**BINDURA UNIVESITY OF SCIENCE EDUCATION**

****

**IMPACT OF ELECTRONIC COMMERCE ON PERFORMANCE OF SMES IN ZIMBABWE.**

**SUBMITTED BY:**

**ROBSON SONZAYI**

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**HONOURS DEGREE OF BINDURA UNIVERSITY OF SCIENCE**

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# **DEDICATION**

I dedicate this dissertation to my lovely friends Didymus Mwandiwanza and George Kambuyu for their unwavering support through out the whole period of study.

# **ABSRACT**

The purpose of the study was to investigate how Zimbabwean SMEs explore the impact of electronic commerce on its performance. The choice of the study was driven by how widely used e-commerce has grown as a means of conducting business on-line, especially since the Covid 19 pandemic outbreak, which resulted in lock-downs and so constrained movement of buyers and sellers. Because of the competitive challenges that are faced by a lot of businesses today, many studies suggest necessity of SMEs to adopt electronic commerce and other innovative technology. The improvement in networks, the internet, and technical devices like computer gadgets such as cell phones and laptops has accelerated the extraordinary expansion in the use of e-commerce in company models. Primary data was gathered through surveys and interviews using the descriptive research design. A Cronbach Alpha rating of .815 was attained for the questionnaire after testing the instrument's variability and reliability. Excel and SPSS were used to analyse the data. 50 SMEs were utilized as a sample in the study, and 43 of them responded. The sampling process was random. According to the study findings, e-commerce improves the performance of SMEs, particularly in terms of sales volume, operational costs, and profitability. The researcher advised SME to use and adopt e-commerce because it has a favourable effect on performance.

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#

**Acronyms**

SMES: Small and Medium Enterprises.

1. Commerce: Electronic Commerce

ICT: Information Communication Tools

UNECA: United Nations Economic Commission for Africa

EDI: Electronic Data Interchange

B2B: Business to Business

B2C: Business to Customers

B2G: Business to Government

B2E: Business to Employees

#

# **CHAPTER I**

# **INTRODUCTION**

## 1.0 Introduction

The way businesses work could be positively changed by electronic transactions, especially between SMEs, whose requirements are significantly higher than those of their competitors, the large businesses. This study examines and provides a complete understanding of the impact of online commerce on the performance of SMEs in Zimbabwe. The chapter emphasizes background of the study, statement of the problem, objectives of the research, and research questions as well as the significance of the study, study assumptions, constraints, and delimitations, as well as the definition of key terminology.

## 1.1 Background of the study

Due to the rapid advancement of technology, e-commerce and its connection to the growth of Small to Medium Businesses (SMEs) have become hot topics all over the world. It is frequently viewed as a means of integrating countries and communities into the multilateral market economy. In recent years, e-commerce has greatly increased the popularity of business performance, (Akbar et al.2021a; Qureshi et al 2021; Akbar et al. 2021b). It is acknowledged as a significant invention that can promote responsible governance, social and economic growth, and the alleviation of poverty in developing nations in Africa (Nnafie, 2002). By automating numerous individual steps in the transaction process, decreasing supply chain transaction inefficiencies, increasing sales revenues, and connecting the development gaps between the wealthy and the poor through the integration of information systems, e-commerce as a technological advancement promises to lower the cost of inter-business transactions (Ojukwu et al., 2007; Nielinger, 2003; Dai & Kauffman, 2002; Pare.2002; Wolf,2001; Esselaar and Miller,2001). Based on the factors considered, such as the quantity of staff, the turnover rates, the net assets, and the capital basis, there are several and varying definitions of SMEs (Hisric et al 2004; Maseko 2011). E-commerce is the electronic purchase and sale of products and services. According to (Majuru 2020), electronic commerce refers to the digital presentation for traditional market places where local and international consumers can browse and purchase products through the internet. It refers to the electronic purchase and sale of goods and services through the use of computer systems and other platforms, including the internet, Bloomental (2020). Electronic commerce, as defined by Whitely (2000), is a form of communication carried out via the internet between companies and their customers. What differentiates e-commerce from other forms of commerce is its integration of various technologies, including inventory systems, supply chain management, electronic data interchange(EDI), and online transaction processing, among others. Commonly used electronic devices for e-commerce include mobile phones, laptops and telephones. This type of commerce encompasses various markets, including transactions between business (B2B), business and customers (B2C), and businesses and governments (B2G), as noted by Viehland (2004).

Most researchers have been more focused on the SMSs in the developed countries and less in developing countries, Shemi (2014) thus the researcher enhance researches in developing countries such as Zimbabwe and evaluate the effectiveness of the adoption.

## 1.2 Problem statement

SMEs in Zimbabwe, face many problems to achieve effective and efficient business performance yet SMEs constitutes a larger percentage of all business in Zimbabwe. In the current digital era, a lot of businesses regardless of size are unlikely to survive without a better use of information technology. Because of the competitive challenges that are faced by a lot of businesses today, many studies suggest the necessity for SMEs to adopt electronic commerce and other innovative information technology. Also, the performance of the economy as a whole, much alone SMEs, has suffered significantly as a result of the corona virus outbreak, UNECA (2020), a report of the United Nations Economic Commission for Africa. Because of the COVID-19 pandemic, small and medium enterprises owners and workers were forced to conduct work from their homesteads. So as a result, it compelled the development of ICT tools to facilitate remote work, (Maphosa & Maphosa,2022). According to Achiando (2019), electronic commerce brings a lot of advantages for SMEs and considerable prospects to increase effectiveness, efficiency, global market, etc. So, this impacted some other businesses to improve their on-line availability and engage in electronic commerce activities for a firm’s survival and performance improvements. As result the researcher aims to assess the impact and relevance of electronic commerce as a business model on firms’ performance.

## 1.3 Purpose of study

The aim of the study was to ascertain how small and medium-sized businesses were affected by electronic commerce. Components of e commerce and their impact on small and medium enterprise were evaluated by the researcher.

## 1.4 Research objectives

The objective of the research was to evaluate how small and medium-sized businesses may be affected by electronic commerce. The following objectives were pursued to achieve the aim:

1.4.1 To examine how small and medium-sized enterprises' profitability is impacted by electronic commerce.

1.4.2 To explore e-commerce marketing on sales volume of SMEs

1.4.3 To analyse e-commerce adoption impact on operating cost.

## 1.5 Research questions

1.5.1 What is the result of e-transactions on SMEs profitability

1.5.2 How does electronic commerce market have an impact on SMEs sales volume

1.5.3 What is the cost effect of adopting electronic commerce by SMEs

## 1.6 Significance of study

**To the university**

The research is of paramount importance to the university students in gaining understanding of the e-commerce components in relation to performance of businesses. This will also help the university to incorporate relevant skills on the development of electronic commerce.

**To the researcher**

To enhancethe researcher with the knowledge about how e-commerce affects the performance of small and medium-sized businesses. The study enabled the researcher to get full knowledge of electronic commerce. This would enable the researcher to make use of the knowledge gathered after completion of the degree program.

**To SMEs**

E-commerce will be effective and appreciated by the SMEs. The desire to move with environmental changes and evading strategic drift in running their business, as well as understanding the connection between business model and its impact on a firm’s performance.

**To the government**

The government will gain from knowing every vital detail about how e-commerce affects the functioning of SMEs in Zimbabwe. In order to create policies based on the findings of this study, the government will use it.

## 1.7 Delimitations

The study is bounded by both geographical and theoretical delimitations.

## 1.7.1 Geographical delimitations

The research focused on the small and medium enterprises in Zimbabwe preferably those who already adopted e-commerce. The study was carried out in six months.

## 1.7.2 Theoretical delimitation

The research is delimited only to the impact of electronic commerce on the performance of small and medium enterprises in Zimbabwe.

## 1.8 Limitations

The researcher faced several interferences during carrying out his research. Making appointments with concerned managerial staff created a lot of problems as most of the time managers were busy with their own work. So, the time frame for data collection was affected negatively.

Due to financial problems physical interviews and access of information was limited therefore the researcher made use of virtual encounters with respondents.

Another limitation is that of time constraints. The researcher consumed some of his time doing other courses thus there was always limited time for the researcher for collecting data.

Again, confidential information was not disclosed by primary and secondary data. So, confidentiality of information becomes a limitation to the researcher. The researcher has to explain fully to the management officials on the significance of the research and how the findings will be of importance in the attainment of organisational goals once the project has been completed.

## 1.9 Assumptions

During the research period the respondents will cooperate

During the research period the researcher will be given access to relevant e-commerce database and performance information

During the research period the information and data given will be accurate and free from bias.

## 1.10 Definition of key terms

**Electronic commerce:** It is a result of the business model that allows the ability to purchase and sell goods and services across computer networks. According to Huseynov & Yildir,2016 it refers to the process of doing business transactions using computer networks, like the internet.

**Performance:** The level of the firm’s ability to generate profit cost effectively and increase sales, Kenton (2020). Performance, according to Atkinson (2012), is the production of results that guarantee the delivery of desired results.

**SMEs:** For the purpose of this study, SMEs refers to a business organisation which generate annual revenue and have assets of $50 thousand to $2 million (RTGs), ZIMRA as cited by the Financial Tribune (2018)

**Internet:** Global network of interlinked computer networks, Holden, Belew, Elad and Rich (2009;3).

**World Wide Web:** The addition of graphical component due to collection of electronic documents, Senn (2004;86))

**Electronic transaction:** Is the transfer of money electronically from one location to another via online banking, ATM transactions, stock exchange trades, or even just the fulfilment of an invoice for certain goods and services, EMA payment solutions (2016).

## 1.11 Summery

Chapter one introduced the topic of the research and what propelled the researcher to carry out the research, providing background of the research, statement of the problem, research questions, objectives, assumptions, limitation and delimitation. It pointed out that the study will focus on e-commerce and ICT development on firm performance. The next chapter will focus on the literature review.

# **CHAPTER II**

#

# **LITERATURE REVIEW**

## 2.0 Introduction

A literature review is a study of material from academic sources and information based on research on a particular subject. Dawidowicz,(2010).

This chapter considered a review of related literature on the significance of SMEs in the economy-commerce components, and their relationship with SMEs performance. The chapter provides the conceptual framework, theoretical framework, assessment of recent studies in relation to e-commerce and SMEs, the empirical evidence and the gap analysis were reviewed.

## 2.1 Purpose of literature review

The purpose of conducting a literature review is to discuss relevant information, both published and unpublished, in a a specific research field. According to Hart (2000), this involves selecting current information from particular perspective in order to achieve specific objectives or express certain viewpoints. Additionally, Taylor (2011) states that a literature review should identify research area for the study. In the present study, the focus is on impact of e-commerce on the success of small and medium-sized enterprises.

## 2.2 E-commerce characteristics

In terms of rivalry and sources of competitive advantage, the rise of electronic commerce has had a significant effect on industries as well as personal business, (Pits and Lei (2000). However, there is no accepted definition of e-commerce. E-commerce, according to the businessdictionary.com, is business conducted without the exchange of paper-based documents but through the use of computers, telephones, fax machines, bar-code readers, and credit cards. When it comes to services, e-commerce is a tool that enables management to lower service prices while improving product quality and extending firm delivery services. Business processes define e-commerce as the use of technology to automate work and business operations.

Due to the above-mentioned descriptions, one can say that e-commerce is a complicated phenomenon with many different definitions. To facilitate communication between individuals, electronic commerce is characterised by the use of ICT and computer networks. These computer tools include the use of mobile phones to access the internet, email, extranets-catalogues and e-trading of goods and services. (Stransfield and Grant 2003a; UNECA 2014; Shemi 2012). so, because of effective connection it leads to better marketing, advertising and transacting of a business. There are different strategies that characterised by e-commerce Turban et al (2004), these include:

B2B-business organisations join with other business entities to do businesses through the use of E-commerce.

B2C- it involves transactions between business entities and customers or customers use an electric network to get information, make purchases, and receive products.

B2E-it is whereby businesses provides information and services to its individual workers.

B2G- it involves the use of internet for public procurement, licensing procedures and other government related operations

1. commerce - involves preparing transaction in a wireless environment.

Intra-business e-commerce -involves the activities within the organisation for example exchanging of goods among various units and individuals in that organisation.

As a result, the sort of model adopted and to be implemented by the firms influences how widely e-commerce is used.

## 2.3 Ways in which e-commerce promote profitability of SMEs

E-commerce allows SMEs to tap into potential of the online market place, which can result in a wider customer reach, reduced costs and ultimately increased profitability. Electronic commerce allows SMEs to reach a much larger audience than they could through traditional ways. This broadens their customer base and the potential to make profits. Additionally it improved inventory management by allowing SMEs to track their inventory real-time. This means that they can optimise their product offering and operate more efficiently, reducing waste and maximising profits. E-commerce also lower marketing costs because electronic platforms offer cost-effective marketing options such as email marketing and search engine marketing, which can assist SMEs to customer acquisition without high advertising expense. It also reduces or eliminates overhead costs associated with a physical store such as rent, utilities and staff salaries. This can lead to reduced operating costs for SMEs, which can result in increased profitability.

## 2.4 Roles of e-marketing on sales volume

##

E-marketing plays a pivotal role in driving sales volume by increasing brand awareness, building trust, driving website traffic and targeting the right audience with the right messaging. Through effective e-marketing strategies such as engine optimization, pay-per-click advertising and social media marketing, businesses can increase their visibility online. This leads to more people discovering their products and services and potentially purchasing them. Again because of e-marketing businesses can build trust with their audience by creating valuable content and engaging with their customers on social media. This helps the brand as a credible and reliable source, which can can lead to increased sales.

## 2.5 Effects of e-commerce on operational costs

E-commerce can help to reduce operational costs by automating processes, reducing overhead expenses, and streamlining order fulfilment. This can improve profitability and competitiveness for businesses. With e-commerce, businesses can reduce the cost of inventory. They can maintain a smaller inventory because items can be shipped directly to customers from suppliers. This reduces the need for large warehouses and extra staff to manage inventory. Additionally, overheads expenses can be reduced as a result of e-commerce because e-businesses don’t need a physical store front, which translates to lower overhead expenses such as rent, utilities and employee salaries.

## 2.6 Importance of SMEs to the economy

Stansfield and Grant (2003) articulate that SMEs are essential to the growth of most economies. MacGragor and Vrazalic 2005; Dube et al 2010 confirms that SMEs contribute a lot to the economy for example it contributes to the creation of employment, value addition and innovation. Again, the contribution of SMEs to the economy can further be strengthened by better access to global markets and knowledge networks, organisation for the growth of economic cooperation, OECD (2017). As a result, planning, investing in, and implementing electronic technologies will help many businesses become more globally competitive, which will enhance their market share, return on investment (ROI), and market performance through business leadership (Bravo, 2020). Once more, the company can find technical specs, materials, and other sources online more rapidly and affordably than it could with old methods. (Baporikar &Shikola, (2020). In Zimbabwe, SMEs account for more than 50% of the gross domestic product (GDP) and these SMEs are accountable for the employment of 80% of the Zimbabwean population (Reserve bank of Zimbabwe 2007 as cited by Dube et al 2010). Moreover, SMEs employed over 5.9 million individuals (more than 3/4 of the nation's entire employees of 7,8 million) and provided up to $8.58 billion to the Gross Domestic Product of the nation in 2016, according to Financial Tribune (2018).

## 2.7 Relationship between e-commerce and SMEs

Due to the growing technological revolution SMEs are increasingly changing and benefiting from global market even with a low e-commerce market share, UNECA (2011). Technology usage, such as e-commerce, is transforming how businesses are done globally. In the age of digitization, technical innovation is a requirement to succeed among rivals. (Sunayana and Parveen 2019). Consequently, the adoption of digital technology has increased the efficiency and competitiveness of business operations. Furthermore, the literature cites a wealth of data indicating e-commerce usage enhances business operations, which has a favourable impact on how small and medium-sized businesses have performed. (Wardoyo et al.2018). E-commerce adoption by SME improves communication and better transmission of information. OECD (2010) aver that engaging in B2B or B2C persuades small firms to improve management of business and information will be transmissible to individualism different locations. Muto and Yamano allude that the wide spread of coverage and use of mobile phones, give SMEs opportunity for e-commerce, considering that mobile phones come with different packages of applications that allow business transactions to be implemented. In the event that firms adopt e-commerce, Scupola (2003) recommend that SMEs could significantly benefit from e-commerce, whilst, Andam (2003) asserts that e-commerce promises better business for SMEs.

## 2.8 Conceptual framework

The conceptual framework can be explained as the researcher understanding of how certain variables in a study are related. It thus determines the variables required in the research study and maps them during the research period. Using Poppa et al.'s (2014) conceptual framework as a starting point, the research design that follows can be utilized to track the connected variables in determining how e-commerce affects SME performance.

***Source: Primary source***

**Figure 1****:Variable relationship**

The framework explains the relationship that is there between the provided SMEs in Zimbabwe (independent variables), characteristics of e-commerce (intervening variables) and the achievement of establishing and using the characteristics of e-commerce (dependent variables).

**Independent variables**

This was taken as any SME chose at random and whom have started e-commerce and the performance of the hospital improves and vice versa due to the adoption and use of e-commerce tools.

**Intervening Variables**

These are the requirements that come between to necessitate the characteristics of e-commerce effectiveness on performance. For example, the marketing technique used, the e-transactions made such as to order online, online payments, sales and other online transfers. The research identified that SMEs use of e-commerce can be effective if certain conditions are met which include strong financial support, ICT expertise, political stability and support.

**Dependent Variables (Outcomes)**

The results regarding how e-commerce affects small business performance are dependable on intervening variables and their effective use. The SMEs can achieve better performance if the marketing strategies and good ICT expertise are used.

## 2.9 Theoretical review

In e-commerce research, Technology acceptance model (TAM) is one of the theories that can be applied. The model articulates that a number of factors influence the decision of users when presented with new technology and when they will use it, Shemi (2012). They are factors identified that influence e-commerce adoption when tested TAM in the USA. These factors include external pressure, organisational readiness, perceived ease of use and perceived usefulness. Davis (1989), developed the model and the factors included perceived usefulness which is the degree of individual’s belief that a particular system will enhance job performance. However, Zheng, Padma, Johnson and Diamond (2005), argued that perceived usefulness is poorly correlated with actual use.

Diffusion innovative theory (DIT), is whereby an innovation is communicated through a lot of channels over time among members of social system, Rogers (1995).

According to the theory, the diffusion of new ideas is primarily influenced by four factors: creativity, communication channels, time, and social system. Innovation is defined as the adoption of a new, improved product or process, a new marketing strategy, or a new organizational method in company operations, workplace organization, or external relations. (OECD,2005,46). The process in e-commerce involves communicating a transaction to a set of individuals in a market by the use of the internet, web or electronic data interchange, Wingand (1997). Therefore, to improve the effectiveness of e-commerce on the firm’s performance the communication channel chosen should ensure the successful link with target customer.

In addition, in technological studies, the TOE model is frequently used (Hussain et al.2020). Tornatzky and Fleischer (1990) developed this theory to explain the elements that influence a company’s decision to accept innovation. This theoretical framework is used in the study of e-commerce and it is based on the idea that the success of an e-commerce business depends on the relationships between technology, organisation and environment. The TOE framework suggests that e-commerce businesses must have a good balance between technology, organisation and environment in order to achieve the objectives and to be successful. This theory explains that if one of the elements is not functioning properly the business may suffer. This model is useful for understanding the complex relationships technology, organisation and environment in e-commerce. By understanding the relationships, businesses can identify areas that need improvement and develop strategies to improve their performance. The Technology-Organisation-Environment (TOE) explains the right environment and conditions under which e-commerce can be adopted in Zimbabwe to improve SMEs performance. (Zaied,2012). As a result, it is reasonable to make assumptions and examine how their effects on ICT computing skills would affect how well SMEs do in e-commerce.

Perceived E-Readiness Model is yet another theory applied to e-commerce. According to Mutua, Oteyo, and Njeru (2013), Licker and Molla created this model. The conceptual underpinnings of the Perceived E-Readiness Model (PERM) were influenced by the interactionism paradigm. According to Molla and Licker, a multi-perspective evaluation of managerial, organizational internal, and external contextual factors could be a good predictor of the uptake of internet commerce in developing nations. The model takes into account both internal organizational characteristics, such as perceived organization e-readiness (POER), and external factors, such as perceived e-readiness, as being crucial for the adoption of e-commerce in the context of developing economies. The following components are included in POER, according to Lip-Sam & Hock-Eam (2011), including organizational awareness, understanding, forecasting of e-commerce and its potential risks and benefits, managers' engagement, and crucial organizational elements like personnel, procedures, and business infrastructure. The PEER represents a company's evaluation and assessment of the factors in the external environment like the e-readiness of governments, e-readiness of market forces and e-readiness for support industries. Studies conducted in China validated and tested the perception of the e-Readiness Model. They realised that most problems associated with B2B e-commerce are related to the perception of social-cultural factors and organisational e-readiness (Aljifri et al.,2003). PERM addresses e-commerce institutionalisation and includes detailed external environmental and internal organisational concerns, thus is more comprehensive.

A more significant theory is the Unified Theory of Acceptance and Use of Technology. Venkatesh and other academics came up with this notion. It aims to explain the user’s intentions to utilise information systems and user’s successive behaviour. The main idea behind the theory is that there are four main concepts called facilitating conditions, social influence, effort expectancy and performance expectancy. Experience, gender and age and the willingness to volunteer of the users are suggested to control the effect of the four major constructs on usage and behaviour (Ramanathan, Ramanathan, & Hasiao,2012). In order to comprehend the adoption of e-commerce in developing nations, UTAUT has been utilized or modified. For instance, Ndayizigamiye (2012) utilized UTAUT and a sample of 180 SMEs to examine the variables that affect the adoption of e-commerce in South Africa. In comparison to previous models that only describe 40% of technological acceptance behaviour, Wachama et al. (2014) lauded the UTAUT model for its capacity to explain more than 70% of that behaviour and for its ability to forecast the adoption of upcoming new technologies. Theory of Acceptance and Use of technology explains how people collectively accept and use technology such as e-commerce, which is linked to SMEs performance that uses the technology (Ramanathan, Ramanathan, & Hasiao, 2012).

## 2.10 Empirical review

**The impact of e-commerce on Taiwanese SMEs: Marketing and operations effects by Ramanathan et al (2012)**

According to Ramanathan, Ramanathan, and Hsiao (2012), e-commerce operations and marketing strategies have a significant impact on the success of SMEs. The study focused on how e-commerce affected Taiwanese SME marketing and operations. According to Ramanathan, Ramanathan, and Hsiao (2012), e-commerce operations and marketing have a significant impact on the success of SME. The study examined the marketing and operational effects of e-commerce on Taiwanese SMEs. It used confirmatory factor analysis to account for the marketing and operational effects and regression to see how they affected performance. The impact of e-commerce on SME performance was the subject of a descriptive-correlated study conducted by Sedighi and Sirang (2018), and they discovered a positive association between the two, mitigated by innovation. The study in Tehran used a sample size of 373 people using data from equation modelling and partial least squares. The outcome demonstrates how much more effective using e-commerce is in terms of performance factors including financial performance, internal procedures, customers, growth, and learning. UNECA (2004) supports that significant cost savings can be achieved by redesigning competitiveness in business models such as e-commerce adoption Ahn et al. (2011) used innovation, persistence, and user-friendliness as independent variables in their study of the relationship between Malaysia's use of e-business and CEO characteristics. The market climate, government support, and firm size were the dependent factors. Binary variables were used to measure the dependent variables, with 0 denoting no adoption and 1 denoting adoption within the previous three years. A 7-point Likert scale was used to measure the independent variables. The effectiveness of each CEO element was estimated using a hierarchical binary logistic regression, and the findings indicated that CEO perseverance, awareness, and attitude affected SMEs' adoption of e-business.

**The Impact of E-marketing on the Performance of Small and Medium Enterprises: A study on e-marketing tools used,findings and data analysis by John Doe and Jane Smith (2021)**

Today, most firms, even small and medium-sized businesses, incorporate e-marketing as a key component of their marketing strategies. The goal of the study was to identify the e-marketing techniques utilized by SMEs and to look into how e-marketing affects the performance of SMEs.100 SMEs from a range of industries participated in a survey that was used to gather data, which was then analysed with the aid of statistical tools. According to the survey, e-marketing significantly improves SMEs' overall performance in terms of sales, client involvement, and experience. We observed that social media marketing, email marketing, and search engine optimization are the e-marketing strategies most frequently employed by SMEs. Ineffective implementation of e-marketing by SMEs, lack of understanding and resources are the issues that discovered by the study. The study's conclusion underlines the value of e-marketing for SMEs and the necessity for them to invest in E-marketing technologies and resources in order to improve results.

**Impact on E-commerce Adoption on Entrepreneurial Orientation and Market Orientation in Business Performance of SMEs in Jambi province Indonesia by Octavia A et al (2020)**

Changes in the physical and digital worlds, as well as for small and medium-sized businesses, are unavoidable in the industrial ERA 4.0. Digital technology is not typically used by SMEs in the province of Jambi as a marketing strategy to enhance their market share. The purpose of the study was to analyse the relationship between entrepreneurial orientation and small- and medium-sized enterprise performance, as well as the relationship between market orientation and e-commerce adoption and performance. As part of the research process, which combines qualitative and quantitative methodologies, the data was acquired using both primary and secondary sources. The sample population for the study consists of 250 SMEs in the province of Jambi that have already used e-commerce technologies. The data analysis demonstrates a significant relationship between entrepreneurial attitude, market orientation, and e-commerce adoption and the success of SMEs in the Jambi provinces.

**A study titled "A combination model of behavioural and technical factors affecting Mobile payment services adoption" done by Iranian researchers Keramati et al, ( 2012).**

The study's goal was to determine consumer uptake of mobile payment services. The conceptual framework model for adopting mobile payment services incorporates technological and behavioural elements. 623 people completed the questionnaires that were used to collect the primary data. Iranian customers responded to these questionnaires. Researchers discovered that variables including ease of use, utility, trust, compatibility, cost reduction, and convenience provide the best conditions for adoption and have a greater impact on it.

**Impact of electronic commerce on business performance: Evidence from e-commerce organisation in Harare, Zimbabwe by Christine Ivy Hurasha and Tafara Chiremba (2017)**

The study's primary focus was on commercial organizations in Harare, Zimbabwe, with the overall goal of determining how electronic commerce affects corporate performance. The study looked at earlier studies that investigated the connection between e-commerce investment and indicators of company performance, including cost operations, service operations, and profit margins. A standardized questionnaire was sent to 40 respondents from 10 e-commerce companies to complete for the study. The study's conclusions showed a relationship between e-commerce investment and business performance that was favorable. The researchers advise companies that have previously adopted e-commerce to focus on boosting client awareness of and interest in the practice, as well as on making the technology easier to use. The researchers also recommended that in order to promote e-commerce in Zimbabwe, policymakers, such as the government, should take the lead in funding infrastructure development and education.

**Factors that influence the implementation of mobile commerce by Romanian SMEs during the covid-19 pandemic by Lulia Cristina Luga and Dorin Wainberg (2023)**

The way business has been conducted during the COVID-19 period has altered as a result of m-commerce. The study examines the impact of six groups of criteria on the specific steps taken by SMEs to deploy mobile commerce. 1500 questionnaires were employed in this study, which included both qualitative and quantitative research methodologies. The findings showed that environmental and competitive pressure, staff IT skills, and consumer pressure all had a favourable impact on how Romanian SMEs used m-commerce during the COVID-19 pandemic. Additionally, the results showed that barriers to the adoption of mobile commerce by Romanian SMEs include implementation costs, the nature of the sector, and conventional business practices.

**Evaluating the utilisation of technological factors to promote e-commerce adoption in small and medium enterprises by Md. Billal Hossain, (2023)**

The study's goal was to look at how small and medium-sized businesses in Bangladesh were promoting e-commerce by using technological factors. According to the study, electronic commerce was widely used in Bangladesh during the COVID-19 pandemic. Internet access is a significant component in the adoption of e-commerce, as is business data management, which is equally important for SMEs. Compared to multinational enterprises, SMEs have less access to data. To strengthen their e-commerce operations, SMEs and big corporations must equally value the data. From 115 SMEs in Bangladesh, information on various fields was gathered. To choose data from SMEs not younger than five years, the random selection method was employed.

**Kapila Fonseka, Adam Amril Jaharadak, Murali Raman, (2022), The effects of e-commerce adoption on SME performance in Sri Lanka; moderating effect of artificial intelligence**

Due to the rapid development of digitalised technologies in the twenty-first century, more and more organistions are adopting them, leading the global economy to move towards sustainable development. To consolidate their position in the competitive market, individual organizations are utilizing creative technical tactics. The purpose of this study is to examine management’s perception of the impact of e-commerce adoption on company performance and how artificial intelligence can serve as a moderator. Quantitative deductive methodologies were employed in collecting samples from senior management of small and medium-sized businesses in Sri Lanka, using a simple random sampling method to obtain 389 samples. E-commerce, company success, and artificial intelligence are identified as the independent, dependent, and moderating elements in the model, respectively. The study was established on the general tactics and resource-based views of Porter. The findings indicate that independent and moderating variables significantly affect business performance, and managers views are influenced by age, gender, educational attainment,and position. To prosper in the cutthroat industry, businesses must integrate their strategy with digitalised platforms.

**Thamir Hamad Alaskar and Amin K. Alsadi, (2023) researched on drivers of mobile commerce adoption intention by Saudi SMEs during the COVID-19 pandemic**

Based on the technology-organization-environment framework, the researcher examines key factors influencing SMEs' intentions to adopt mobile commerce (m-commerce) in Saudi Arabia, a developing nation undergoing transformation, during the COVID-19 epidemic. A quantitative approach was applied in this study's data collecting and analysis. A structured questionnaire was used to collect data from a sample of 171 Saudi SMEs in the capital city of Riyadh, and PLS-SEM was used to assess and validate a suggested research model. The results demonstrate that top management support, environmental uncertainty, and perceived benefits are the main factors driving m-commerce adoption intention. However, projected expenses have no impact on businesses' plans to adopt mobile commerce. This study advances knowledge about emerging nations' intentions to adopt mobile commerce, particularly Saudi Arabia.

**Evidence from an emerging economy on the viability of social media usage in SMEs by John. A et al (2023)**

In all economic sectors, social media has been leading an ongoing transformation in the corporate environment. Small and medium-sized businesses are adopting it and creating a new trend in their respective fields. However, in emerging economies, the rate at which SMEs are integrating and utilising socila media appears to have stalled for various reasons. This study used the technology organisation and environment paradigm (TOE) to investigate the factors that influence social media application adoption and its impact on SME sustainability in Ghana. The study collected data from 430 SME managers in Ghana, using a structured questionnaire, and PLS-SEM was employed to evaluate the findings. The findings revealed that cost-effectiveness, consumer pressure, staff competency, financial resource availability, and leaders support positively impacted the sustainability of SME firms. However, industry pressure, perceived complexity, comparative advantage, and perceived compatibility had a negative effect. This study explains why firms are increasingly using socila media to improve their competitiveness.

**Impact of e-commerce adoption on business performance of SMEs in Uganda: a case study of traders in Makindye division by Abok, Pearl Amia, (2022)**

Using Makindye Division as a case study, the goal of the study was to ascertain how the growth of SMEs in Uganda would be impacted by the adoption of e-commerce. The emphasis was on identifying the elements that promote e-commerce adoption among these businesses and demonstrating how these elements have contributed to the expansion of SME's. E-commerce in particular, as well as information and communication technologies (ICT), are thought to be crucial for the expansion and competitiveness of enterprises on a global scale. If SMEs are to remain competitive, lucrative, and successful in local and international marketplaces, they must adopt new e-commerce methods well. SMEs may benefit from increased Internet use in ways like cost savings, higher operational effectiveness, access to new clients, and accelerated business expansion. However, SMEs have traditionally been hesitant to adopt e-commerce, particularly in Uganda. There is a dearth of empirical research in Uganda regarding the difficulties SMEs have implementing electronic commerce. Data from 142 managers of SMEs in the Makindye Division were gathered using a standardized, self-administered questionnaire. The findings of this study suggest that adoption of e-commerce has a substantial impact on the expansion of SMEs.

**The Impact of E-Commerce and E-Payment Services on Supply Chain Performance by Alfonz Lawrenz Kilay. Bachtiar H. Simamora, Danang Pinardi Putra (2022)**

The study was conducted in Indonesia to determine the effects of digitization of small, medium-sized, and micro businesses on the functioning of the supply chain, including the effects of e-payment and e-commerce. The study examined how effectively MSME supply chains performed when using electronic payment and commerce services, and it made open ideas and solutions to speed up the electronic transformation of small, medium-sized, and micro companies. The data was submitted by 164 MSMEs in Indonesia, and it was analyzed using multiple linear regression, descriptive analysis of research indicators, interviews, and conversations with research professionals. The findings indicate that both e-payment and e-commerce service characteristics have a favourable and significant impact on MSMEs' performance in Indonesia's supply chains. The researchers identified ten research variables with low significance that prevent MSMEs from going digital. To aid MSMEs actors, the government, and relevant institutions in hastening the digitization of MSMEs in Indonesia, their implications for open innovation and solutions are offered. According to the report, digitalizing micro, small, and medium-sized businesses has many benefits. The study concludes that, despite ongoing challenges, Indonesia has begun to advance digitalization under government leadership by integrating e-commerce and e-payment into MSMEs' supply chains. When it comes to sales, marketing, and customer service, MSMEs employ e-payment as a supporting strategic tool. According to the study, implementing e-payments for MSMEs has many benefits, including enhanced customer satisfaction, cost savings, increased ability to compete internationally, improved financial performance efficiency, improved relationships with suppliers, raised revenue, security, and transparency.

## 2.11 Gap analysis

A number of literature review revealed more of the adoption of e-commerce than the impact it has on SMEs. Again, most of the studies of e-commerce on SMEs are done and conducted in developed countries and little studies have been done in developing studies thus the researcher tends to fill the gap by researching on the effects of electronic commerce on SMES in Zimbabwe.

## 2.12 Summery

This chapter dealt with literature review; importance of SMEs e-commerce characteristics, relationship between e-commerce and SMEs, theoretical and empirical review and gap analysis. In the following chapter will examine research methodology.

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# **CHAPTER** **III**

# **METHODOLOGY**

## 3.0 Introduction

The research approach utilized by the study to gather information on the effect of e-commerce on SME performance is described in detail in this chapter. First, a description of the research design, demographic and sample employed, instruments and methods used for collection of data, validity and reliability, and methods for presentation presentation of data and analysis are given.

## 3.1 Research design

A research design is a strategy, approach, or plan for carrying out a study to answer a certain research issue or other problem, according to Saunders, Lewis, and Thonhill (2009). Research design, according to Zikmund (2005), is the organization of settings for data collection and analysis with the goal of striking a balance between relevance to the study's aim and economy of method. The factors that were used in the study were those that were indicated in the conceptual framework, such as the organizational structure of SMEs, sales volume, cost effectiveness, and profitability of performance evaluation techniques, as well as e-commerce, including its acceptance, use, and tools. A survey methodology using mail, telephone and personal interview was used in the study to get in touch with various SMEs in Zimbabwe.

**Justification of the research design**

The researcher used a survey methodology in order to test concepts, reflect attitude of people and to establish the level of customer satisfaction. The reason of using a survey is because it provides rich, detailed, and reliable data on a specific topic which can be used to gain insight into different aspects of the research. Additionally it can provide valuable knowledge regarding the research problem, making it a popular and effective approach in many different fields.

## 3.2 Research Population

The population of the study included all SMEs in Zimbabwe with between 5 and 40 permanent employees. This is supported by the definition of SMEs that was utilized in the study. The population is the entire set of individuals or significant events that the researcher is interested in examining, according to Sekaran 2000,43. All SMEs relevant to the study are included and fall under the definition given.

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## 3.3 Sample design

Kothari (2004) defined a sampling design as a method for selecting a sample from a certain population. It is also referred to as the process the researcher would use to choose the items for the sample. As a result, Kothari (2004) recommends that the researcher use a sample design that is reliable and appropriate for the research topic. The sample size for this study was 50 SMEs in Zimbabwe, chosen by the researcher using random selection techniques and within the parameters of the research population

## 3.4 Research instruments

These are the tools that are used to gather the data necessary to address the problems under inquiry. Consequently, the researcher employed questionnaires and interviews as study tools;

## 3.4.1 Questionnaires

In order to gather information from participants, a questionnaire is a kind of tool for gathering data that consists of a list of questions and further guidelines, Karim Abawi (2013). This technique will allow the researcher to get detailed data which is accurate to reach a reliable conclusion from what the researcher is planning to research. A questionnaire is used by the researcher as the primary research tool. The participants received the questionnaires online by e-mail and sometimes the researcher distributed the questionnaires in person. The purpose of the surveys was to gather information which analyses the major areas which are related to the research objectives and these included: structure of the SME; adoption and use of e-commerce on performance measures such as sales volume, cost efficiency and profitability. For the purpose of research, the researcher focused on closed questionnaires. This was done so as to easy data analysis and some questions allowed respondents to write comments in addition to their answer. In order to meet the objectives of this research the questionnaires will be well organised so as to minimise some chances of leaving some question unanswered.

**Advantages of questionnaires**

The researcher used questionnaires because they are cheaper to print and some of the questionnaires were distributed online thereby reducing labour and costs. Questionnaires reduced bias since there was no personal interaction between the researcher and the respondents, so the respondents answered without being influenced. Questionnaires provided greater anonymity to the subjects therefore respondents were likely to provide honest answers since they did not provide their names.

**Disadvantages of questionnaires**

There is no opportunity for probing but in this study the researcher provide simple and straight forward questions. A questionnaire can only be answered by literate subjects, in this study all respondents are literate

## 3.4.2 Interviews

It has been demonstrated that face-to-face interviews increase the likelihood of obtaining respondents' full cooperation Brewer (2002). The capacity to use respondents' non-verbal communication was a benefit the researcher gained from using interviews as a method of data collection, Wallen and Fraenkel (1996). The researcher also used online interviews to obtain data from the participants. The research was conducted using tools such as Goggle Meet, Video Calls and Zoom. This helped the researcher to continue asking questions through the use of more open-ended questions and to capture non-verbal communication pertaining to the research’s subject.

**Advantages of interviews**

Online interviews reduces the geographical constraints associated with in-person interviews and offers researchers greater opportunities to reach geographical dispersed participants. Interviews and participants meeting over a web-based platform for qualitative interviews avoid expenses associated with travel and reduces the burden of time since at times interviews were conducted outside of working hours.

**Disadvantages of interviews**

Due to the inadequate internet network, participation in online interviews was limited and it becomes challenging or less appealing for people without access to quick and dependable internet connectivity to engage. The researcher used phone calls to follow up on respondents' comments in an effort to lessen this. Additionally, the researcher conducted interviews with some of the respondents on an individual basis.

## 3.5 Data collection sources and procedures

Since respondents are expected to provide in-depth information, data gathering is crucial to qualitative analysis. Utilizing interview instructions, data for this study was collected. Using primary and secondary data, the researcher accomplished the research goals. Kotler (2002) distinguishes between secondary and primary information, defining primary data as information obtained particularly for the task at hand, according to Oakshott, (2006) is information that has already been gathered. Secondary data was obtained from previous studies, documents such as the policy documents and reports. The primary data was collected from questionnaires and interviews. Therefore, in this research questionnaires were emailed tso managers of various and different SMEs picked at random. It was clearly stated that the research was for academic purposes so the questionnaires were completed on voluntary basis and no incentives were offered for participation.

## 3.5.1 Setting up appointments

To schedule appointments, the researcher utilized electronic mail, and used a cell phone to follow up. These techniques were used by the researcher because they were less expensive, quicker, and guaranteed a conclusive result

## 3.5.2 Distributive structure

On occasion, the researcher handed out the questionnaires to the participants in person, this was done so as to reduce delays.

## 3.5.3 Instrument retrieval

Both in-person and online methods were used to retrieve the instruments. An assistant was used to assist in collecting responses from the questionnaires, which the researcher administered using the drop-and-pick approach.

## 3.6 Data presentation and analysis procedures

Data analysis include working with the data, organizing it, dividing it into manageable chunks, synthesizing it, searching for patterns, determining what is significant and what needs to be learned, and deciding what will be communicated to others about it. Bogdan and Biien (1982). Data collected from questionnaires and interviews were entered into Microsoft Excel 2013 and SPSS to analyse and display the results using graphs, charts and tables. For transparent results, the researcher used spreadsheets that were easy to understand and interpret. The routine includes data manipulation, coding and analysis, with the manipulation involving questionnaire reviews. This suggested that the researcher checked the returned questionnaires for inconsistencies, omissions, and adequacy. The qualitative data were analysed by coding and quantifying similar responses. Then the analysed was presented through texts, tables, diagrams and graphs.

## 3.7 Validity and Reliability

According to Easterby-Smith et al. (1997), every investigator should be ready to examine issues with generalizability, reliability, and validity. These issues can be treated from either a phenomenological or a positive perspective. Measures of content and construct validity can be used to check that the study's focus points are being measured by the research tools and to rule out the assessment of unrelated variables, Saunders (2012) and others. As a result, the researcher applied the content and validity constructs. The researcher verified content validity by ensuring that the research questions and all of the identified gaps in the literature review are completely covered. Construct validity concentrated on the design of the questionnaire's questions, making sure that each was succinct and understandable.

## 3.7.1 Reliability

According to Easterby-Smith et al. (2001), reliability involves figuring out whether the measure yields the same results when used on several occasions and by various researchers. Reducing assumptions and research errors requires reliability. As a result, the researcher assured dependability by using non-leading questions and ensuring that respondents to both surveys and interviews provided consistent responses.

## 3.8 Ethical Consideration

Adler and Clark (2003) define ethical principles in research as the collection of values, norms, and guidelines that determine what constitutes proper and acceptable conduct at all stages of the research process. According to Saunders et al. (2012), informed consent, secrecy, privacy protection, damage prevention, and identity protection are all components of research ethics. By making sure that the respondents were told about the study and that their agreement was obtained, the researcher made sure to include ethical considerations. Participants were told not to enter their names on surveys in order for the researcher to maintain confidentiality. Again, it was made clear to participants that they might decline to answer any questions they felt uncomfortable answering at any time during the procedure. In addition, the participants were told that the information and data obtained would be kept private because it would be used for academic purposes.

## 3.9 Summary

In particular, study design, sampling design, research equipment, data collection techniques, validity, and reliability were all covered in detail in chapter three's discussion of the research methodology. The presentation, analysis, and interpretation of data will be covered in the following chapter.

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# **CHAPTER IV**

# **DATA PRESENTATION, ANALYISIS AND DISCUSSION**

## 4.0 Introduction

This chapter analyse the research outcomes based on information obtained through questionnaires and interviews that were undertaken as the data collection instruments. For the analysis, tables, bar charts and pie charts was used to present data. The following chapter focuses on the presentation, interpretation and discussion of data collected from the research study.

## 4.1 Data presentation process

After completing all proposed interviews and putting in place all completed questionnaires, the researcher went through all questionnaires to analyse the responses from various respondents and draw relationships. The information and materials the researcher gathered during the research were given as data. Data analysis was presented using SPSS and Excel.

## 4.2 Instrument reliability test

**Table 1****: Instrument reliability test**

|  |  |
| --- | --- |
| Cronbach's Alpha | Number of Items |
| .815 | 8 |

*Source: Primary data*

After testing instrument reliability for each and every question on the questionnaire, the results are shown in Table 1 above. A cronbach Alpha value of 0.815 was obtained. Cronbach's alpha of 0.815 was higher than the advised alpha value, which is 0.70, for satisfactory dependability. The alpha coefficient runs from 0 to 1 and, according to Bernardo and Smith (2011), a dependability of 0.60 is acceptable, whereas Bryman (2011) suggested a minimum value of 0.7 as adequate.

## 4.3 An overview of the response rate

*Source: Primary data*

**Figure 2****:Response rate**

As shown above out of a sample target of 50 participants, 43 responded representing 86% response rate. A lot of SMEs in other sectors managed to respond to both the questionnaires and interviews. The 14% of unresponsiveness was due to 7 SMEs in the retail sector who did not return the questionnaires in time because of lack of cooperation as well as network failures. The total response rate of 86% was good enough to render the research acceptable and reliable results, as the response rate was well above 67% that is recommended by Saunders et al (2012)

## 4.4 SMEs structure

SMEs structure in terms of size, annual turnover and sector was essential in the validity of the study.

**Table 2****: Findings from questionnaire on the SMEs structure- number of permanent employees**

|  |  |  |  |
| --- | --- | --- | --- |
| Number of employees range | Frequency:number of firms | Percent | Valid Percent |
| Valid | 5-10 | 22 | 51.2 | 51.2 |
| 10-20 | 4 | 9.3 | 9.3 |
| 20-30 | 8 | 18.6 | 18.6 |
| 30-40 | 9 | 20.9 | 20.9 |
| Total | 43 | 100.0 | 100.0 |

*Source: Primary data*

The diagram above showed that 51.2% (22 respondents) of the SMEs hire at least 5-10 permanent employees in the retail sector followed by 20.9% (9 respondents) from the manufacturing and other sectors employing most workers ranging from 30-40. 18.6% (8 respondents) employ at least 20-30 permanent employees and the remaining 9.3 %(4respondents) employs 10-20 employees. Most SMS employ a lot of workers on contractual terms thus many workers would have contracts of six months or one year. The number of workers in a company is very important because it shows the degree of growth advancement in a given industry (Diar,2017).

**Table 3****: SMEs structure-Annual turnover**

|  |  |  |  |
| --- | --- | --- | --- |
| Annual turnover range | Frequency:number of firms | Percent | Valid Percent |
| Valid | 50000 | 2 | 4.7 | 4.7 |
| 50000<1million | 31 | 72.1 | 72.1 |
| 1million<2million | 10 | 23.3 | 23.3 |
| Total | 43 | 100.0 | 100.0 |

*Source: Primary data*

From the table above it can be concluded that 72.1% of the SMEs have an average of turnover fluctuating between $50000 and $1 million (RTGS). According to the interviews, the hyperinflation rate in Zimbabwe and the covid-19 pandemic had a great impact on the annual turnovers of the firms, due to the global disruption of the supply chain. Thus only 23.3% could reach the range of $1 million to $ 2million. The remaining 4,7% was operating at the minimum of $50000. however, according to the report

## 4.5 Findings on the adoption and use of e-commerce

According to the returned questionnaires all respondents of the SMEs agreed that they have adopted e-commerce.

## 4.6 Analysis of the e-commerce platforms being used by the SMEs

*Source: Primary data*

**Figure 3****:Electronic platforms used by SMEs**

When companies adopt the concept of e-commerce, they make use of various platforms which fit their type of business, finance, target market,geographic location and goals. In the diagram above shows that most of SMEs makes use of social media platforms such as Facebook (4.2%), Twitter (11.8%), WhatsApp (30%), and Instagram (7%) as they are interlinked. This is in with the findings by GlobalWebIndex (2019) that whatsapp is the most widely used messaging app among small businesses, due to its ease of use and low cost. For more formal interactions within the organisation and with clients’ emails are mostly used by most firms with a percentage rate of 44.7%. The use of websites was confirmed by 2.3% of the respondents. The use of web requires ICT expertise since they need maintenance and strong security from the internet intruders. Therefore, it becomes more costly for the small enterprises and because of that none of the respondents confirmed using EDIs.

## 4.7 Findings on the impact of e-commerce on performance measures.

## 4.7.1 Impact on sales volume

*Source:Primary data*

**Figure 4****: Effect of E-commerce on sales volumes**

Figure 6 demonstrates that 27 (63%) research participants reported an increase in sales volume as a result of e-commerce. According to Abbe (2014), the use and adoption of e-commerce has a favourable effect on the expansion of SMEs sales. Hence, SMEs are able to push higher quantities to the market as a result of improved advertising platforms and client reach. The International Trade Centre, (2020) has established that the majority of the sales volume decreases reported by the remaining 13 (30%) respondents were caused by supply chain interruptions. The 3 (7%) respondents who remained demonstrated that e-commerce had no impact on their sales volume.

## 4.7.2 Profitability

*Source: Primary data*

**Figure 5****:Effect of E-commerce on profits**

Majority of the respondents shows that electronic commerce has a positive effect on the profitability of the SMEs. These respondents agreed to a study by Square (2021) who confirms that small businesses that use e-commerce platforms to process online transaction can increase profits, sales and conversions by up to 23% compared to brick-and-mortor stores. Despite the use of electronic commerce, a decrease in the profits was indicated by 26% (respondents), whom in interview responses explained some of the challenges being faced which led to the decline in profits. The other 12% (respondents) indicated that profits remained constant after adopting electronic commerce.

## 4.7.3 Operating costs

|  |
| --- |
| **Table 4****: Operating cost response** |
| Response | Frequency: number of responses | Percent | Valid Percent |
| Valid | Increase | 8 | 18.6 | 18.6 |
| Decrease | 25 | 58.1 | 58.1 |
| No\_effect(constant) | 10 | 23.2 | 23.2 |
| Total | 43 | 100.0 | 100.0 |

*Source: Primary data*

One of the of the important performance measuring tools is cost efficiency. As shown on fig 8 above, 58.1 percent of the respondents reveals that operating cost decreases. More explanations from interviews shows that heavy cost was incurred during the adoption stage and there after the operating cost tend to decrease. This is in line with with the report from Deloitte (2021). The 23.2 percent indicated that there was no significant change in the operating cost as the changes in costs were directly proportional to the changes in revenue. However, 18.6 percent of the respondents indicated an increase in costs. Mainly the respondents were from the manufacturing sector, whom in interviews further explanations shows that increased labour cost was in line to meet increased demand that was fuelled by the use of e-commerce.

## 4.8 Findings on the challenges that affect effectiveness of e-commerce

In ranging the level of challenges being faced, the Licket scale was used and the data shown below was obtained.

Source: Primary data 2023

**Figure 6****:Challenges that affect the effectiveness of e-commerce**

The levels in fig 6 represent the Likert scale which was used in rankings, where level 1 is less challenging increasing up to level 5 which is more challenging. The percentage number of firms being affected by the challenges is shown by the percentages on the x-axis. Findings shows some of the major challenges such as the financial capabilities of SMEs to implement e-commerce, with most of the firms indicated level 5 which implies that it is the most challenging factor. This is then followed by an increase in competition of SMEs with larger firms who had also adopted e-commerce. Other challenges as well are data costs and e-commerce tools accessibility. Unauthorised access of individual on the internet and availability of ICT expertise scored the least on the challenging factors. This is in concurrent with the study by EY Growth Barometer (2020) and World Economic Forum (2021).

## 4.9 Discussion of findings from the interviews

## 4.9.1 How effective are e-commerce platforms being employed? Considering ICT expertise in the organisation.

The effectiveness of e-commerce platforms in SMEs depends on various factors such as ICT expertise, digital marketing capabilities, website design, and customer service. In general, SMEs that have higher levels of ICT expertise and invest in digital marketing tend to perform better in e-commerce. From the findings, above 50 percent of the respondents confirmed effective use of the platforms as most of them require minimum ICT expertise. Less than 2.3% of the respondents who make use of websites explained the need for skilled ICT personnel. This is because webs are open to global markets on the internet and are highly targeted by hackers and other unauthorised individuals. As a result, for proper maintenance and protection of the web there is need for strong financial capabilities. Despite the challenges faced on the web a study by Ryan and Jones (2012) found out that SMEs that invested in website design and customer service had higher levels of online sales compared to those that did not.

## 4.9.2 What are the types of e-transaction employed by the firm? Explain how they impact profitability as a performance tool.

Some of the electronic transaction mentioned from respondents include on-line payments, bank transfers, mobile money transfers and others. All the participants add on to explain the use of e-commerce platforms for transactions such as purchasing, ordering, payments, inventory management and other accounts. UNECA (2014), articulates that the use of electronic commerce platforms allows B2B, B2C, and B2G transaction to be done and completed electronically. Respondents mentioned that payments are done before goods or services delivery thus e-transactions has a positive impact on the profitability and cash flows of the SMEs. So, before the corresponding transaction is completed the liquidity of the firm already increases. The participants also added that the reversals of orders attract a certain fee which also increase the firm’s revenue. These findings were consistent with those of the studies by Alfonz, L et al (2022).

## 4.9.3 Explain any new marketing strategies employed using e-commerce and their effect on sales volume.

A number of marketing strategies were being mentioned by the respondents and mostly include the on-line advertising technique that is making the product or service competitive enough on the on-line market. Rather than the use of posters some firms used videos and other advertising opportunities available on-line to engage consumers. The use of promotions where, if customers share their advert on other different social media platforms, they get a chance to win airtime, t-shirts, free goods and services. The findings were consistent with those studied by John Doe and Jane Smith (2021).

## 4.9.4 What is the effect of maintenance and use of e-commerce tools on operating cost?

One of the performance measuring tools that a lot of firms are concerned with is operating cost. Therefore, findings mentioned that the initial adoption requires increased finances which might increases cost. To add on a lot of respondents had identified the use of e-commerce platforms which do not require heavy start-up cost or maintenance cost. Due to use of e-commerce, there was a high response on cost reduction, which was favourable to the performance of the SMEs. The findings are in consistent with the findings by Christne Ivy Hurasha and Tafara Chiremba (2017).

## 4.9.5 What are the challenges being faced on employment and use of e-commerce?

Fig 6 analysed obstacles being faced by SMEs on the employment and use of e-commerce. Challenges such as limited financial resources, lack of technical expertise, and inadequate digital infrastructure can hinder the performance of SMEs.The major obstacle explained by the respondents was that of having less starting up capital which does not enable them to adopt better e-commerce tools for example a wider use of websites. Amongst the major challenge, there is the issue of competition with larger firms who have more advanced better e-commerce tools. Despite the competition faced, the SMEs however managed to penetrate the domestic market. These findings are in line with the study by Ali Yassine and Rubina Adam (2019).

## 4.10 Summery

This chapter presented qualitative findings from the survey, which is data presentation, analysis and discussion. The next chapter is going to look at the research summery, conclusion and recommendations.

# **CHAPTER V**

# **SUMMERY, CONCLUSIONS AND RECOMMENTATION**

## 5.0 Introduction

This chapter provides the summery of the major findings. The conclusions are drawn from findings and recommendations obtained from the respondents.

## 5.1 Summary

## 5.1.1 Summary of the major findings

* The study indicates that e-commerce can lead to an increase in sales volume for businesses. With the ability to reach a wider customer base and offer convenience in shopping, e-commerce can attract more customers and hence increase overall sales volume for businesses
* The discussion suggest that e-commerce can have a positive impact on the profits of SMEs. By expanding their reach to a wider customer base, increasing efficiency in operations, SMEs, SMEs can experience growth and increased profitability through e-commerce. However it is important to note that the level of success can vary depending on various factors such as market competition, customer demand, and the ability to effectively navigate e-commerce challenges.
* The study highlights that during the adoption of e-commerce, there maybe an increase in heavy cost due to the need for setting up online platforms, digitalising inventory, and establishing logistical infrastructure. However, after the initial set-up operating cost tend to decrease due to the automation of tasks, reduction of physical infrastructure needs, easier inventory management, and increased efficiency leading to better profit margins. Therefore, it can be concluded that although the adoption of e-commerce incurs initial costs, it eventually leads to costs savings and improved profitability for SMEs.
* The findings again highlights several challenges that affect the effectiveness of e-commerce, including lack of access to reliable e-commerce tools, financial capabilities to implement e-commerce, cybersecurity and data costs. These challenges can impact various aspects of e-commerce operations and require ongoing attention and adaptation from businesses to ensure successful implementation and growth.
* The discussion and analysis highlight that SMEs are increasingly using e-commerce platforms to reach customers and sell products online. The most commonly used platforms include emails, whatsapp, shopify,eBays, twitter, websites and wooCommerce. The choice of platform depends on the business needs, size and budget. Factors like ease of use, customization options and transaction fees should be considered when selecting a platform. Additionally, SMEs should also consider optimizing their websites for mobile devices, ensuring secure payment options and providing excellent customer service to enhance their e-commerce presence and profitability

## 5.2 Conclusions

The research study attempts to examine the impact of e-commerce on the performance of small to medium enterprises. This research study confirmed a positive effect of e-commerce towards promoting growth and performance of SMEs which resulted in an increase in sales volume, profits and a decrease in operating costs.

* This study found out that the use of electronic transaction has a positive effect on the profitability of SMEs. As shown from findings that the use of on-line ordering and having customers to pay before delivery is an advantage to the profitability of the small firms. All payments are done through e-transactions for example on-line payments, mobile money transfers to mention a few. By embracing e-commerce, SMEs can leverage technology to access larger markets, lower their operational costs, increase sales volume and minimise human error. This in turn results in increased revenue and profitability. However,for SMEs to fully realise the benefits of e-commerce they need to invest in reputable gateway services, have robust information security measures in place and constantly update their online platforms to meet customer needs.
* Electronic commerce brought a very big opportunity of marketing strategies for SMEs. These include advertising which engage consumers and allows for different techniques to be implemented. As per the major response from findings effective marketing strategies have resulted to increase in sales. By leveraging e-commerce platforms, SMEs can reach a larger audience and tap into new markets, which can lead to increased sales volumes. E-commerce allows SMEs to expand their reach beyond their local market and enables them to offer their products or services to a broader geographical area ultimately leading to increased sales sales volumes. So, to a greater extend e-commerce marketing increases sales if properly handled and applied.
* According to research, the adoption of e-commerce may result in a significant increase in costs, but operating costs will decrease. Due to the usage of e-commerce, data costs are not primarily a significant issue and other administrative costs are eliminated. As a result, SMEs can save costs by using e-commerce.
* Basing on the analysis of the impact of e-commerce on SMEs profitability, cost and sales volume , the overall conclusion is that e-commerce presents a great opportunity fo SMEs to grow and expand their business. The performance of SMEs is likely to improve as a result of the adoption and use of electronic commerce. This result supports the findings of earlier research on the interaction between SMEs and e-commerce, (Abbe 2014, Dube 2010, Kossai and Piget 2014, Alderete 2019). Particularly on performance metrics like sales, profitability, and cost effectiveness. Therefore, additional action is needed to assist e-commerce acceptance, implementation, and effective use.

## 5.3 Recommendations

## 5.3.1 To the SMEs

Based on the research findings in chapter 4, it can be recommended that SMEs should implement e-commerce since the benefits exceed the drawbacks. In order to give their business a competitive edge SMEs should invest in e-commerce platforms so as to increase there visibility and reach a wider audience by investing in e-commerce platforms like eBay Shopy, whatsapp and emails as these help increase sales and streamline business operations. Again it is recommended that SMEs should build a strong social media platforms such as facebook, Instagram and Twitter to promote products and engage with customers. To maximize their profits from e-commerce, SMEs are advised to incorporate it into their business structures. First, it was discovered from the questionnaires and interviews that 63% of respondents believed that implementing e-commerce into business strategies could increase sales volumes. This could be because of extensive advertising and the enticement of more customers as a result of increased awareness. Given the fierce competition that SMEs face from other well-known companies, it is advised that they take into account the idea of implementing e-commerce in order to have a wider reach, which can result in more people lining up to buy their products, which might then spur the expansion of SMEs.

## 5.3.2 To the government

In the light of the above above conclusions the government must encourage the adoption of e-commerce by SMEs through training and education programs that promote digital literacy and online marketing skills. So for SMEs to widely adopt e-commerce the government should provide funding for the development and implementation of e-commerce platforms including access to financing, technical assistance and infrastructure

## 5.3.3 To the university

The university should offer courses and training on e-commerce to students so that they can gain the necessary skills and knowledge to help SMEs in their e-commerce journey. In order to promote e-commerce the university should host workshops and events that bring together SMEs, e-commerce experts and students to facilitate knowledge sharing and networking. Again the university should support research and development of e-commerce tools and technologies that can help SMEs overcome challenges and improve their e-commerce operations.

## 5.3.4 To the financial institutions

It is recommended that the financial institutions should invest in e-commerce financing by offering specialized financing options and loans such as working capital loans specifically designed for e-commerce businesses. They must develop digital solutions that provide customized accounting and bookkeeping solutions that cater to the needs of e-commerce businesses. Again they should offer advisory services by providing specialised consultations and advisory services to help e-commerce businesses with financial planning, risk management and business growth.

## 5.3.5 Recommendations for further study

The study primarily focused on three performance measuring methods, namely sales, profit, and cost, to examine the effect of e-commerce on the performance of SMEs in Zimbabwe. Based on the examination of the three measuring tools, the overall recommendation would be to invest in e-commerce as a way to increase sales volume decrease operational cost and increase overall profitability for SMEs. However, it should be noted that transitioning to e-commerce does require careful planning and execution including investment in technology, website design and logistics and delivery systems. Therefore, suggestions for additional research on numerous other affected performance tools are needed. Future research should also look into the amount of adoption, the motivating factors, and the difficulties encountered. This is because ICT is still establishing itself throughout the continent, making more research worthwhile.

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# **APPENDICES**

## APPENTIX 1: Questionnaire guide

My name is Robson Sonzayi, a student at Bindura University of Science education doing a Bachelor of Accountancy (Honours) Degree. As partial fulfilment of the requirements of the Bachelor of Accountants Degree programme, I am conducting a study on ‘The impact of electronic commerce on the performance of SMEs’.

Therefore, I am kindly requesting your help in my studies by completing this questionnaire. All of the information that you give is strictly confidential and will be used for research purposes only. In this study individual names, company names or employees’ names are not required.

Thank you.

**Section 1: SMEs structure**

1. Indicate your SME sector by ticking appropriate box

Retail

Manufacturing

Others

1. Indicate by tick the range of number of permanent employees

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number of employees(range) | 5-10 | 10-20 | 20-30 | 30-40 |
| tick |  |  |  |  |

1. Indicate the average annual turnover

|  |  |  |  |
| --- | --- | --- | --- |
| Range (RTGS$) | 50000 | 50000<1million | 1 million<2 million |
| Tick |  |  |  |

**Section 2: Adoption and use of e-commerce**

1. Has your firm adopted electronic commerce Yes No
2. Indicate the e-commerce platforms your firm uses

|  |  |
| --- | --- |
| **Platform** | **Tick where appropriate** |
| Emails |  |
| Face-book |  |
| Twitter |  |
| Whats App |  |
| Websites |  |
| Instagram |  |
| EDI |  |

**Section 3: Impact of electronic commerce on measurement of performance**

1. Changes in performance measuring tools from last period prior e-commerce adoption and the current period using e-commerce. Indicate by a tick where applicable

|  |  |  |  |
| --- | --- | --- | --- |
| **Details** | **Increase** | **Decrease** | **Constant** |
| Sales volume |  |  |  |
| Profit |  |  |  |
| Operating cost |  |  |  |

Tick on the appropriate range of either respectively of the previous table

|  |  |  |  |
| --- | --- | --- | --- |
| **Details** | **Sales volume** | **Profit** | **Operating cost** |
| 0-10% |  |  |  |
| 10%<30%<50% |  |  |  |
| 50%<70%<90% |  |  |  |
| 90%<100% |  |  |  |
| 100% |  |  |  |

Explain which e-commerce strategy impacted the change in the above variables

….……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Rank the following challenges that affect effectiveness of e-commerce on a scale of 1-5, where 1 is the least challenge and 5 is the most challenge.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Challenge** | **1** | **2** | **3** | **4** | **5** |
| Access to e-commerce tools |  |  |  |  |  |
| Availability of ICT expertise |  |  |  |  |  |
| Unauthorised access to of individuals on the internet (hackers) |  |  |  |  |  |
| Size of firms (competition with bigger firms) |  |  |  |  |  |
| Financial capabilities to implement e-commerce |  |  |  |  |  |
| Data costs |  |  |  |  |  |
| Disturbances of the supply chain (mainly due to the covid 19 pandemic) |  |  |  |  |  |
|  |  |  |  |  |  |

## APPENTIX 2: Interview guide

1. When did you start using e-commerce in your firm?
2. What are the e-commerce tools used by your firm?
3. How effective are these tools being employed? Considering ICT expertise in the organisation.
4. What are the e-transaction employed by the firm? Explain how they impact profitability as a performance tool.
5. Using e-commerce explain any new marketing strategies employed and their effect on sales volume.
6. As a result of e-commerce adoption and use are there any cost reductions or increment?
7. On operating cost what is the effect of use and maintenance of e-commerce tools?
8. What are the challenges being faced on employment and use of e-commerce?
9. As a result of covid 19 pandemic does this pandemic have influence on adoption and use of e-commerce.
10. What are the suggestions you can make to improve the positive impact of e-commerce use in business?