions				
E-commerce will replace traditional businesses				

3. The following are some social and cultural beliefs that impedes e-commerce adoption by SMEs. indicate your thoughts by ticking (✓) the appropriate box whereby,

***Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4***

	1	2	3	4
E-commerce will change how I interact with my customers.				
I believe in know your customer or supplier tradition.				
Customers must see what they are buying first before paying.				
Customers have no confidence in doing business on-line.				
Traditional businesses provide the best service.				

4. The following are some of the infrastructural factors that impedes e-commerce adoption by SMEs. Indicate your thoughts by ticking (✓) the appropriate box whereby,

***Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4***

	1	2	3	4
I have easy access to internet.				
The internet speed can adequately sustain e-commerce.				
Internet costs are affordable.				

Financial institutions can support e-commerce.				
We have adequate computers/tablets/smart phones.				
Our customers are ready to do business on-line.				

5. The following are some of the management issues that impede e-commerce adoption by SMEs. Indicate your thoughts by ticking (✓) the appropriate box whereby,

***Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4***

	1	2	3	4
As management we are committed to adopting e-commerce.				
My business has a clear vision on how to implement e-commerce.				
We are prepared to commit funds towards adoption of e-commerce.				
We have technical and managerial skills to implement e-commerce.				
Adopting e-commerce will not change systems and structures.				

6. The following are some of the legal factors that impedes e-commerce adoption by SMEs.

Indicate your thoughts by ticking (✓) the appropriate box whereby,

***Agree = 1, Indifferent = 2, Disagree = 3, Not sure = 4***

	1	2	3	4
The Government supports e-commerce adoption by SMEs.				
Existing laws support on-line business.				
There are adequate laws to protect businesses and customer privacy.				