

**UNIVERSITY
OF
LUSAKA**

School of Postgraduate Studies

**THE STATE OF E-COMMERCE ADOPTION AMONG MICRO, SMALL AND
MEDIUM-SIZED ENTERPRISES (MSMES) IN CHIRUNDU, ZAMBIA**

Master of Business Administration GENERAL

Name: HELLEN MUNIKA SABI KAPASULA

Student number: MBAGEN 211482834

Date:14.01.2024

DECLARATION

I, Hellen Sabi, I hereby affirm that the content showcased in this thesis titled “the state of e-commerce adoption among micro, small and medium enterprises (MSMEs) I solemnly affirm that the entire dissertation is composed wholly of my own efforts, unless specified otherwise as supervised by Dr Jason Mwanza.

The contents reflect my understanding and interpretation of the subject matter. I have acknowledged appropriately and reference all the external data utilized in accordance with the prescribed academic norms and referencing style outlined in the provided guidelines by the school.

Any direct quotation, paraphrases or ideas taken from other sources have been acknowledged accordingly using in-text citations and a bibliography. The data, findings, and conclusion presented in this thesis are precise and dependable to the utmost knowledge of my understanding and capabilities. This research dissertation has been conducted with the strict adherence to the ethical principles and regulations established by the University of Lusaka.

Authors signature:h.



Hellen munika sabi kapasula

Date: 14.01.2024

I here by declare that the presentation and preparation of this dissertation were supervised in accordance with the guidelines on supervision set forth by the University of

Lusaka.Supervisor’s signature:



Date: 14.01.2024

DEDICATION

I wish to dedicate this dissertation to my late mother and father Perry Banda Sabi and Jackson katongo Sabi. God took you at the time I need you the most. it's because of the life skills that you taught me that today am able to excel this far. Mother you are forever supreme and second to none. My father my hero am ever indebted for your insistence on the value of education. Thanks for the endless effort to unite the family. Similarly, you are second to none.

I wish to dedicate this work also to all my late bothers and sisters that have gone to be with the lord, Brian Sabi, Sheggy Sabi, Eggar Sabi and Wendy Sabi, you are forever missed and loved. Will meet on the other side, rest in perfect peace of the lord.

ACKNOWLEDGEMENTS

An artist will never die for as long as his work remain in existence. firstly, I acknowledge my lord for allowing me to carry on and giving me the strength even when all hope of completing thus program was gone. “this is the confidence that we have in him that whatever we ask anything according to his will he hears us” 1 John 5:14-15.

Secondly my credit goes to my supervisor Dr Jason Mwanza from the University of Zambia. his guidance, wisdom and learned ideas and considerable attention to detail and presentation urged me to aspire to archive the best. Any quality work exhibited is an attestation of his invaluable guidance and all the mistakes herein are mine.

My heartfelt acknowledgement goes to my family, my husband Mr. kapasula and all my 4 children Delgracious, Walani, Thamando and Perry for the patience and understanding that most of the time I would not give them the care and attention that you needed. God alone knows how I can ever thank them for all you have been to me. Thank you and I love you all.

LIST OF TABLES

Table 1: Age.....	28
Table 2: Gender	28
Table 3: Education	29
Table 4: Years of Experience	29
Table 5: Ownership Status	30
Table 6: MSME Class.....	30
Table 7: Business Sector	31
Table 8: Business Model	33
Table 9: E-commerce Channel.....	34
Table 10: Challenges of Using E-commerce	36
Table 11: Enhancing the level of e-commerce adoption.....	38

ACRONYMS & ABBREVIATIONS

ECT.....Electronic Commerce Technology
PACRA.....Patents and Company Registration Agency
ZRA.....Zambia Revenue Authority
ZDA.....Zambia Development Agency
TOE.....Technology Organisation Environment.
TAM.....Technology Acceptance Model
ECEMs.....E-commerce and E-markeplaces
TPB.....Theory of Planned Behaviour

Table of Contents

DECLARATION.....	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS	iii
LIST OF FIGURES.....	Error! Bookmark not defined.
LIST OF TABLES.....	iv
ACRONYMS & ABBREVIATIONS	v
ABSTRACT.....	ix
CHAPTER ONE	1
INTRODUCTION.....	1
1.0 Introduction	1
1.2 Background.....	2
1.3 Statement of the problem.....	4
1.4 Research Objectives.....	5
1.5 Research Questions	5
1.5 Hypotheses.....	Error! Bookmark not defined.
1.7 Significance of the study	5
1.8 Scope of the study	5
1.9 Definition of key terms and concepts	7
1.10 Organization of the report	8
CHAPTER TWO.....	10
LITERATURE REVIEW.....	10
2.0 Introduction	10
2.1 Empirical Literature	10
2.1.1 Global Perspective.....	10

2.1.2 Regional Perspective	13
2.1.3 Local Perspective.....	16
2.2 Theoretical Framework	17
2.2.1 Technology Acceptance Model (TAM)	17
2.2.2 Innovation Diffusion Theory.....	18
2.3 Conceptual Framework.....	19
CHAPTER THREE	22
METHODOLOGY	22
3.0 Introduction	22
3.1 Research Philosophy	22
3.2 Research Approach	22
3.3 Research Design	23
3.4 Target Population.....	23
3.5 Sample Size.....	23
3.6 Sampling Techniques	24
3.7 Data Collection.....	25
3.8 Data analysis	25
3.9 Ethical Considerations	25
CHAPTER FOUR: ANALYSIS AND PRESENTATION OF FINDINGS	27
4.0 Introduction	27
4.1 Demographic Results	27
4.1.1 Age.....	27
4.1.2 Gender	28
4.1.3 Level of Education	28
4.1.4 Years of Experience.....	29

4.2 MSME Classification	30
4.2.1 Ownership Status.....	30
4.2.2 MSME Class	30
4.2.2 Business Sector	31
4.3 Business Models	31
4.4 Challenges of Using E-commerce	35
4.5 Enhancing the level of e-commerce adoption	36
CHAPTER FIVE: DISCUSSION OF FINDINGS	42
5.0 Introduction	42
5.1 Meaning of Findings	42
5.2 Summary.....	52
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS	53
6.0 Introduction	53
6.1 Summary.....	53
6.2 Recommendations	54
6.3 Areas of Further Research	56

ABSTRACT

This study delves into the landscape of e-commerce adoption among micro, small and medium-sized enterprises (MSMEs) in Chirundu, Zambia, aiming to understand prevailing practices, challenges, and influencing factors. With objectives centered on assessing e-commerce extent, identifying adoption influencers, and examining SME challenges, the research utilizes a structured questionnaire for data collection. The study employs quantitative analysis, including descriptive statistics and inferential methods, to derive insights from 230 respondents.

The findings reveal a diverse e-commerce adoption landscape, with local online marketplaces, Facebook, and WhatsApp Business being widely embraced compared to company websites and certain social media channels. Demographic characteristics, ownership structures, and business models significantly shape adoption, emphasizing the need for tailored interventions. Challenges include a moderate lack of awareness about e-commerce types and concerns related to security, trust, unreliable internet, lack of skill, and complexity.

The policy implications and recommendations advocate for tailored training programs addressing diverse demographic needs, emphasizing user-friendly platform development, strengthening cybersecurity through collaborative efforts, and fostering support for digital payment solutions. Additionally, collaboration with digital marketing experts and sector-specific interventions are recommended to drive sectoral growth.

This study contributes insights for policymakers, business support entities, and stakeholders, providing a roadmap for enhancing e-commerce adoption among Chirundu MSMEs. The findings can inform strategies in similar contexts, facilitating a more inclusive and effective approach to fostering digital resilience among MSMEs.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In the contemporary landscape of global business, the relentless progression of digital technologies has ushered in a paradigm shift, profoundly altering the operational dynamics of enterprises worldwide. At the forefront of this digital revolution stands e-commerce, a dynamic and potent tool for fostering economic growth, amplifying market reach, boosting sales, and optimizing operational efficiencies. “Within this context, Micro, Small, and Medium Enterprises (MSMEs) have ascended to a position of paramount importance, often being lauded as the 'lifeblood' and 'economic muscle' of nations due to their pivotal role in spurring economic development and generating employment opportunities” (Endris & Kassegn, 2022).

For MSMEs, the imperative for growth is not merely a strategic choice but a vital necessity to ensure survival and competitiveness in today's highly competitive markets. “In the Zambian context, MSMEs are demarcated by an annual turnover not exceeding K800,000 and a workforce comprising fewer than 15 employees” (GRZ, 2008). However, despite their intrinsic importance, “the integration of e-commerce within formal MSMEs in Chirundu, Zambia, is noticeably deficient, presenting a formidable impediment to their growth trajectory and competitive positioning in the digital age” (ZDA, 2020).

The prioritization of MSMEs by the Zambian government as key contributors to economic growth underscores their pivotal role, constituting 97% of all businesses and contributing 70% to Zambia's GDP (deVere Group, 2022). “The Ministry of small and medium enterprises development, further emphasizes the significance, indicating that MSMEs account for 88% of employment opportunities, particularly benefiting vulnerable sections of the workforce” (deVere Group, 2022). However, despite their economic importance, the adoption and utilization of e-commerce technologies among MSMEs in Zambia, particularly in Chirundu, remain conspicuously low. The Zambia Chamber of Commerce (2018) reports that, despite the evident profitability of electronic commerce, a substantial portion of MSMEs possess e-commerce facilities and tools, yet fail to fully exploit them in their business operations. This phenomenon is consistent with the observations of

Simpson and Docherty (2004), who noted that MSMEs lag behind larger corporations in the adoption and usage of electronic commerce. This disparity poses a critical challenge to the growth and competitiveness of MSMEs in the digital era.

The identified problem is further underscored by the findings of a study conducted by the ZDA in 2020, “revealing that only 22% of MSMEs in the country have embraced e-commerce practices” (ZDA, 2020). This glaring discrepancy between the potential advantages of e-commerce and the actual adoption rates among MSMEs in Zambia points to a significant gap that demands urgent attention.

This disparity in the adoption of e-commerce within Chirundu's MSME landscape calls for an examination of the multifaceted factors that hinder its uptake and optimal utilization. Focusing specifically on formal MSMEs, characterized by valid PACRA registration certificates and prominently displayed ZRA tax certificates, this research aims to unravel the complexities that influence the adoption of e-commerce in the region. By scrutinizing the distinctive challenges faced by MSMEs in embracing digital platforms, the study endeavors to contribute insights essential for the formulation of targeted and effective intervention strategies.

The research's foundational premise lies in the belief that understanding the e-commerce adoption barriers is pivotal for crafting interventions that align with the unique needs and constraints of Chirundu's MSMEs. The ultimate aspiration is to empower these enterprises to navigate the transformative realm of e-commerce effectively, fostering their resilience and competitive prowess in an ever-evolving and interconnected global business environment. Through this comprehensive exploration, the study seeks not only to identify challenges but to pave the way for actionable recommendations that can drive tangible change, enabling Chirundu's MSMEs to harness the full spectrum of benefits offered by digital platforms and thrive in the contemporary business landscape.

1.1 Background

The landscape of global commerce has been profoundly reshaped by the relentless march of the digital revolution. The integration of electronic commerce (e-commerce) has emerged as a linchpin for economic growth and competitiveness on the world stage. Developed economies have harnessed the transformative power of e-commerce,

showcasing its potential to revolutionize market dynamics, streamline operations, and bolster international trade. As countries in North America, Europe, and Asia experience the paradigm shift brought about by digitalization, the trajectory of Micro, Small and Medium Enterprises (MSMEs) has been particularly noteworthy (Wymer and Regan, 2005).

Studies on e-commerce adoption globally underscore its pivotal role in enhancing business efficiency and market reach. For instance, research by Amornkitvikai et al., (2021), in Thailand highlighted the “multifaceted influence of factors such as business environment, knowledge of e-commerce technology, and customer behavior on the adoption of electronic commerce technology by Thai MSMEs” (Amornkitvikai, et al., 2021). Lim & Trakulmaykee (2018) delved into the challenges faced by MSMEs in West Malaysia, emphasizing the impact of perceived barriers, organizational readiness, and competitor pressures on e-commerce adoption (Lim & Trakulmaykee, 2018). These global studies collectively reveal a narrative of both challenges and opportunities in the e-commerce adoption journey of MSMEs.

The insights drawn from global endeavors provide a valuable backdrop for understanding the dynamics at play in the Zambian context, particularly in Chirundu. The globalization of markets and the interconnectedness of economies underscore the urgency for local businesses to align with international trends. “Only 22% of MSMEs in Zambia have adopted e-commerce techniques, according to a 2020 study by the Zambia Development Agency (ZDA)” (ZDA, 2020). This mirrors a broader global conversation about the digital divide impacting MSMEs.

In tandem with the global narrative, the study situates itself within the local context of Chirundu, a critical border town that bridges Zambia and Zimbabwe. Chirundu's inimitable socio-economic and geographic characteristics add a layer of complexity to the study. Its unique position brings forth challenges and opportunities distinct from those encountered in inland regions. Globalization has interconnected markets, and cross-border dynamics present a unique set of challenges for businesses in border towns (Buckley & Ghauri, 2004). Understanding how MSMEs in Chirundu navigate these complexities is essential

for crafting targeted strategies that resonate with the specific challenges of a border economy.

The digitalization journey of MSMEs is not a uniform experience globally; it is a distinct and context-specific phenomenon. While developed economies showcase a high level of e-commerce adoption, developing countries face a myriad of challenges, often stemming from limited resources, digital literacy, and infrastructure constraints (Wymer and Regan, 2005). In this backdrop, Chirundu's endeavor to embrace e-commerce becomes a microcosm of the broader global effort to bridge the digital gap and unlock the economic potential inherent in digital technologies.

As the global economy pivots towards a digital future, understanding the challenges faced by MSMEs in Chirundu becomes pivotal for shaping effective interventions that resonate with the local business landscape. Bridging this knowledge gap is not just a scholarly pursuit; it is a call to action to propel Chirundu into the digital era and enable its MSMEs to compete effectively in the global marketplace. The synthesis of global insights and local distinctions sets the stage for a comprehensive exploration of e-commerce adoption in Chirundu, positioning the study as a beacon that brightens the path towards a digitally empowered and economically vibrant future.

1.2 Statement of the problem

The existing literature indicates that low e-commerce adoption and usage among MSMEs in Zambia present a substantial hindrance to their full participation in the digital economy. In light of the above, there is a pressing need to systematically evaluate the effects influencing the adoption and usage of e-commerce among MSMEs. Addressing this critical problem is essential for unlocking the growth potential of MSMEs, enhancing their competitiveness, and aligning them with the digital evolution. This study sought to investigate the underlying factors contributing to the low e-commerce adoption rates, thereby bridging the gap between the potential benefits of e-commerce and the current state of adoption among MSMEs in Chirundu, Zambia. The study applied a mixed-methods approach, employing the use of frequency distribution technique to summarize data derived from the questionnaire responses.

1.3 Research Objectives

The primary goal of the research is to analyse the variables affecting MSMEs in Chirundu, Zambia, adoption of e-commerce.

1.3.1 Specific Objectives

- i. To identify the present condition of e-commerce adoption among MSMEs in Chirundu.
- ii. To assess the extent of ecommerce practices adopted by MSMEs in Chirundu.
- iii. To identify the factors influencing the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu.
- iv. To examine the challenges faced by MSMEs in Chirundu during the process of adopting e-commerce.

1.4 Research Questions

- i. What is the current state of ecommerce adoption among MSMEs in Chirundu,?
- ii. To what extent have MSMEs in Chirundu adopted e-commerce practices?
- iii. What factors determine the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu, Zambia?
- iv. What challenges do MSMEs in Chirundu face in the process of adopting e-commerce?

1.5 Significance of the study

Theoretical Uses

This investigation holds significant theoretical implications for scholars and researchers in the fields of e-commerce, business management, and technology adoption. By investigating the current state of e-commerce adoption MSMEs in Chirundu, Zambia, the research contributes to existing theoretical frameworks related to technology diffusion and innovation adoption within the context of developing economies. The results may offer insights into the applicability and modification of existing theoretical models to suit the specific dynamics of MSMEs in the studied region.

1.6 Scope of the study

This study meticulously delves into the realm of micro, small, and medium-sized enterprises (MSMEs) situated in Chirundu, Zambia, scrutinizing their journey towards the adoption of e-commerce.

The choice of Chirundu as the focal point of this study is rooted in several compelling factors. Firstly, Chirundu represents a dynamic microcosm of MSME activity within Zambia, offering a diverse and vibrant ecosystem of businesses. Through focusing on this specific locale, the study captured distinct insights into the e-commerce adoption within a real-world context, providing valuable lessons and recommendations applicable to similar settings. Secondly, Chirundu's strategic geographic location as a major trade hub between Zambia and neighboring countries like Zimbabwe makes it an ideal case study for e-commerce adoption among MSMEs. The town's role as a bustling commercial center presents unique challenges and opportunities for businesses, making it a rich source of data and experiences for analysis.

Central to the investigation are the owners and managers of these MSMEs in Chirundu, serving as the primary respondents whose perspectives provide invaluable insights. The research navigates through the multifaceted landscape of factors that exert influence on the adoption of e-commerce, concurrently evaluating the tangible benefits derived from such adoption and elucidating the barriers confronted by MSMEs in embracing and effectively leveraging e-commerce platforms.

Crucially, it's paramount to emphasize that the study's scope is deliberately confined to the specific context of MSMEs within Chirundu, lending depth and specificity to its findings. The insights garnered from MSME owners and managers in Chirundu contribute to an understanding of the e-commerce landscape in this region. However, it is essential to acknowledge the limitation that the findings of this study may not be universally applicable to other regions or countries, as regional idiosyncrasies and contextual variations can significantly influence the dynamics of e-commerce adoption.

The research, inclusive in its approach, encompasses diverse sectors and industries represented by MSMEs in Chirundu, providing a comprehensive overview of the e-commerce landscape across various business domains. Yet, pragmatism dictates the employment of a sample of MSMEs, a strategic decision driven by the imperative of optimizing available time and resources. This deliberate sampling methodology allows for a focused and in-depth exploration within manageable bounds, recognizing the practical

constraints inherent in attempting to encapsulate the entirety of MSMEs in the Chirundu area.

1.7 Definition of key terms and concepts

E-commerce: as defined by Turban et al. (2020), encompasses "the buying and selling of goods and services conducted over the internet or other electronic networks." It represents the digitalization of commercial transactions, fundamentally transforming traditional business approaches (Turban, et al., 2020).

Adoption: In the specific context of this study, adoption is characterized as "the decision and process by which Micro, Small, and Medium-sized Enterprises (MSMEs) in Chirundu choose to integrate and utilize e-commerce platforms in their business operations." It encapsulates the strategic choices and operational incorporations made by these enterprises in embracing digital commerce (Tavengerwei, 2018).

MSMEs: "Micro, Small, and Medium-sized Enterprises (MSMEs) are defined in this study as small businesses with an annual turnover of less than K800,000 and a workforce comprising fewer than 15 employees, aligning with the categorization established by the Government of the Republic of Zambia in 2008" (GRZ, 2008).

Business Model: "The business model outlines the fundamental structure and approach an enterprise employs to generate revenue and sustain its operations. It involves the identification of target customers, value proposition, revenue streams, and key resources, offering a holistic view of how a business creates, delivers, and captures value" (Teece, 2010).

Social Media: "Social media pertains to online platforms and technologies that facilitate the creation, sharing, and exchange of information, ideas, and content in virtual communities" (Ahmed, et al., 2019). In the business context, social media plays a crucial role as a marketing and communication channel, enabling enterprises to engage with their audience and build brand presence.

Business Sector: The business sector refers to the categorization of enterprises based on the nature of their economic activities. It encompasses a wide range of industries, such as manufacturing, services, agriculture, and trade, each constituting a distinct sector

contributing to the overall economy (Phillips & Ormsby, 2016). Understanding the business sector is vital for contextualizing the challenges and opportunities specific to different industries in the adoption of e-commerce.

1.8 Organization of the report

This research report is structured to provide a comprehensive exploration of “the factors influencing the adoption of e-commerce among Micro, Small and Medium Enterprises (MSMEs) in Chirundu”. The organization of the study is as follows:

The introductory chapter sets the stage for the research, providing a background to the study, articulating the problem statement, outlining the research objectives, emphasizing the significance of the study, and defining the scope within which the research is conducted.

Chapter two delves into existing knowledge on e-commerce adoption among MSMEs. It encompasses a review of empirical evidence, exploring studies conducted globally, and delving into theoretical frameworks that underpin e-commerce adoption. The conceptual framework synthesizes this knowledge, guiding the study's theoretical underpinnings.

Chapter three outlines the research philosophy, approach, design, and methodology employed in the study. It details the chosen research design, target population, sample size determination, sampling techniques, and the planned data analysis methods. The transparency in methodology ensures the study's rigor and replicability.

Chapter four focuses on the analysis and presentation of the collected data. It employs both quantitative and qualitative techniques to provide a comprehensive understanding of the factors influencing e-commerce adoption among MSMEs in Chirundu, Zambia.

The findings from the data analysis are critically examined and interpreted in chapter five. Comparison with previous studies is made, implications of the findings are discussed, and the study's limitations are acknowledged.

The final chapter synthesizes the study's findings, draws conclusions based on the evidence presented, and offers recommendations for MSMEs, policymakers, and future

research. It concludes with a summary of the study and suggests areas for future research to build upon the current investigation.

This organization ensures a logical flow of information, guiding the reader through the research journey from introduction to conclusion, and facilitating a detailed understanding of the factors influencing e-commerce adoption among MSMEs in Chirundu, Zambia.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section presents an examination of current literature, encompassing empirical studies, theoretical frameworks, and the establishment of a conceptual framework. The objective is to gain insights into the factors that shape the adoption of ecommerce among MSMEs. Through an investigation of global empirical studies and the integration of established and emerging theoretical perspectives, this chapter sets the stage for a understanding of the dynamics surrounding e-commerce adoption in the SME sector..

2.1 Empirical Literature

2.1.1 Global Perspective

This section delves into global studies conducted in various countries, including Thailand, Malaysia, and Saudi Arabia, shedding light on the diverse factors impacting the adoption of e-commerce. These studies offer a broader perspective on the challenges and opportunities faced by MSMEs in embracing electronic commerce technologies and provide valuable insights that can contribute to the global discourse on e-commerce adoption.

Chooprayoon's (2011) study delved into the “factors influencing the adoption of Electronic Commerce Technology (ECT) among micro, small and medium enterprises (MSMEs) in Thailand” (Chooprayoon, 2011). The study is focused on retailing MSMEs in Bangkok and its surrounding areas, incorporating online customers studying at Rangsit University. The research engaged 400 MSMEs and 400 online customers through two sets of questionnaires, exploring 20 hypotheses predicting the influence of factors on ECT adoption.

Key predictors on the MSME side included considerations such as “size, business years, gender of owners, ECT implementation, website ownership, domain name ownership, and planning to implement ECT. On the customer side, factors like age, gender, e-commerce/Internet experience, and intentions to engage in online shopping were taken into account” (Chooprayoon, 2011). The study's findings underscored the significance of factors such as “the business environment, knowledge of ECT, organizational aspects,

capital availability, and the state of e-commerce technology in influencing ECT adoption among MSMEs” (Chooprayoon, 2011).

Discriminant analysis was employed to generate equations that validated these influences, with particular emphasis on the role of customer behavior in the adoption process. The research outcomes also shed light on significant factors from both “MSME and customer perspectives, offering detailed insights into critical aspects such as capital availability, supplier readiness, online brand development, web design, and security considerations” (Chooprayoon, 2011). Overall, Chooprayoon's study contributes valuable insights into the intricate dynamics of ECT adoption within the MSME landscape, providing a foundation for understanding and enhancing the utilization of electronic commerce technology in this context.

Lim et al. (2018) made a significant contribution to the comprehension of e-commerce adoption within MSMEs in West Malaysia. “The study specifically highlighted the pivotal factors of Perceived Barriers, Organization Readiness, and Competitor Pressures. Employing questionnaires and SmartPLS for robust data analysis, the research focused on MSMEs in West Malaysia, aiming to delve into the intricate dynamics influencing e-commerce adoption” (Lim, et al., 2018).

The study's findings revealed noteworthy insights. “Perceived Barriers demonstrated a negatively significant influence on the adoption of e-commerce, particularly among medium-sized MSMEs, while this influence did not hold for small-sized MSMEs” (Lim, et al., 2018). Furthermore, Organization Readiness exhibited substantial differences in its impact between small and medium-sized MSMEs. “Lastly, Competitor Pressures emerged as a crucial factor influencing e-commerce adoption, demonstrating significance for both small and medium-sized MSMEs” (Lim, et al., 2018).

These findings not only contribute to the academic understanding of e-commerce adoption but also offer practical implications for stakeholders invested in enhancing the effectiveness of e-commerce applications. The differentiation in the impact of factors based on the size of MSMEs underscores the need for tailored strategies and

interventions to address the unique challenges and opportunities faced by businesses of varying sizes in the e-commerce adoption journey.

Satar and Alarifi (2022) undertook a comprehensive investigation into “the factors shaping the adoption of e-business within Micro, Small, and Medium Enterprises (MSMEs) in Saudi Arabia, utilizing the well-established Technology-Organization-Environment (TOE) framework” (Satar & Alarifi, 2022). Their study employed a “dual-pronged approach”, involving an extensive literature review and a focus group interview, to meticulously craft a conceptual model. Through a questionnaire-based survey administered to 111 MSMEs, complemented by multiple regression analysis, the research provided empirical insights into the complex dynamics of e-business adoption.

The findings of the study highlight several key factors that significantly influence e-business adoption in Saudi Arabian MSMEs. Notably, “firm size, competitive pressure, entrepreneur’s innovativeness, and IT savviness emerged as crucial determinants in shaping the adoption landscape. The proposed framework, rooted in technological, organizational, environmental, and individual context dimensions, encapsulates nine independent variables, offering a comprehensive understanding of the multifaceted nature of e-business adoption” (Satar & Alarifi, 2022). This research not only enriches the existing body of knowledge by contributing empirical evidence specific to Saudi Arabian MSMEs but also extends its relevance globally. By shedding light on the contextual nuances of e-business adoption, the study enhances the broader understanding of factors that play a pivotal role in shaping the adoption landscape across diverse business environments.

The global studies on the adoption of electronic commerce and business technologies among Micro, Small and Medium Enterprises (MSMEs) provide valuable insights into the multifaceted factors influencing adoption across diverse geographical contexts. Chooprayoon's (2011) study in Thailand reveals that “business environment, knowledge of Electronic Commerce Technology (ECT), organization & capital, and e-commerce technology significantly impact adoption, with customer behavior playing a crucial role” (Chooprayoon, 2011). Lim et al.'s (2018) examination of West Malaysian MSMEs emphasizes Perceived Barriers, Organization Readiness, and Competitor Pressures,

showcasing variations in their influence based on MSME size. Meanwhile, Satar and Alarifi's (2022) study in Saudi Arabia incorporates the "Technology-Organization-Environment (TOE) framework and underscores the significance of firm size, competitive pressure, entrepreneur's innovativeness, and IT savviness in e-business adoption" (Satar & Alarifi, 2022). Despite regional differences, common themes emerge, including the importance of organizational readiness and competitive pressures. However, variations exist, such as the role of perceived barriers, which differs based on MSME size in West Malaysia. These studies collectively contribute to a understanding of the adoption landscape, providing insights adaptable to diverse global contexts while highlighting the contextual differences shaping the adoption dynamics in different regions.

2.1.2 Regional Perspective

This segment discusses the regional studies conducted in Tanzania, Kenya, Nigeria, and a broader African context contribute significant insights into the multifaceted factors influencing the adoption of e-commerce.

Makame, Kang & Park's (2014) empirical study in Tanzania extends the "Technology Acceptance Model (TAM) to comprehensively analyze the factors influencing e-commerce adoption. In this endeavor, the researchers engaged 111 respondents, including Tanzanian government officers, in a survey" (Makame, et al., 2014). The study, utilizing structural equation modeling, "introduced three novel factors—national policy initiatives, technology infrastructure, and trust—in assessing their impact on e-commerce adoption" (Makame, et al., 2014). Noteworthy findings emerged, underscoring the pivotal role of technology infrastructure and the significance of national policy initiatives in building online trust and enhancing technology infrastructure within Tanzania. The study's implications resonate strongly with government policymakers, emphasizing the encouragement of robust technology infrastructure and trust-building initiatives for fostering e-commerce adoption. However, the study acknowledges limitations, such as a sample bias toward individuals with internet access and the confinement of the survey to Tanzania, urging caution in generalizing results to other African countries (Makame, et al., 2014).

Chepngeno's (2017) research concentrated on elucidating “the factors influencing the adoption of e-commerce within MSMEs in Nairobi, Kenya. The study developed a Technology Acceptance Model and delineated five specific objectives: Cost of ICT, ICT knowledge and skills, access to ICT, perceived benefits, and firm size context” (Chepngeno, 2017). Employing a survey research design, the study targeted 1569 MSME employees in Kamukunji constituency, Kenya, utilizing purposive sampling. The findings pointed to the majority of entrepreneurs in the region adopting e-commerce to enhance organizational performance. ICT cost, skills, and perceived benefits exerted substantial influence, with firm size and access to ICT also contributing, albeit less significantly. The study's implications underscore the need for MSMEs to integrate all e-commerce components into their ICT systems to enhance overall firm performance, urging future research in different industries and countries for generalizability. The implications drawn from this study emphasize the imperative for MSMEs to integrate all components of e-commerce into their existing ICT systems, presenting a pathway to amplify overall firm performance. Furthermore, the research advocates for future investigations across diverse industries and countries to enhance the generalizability of the findings, thereby contributing to the broader understanding of e-commerce adoption dynamics (Chepngeno, 2017).

Nwosu's (2017) study in Nigeria focused on exploring the “strategies employed by MSMEs in Lagos to implement e-commerce systems, guided by the dynamic capabilities framework” (Nwosu, 2017). The research targeted retail MSMEs with functional e-commerce systems, conducting semi-structured interviews with four business owners/managers and analyzing relevant documentation. Key themes that emerged included service delivery strategies, dynamic marketing strategies, and the critical need for learning and adaptation for successful e-commerce implementation. The study's implications extend to social change, emphasizing increased wealth creation opportunities through enhanced business performance, job creation, and economic development in Nigeria (Nwosu, 2017).

An investigation by Wymer and Regan's (2005) endeavored to discern and gauge the magnitude of factors influencing the adoption and utilization of e-commerce by Micro,

MSMEs throughout Africa. “The study unfolded by presenting 26 factors sourced from existing literature to MSMEs, probing their impact on the decision-making process concerning e-commerce adoption. Among these, 16 factors emerged as substantial, with 10 functioning as incentives and six as barriers” (Wymer & Regan, 2005). A consistent theme resonated across all participant groups: the perceived barrier of cost, implying its universal significance in the context of e-commerce adoption. “The study's overarching conclusion underscored the nature of how different groups of MSMEs perceive these adoption factors” (Wymer & Regan, 2005). This accentuates the imperative for a sophisticated understanding when formulating e-commerce adoption models, tailoring them to accommodate the diverse perspectives held by MSMEs scattered across the expansive landscape of Africa. This approach ensures that adoption strategies are finely tuned to the specific contexts and challenges faced by MSMEs in the varied economic and cultural milieu of the African continent (Wymer & Regan, 2005).

The regional studies conducted in diverse African settings provide valuable insights into the factors influencing the adoption of e-commerce. Makame, Kang & Park's (2014) Tanzanian study highlights the crucial role of technology infrastructure and national policy initiatives in e-commerce adoption. Chepngeno's (2017) research in Nairobi, Kenya emphasizes the significance of ICT cost, skills, and perceived benefits, with an overarching recommendation for MSMEs to integrate all e-commerce components into their ICT systems. Nwosu's (2017) exploration of Nigerian MSMEs reveals dynamic marketing and service delivery strategies as pivotal for successful e-commerce implementation, fostering economic growth. Wymer and Regan's (2005) pan-African study underscores the universal concern of cost as a perceived barrier to adoption, with variations in how MSMEs perceive other factors. Common themes across these studies include the importance of technology infrastructure, government policy initiatives, and overcoming cost barriers. While these studies contribute to a nuanced understanding of e-commerce adoption in diverse African contexts, differences in regional dynamics and MSME perspectives suggest the need for tailored approaches to promote adoption effectively. Despite these variations, the studies collectively advocate for comprehensive strategies integrating technology, policy, and perceived benefits to enhance e-commerce adoption across the continent.

2.1.3 Local Perspective

In the context of Zambia, this segment explores local studies conducted in Kitwe Town and examines the e-commerce landscape in the country. Additionally, it discusses a study focused on the adoption of social media e-commerce in MSMEs in Zambia. These local studies provide specific insights into the unique challenges and opportunities within the Zambian business environment, contributing essential knowledge for the development of targeted strategies to enhance e-commerce adoption among MSMEs in the country.

A research by Mwenya's (2020) provides an investigation into the hindrances of full e-commerce adoption in micro, small and medium enterprises (MSMEs) in Kitwe Town, Zambia, underscores the critical role of globalization and information technology in contemporary commerce. Employing both quantitative and qualitative methods, the study used a questionnaire to explore contextual and organizational factors affecting e-commerce adoption. The sample of 40 MSMEs was drawn from the population of 140 registered MSMEs in Kitwe, using cluster sampling. Findings revealed several barriers to e-commerce adoption, with the lack of education in information technology skills and knowledge among management emerging as a significant hindrance. Other obstacles included challenges in maintaining internet services, resistance to change, unreliable internet access, and low usage among stakeholders (Mwenya, 2020)

Shemi's (2023) study delves into the adoption of "Web 2.0 social media" in e-commerce and e-marketplaces (ECEMs) among MSMEs in Zambia. Focused on emerging markets, particularly Zambia, the research aims to uncover theoretical foundations and factors guiding the use of Web 2.0 social media applications (WSMAs) in the context of MSMEs. Employing a qualitative research design with literature reviews and content analysis of selected articles, the study reveals that theories such as "Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), Technology-Organization-Environment (TOE), Task-Technology Fit (TTF), and Diffusion of Innovation Theory (DIT) have been influential in guiding e-commerce research using WSMAs" (Shemi, 2022). The investigation identifies behavioral, technological, and organizational factors, including trust, ease of use, after-sales logistics, and price flexibility, as prevalent in shaping WSMA adoption. The study

recommends strategies for continued WSMA adoption by MSMEs in developing countries, emphasizing collaboration within regional and global e-commerce value chains to enhance capacity and growth, particularly in the context of Zambia (Shemi, 2022).

The local studies conducted in Zambia provide valuable insights into the challenges and opportunities surrounding the adoption of e-commerce among MSMEs in the country. Mwenya's (2020) investigation in Kitwe Town highlights the impediments to full e-commerce adoption, including issues related to education, internet maintenance, resistance to change, and stakeholder engagement. Notably, the study underscores the underutilization of existing e-commerce facilities among MSMEs despite their availability. Shemi's (2023) research focuses on the theoretical foundations and factors guiding the adoption of Web 2.0 social media in e-commerce among Zambian MSMEs. The study emphasizes the importance of theories like "TAM, TPB, UTAUT2, TOE, TTF, and DIT" in shaping e-commerce research, identifying key behavioral, technological, and organizational factors influencing adoption. The findings collectively underscore the need for strategic initiatives and collaborative efforts to overcome barriers and enhance e-commerce capacity among MSMEs in Zambia. These local studies emphasize the significance of addressing education, internet infrastructure, and stakeholder engagement for successful e-commerce adoption. Undertaking a current study in Zambia is essential to further explore the distinct dynamics of the local business environment, technological landscape, and unique challenges faced by MSMEs, contributing to the development of targeted strategies that can foster a more robust and effective adoption of e-commerce practices in the country.

2.2 Theoretical Framework

The study was anchored on the following theories:

2.2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), which offers a formal framework for comprehending users' attitudes and intents, dives further into the behavioural and psychological factors that influence the adoption of new technologies. TAM, "which was created by Fred Davis in 1989, asserts that perceived utility and perceived ease of use are the two main elements that essentially impact people's decisions to adopt technology"

(Davis, 1989). The degree to which “people think implementing a specific technology would improve their performance or productivity in a given situation is known as perceived usefulness” (Faqih, 2020). When it comes to MSMEs' adoption of e-commerce, it includes the advantages and benefits that MSME owners and managers believe coming from incorporating e-commerce into their daily operations. This might involve raising client involvement, expanding the market, and improving efficiency.

On the other hand, perceived ease of use refers to the degree to which individuals perceive the technology as user-friendly and uncomplicated. For MSMEs, this aspect of TAM explores how accessible, intuitive, and manageable e-commerce platforms are perceived to be. “It considers factors such as the simplicity of implementation, training requirements, and the overall ease with which MSMEs can incorporate e-commerce tools into their existing business processes” (Esfahbodi, et al., 2022).

TAM proposes that these two factors significantly influence users' “attitudes and behavioral intentions toward adopting a specific technology. If individuals perceive a technology as both useful and easy to use, they are more likely to exhibit positive attitudes and intentions to adopt it” (Davis, 1989). TAM has been widely applied across various technological contexts, and its adaptability makes it particularly relevant for understanding the nuances of e-commerce adoption among MSMEs in Chirundu, Zambia. By employing TAM in this research, an exploration of the intricate interplay between “perceived usefulness, perceived ease of use”, and the adoption of e-commerce within the unique context of MSMEs in Chirundu can be undertaken. This theoretical foundation provides a robust framework for analyzing the psychological processes that underpin MSMEs' decisions to integrate e-commerce into their business strategies.

2.2.2 Innovation Diffusion Theory

Everett Rogers developed the Innovation Diffusion Theory in 2003, which provides an extensive structure for comprehending the complex process of how ideas are embraced and spread within a social system. “The primary tenet of this theory is the division of adopters into four categories: early adopters, early majority, late majority, and laggards. These groups display different degrees of innovation and openness to adopting new technology” (Rogers, 2003). According to Rogers, “the Innovation Diffusion Theory offers

significant understanding into the mechanics of how advancements spread throughout a social structure” (Hall, 2004). The theory's usefulness to the setting of e-commerce adoption among MSMEs in Chirundu, Zambia resides in its capacity to deconstruct the features of adopters, examine the communication routes driving acceptance, and outline the possible hurdles and drivers to diffusion.

Through the use of this model, the study is able to identify the many MSMEs in Chirundu and explore their distinct attributes, driving forces, and methods for arriving at choices concerning the incorporation of e-commerce into their operations. The theory's adopter classification allows for a more in-depth investigation of the many ways that MSMEs in the community move throughout the adoption spectrum. Additionally, the study may analyse the communication channels and tactics that are crucial in influencing the spread of e-commerce practices among MSMEs in Chirundu via the perspective of the Innovation Diffusion Theory. “It is crucial to comprehend how the community receives and distributes information about e-commerce in order to develop focused interventions and tactics that address the specific needs and tastes of various adopter groups” (Rogers, 2003).

2.3 Conceptual Framework

The conceptual framework serves as a structural blueprint, delineating the association between the independent variables, “factors influencing e-commerce adoption, benefits of e-commerce adoption, and barriers to e-commerce adoption” and the dependent variable, business growth, all situated within the contextual framework of the research objectives. In this framework, the interplay among these components is systematically mapped out to provide a comprehensive understanding of their associations and impacts.

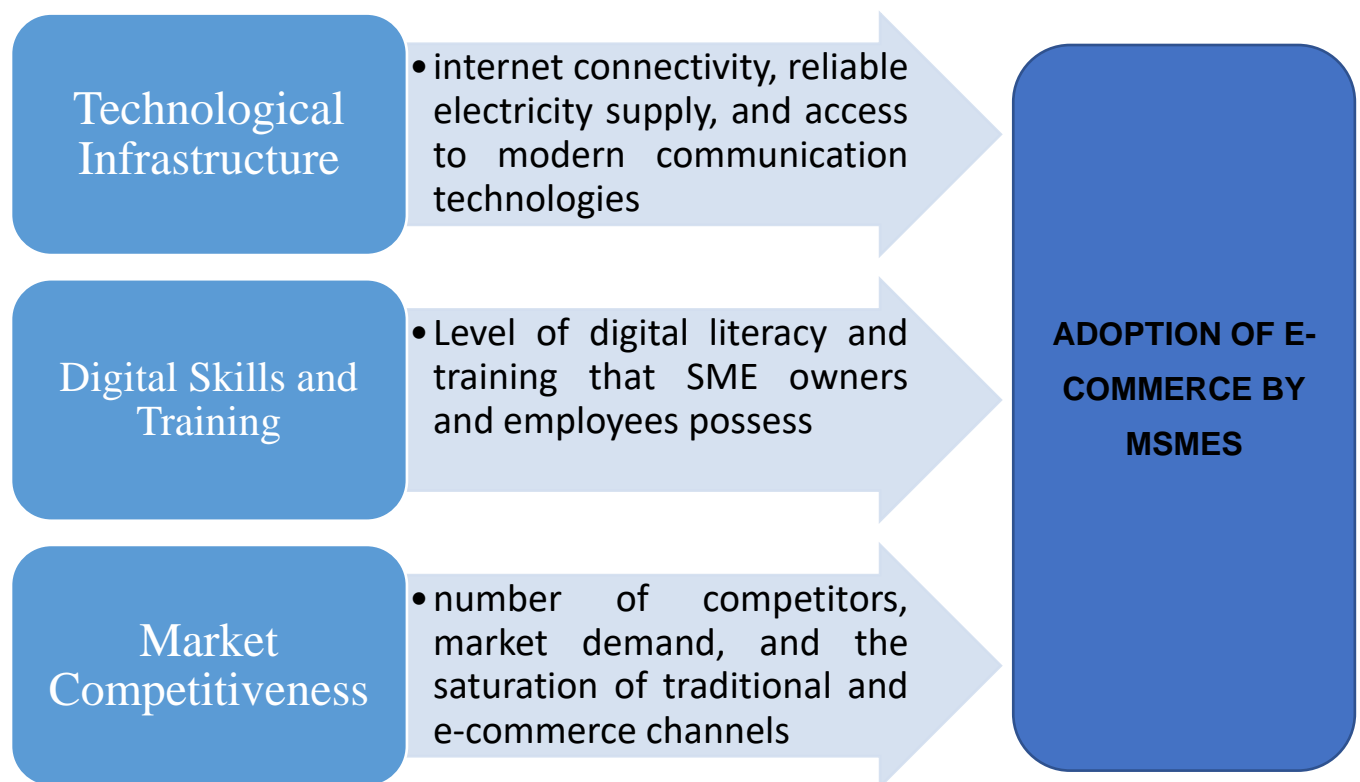
The independent variables act as pivotal determinants shaping the landscape of e-commerce adoption among MSMEs in Chirundu. Factors influencing e-commerce adoption encompass a spectrum of elements, including technological, organizational, environmental, and individual dimensions, all of which contribute to the decision-making process of MSMEs regarding the integration and utilization of e-commerce platforms. Simultaneously, the benefits of e-commerce adoption serve as catalysts for positive outcomes within the MSME sector. These advantages may span increased market reach,

enhanced operational efficiency, improved customer relations, and other strategic gains that directly contribute to business growth.

However, the path to e-commerce adoption is not devoid of challenges. Barriers to e-commerce adoption encapsulate impediments and constraints that MSMEs may encounter during the adoption journey. These could range from resource limitations and technological constraints to factors related to organizational resistance and external market dynamics. At the core of the conceptual framework lies the dependent variable, business growth, which serves as the ultimate metric for evaluating the effectiveness of e-commerce adoption. Business growth encapsulates the expansion, development, and overall advancement of MSMEs as a result of their engagement with e-commerce practices.

Independent Variables

Dependent Variable



Independent Variables

Technological Infrastructure: This independent variable represents the quality and accessibility of digital infrastructure in Chirundu, including factors such as internet connectivity, reliable electricity supply, and access to modern communication technologies. It is hypothesized that a higher quality of technological infrastructure will have a positive influence on the adoption of e-commerce among MSMEs. In other words, when businesses have access to robust digital infrastructure, they are more likely to adopt e-commerce practices due to improved connectivity and operational capabilities.

Digital Skills and Training: This independent variable pertains to the level of digital literacy and training that MSME owners and employees possess. The hypothesis posits that MSMEs with well-trained staff in digital skills and e-commerce practices will exhibit a higher propensity to adopt e-commerce. Digital skills and training are expected to empower MSMEs with the knowledge and competence needed to navigate and utilize e-commerce tools effectively.

Market Competitiveness: Market competitiveness represents the overall competitive landscape in Chirundu's business environment. It encompasses factors such as the number of competitors, market demand, and the saturation of traditional and e-commerce channels. The conceptual framework suggests that market competitiveness may have a moderating effect on the relationship between technological infrastructure, digital skills, and e-commerce adoption. In highly competitive markets, MSMEs may be more motivated to adopt e-commerce as a means to gain a competitive advantage.

Dependant Variable

Adoption of E-commerce among MSMEs: This dependent variable reflects the extent to which MSMEs in Chirundu have embraced e-commerce practices. It encompasses the use of e-commerce platforms for online sales, marketing, payment processing, and other related activities. The strength and direction of the relationship between the independent variables and this dependent variable will be explored through empirical research and data analysis.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology employed to investigate the research problem. It provides an overview of the research philosophy, approach, design, target population, sample size determination, sampling techniques, and the chosen methods for data analysis. This chapter aimed to provide information of the methods used to attain the research findings, contributing to the strength of the study's outcomes.

3.1 Research Philosophy

For this research, a positivist research philosophy will be adopted. Positivism, as advocated by Auguste Comte and further developed by scholars like Emile Durkheim, is characterized by an objective and empirical approach to research. Positivism emphasizes the collection of quantifiable data to test hypotheses and establish causal relationships (Bryman, 2016). This philosophy is in line with the quantitative research approach chosen for this study, which aims to systematically collect and analyze numerical data to draw objective conclusions and generalize findings to the broader population of MSMEs in Chirundu district. In the context of this research, adopting a positivist philosophy will provide a foundation for data collection and analysis, contributing to the end of the study's results.

3.2 Research Approach

When developing the study's approach, consideration was given to the selection of a research approach that would serve the study objectives. "Two primary research approaches—quantitative, qualitative were contemplated, as well as the composite of both approaches (mixed methods) each offering distinct advantages and methodologies (Creswell & Creswell, 2017). This study adopted a quantitative approach because it aligns with the study's main aim and objectives. Quantitative research, as outlined by Creswell and Creswell (2017), involves the systematic collection and analysis of numerical data, often through structured surveys or questionnaires. In this specific context, structured questionnaires were deemed most fitting for capturing data from MSMEs, providing a

standardized means of measuring variables crucial to the understanding of e-commerce adoption. The chosen variables encompass fundamental aspects such as technological infrastructure, digital skills and training, and market competitiveness, all of which play pivotal roles in determining the readiness of MSMEs for e-commerce integration.

3.3 Research Design

In the context of this study, the goal was to gain an understanding of the current state of e-commerce adoption among MSMEs in Chirundu. This design enables researchers to collect data and information about the phenomenon under investigation in a systematic and structured manner. The study aimed to provide a portrayal of the factors influencing e-commerce adoption by employing a descriptive research design. This includes examining the status of technological infrastructure, assessing the levels of digital skills and training among MSMEs, and gauging the degree of market competitiveness. Descriptive research is particularly well-suited for generating of the research area and identifying patterns, trends, and associations among variables (Creswell & Creswell, 2017). Moreover, a descriptive research design allows for the use of quantitative data collection methods, such as surveys and questionnaires, which are conducive to the study's quantitative research approach.

3.4 Target Population

The target population of this study comprises Micro, Small, and Medium-sized Enterprises (MSMEs) actively operating within Chirundu district, Zambia. Chirundu district is estimated to host approximately 2,000 such enterprises (Chisala, 2022). These MSMEs form the primary focus of data collection and subsequent analysis in the study. The decision to concentrate on Chirundu district is deliberate, aligning with the specific geographic scope of the research and ensuring contextual relevance. By encompassing all MSMEs within this defined population, the study aims to offer a comprehensive understanding of the factors influencing e-commerce adoption among MSMEs in this particular region of Zambia.

3.5 Sample Size

The Yamane Sample size formula was applied in order to establish the suitable size of the sample for this investigation. The method of calculation consists of the follows, with a margin of error of 5% and a confidence level of 95%:

$$n = \frac{N}{(1+Ne^2)} \dots\dots\dots \text{Equation 1}$$

where:

n is the sample size

N is the Total population size

e is the Margin of error (expressed as a proportion, not percentage)

To use Yamane's formula, the follow steps were done:

Step 1: Determine the total population size (N). In this case, it's 2000.

Step 2: Decide on the desired margin of error (e) as a proportion. For this study 5% (0.05) is the margin of error.

Step 3: Plug the values into the formula and calculate the sample size (n).

$$n = \frac{2000}{(1 + 2000 \times 0.05^2)} = 333$$

Step 4: Round up the sample size to the nearest whole number will equal **78** total respondents.

The recommended sample size using Yamane's formula for a population of 2000 with a 5% margin of error is approximately 333 participants. However, the study only recorded 230 completed responses.

3.6 Sampling Techniques

For data collection, a purposive sampling technique was employed, involving the intentional selection of respondents whose characteristics closely aligned with the research objectives. Purposive sampling entails the strategic choice of individuals or groups based on specific traits deemed pertinent to the study, ensuring relevance to the research focus on factors shaping e-commerce adoption among local businesses. This sampling method was chosen for its suitability to the context, allowing for the targeting of MSMEs with direct experience or a keen interest in e-commerce to extract detailed and firsthand insights into adoption challenges, advantages, and decision-making dynamics. The utilization of purposive sampling serves to optimize the study's efficiency and applicability by concentrating on MSMEs connected to the research objectives (Creswell & Creswell, 2017). This approach that the selected sample is a representative subset of

the broader population under scrutiny, facilitating a concentrated exploration of the factors influencing e-commerce adoption among MSMEs in Chirundu, Zambia.

3.7 Data Collection

A structured questionnaire was designed to systematically measure the various factors influencing e-commerce adoption and utilization among MSMEs in Chirundu. This questionnaire employed Likert-scale questions, offering an assessment of the participants' perceptions regarding the benefits, barriers, and strategies associated with e-commerce adoption. To ensure an understanding of the subject matter, the questionnaire incorporated a mix of closed-ended Likert-scale questions that were summarised in frequency distributions. Additionally, the study introduced open-ended questions strategically, capturing non-numerical responses from the targeted demographic. This dual-approach was designed to gather both quantitative metrics such as from the rating scale and qualitative insights, providing a perspective on the factors influencing e-commerce adoption among MSMEs in the Chirundu region. The administration of the questionnaire was done both electronically and in-person delivery methods, ensuring accessibility for the selected MSME owners/managers.

3.8 Data analysis

The utilization of frequency tables played a pivotal role in summarizing and presenting the collected data in frequency tables. This technique offered an overview of the respondents' perceptions and characteristics pertinent to e-commerce adoption. Descriptive statistics contributed to characterizing the sample and illuminating essential trends, patterns, and variations within the dataset. This analytical approach proved instrumental in offering a preliminary understanding of the study's variables, thereby setting the stage for more detailed analyses in subsequent phases.

3.9 Ethical Considerations

Ethical considerations were paramount throughout the research process. The following ethical principles were adhered to:

- **Informed Consent:** Prior to data collection, informed consent was obtained from all participants, ensuring they understand the purpose of the study, their voluntary participation, and the confidentiality of their responses.

- **Data Confidentiality:** Data collected were treated confidentially, with responses anonymized and stored securely. Only authorized researchers had access to the data.
- **Avoiding Harm:** The research process was conducted in a manner that avoids harm or discomfort to the participants. Their well-being and rights were respected at all times.
- **Transparency:** The research process and methodology were transparently communicated to participants, and any potential conflicts of interest were disclosed.

CHAPTER FOUR: ANALYSIS AND PRESENTATION OF FINDINGS

4.0 Introduction

This section reveals the outcomes of the results and analysis based on data gathered from 230 participants through a structured questionnaire. Utilising both the SPSS 16 statistical package and Google Sheets, the investigation navigates through various methods of data analysis such as measures of central tendency and frequency distributions. It begins by spotlighting the demographic details of the respondents, delving into the diversity that shapes their characteristics. Subsequently, the chapter articulates the outcomes of the classification of micro, small, and medium-sized enterprises (MSMEs), shedding light on prevalent business models within the sampled cohort. Moving forward, the narrative encompasses an examination of specific e-commerce channels, elucidating the concerns articulated by respondents during their utilization. Concluding the discourse, the chapter outlines the aspirations for respondents elucidated through the findings, providing a perspective on the current state of e-commerce adoption among small and medium-sized enterprises.

4.1 Demographic Results

4.1.1 Age

The age distribution, as illustrated in Table 1, provides a breakdown of respondent ages. The majority, comprising 82 respondents, falls within the 36 to 45 age range, while 71 respondents fall between 26 to 35. Additionally, 34 respondents are aged 45 to 50, 25 respondents are between 18 to 25, and only 18 are above 50. This breakdown facilitates an analysis of age-related patterns within the study sample. The majority, comprising 35.7%, falls within the 36 to 45 age range, while 30.9% fall between 26 to 35. Additionally, 14.1% are aged 45 to 50, 10.9% are between 18 to 25, and only 7.8% are above 50. This breakdown facilitates an analysis of age-related patterns within the study sample. These patterns suggest a notable concentration of respondents in the mid to late career stages, with a significant portion falling within the prime working-age demographic of 26 to 45.

Table 1: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 25	25	10.9	10.9	10.9
	26 to 35	71	30.9	30.9	41.7
	36 to 45	82	35.7	35.7	77.4
	45 to 50	34	14.8	14.8	92.2
	Above 50	18	7.8	7.8	100.0
	Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.1.2 Gender

Table 2 outlines the gender distribution among respondents, indicating that 139 respondents identified as male, while 91 identified as female. This gender breakdown offers insights into the gender composition of the study, which is for understanding potential variations in responses based on gender.

Table 2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	139	60.4	60.4	60.4
	Female	91	39.6	39.6	100.0
	Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.1.3 Level of Education

The educational profile of the respondents is detailed in Table 3. The data reveals that 101 respondents held a college diploma, 56 respondents possessed a bachelor's degree, 51 respondents completed secondary education, 15 completed postgraduate qualifications, and 7 completed primary school. The data shows that 43.9% held a college diploma, 24.3% possessed a bachelor's degree, 22.2% completed secondary education, 6.5% completed postgraduate qualifications, and 3% completed primary school. This breakdown sheds light on the educational diversity within the study sample.

Table 3: Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary	7	3.0	3.0	3.0
Secondary	51	22.2	22.2	25.2
Diploma	101	43.9	43.9	69.1
Bachelor's Degree	56	24.3	24.3	93.5
Postgraduate	15	6.5	6.5	100.0
Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.1.4 Years of Experience

Table 4 provides an overview of respondents based on their business experience, highlighting the distribution across different experience brackets. The majority of the respondents, at 74, reported 6 to 10 years of experience, 67 had 1 to 5 years, 32 had 11 to 15 years, 31 had more than 15 years, and 26 possessed less than a year of business experience. The majority, at 32.2%, reported 6 to 10 years of experience, 29.1% had 1 to 5 years, 13.9% had 11 to 15 years, 13.5% had more than 15 years, and 11.3% possessed less than a year of business experience. This breakdown aids in understanding the diverse experience levels of participants.

Table 4: Years of Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 year	26	11.3	11.3	11.3
1-5 years	67	29.1	29.1	40.4
6-10 years	74	32.2	32.2	72.6
11-15 years	32	13.9	13.9	86.5
More than 15 years	31	13.5	13.5	100.0
Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.2 MSME Classification

In this section, the classification of Micro, Small, and Medium-sized Enterprises (MSMEs) is examined, providing insights into ownership status, business class, and the sectoral distribution of the respondents.

4.2.1 Ownership Status

Table 5 outlines the ownership status of the businesses represented in the study. The majority, 167 respondents are identified as owners, indicating that a significant proportion of respondents are proprietors of the businesses they are involved in, while 63 are identified as managers. The majority (72.6%) are identified as owners, while 27.4% are identified as managers. This breakdown offers clarity on the organizational structure within the study sample.

Table 5: Ownership Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Business Owner	167	72.6	72.6	72.6
Manager	63	27.4	27.4	100.0
Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.2.2 MSME Class

Table 6 presents the classification of businesses based on the number of employees, distinguishing between micro, small, and medium-sized enterprises. A considerable majority of respondents (159) are associated with micro-businesses, characterized by having not more than 10 employees. Additionally, 55 are involved in small businesses with employees ranging between 10 and 49, while only 16 are part of medium-sized enterprises with employee counts between 50 and 249. A considerable majority of respondents (69.1%) are associated with micro-businesses, characterized by having not more than 10 employees. Additionally, 23.9% are involved in small businesses with employees ranging between 10 and 49, while only 7% are part of medium-sized enterprises with employee counts between 50 and 249. This classification provides valuable insights into the size distribution of MSMEs in Chirundu.

Table 6: MSME Class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Fewer than 10 employees (Micro)	159	69.1	69.1	69.1
Between 10 and 49 employees (Small)	55	23.9	23.9	93.0
Between 50 and 249 employees (medium-sized)	16	7.0	7.0	100.0
Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.2.2 Business Sector

The respondents' affiliation with various business sectors is detailed in table 7. The majority 100 operate within the service sector, followed closely by 90 in the trade sector. The agricultural sector is represented by 34, while the manufacturing sector constitutes 6. The majority (43.5%) operate within the service sector, followed closely by 39.1% in the trade sector. The agricultural sector is represented by 14.8%, while the manufacturing sector constitutes 2.6%. This sectoral distribution highlights the diversity of businesses within the MSME landscape in Chirundu.

Table 7: Business Sector

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Trade	90	39.1	39.1	39.1
Service	100	43.5	43.5	82.6
Manufacturing	6	2.6	2.6	85.2
Agriculture	34	14.8	14.8	100.0
Total	230	100.0	100.0	

Source: "Generated by the Researcher (2023)"

4.3 Business Models

This segment delves into the business models adopted by the respondents, specifically focusing on Business to Business (B2B), Business to Customer (B2C), Customer to Customer (C2C), and Customer to Business (C2B) models. To answer the research

question “What is the current state of e-commerce adoption among micro, small and medium-sized enterprises (MSMEs) in Chirundu, Zambia?” in order to demonstrate the current state of ecommerce adoption among MSMEs 2 questions were asked .

1: To ascertain the current state of e-commerce adoption among businesses (MSMEs) in Chirundu, Zambia.

(a) People who run businesses like yours use a lot of transactions, what types of business transactions do you frequently engage in through e-commerce? This question Was assessed using 5 business models as ecommerce adoption . the findings are

- Business-to-Business (B2B)
- Business-to-Consumer (B2C)
- Consumer-to-Consumer (C2C)
- Consumer-to-Business (C2B)

Table 8 offers a detailed portrayal of e-commerce transaction engagement across various business models within micro, small, and medium-sized enterprises (MSMEs) in Chirundu. The examination of B2B transactions reveals a predominant trend, with 110 respondents frequently utilizing this model. Additionally, 60 respondents engage occasionally, 27 participate infrequently, 21 exhibit consistent engagement, and 12 respondents refrain entirely from B2B transactions.

In the segment of B2C transactions, the majority of 145 respondents consistently utilize this model, showcasing its substantial significance in establishing direct connections with end consumers. Furthermore, 75 respondents frequently engage, 7 participate occasionally, 2 engage infrequently, and 1 respondent refrains from B2C transactions.

Contrastingly, C2C transactions depict varied engagement patterns, with a notable majority of 128 respondents abstaining from this model. However, 59 respondents engage sporadically, 26 engage occasionally, 10 engage frequently, and 7 respondents consistently embrace C2C transactions, highlighting diverse engagement levels.

Examining C2B transactions, 97 respondents do not engage in this model, indicating limited relevance or perceived challenges. Nonetheless, 45 respondents participate

sporadically, 40 engage occasionally, 28 engage frequently, and 20 respondents consistently integrate C2B transactions into their business operations. These insights offer an understanding of MSMEs' engagement across different e-commerce business models in Chirundu.

Table 8: Business Model

Model	Frequency					Total
	Never	Once in a while	Occasionally	Frequently	Always	
B2B	12	27	60	110	21	230
B2C	1	2	7	75	145	230
C2C	128	59	26	10	7	230
C2B	97	45	40	28	20	230

The second question asked in order to ascertain the current state of e-commerce adoption among businesses (MSMEs) in Chirundu, Zambia was:

(b) When you are transacting you may have your preferences. Indicate your preferences for each one of the e-commerce channels.

- Local Online marketplaces
- Company website
- Facebook
- Twitter
- Instagram
- LinkedIn
- WhatsApp Business
- Pinterest

In Table 9, the preferences of respondents regarding their usage of various e-commerce channels are detailed across five levels: "never," "once in a while," "occasionally," "frequently," and "always." For local online marketplaces, 53 respondents indicated never using this channel, 29 mentioned using it once in a while, 76 reported occasional usage,

52 stated frequent usage, and 20 expressed always using it. Concerning company websites, 176 respondents never used them, 16 used them once in a while, 21 occasionally, 8 frequently, and 9 always. In the case of Facebook, responses included 20: never use it, 37: use it once in a while, 56: occasionally use it, 64: frequently use it, and 53: always use it.

For Twitter, frequencies indicate that 186 never use it, 18 only use it once in a while, 23 occasionally use it, 1 frequently uses it, and 2 always use it. Moving to Instagram, 156 respondents reported that they never use it, 20 use it once in a while, 33 occasionally use it, 13 use it frequently, and 8 always use it. LinkedIn frequencies were 203 respondents. Never use it; 8 use it once in a while; 11 use it occasionally; 6 frequently use it; and 2 always use it. WhatsApp Business saw 12 never using it, 16 use it once in a while, 65 use it occasionally, 69 use it frequently, and 68 always use it. Finally, for Pinterest, frequencies were 208 respondents. Never use it, 3 use it once in a while, 11 occasionally use it, 4 frequently use it, and 4 always use it. These responses provide a detailed account of user preferences and patterns across different e-commerce channels among the respondents.

Table 9: E-commerce Channel

Channel	Frequency					Total
	Never	Once in a while	Occasionally	Frequently	Always	
Local Online marketplaces	53	29	76	52	20	230
Company website	176	16	21	8	9	230
Facebook	20	37	56	64	53	230
Twitter	186	18	23	1	2	230
Instagram	156	20	33	13	8	230
LinkedIn	203	8	11	6	2	230
WhatsApp Business	12	16	65	69	68	230
Pinterest	208	3	11	4	4	230

4.4 Challenges of Using E-commerce

This segment presents the findings of the factors that prevent businesses from adopting e-commerce channels. To answer the question "What challenges do MSMEs in Chirundu face in the process of adopting e-commerce?"

To examine the challenges faced by MSMEs in Chirundu during the process of adopting e-commerce.

(a) You may be concerned with barriers towards using generally the above electronic channels. Indicate what applies to you as follows:

- I am not well-informed about the types of electronic channels available for business.
- I am currently unwilling to use these channels due to concerns about security and privacy.
- I am concerned about risks and trust issues of these electronic channels
- Lack of access to reliable internet connectivity is a hindrance for me
- I do not have that skill needed to use these electronic channels.
- I have concerns about the complexity of using electronic channels Perceived

In Table 10, the challenges faced by MSMEs in Chirundu during the adoption of e-commerce channels are outlined, addressing concerns and barriers. Respondents expressed their sentiments using a five-point scale ranging from "strongly disagree" to "strongly agree." For the challenge of not being well-informed about the types of electronic channels available for business, frequencies include 55 respondents strongly disagreeing, 113 disagreeing, 17 being neutral, 38 agreeing, and 7 strongly agreeing. Regarding the unwillingness to use channels due to security and privacy concerns, responses comprise 56 strongly disagreeing, 134 disagreeing, 24 being neutral, 14 agreeing, and 2 strongly agreeing. Concerns about the risks and trust issues of electronic channels saw 43 strongly disagreeing, 101 disagreeing, 27 being neutral, 55 agreeing, and 4 strongly agreeing.

Lack of access to reliable internet connectivity as a hindrance yielded frequencies of 50 strongly disagreeing, 125 disagreeing, 29 being neutral, 20 agreeing, and 6 strongly

agreeing. For lacking the skill needed to use electronic channels, responses included 58 strongly disagreeing, 115 disagreeing, 30 being neutral, 26 agreeing, and 1 strongly agreeing. Lastly, concerns about the complexity of using electronic channels were perceived at frequencies of 49 strongly disagreeing, 103 disagreeing, 37 being neutral, 39 agreeing, and 2 strongly agreeing. These findings provide a detailed insight into the challenges that MSMEs in Chirundu encounter during the adoption of e-commerce channels, shedding light on specific areas that may require targeted interventions.

Table 10: Challenges of Using E-commerce

Challenge	Frequency					Total
	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	
I am not well-informed about the types of electronic channels available for business.	55	113	17	38	7	230
I am currently unwilling to use these channels due to concerns about security and privacy.	56	134	24	14	2	230
I am concerned about risks and trust issues of these electronic channels	43	101	27	55	4	230
Lack of access to reliable internet connectivity is a hindrance for me	50	125	29	20	6	230
I do not have that skill needed to use these electronic channels.	58	115	30	26	1	230
I have concerns about the complexity of using electronic channels Perceived	49	103	37	39	2	230

4.5 Enhancing the level of e-commerce adoption

This section explores the aspirations of micro, small, and medium-sized enterprises (MSMEs) in Chirundu, Zambia, concerning improvements in electronic channels. The analysis focuses on respondents' desires to enhance their ecommerce impact and the types of improvements they deem essential. To answer the research question, "What factors determine the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu, Zambia?" the following question was asked.

To identify the factors influencing the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu, Zambia.

- (a) Looking at your use of these electronic channels, in your opinion, from what is presented below, indicate what you would desire to happen to you by indicating as follows:

- Increasing social media marketing
- Website development for my enterprise
- To be helped in data analytics
- To ensure cybersecurity
- To have experience in E-commerce platform management
- Using online payment systems
- Mobile app use
- Being helped in content creation (graphics, videos)
- Enhancing my Digital advertising strategies
- Customer relationship management (CRM) software
- E-commerce logistics and supply chain management

In Table 11, the aspirations of MSMEs in Chirundu regarding improvements in electronic channels are outlined, indicating the degree of desire on a five-point scale ranging from "not desired" to "very much desired." The findings highlight the preferences of respondents in terms of enhancing their e-commerce impact. For the desire to increase social media marketing, frequencies include 3 respondents marking it as not desired, none indicating slight desire, 40 moderately desiring, 78 very desiring, and 109 very much desiring. Regarding website development for enterprises, frequencies consist of 48 not desiring, 47 slightly desiring, 55 moderately desiring, 35 very desiring, and 45 very much desiring. The desire to be helped in data analytics saw 11 not desiring, 10 slightly desiring, 54 moderately desiring, 79 very desiring, and 76 very much desiring responses.

Ensuring cybersecurity had 4 not desiring, none slightly desiring, 35 moderately desiring, 91 very desiring, and 100 very much desiring responses. For experience in e-commerce platform management, frequencies include 7 not desiring, 2 slightly desiring, 45 moderately desiring, 87 very desiring, and 89 very much desiring. Using online payment systems yielded 18 responses: 18 not desiring, 2 slightly desiring, 55 moderately desiring, 75 very desiring, and 80 very much desiring. Desire for mobile app use included 30 not desiring, 15 slightly desiring, 52 moderately desiring, 62 very desiring, and 71 very much desiring. Being helped in content creation (graphics, videos) had 3 not desiring, none

slightly desiring, 37 moderately desiring, 93 very desiring, and 97 very much desiring responses.

Enhancing digital advertising strategies had 4 not desiring, none slightly desiring, 39 moderately desiring, 88 very desiring, and 99 very much desiring responses. For customer relationship management (CRM) software, frequencies consisted of 17 not desiring, 14 slightly desiring, 46 moderately desiring, 69 very desiring, and 84 very much desiring. Lastly, for e-commerce logistics and supply chain management, responses included 20 not desiring, 11 slightly desiring, 47 moderately desiring, 70 very desiring, and 82 very much desiring. These findings provide valuable insights into the areas where businesses aspire to see improvements, guiding potential interventions to enhance the e-commerce landscape for MSMEs in Chirundu.

Table 11: Enhancing the level of e-commerce adoption

Factors	Frequency					Total
	Not Desired	Slightly Desired	Moderately Desired	Very Desired	Very Much Desired	
Increasing social media marketing	3	0	40	78	109	230
Website development for my enterprise	48	47	55	35	45	230
To be helped in data analytics	11	10	54	79	76	230
To ensure cybersecurity	4	0	35	91	100	230
To have experience in E-commerce platform management	7	2	45	87	89	230
Using online payment systems	18	2	55	75	80	230
Mobile app use	30	15	52	62	71	230
Being helped in content creation (graphics, videos)	3	0	37	93	97	230
Enhancing my Digital advertising strategies	4	0	39	88	99	230
Customer relationship management (CRM) software	17	14	46	69	84	230
E-commerce logistics and supply chain management	20	11	47	70	82	230

4.6 Independent T test

In order to ascertain the level of adoption of the top three most used ecommerce channels by business owners and managers. The independent samples test was conducted to test the following hypothesis.

Conducted a T-test to fail to reject or reject the hypotheses:

H0 = There is no statistically significant difference between the owner and non owner run MSME usage of whatsapp, facebook and local online market places

H1 = There is a statistically significant difference between the owner and non owner run MSME usage of whatsapp, facebook and local online market places

This test was done to determine the extent to which managers and owner run MSMES have adopted the most utilised channels.

Table 12: Independent Samples Test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
LocalOnlineMarketplaces	Equal variances assumed	5.824	.017	3.633	228	.000	.661	.182	.302	1.019
	Equal variances not assumed			3.515	104.918	.001	.661	.188	.288	1.033
Facebook	Equal variances assumed	.393	.531	-1.491	228	.137	-.274	.184	-.636	.088
	Equal variances not assumed			-1.456	106.746	.148	-.274	.188	-.647	.099
WhatsAppBusiness	Equal variances assumed	.645	.423	-.766	228	.444	-.127	.166	-.453	.199

Based on the results:

- For local online marketplaces, the p-value is less than 0.05 (both for equal and unequal variances assumed), indicating a statistically significant difference in usage of local online market places between owners and non-owners.
- For Facebook, the p-value is greater than 0.05 (both for equal and unequal variances assumed), suggesting no statistically significant difference in usage between owners and non-owners.
- For WhatsApp Business, the p-value is greater than 0.05 (both for equal and unequal variances assumed), indicating no statistically significant difference in usage between owners and non-owners.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 Introduction

In this segment, a comprehensive and insightful exploration of the previously outlined results unfolds. The findings, meticulously detailed, are not merely presented but are deeply analyzed and substantiated through the application of pertinent theories and scrutiny of empirical studies. This rigorous examination aims to transcend the surface-level presentation, providing a nuanced and detailed understanding of the outcomes. By delving into the implications of the findings through the lens of established theories and empirical evidence, this discussion adds both depth and context, offering a richer perspective on the intricacies and implications of the research results.

5.1 Meaning of Findings

The exploration of findings sheds light on the current state of e-commerce adoption among MSMEs in Chirundu, Zambia. Understanding the attributes of their preferences, awareness levels, and perceived barriers is crucial for formulating targeted strategies to enhance adoption. This section delves into the meaning of these findings, providing a detailed analysis through the lens of answering the research questions using the findings of the study and the relevant theories and empirical studies.

Research Question 1: What is the current state of e-commerce adoption among micro, small and medium-sized enterprises (MSMEs) in Chirundu, Zambia?

The research aimed to discern the current state of e-commerce adoption by Micro, Small, and Medium Enterprises (MSMEs) in Chirundu during the adoption of e-commerce. The study explored various facets, including respondents' preferences for different electronic channels, their level of awareness, and the perceived barriers hindering the adoption of these channels. Understanding these factors is vital for devising strategies that can

facilitate smoother integration and utilization of e-commerce platforms among MSMEs in Chirundu.

The findings revealed a high level of awareness among MSMEs, with 73.0% of respondents expressing disagreement with being unaware (see table 16). This positive response indicates a strong foundational knowledge base, emphasizing the importance of continuous educational efforts to keep businesses informed about emerging e-commerce channels and their evolving benefits. While the study indicates a moderate lack of awareness about types of e-commerce among MSMEs in Chirundu, efforts to simplify and educate businesses about different e-commerce types could positively influence their adoption, aligning with the principles of the Technology Acceptance Model (TAM) that emphasize perceived ease of use and perceived usefulness.

Security and privacy concerns were largely dispelled among respondents, with 82.6% disagreeing or strongly disagreeing with such apprehensions (see table 17). This optimistic response is a positive sign, suggesting that businesses generally feel secure in the e-commerce landscape. Aligning with Chooprayoon's (2011) study in Thailand, the emphasis on security and privacy concerns in this study underscores the critical role of addressing these factors for successful e-commerce adoption. Implementing robust security measures and transparent privacy policies could effectively address the moderate level of unwillingness indicated by a mean of 2.01 in this context.

Regarding trust and risk concerns, 62.6% of respondents expressed disagreement, indicating a predominantly positive perception among businesses (see table 18). Strengthening trust-building measures and sharing success stories could further reinforce this positivity, fostering a more conducive e-commerce environment. The moderate level of 'Concerns about Risk and Trust' with a mean of 2.46 suggests a subset of respondents leans towards higher concern levels. Addressing these concerns through strategies focusing on transparent practices and risk mitigation is crucial. Satar and Alarifi's (2022) study in Saudi Arabia supports these findings, emphasizing the influence of factors like firm size, competitive pressure, and entrepreneur's innovativeness in e-business adoption, all of which relate to trust and risk concerns.

Concerns about unreliable internet access seem relatively minor, with 76.1% of respondents disagreeing or strongly disagreeing (see table 19). A positive perception is observed, with 75.2% disagreeing or strongly disagreeing (see table 20). This signifies that, businesses in Chirundu generally feel equipped with the necessary skills. The findings on unreliable internet and lack of skill align with Lim et al.'s (2018) study in West Malaysia, highlighting the importance of tailoring interventions based on the specific barriers relevant to different MSMEs. Ongoing support for skill development can ensure that the positive sentiment regarding businesses feeling equipped with the necessary skills is sustained.

Moreover, 66.1% of respondents disagreed or strongly disagreed with concerns about the complexity of electronic channels (see table 21). This suggests that, overall, businesses do not find electronic channels excessively complex. Initiatives focusing on user-friendly designs and simplification efforts can further enhance this positive sentiment. 'Moderate' was a recurring theme in perceptions of 'Lack of Reliable Internet,' 'Lack of Skill,' and 'Complexity Concerns.' MSMEs express a moderate level of concern across these aspects, signifying that while these barriers are acknowledged, they may not be overwhelmingly inhibitory.

Research Question 2: To what extent have MSMEs in Chirundu adopted e-commerce practices?

The exploration of e-commerce channel preferences among Micro, Small, and Medium-sized Enterprises (MSMEs) in Chirundu sheds light on their digital engagement patterns, providing insights into the extent of e-commerce adoption. Analyzing each e-commerce channel's findings reveals valuable information that answers the research question: To what extent have MSMEs in Chirundu adopted e-commerce practices?

The study found that Local online marketplaces, a key e-commerce channel, demonstrate a mean preference score of 2.81, indicating a moderate level of engagement. The distribution is symmetric, with a concentration towards 'Occasional' usage (see table 6). This aligns with Chooprayoon's (2011) findings in Thailand, emphasizing the influence of business environment and organizational factors in e-commerce adoption. The moderate

adoption levels signify an opportunity for local online marketplaces to enhance offerings and encourage more frequent engagement. Tailored strategies addressing the concerns of the segment with 'Never used' preferences can further boost adoption, aligning with Mwenya's (2020) findings in Kitwe Town, Zambia, highlighting education and IT skills as adoption barriers.

Company websites, however, exhibit a lower mean preference score of 1.51, indicating generally low engagement. The right-skewed distribution suggests a concentration towards 'Never' preferences, with 76.5% reporting minimal or no use (see table 8). Aligning with Chooprayoon's (2011) emphasis on web design and online brand development, interventions targeting improved perceived usefulness and ease of use are crucial for greater adoption. Educational initiatives emphasizing the benefits of a company website could effectively address the low adoption rates.

Social media channels vary in adoption rates, with Facebook standing out with a higher mean preference score of 3.40, indicating a strong preference and left-skewed distribution towards early adopters and frequent users. This aligns with Chooprayoon's (2011) emphasis on social media and customer behavior in e-commerce adoption. In contrast, Twitter, Instagram, LinkedIn, and Pinterest exhibit lower adoption rates, with strong right-skewed distributions towards 'Never' preferences (see table 6). Strategies focused on increasing awareness and showcasing the e-commerce potential of these platforms can encourage broader utilization, aligning with TAM and the Innovation Diffusion Theory.

WhatsApp Business emerges as a preferred channel with a higher mean preference score of 3.72, indicating a relatively high level of engagement. The left-skewed distribution towards more frequent usage aligns with the Innovation Diffusion Theory, emphasizing its popularity among the majority of adopters. Leveraging WhatsApp Business features and continued education can enhance its effectiveness as a preferred e-commerce channel.

The findings suggest a varying extent of e-commerce adoption among MSMEs in Chirundu. Local online marketplaces, Facebook, and WhatsApp Business were found to have relatively higher adoption rates, while company websites and certain social media

channels exhibit lower engagement. Tailored interventions, guided by theoretical frameworks like TAM and the Innovation Diffusion Theory, can address specific barriers, improve perceived usefulness and ease of use, and contribute to a more comprehensive e-commerce adoption landscape among businesses in Chirundu.

Upon finding that local online marketplaces, Facebook, and WhatsApp Business were the most used channels. An independent t test was conducted in terms of the comparison between MSMEs owned by owners and those run by non-owners:

To start with, the t-test results for local online market places indicated a statistically significant difference in the usage of local online marketplaces between MSMEs owned by owners and those run by non-owners. This suggests that there is a meaningful disparity in the adoption or utilization of local online marketplaces between businesses owned by owners and those managed by non-owners. Owners may be more inclined or better equipped to leverage local online marketplaces for their businesses compared to non-owners. This difference could have implications for business strategies, market reach, and competitiveness within the local market.

In regards to Facebook, the t-test results did not show a statistically significant difference in the usage of Facebook between MSMEs owned by owners and those run by non-owners. This indicates that both owner-operated and non-owner-operated MSMEs have similar levels of Facebook usage. Therefore, ownership status may not play a significant role in determining the extent to which businesses utilize Facebook as an e-commerce platform. Businesses, regardless of ownership, may perceive Facebook as equally valuable for engaging with customers, promoting products/services, and building brand presence.

Similar to Facebook, the t-test results reveal no statistically significant difference in the usage of WhatsApp Business between MSMEs owned by owners and those run by non-owners. This suggests that ownership status does not influence the adoption or utilization of WhatsApp Business among MSMEs in Chirundu. Both owner-operated and non-owner-operated businesses show similar patterns of using WhatsApp Business, implying

that this platform is perceived as equally important for communication, customer engagement, and potentially, e-commerce transactions, regardless of ownership status.

Overall, the implications highlight differences in the adoption and utilization of different e-commerce platforms among MSMEs based on ownership status. While local online marketplaces show a significant discrepancy, Facebook and WhatsApp Business exhibit similar usage patterns irrespective of ownership, indicating the potential for broader strategies aimed at enhancing digital presence and e-commerce capabilities across various ownership structures within the MSME sector in Chirundu, Zambia.

Research Question 3: What factors determine the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu, Zambia?

The findings regarding e-commerce channel preferences among MSMEs in Chirundu provide valuable insights into the factors determining the level of e-commerce adoption within this sector. Particularly, the higher adoption rates of Facebook and WhatsApp Business can be explained through the perceived usefulness and ease of use among MSMEs.

The study found that Facebook exhibits a high mean preference score of 3.40, indicating elevated engagement. The slightly left-skewed distribution suggests a concentration towards more frequent usage, with a mode of 4 (Frequently) (see table 6). The adoption of Facebook can be attributed to its perceived usefulness and ease of use among MSMEs in Chirundu. According to TAM, perceived usefulness and perceived ease of use significantly influence users' acceptance of technology (Davis, 1989). In the context of Facebook, businesses may find it useful for marketing, customer engagement, and brand promotion. The platform's user-friendly interface and widespread popularity contribute to its ease of use. Moreover, the left-skewed distribution aligns with the Innovation Diffusion Theory, indicating that Facebook has gained traction among early adopters and frequent users. This suggests that MSMEs in Chirundu perceive Facebook as a valuable tool for e-commerce, and its adoption is spreading among different types of businesses within the sector (Rogers, 2003).

According to the findings, WhatsApp Business has a higher mean preference score of 3.72, indicating a relatively high level of engagement (see table 6). The slightly left-skewed distribution suggests a concentration towards more frequent usage, with a significant portion reporting 'Always' or 'Frequently' using WhatsApp Business (see table 13). The adoption of WhatsApp Business can be explained by its perceived usefulness in facilitating real-time communication, customer support, and secure transactions. The platform's features, such as catalog sharing and business profiles, contribute to its effectiveness in supporting e-commerce activities. The left-skewed distribution indicates that a considerable proportion of MSMEs in Chirundu actively uses WhatsApp Business, aligning with the Innovation Diffusion Theory's concept of the majority adopters. The higher adoption rates of Facebook and WhatsApp Business among MSMEs in Chirundu can be attributed to a combination of demographic characteristics and aligning features of these platforms with the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory.

The demographic profile in the findings of the study provide further insights into the factors that determine the level of e-commerce adoption among different types of businesses within the MSME sector in Chirundu, Zambia. The diverse age distribution, with a significant presence in the prime working years (36 to 45) and a substantial representation of the younger workforce (26 to 35), indicates a technologically diverse user base (see figure 2). Younger entrepreneurs may be more receptive to innovative digital solutions, and the findings suggest that Facebook and WhatsApp Business align well with the preferences of different age groups. The gender distribution, with 60.4% identifying as male and 39.6% as female (see figure 3), implies that e-commerce adoption may vary between male and female entrepreneurs. Facebook and WhatsApp Business, known for their inclusive interfaces, appeal to both genders, contributing to their higher adoption rates.

The diverse educational backgrounds, with the majority having attained college diplomas (43.9%) and university degrees (24.3%), highlights the capacity of the respondents to comprehend the use of ecommerce channels (see figure 4). Facebook's user-friendly design and WhatsApp Business's straightforward communication features resonate well

with a varied educational audience. Varying levels of business experience, with a significant cohort having 6 to 10 years of experience, indicate a diverse landscape with businesses at different developmental stages (see figure 5). Facebook and WhatsApp Business offer scalable solutions suitable for both established businesses and relatively new ventures.

Both Facebook and WhatsApp Business are perceived as useful platforms for marketing, customer engagement, and real-time communication, aligning with the TAM's emphasis on perceived usefulness. The user-friendly interfaces of Facebook and WhatsApp Business contribute to their ease of use, a crucial factor in technology adoption according to TAM. The left-skewed distribution of Facebook and WhatsApp Business adoption aligns with the Innovation Diffusion Theory, indicating concentration towards early and late majority adopters. The findings suggest that these platforms have gained traction among businesses at various stages of adoption. The lower adoption rates of platforms like Twitter, Instagram, LinkedIn, and Pinterest, as indicated by strong right-skewed distributions, suggest challenges in overcoming barriers (see table 6). This resonates with the Innovation Diffusion Theory, emphasizing the importance of perceived barriers and organizational readiness.

The higher adoption rates of Facebook and WhatsApp Business among MSMEs in Chirundu are influenced by a combination of demographic characteristics and the alignment of these platforms with TAM and the Innovation Diffusion Theory. Recognizing the diverse needs of different age groups, genders, educational backgrounds, and business experience levels is crucial for tailoring interventions effectively. Policymakers and stakeholders can leverage these insights to design targeted initiatives that address the unique needs of businesses in Chirundu, fostering a more inclusive and comprehensive e-commerce adoption landscape in the region (Lim et al., 2018).

Research Question 4: What challenges do MSMEs in Chirundu face in the process of adopting e-commerce?

The exploration of respondents' desires for improvements in various aspects of e-commerce sheds light on their aspirations and identifies areas where support and

development are sought. This section comprehensively discusses the findings in each domain, drawing insights and highlighting their implications for the overall enhancement of e-commerce impact. The overwhelming desire (81.3%) for a significant increase in social media marketing underscores its perceived importance among MSMEs in Chirundu. This strong inclination reflects an awareness of the pivotal role social media plays in brand visibility and customer engagement. Aligning with Chooprayoon (2011), this finding emphasizes the crucial influence of social media on e-commerce adoption, particularly in emerging markets like Zambia. The result also resonates with the Technology Acceptance Model (TAM) (Davis, 1989), highlighting the perceived usefulness of social media for enhancing business performance. The implications suggest a need for tailored training programs and resources to empower businesses in leveraging social media effectively.

While a notable 40.5% expressed either no or minimal interest in website development (Figure 9), a combined 58.8% indicated at least moderate interest. This aligns with the Innovation Diffusion Theory (Rogers, 2003), categorizing adopters based on innovativeness. The varied responses suggest a need for flexible support mechanisms, including awareness campaigns for those with minimal interest. Limited capital and complexity often deter micro and small businesses from website development, justifying the prevalent disinterest among respondents. A substantial 67.0% expressed a desire for considerable or extensive assistance with data analytics (Table 23), indicating an awareness of the value of data-driven decision-making (Satar and Alarifi, 2022). This resonates with TAM, where the perceived usefulness of data analytics in enhancing operational efficiency and customer insights is crucial (Davis, 1989). Implementing accessible and user-friendly data analytics tools, along with training initiatives, can empower businesses in this domain.

The strong desire (83.1%) for extensive cybersecurity measures (Figure 10) indicates a heightened awareness of the potential risks associated with e-commerce operations. This aligns with global concerns about security and privacy (Satar and Alarifi, 2022). Strengthening cybersecurity frameworks and providing educational resources on best practices become imperative to address these concerns. Collaborative efforts with

cybersecurity experts can further enhance the resilience of MSMEs. The majority (76.5%) expressed a strong desire for extensive e-commerce platform management (Table 22), reflecting a recognition of the integral role effective platform management plays in the overall success of e-commerce endeavors. MSMEs seek comprehensive support, suggesting the need for user-friendly platforms and accessible training resources (Chooprayoon, 2011). The finding also resonates with TAM's emphasis on perceived ease of use (Davis, 1989), as businesses seek user-friendly platforms.

A considerable 67.8% expressed a desire to learn extensively about online payment systems (Table 23), underscoring the importance of seamless and secure online transactions (Satar and Alarifi, 2022). MSMEs are eager to embrace digital payment solutions, signaling an opportunity for financial institutions and fintech companies to provide tailored training and integration support. With 58.5% expressing a considerable or very much desired inclination (Table 24), MSMEs recognize the potential of mobile apps in enhancing their e-commerce impact (Chooprayoon, 2011). This resonates with TAM's focus on perceived ease of use (Davis, 1989), emphasizing the need for initiatives to demystify mobile app development and make it accessible to businesses with varying technical capabilities.

The substantial desire for extensive assistance in content creation (Figure 11) by 82.6% indicates a recognition of the role compelling content plays in engaging online audiences. This resonates with TAM's focus on perceived usefulness (Chooprayoon, 2011), emphasizing the importance of content in elevating digital presence. Tailored workshops, creative toolkits, and collaborations with content creators can empower MSMEs in enhancing their digital presence. The strong inclination (81.3%) for extensive help with digital advertising strategies (Figure 12) reveals an understanding of the pivotal role advertising plays in driving online visibility. Collaborations with digital marketing experts and provision of educational resources can enhance the effectiveness of digital advertising efforts.

The majority (66.5%) expressed a strong desire for extensive assistance in utilizing CRM software (Figure 13), underscoring the recognition of the significance of customer relationship management in fostering customer loyalty. Tailored CRM solutions and

training programs can empower MSMEs in building lasting customer relationships. A significant 71.1% expressed a strong desire for extensive assistance in optimizing e-commerce logistics and supply chain management (Figure 14). This indicates a recognition of the critical role logistics play in the overall e-commerce experience. Collaborations with logistics experts and streamlined educational initiatives can further enhance businesses' capabilities in this domain.

5.2 Summary

In summary, the findings provide a comprehensive understanding of the challenges and opportunities MSMEs in Chirundu encounter in the process of adopting e-commerce. The insights derived from respondents' preferences and desires serve as a valuable foundation for developing targeted interventions, educational programs, and support mechanisms. Policymakers, business support organizations, and stakeholders can leverage these findings to design initiatives that address the specific needs and concerns of businesses in Chirundu, ultimately fostering a digitally resilient and thriving business community.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter presents a comprehensive summary of the findings from the study on e-commerce adoption among micro, small and medium-sized enterprises (MSMEs) in Chirundu, Zambia. The study aimed to ascertain the current state of e-commerce adoption, assess the extent of e-commerce practices, identify factors influencing adoption, and examine challenges faced by MSMEs in Chirundu during the adoption process. This chapter presents a summary of the findings of the study and how the objectives were met. The chapter further provides recommendations and areas for future study.

6.1 Summary

6.1.1 Current State of E-commerce Adoption

The findings reveal a diverse landscape of e-commerce adoption among MSMEs in Chirundu. While there is a notable presence of businesses engaging in various e-commerce channels, certain platforms, such as local online marketplaces, Facebook, and WhatsApp Business, stand out as more widely adopted. However, the adoption rates for company websites and certain social media channels remain lower. The study successfully captured the distinctions of e-commerce adoption, providing a detailed understanding of the preferences and practices of businesses in the region.

6.1.2 Extent of E-commerce Practices

The study delves into the extent of e-commerce practices among MSMEs in Chirundu by analyzing preferences for different e-commerce channels. Local online marketplaces, Facebook, and WhatsApp Business emerge as popular choices, while company websites and some social media channels exhibit lower adoption rates. The detailed analysis of each channel provides actionable insights for designing targeted interventions to enhance e-commerce practices among businesses in the region.

6.1.3 Factors Influencing E-commerce Adoption

Demographic characteristics, classification of MSMEs, and business models were explored to identify factors influencing e-commerce adoption. The age distribution, gender representation, educational background, and business experience varied among respondents, suggesting the need for tailored interventions. Owner-operated businesses dominate the landscape, with a prevalence of micro-businesses in terms of size and a diverse sectoral distribution. The findings align with theoretical frameworks such as the Technology Acceptance Model (TAM) and the Innovation Diffusion Theory, emphasizing the importance of perceived usefulness, ease of use, and organizational characteristics in adoption.

6.1.4 Challenges Faced by MSMEs in E-commerce Adoption

Concerns and barriers related to electronic channels, awareness, security and privacy, trust and risk, unreliable internet, lack of skill, and complexity were examined. The study identified a moderate lack of awareness about different e-commerce types, highlighting the importance of continuous education efforts. Security and privacy concerns were not prominent, but trust and risk concerns were identified, suggesting the need for trust-building measures. Unreliable internet and lack of skill were perceived as minor concerns, while complexity concerns were moderate. These findings provide a detailed understanding of the challenges that businesses face, paving the way for targeted interventions.

6.2 Recommendations

6.2.1 Tailored Training Programs and Resources

Considering the diverse demographic characteristics and varying levels of e-commerce adoption, tailored training programs and resources should be developed. These initiatives can cater to the specific needs of different age groups, genders, educational backgrounds, and business experience levels. By addressing these diversities, interventions can be more effective in promoting sustainable e-commerce practices.

6.2.2 User-Friendly Platforms and Simplification Efforts

For businesses expressing minimal interest in website development and concerns about the complexity of electronic channels, there is a need for user-friendly platforms and simplification efforts. Awareness campaigns highlighting the benefits of a robust online presence and initiatives to simplify e-commerce processes can encourage wider adoption.

6.2.3 Strengthening Cybersecurity Measures

The strong desire for extensive cybersecurity measures underscores the need for collaborative efforts to enhance the resilience of MSMEs. Partnerships with cybersecurity experts and the development of robust frameworks can address security concerns effectively, fostering a more secure e-commerce environment.

6.2.4 Financial Institutions and Fintech Support

Given the considerable interest in learning extensively about online payment systems, financial institutions and fintech companies can play a pivotal role. Tailored training programs and integration support can empower businesses in embracing digital payment solutions, contributing to the growth of the digital economy.

6.2.5 Collaboration with Digital Marketing Experts

The expressed desire for extensive help with digital advertising strategies suggests a need for collaboration with digital marketing experts. Educational resources and collaborative initiatives can enhance the effectiveness of digital advertising efforts, providing businesses with the tools to drive online visibility.

6.2.6 Sector-Specific Interventions

Considering the sectoral distribution of businesses, policymakers and stakeholders can develop sector-specific interventions. Tailored strategies addressing the unique challenges and opportunities in different sectors, such as service, trade, agriculture, and manufacturing, can foster sectoral growth and diversity.

6.3 Areas of Further Research

While this study provides valuable insights into e-commerce adoption among MSMEs in Chirundu, there are areas that warrant further research. Future studies could delve deeper into the specific challenges faced by businesses in different sectors, explore the impact of external factors such as economic conditions, and investigate the evolving trends in e-commerce adoption over time. Additionally, longitudinal studies tracking the progress of businesses after implementing interventions would contribute to a more comprehensive understanding of the long-term impact of e-commerce initiatives.

Conclusion

In summary, the study on the state of e-commerce adoption among MSMEs in Chirundu, Zambia, provides an understanding of the digital landscape in the region. The findings underscore the diverse preferences and practices of businesses, with notable adoption rates for local online market places, Facebook, and WhatsApp businesses. Challenges such as awareness gaps, trust concerns, and complexity issues have been identified, paving the way for targeted interventions. The recommendations emphasized tailored training programs, user-friendly platforms, strengthened cyber security measures, and sector-specific interventions to foster a more inclusive and digitally resilient business community. As we navigate the evolving dynamics of e-commerce, these insights and recommendations serve as a foundation for policy makers, stakeholders, and businesses in shaping a vibrant digital future for MSMEs in Chirundu, Zambia.

Bibliography

Ahmed, Y., Ahmad, M., Ahmad, N. & Zakaria, N., 2019. *Social media for knowledge-sharing: A systematic literature review.* , s.l.: Telematics and informatics, 37, pp.72-112..

Amornkitvikai, Y., Tham, S. Y., Harvie, C. & Buachoom, W. W., 2021. *Barriers and Factors Affecting the E-Commerce Sustainability of Thai Micro-, Small- and Medium-Sized Enterprises (MSMEs).* , s.l.: Sustainability, 14(14), 8476. <https://doi.org/10.3390/su1414847>.

Buckley, P. J. & Ghauri, P. N., 2004. *Globalisation, Economic Geography and the Strategy of Multinational Enterprises.*, s.l.: Journal of International Business Studies, 35(2), 81–98. <http://www.jstor.org/stable/3875244>.

Chepngeno, W., 2017. *The factors influencing the adoption of e-commerce within MSMEs in Nairobi, Kenya*, s.l.: s.n.

Chisala, Barbara. "An assessment of ZRA e-filing on tax compliance among SMEs in Zambia: a case study of Chirundu market." PhD diss., The University of Zambia, 2022.

Chooprayoon, V., 2011. *A study of factors influencing the adoption of E-Commerce technology in small and medium enterprises (SMES) in the kingdom of Thailand*, s.l.: s.n.

Creswell, J. W. & Creswell, J. D., 2017. *Research design: Qualitative, quantitative, and mixed methods approaches.* s.l.:Sage publications..

Davis, F. D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology.. *MIS Quarterly*, Volume 13(3), pp. 319-340..

deVere Group, 2022. deVere Group. [Online] Available at: <https://www.devere-zambia.co.zm/> [Accessed 2023].

Endris, E. & Kassegn, A., 2022. *The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: A systematic review of evidence from Ethiopia.*, s.l.: Journal of Innovation and Entrepreneurship.

Esfahbodi, A., Pang, G. & Peng, L., 2022. *Determinants of consumers' adoption intention for blockchain technology in E-commerce.*, s.l.: Journal of Digital Economy, 1(2), pp.89-101..

Faqih, K., 2020. *The influence OF perceived usefulness, social influence, internet self-efficacy and compatibility ON USERS'INTENTIONS to adopt e-learning: investigating the moderating effects OF culture.*, s.l.: IJAEDU-International E-Journal of Advances in Ed.

GRZ, 2008. *The Micro, Small and Medium Enterprise Development Policy.*, s.l.: Retrieved from <https://www.boz.zm/Micro-Small-and-Medium-Enterprise-Development-Policy-2008.pdf> on 17th September, 2023 at 11.27 PM..

Hall, B., 2004. *Innovation and diffusion.*, s.l.: s.n.

Lim, I., Yin, C. & Tan, D., 2018. *impct of of e-commerce adoption among Micro, Small and Medium Enterprises (MSMEs) in West Malaysia*, s.l.: s.n.

Lim, S. & Trakulmaykee, N., 2018. *An empirical study on factors affecting e-commerce adoption among SMEs in west Malaysia.*, s.l.: Management Science Letters, 8(5), 381-392..

Makame, W., Kang, J. & Park, S., 2014. *Factors influencing electronic commerce adoption in developing countries : the case of Tanzania.*, s.l.: South African Journal of Business Management, 45, 83-96. <https://doi.org/10.4102/SAJBM.V45I2.126>.

Mwenya, G., 2020. *AN INVESTIGATION INTO THE MAJOR FACTORS THAT HINDER THE FULL ADOPTION OF E-COMMERCE IN SMALL AND MEDIUM ENTREPRISES* , s.l.: CAVENDISH UNIVERSITY ZAMBIA.

Nwosu, A. O., 2017. *E-Commerce Adoption by Small and Medium Enterprises in Nigeria*, s.l.: Walden University.

Phillips, R. & Ormsby, R., 2016. *Industry classification schemes: An analysis and review*. , s.l.: Journal of Business & Finance Librarianship, 21(1), pp.1-25..

Rogers, E. M., 2003. *Diffusion of Innovations*. 5th ed. ed. s.l.:Free Press.

Satar, M. S. & Alarifi, G., 2022. *Factors of E-Business Adoption in Small and Medium Enterprises: Evidence from Saudi Arabia*, s.l.: s.n.

Shemi, A., 2022. *Adoption of Web 2.0 Social Media eCommerce in SMEs: Conceptualising Theories and Factors for Zambia*, s.l.: <https://www.intechopen.com/online-first/86961>.

Tavengerwei, R., 2018. *Using trade facilitation to assist MSMEs in E-commerce in developing countries*. , s.l.: Journal of International Economic Law, 21(2), pp.349-378..

Teece, D., 2010. *Business models, business strategy and innovation*. , s.l.: Long range planning, 43(2-3), pp.172-194..

Turban, E. et al., 2020. *Electronic Commerce 2020: Business, Technology, and Society*. 16th ed ed. s.l.: Pearson..

Wymer, S. A. & Regan, E. A., 2005. *Factors Influencing e-commerce Adoption and Use by Small and Medium Businesses*, s.l.: Routledge.

ZDA, 2020. *SMEs in Zambia: Unlocking the Potential for Growth*., s.l.: Zambia Development Agency..

Final report Hellen sabi

ORIGINALITY REPORT

12%

SIMILARITY INDEX

9%

INTERNET SOURCES

5%

PUBLICATIONS

5%

STUDENT PAPERS

PRIMARY SOURCES

1

Submitted to UNIVERSITY OF LUSAKA

Student Paper

1%

2

www.researchgate.net

Internet Source

1%

3

citeseerx.ist.psu.edu

Internet Source

1%

4

Syed Zamberi Ahmad, Abdul Rahim Abu Bakar, Tengku Mohamed Faziharudean, Khairul Anwar Mohamad Zaki. "An Empirical Study of Factors Affecting e-Commerce Adoption among Small- and Medium-Sized Enterprises in a Developing Country: Evidence from Malaysia", Information Technology for Development, 2014

Publication

1%

5

hull-repository.worktribe.com

Internet Source

<1%

6

core.ac.uk

Internet Source

<1%

mts.intechopen.com

7	Internet Source	<1 %
8	1library.net Internet Source	<1 %
9	Submitted to University of Gloucestershire Student Paper	<1 %
10	ir.knust.edu.gh Internet Source	<1 %
11	Mir Shahid Satar, Ghadah Alarifi. "Factors of E-Business Adoption in Small and Medium Enterprises: Evidence from Saudi Arabia", Human Behavior and Emerging Technologies, 2022 Publication	<1 %
12	Ton Duc Thang University Publication	<1 %
13	M. Y. SIYAL, B. S. CHOWDHRY, A. Q. RAJPUT. "SOCIO-ECONOMIC FACTORS AND THEIR INFLUENCE ON THE ADOPTION OF E-COMMERCE BY COMSUMERS IN SINGAPORE", International Journal of Information Technology & Decision Making, 2011 Publication	<1 %
14	de.slideshare.net Internet Source	<1 %

15	dspace.sunyconnect.suny.edu Internet Source	<1 %
16	Submitted to Brunel University Student Paper	<1 %
17	dspace.ciu.ac.ug Internet Source	<1 %
18	ajomc.asianpubs.org Internet Source	<1 %
19	ro.uow.edu.au Internet Source	<1 %
20	worldwidescience.org Internet Source	<1 %
21	Submitted to Robert Kennedy College AG Student Paper	<1 %
22	Submitted to Sheffield Hallam University Student Paper	<1 %
23	Submitted to University of Ulster Student Paper	<1 %
24	Submitted to Glasgow Caledonian University Student Paper	<1 %
25	Submitted to Hawaii Pacific University Student Paper	<1 %
26	Submitted to University of Bradford Student Paper	<1 %

27	Submitted to Berlin School of Business and Innovation Student Paper	<1 %
28	Submitted to University of Salford Student Paper	<1 %
29	mafiadoc.com Internet Source	<1 %
30	Submitted to Coventry University Student Paper	<1 %
31	Submitted to University of Leeds Student Paper	<1 %
32	www.researchsquare.com Internet Source	<1 %
33	nsuworks.nova.edu Internet Source	<1 %
34	www.answers.com Internet Source	<1 %
35	discol.umk.edu.my Internet Source	<1 %
36	erepository.uonbi.ac.ke Internet Source	<1 %
37	hdl.handle.net Internet Source	<1 %
38	iied.org Internet Source	

		<1 %
39	udsspace.uds.edu.gh Internet Source	<1 %
40	archive.org Internet Source	<1 %
41	www.geeksforgeeks.org Internet Source	<1 %
42	www.sweetstudy.com Internet Source	<1 %
43	Submitted to INTI University College Student Paper	<1 %
44	Submitted to University of Newcastle upon Tyne Student Paper	<1 %
45	Submitted to University of Wales Swansea Student Paper	<1 %
46	epdf.pub Internet Source	<1 %
47	ir.jkuat.ac.ke Internet Source	<1 %
48	www.cisdijournal.net Internet Source	<1 %

49	Submitted to Asia Pacific University College of Technology and Innovation (UCTI) Student Paper	<1 %
50	Submitted to HTM (Haridus- ja Teadusministeerium) Student Paper	<1 %
51	Submitted to King's College Student Paper	<1 %
52	Submitted to Laureate Education Inc. Student Paper	<1 %
53	Submitted to Rutgers University, New Brunswick Student Paper	<1 %
54	openaccessojs.com Internet Source	<1 %
55	Submitted to European University Student Paper	<1 %
56	Submitted to Ghana Technology University College Student Paper	<1 %
57	erepository.uonbi.ac.ke:8080 Internet Source	<1 %
58	repository.mua.ac.ke Internet Source	<1 %
59	akhuwat.org.pk	

60	www.equal.mlsi.gov.cy Internet Source	<1 %
61	www.ncbi.nlm.nih.gov Internet Source	<1 %
62	Submitted to Monash University Student Paper	<1 %
63	Submitted to University of Glamorgan Student Paper	<1 %
64	cirdjournal.com Internet Source	<1 %
65	etd.uum.edu.my Internet Source	<1 %
66	repository.au.edu Internet Source	<1 %
67	www.mdpi.com Internet Source	<1 %
68	Submitted to Binary University College Student Paper	<1 %
69	Submitted to Queen Mary and Westfield College Student Paper	<1 %
70	Submitted to Tilburg University Student Paper	

		<1 %
71	Weitong Liu, Ke Hu. "The Impact of Teaching Support on Teachers' Online Teaching Experience: The Mediating Role of Teachers' Technological Innovation Awareness and Technological Acceptance", Research Square Platform LLC, 2023 Publication	<1 %
72	covenantuniversity.edu.ng Internet Source	<1 %
73	dokumen.pub Internet Source	<1 %
74	ebpj.e-iph.co.uk Internet Source	<1 %
75	etd.aau.edu.et Internet Source	<1 %
76	etd.cput.ac.za Internet Source	<1 %
77	migrationletters.com Internet Source	<1 %
78	tml.nul.ls Internet Source	<1 %
79	vital.seals.ac.za:8080 Internet Source	<1 %

80	www.ferris.edu Internet Source	<1 %
81	www.ilomata.org Internet Source	<1 %
82	www.purdue.edu Internet Source	<1 %
83	www.tutorialspoint.com Internet Source	<1 %
84	Aldila Yanri. "AKHLAK Core Values Effects in the Levers of Control Framework on the Accounting Fraud Tendency", JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi, 2024 Publication	<1 %
85	Scott Wymer, Elizabeth Regan. "Factors Influencing e-commerce Adoption and Use by Small and Medium Businesses", Electronic Markets, 2005 Publication	<1 %

Exclude quotes Off

Exclude matches Off

Exclude bibliography On



UNIVERSITY
OF
LUSAKA

SCHOOL OF POSTGRADUATE STUDIES
SUBMISSION OF DISSERTATION FOR EXAMINATION

Name of student:.....HELLEN MUNIKA SABI KAPASULA

Student number:.....MBAGEN211482834.....

Program of study:....MBAGENERAL...

Dissertation title:.....THE STATE OF E-COMMERCE AMONG MSMEs IN
CHIRUNDU,ZAMBIA...

Signature of student: ...H.sabi.....

Date:14.01.2024.....

Supervisor's Comments:

I recommend this dissertation for submission for examination (If you do not recommend,
kindly provide a written report and attach hereto).

Name of Supervisor: Dr Jason Mwanza

Signature of Supervisor

Date: January 14th 2024



SCHOOL OF POSTGRADUATE STUDIES
5TH TO 14TH JANUARY 2024 GBS800 DISSERTATION SUBMISSION

No	Item	Done
1	Were you registered for GBS800 in the JULY-DECEMBER 2023 semester?	YES
2	Has your FINAL DISSERTATION been signed by the supervisor ¹ ?	YES
3	Have you attached the Turnitin similarity report to the appendix?	YES
4	Is your Turnitin similarity report below 20 percent? Please append the similarity report to your dissertation.	YES
5	Have you submitted a soft copy version of your dissertation to the UNIVERSITY TURNITIN CLASS called "DISSERTATION FINAL SUBMISSION JAN 2024?" See point (3) on the next page for more details.	YES
6	What is your dissertation's total word count (including references and appendices)?16500.....WORDS
	Candidate Name: HELLEN MUNIKA SABI KAPASULA	

¹ Please ensure that the "SUBMISSION OF DISSERTATION FOR EXAMINATION FORM" (available on page 43 of the dissertation guidelines) is printed and signed by your supervisor and included as part of your submission.

	Student Number: MBAGEN211482834
	Signature: H. SABI
	Date:14.01.2024

EACH STUDENT MUST ATTACH THE FOLLOWING SIGNED CHECKLIST AS PART OF THEIR DISSERTATION SUBMISSION.

A STUDENT WHO DOES NOT MEET ALL REQUIREMENTS LISTED IN THE CHECKLIST ABOVE MAY NOT BE READY FOR SUBMISSION AND MAY HAVE TO RE-REGISTER FOR GBS800 IN THE FIRST SEMESTER OF 2024.

DETAILS REGARDING EACH ITEM ON THE CHECKLIST

No	Item
1	<p>If you were not registered for GBS 800 for the period JULY-DECEMBER 2024 you must do so otherwise you risk:</p> <ul style="list-style-type: none"> • Not being scheduled for dissertation defense • Not receiving communication • Not receiving your GBS800 results • Not meeting graduation criteria
2	<p>If supervisor can't sign off the hard copy dissertation, approval for submission can be submitted by either:</p> <ul style="list-style-type: none"> • Appending an electronic signature in the dissertation, or • Sending consent via email to abby.nakalinda@unilus.ac.zm or jphiri@unilus.ac.zm (copying the student) the email must then be printed and included as part of the submission.
3	<p>* NOTE: THERE ARE TWO (2) TYPES OF TURNITIN ACCOUNTS:</p> <p>i) <u>Account set up by YOUR SUPERVISOR</u> – this is where you should submit your work to <u>check, manage and discuss your plagiarism report with your</u></p>

	<p><u>supervisor</u>. Once your work has been approved for submission, your soft copy dissertation can then be submitted to the University Turnitin Account below.</p> <p>ii) <u>Account set up by THE UNIVERSITY</u> – this is where your <u>very final copy of the dissertation</u> will be deposited. You can only submit to this account once - no resubmissions are allowed! This account is not for generating similarity reports but purely for submitting your final soft copy dissertation. Go to turn it in and enter the enrollment details provided below:</p>
4	<p>Class ID: 41889021</p> <p>Enrollment key: 1234</p> <p>Class name: DISSERTATION FINAL SUBMISSION JAN 2024</p>
5	<p>Ensure your word count is as per University requirement (i.e. 15,000-20,000 words).</p>
6	<p>If anything is unclear, email the GBS800 coordinator or Assistant.</p>