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TITLE:

A MODEL FOR THE ADOPTION OF ICT FOR THE SURVIVAL AND GROWTH OF SMEs IN ZIMBABWE: CASE OF PRIME GALAXY INVESTMENTS, ADEL'S CLEANING SERVICES AND MAX PLUMBING SOLUTIONS.

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE BACHELOR OF ACCOUNTANCY HONOURS DEGREE OF BINDURA UNIVERSITY OF SCIENCE EDUCATION. FACULTY OF COMMERCE.

By:

First name : Destine

Middle name : Tanaka

Surname : Zvapera

Student number: B222460B

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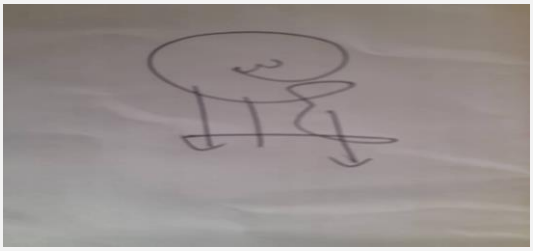
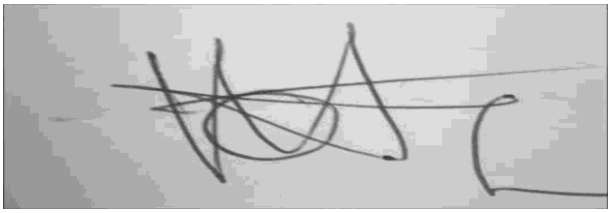
Student No.:		**STUDENT NAME:**			
B222460B		Destine Tanaka Zvapera			
SUPERVISOR'S SIGNATURE					
CHIARMAN'S SIGNATURE					

DECLARATION

I, the undersigned, declare that this dissertation entitled *"The Adoption of ICT for Business Survival and growth Among SMEs in Zimbabwe: A Case Study of Prime Galaxy Investment*, *Adel's cleaning services and Max Plumbing solutions"* is my original work, submitted in partial fulfilment of the requirements for the degree at Bindura State University. It has not been previously submitted to any other institution of higher learning for any academic award.

Where other sources of information have been used, they have been duly acknowledged.

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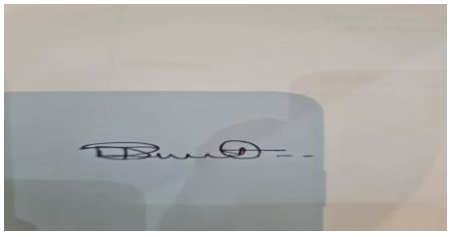
Destine Tanaka	Zvapera	

DEDICATION

This dissertation is dedicated to my beloved family, whose love, sacrifices, and constant encouragement have been the foundation of my success. To my mother and brother, thank you for instilling in me the value of education and for supporting me throughout. This achievement is as much yours as it is mine.

ABSTRACT

This study explores the adoption of Information and Communication Technologies (ICT) for business survival and growth among Small and Medium Enterprises (SMEs) in Zimbabwe, using Prime Galaxy Investment, Adel's cleaning services and Max Plumbing solutions as case studies. The study aims is to formulate a framework for the adoption of ICT by SMEs which can be used by SMEs in Zimbabwe as an instrument of business survival. The research aims to investigate how ICT tools and platforms influence operational efficiency, customer engagement, and overall business sustainability within the SME sector. A mixed-methods approach was employed, combining qualitative interviews and quantitative questionnaires administered to key employees and management at Prime Galaxy Investment. The findings reveal that ICT adoption has significantly contributed to business continuity by enhancing communication, marketing, financial management, and supply chain operations. However, challenges such as limited funding, digital skills gaps, and unreliable internet infrastructure hinder optimal utilization. The study concludes that effective ICT integration is vital for SME resilience, especially in volatile economic environments. Recommendations include increased investment in ICT training, government incentives for SME digitization, and infrastructure development to support digital transformation in the sector.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Chapter introduction

This chapter introduces the research study on the adoption of Information and Communication Technologies (ICT) for the survival and growth of Small and Medium Enterprises (SMEs) in Zimbabwe, focusing specifically on Prime Galaxy Investment as a case study. The chapter begins by providing the background to the study, establishing the critical role that SMEs play in Zimbabwe's economy and the challenges they face in adopting ICT. It then presents the statement of the problem, highlighting the gap between the potential benefits of ICT adoption and the realities experienced by SMEs operating in a resource-constrained environment.

Following this, the chapter outlines the research objectives and research questions, which are designed to guide the study towards developing a practical model for ICT adoption tailored to the Zimbabwean context. The significance of the study is discussed, emphasizing the contribution of the research to SME development, policy formulation, and academic knowledge. The scope of the study is also defined, clarifying the boundaries within which the research is conducted. Finally, the chapter concludes by presenting the structure of the entire dissertation, offering the reader a clear overview of how the research is organized and what to expect in the subsequent chapters.

1.1 Introduction and Background of the Study

Small and Medium Enterprises (SMEs) are defined by specific thresholds related to their income, assets, and workforce. In Zimbabwe, the Zimbabwe Revenue Authority (ZIMRA) classifies SMEs as businesses employing between 5 and 40 individuals, with annual

revenues and asset values ranging from $50,000 to $2 million. Regardless of size, all businesses require profitability and sustainable growth to remain viable. In this regard, Information and Communication Technology (ICT) plays a pivotal role in supporting business continuity. According to the Research Council of Zimbabwe (2019), the SME sector employs more than 60% of the national workforce, contributes around 50% to the GDP, and accounts for 70% of all enterprises in the country. Thus, ensuring the sustainability of SMEs is critical to Zimbabwe's economic development.

The rapid advancement of ICT has drastically reshaped the global business environment. ICT encompasses various tools such as the internet, mobile technologies, and software systems that improve communication, facilitate information exchange, and enhance operational efficiency (Heeks, 2002). For SMEs, which represent a significant portion of many national economies, embracing ICT is vital not only for boosting productivity but also for survival and gaining a competitive edge in today's digital economy (Hollis, 2020). In Zimbabwe, SMEs are essential drivers of economic growth, contributing heavily to both employment and GDP. Data from the Zimbabwe National Statistics Agency (ZIMSTAT, 2020) show that SMEs provide over 70% of jobs and contribute approximately half of the country's GDP. However, these enterprises encounter numerous challenges such as limited funding opportunities, inadequate infrastructure, and a shortage of ICT-related skills (Mataruka, 2022). Therefore, investigating ICT adoption in this context is crucial for fostering business sustainability and resilience.

While SME definitions in Zimbabwe often hinge on factors like employee numbers and revenue, these benchmarks can vary across contexts. Zimbabwean SMEs operate in a difficult economic climate marked by hyperinflation, currency instability, and low foreign investment (Zvimba & Chikozho, 2020). These economic hardships, along with regulatory burdens and restricted access to technology, hamper SME growth. Integrating ICT presents a potential remedy to many of these challenges by enabling businesses to streamline operations and expand market access (Nyamadzawo, 2019).

Due to these persistent economic challenges, adopting innovative solutions such as ICT has become essential for SME competitiveness and efficiency. Studies have shown that SMEs

utilizing ICT tools often experience improved service delivery and productivity, which enhances their market position (Chiripanhura & Nyangairi, 2018). ICT adoption provides several benefits: it improves operational workflows through automation and communication, reduces costs, and boosts output (Terry et al., 2020; OECD, 2019). It also opens access to wider markets through digital platforms and social media—particularly important in Zimbabwe where traditional markets are constrained (Mataruka, 2022). Moreover, ICT fosters innovation, allowing SMEs to adapt to changing consumer needs (Hollis, 2020). Consequently, a thorough understanding of ICT's role is essential for enhancing SME survival prospects.

1.2 Problem Statement

Over the past decade, the Zimbabwean government has introduced various policies aimed at economic revitalization, including the 2014 Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET), which sought to boost SME growth (Chingwaru, 2014). However, implementation has lagged, especially regarding SME financing mechanisms. Mutseyakwa (2012) highlights that many SMEs have not adopted appropriate ICT systems aligned with their operations.

Despite the clear advantages of ICT adoption, many Zimbabwean SMEs have not effectively integrated these technologies into their business practices. The central research problem is identifying the factors that inhibit ICT adoption. Common obstacles include poor infrastructure, financial constraints, limited skilled personnel, and a lack of awareness about ICT benefits (Zvimba & Chikozho, 2020). Addressing these issues is key to bolstering SME resilience, especially amid ongoing economic adversity (Chiripanhura & Nyangairi, 2018). Mutsongoni and Mutambara (2021) emphasize that the success and transformation of SMEs into large enterprises are vital indicators of economic health in Zimbabwe, as SMEs also support the livelihoods of many families.

Barriers such as unreliable electricity supply, limited internet access, and poor transport infrastructure severely hamper the capacity of SMEs to adopt and maintain ICT systems (Chikozho, 2020). Frequent blackouts and connectivity issues disrupt business continuity and obstruct digital transformation. Furthermore, SMEs often operate under constrained

budgets and lack access to affordable financing options, making ICT investment difficult (Gonzalez et al., 2021).

Another significant challenge is the shortage of ICT competencies within the SME workforce. Many businesses struggle to hire or train personnel with the necessary technological skills (Nyamadzawo, 2019), limiting effective ICT use. Additionally, bureaucratic hurdles and complex regulatory environments slow down technology adoption, as compliance requirements drain time and resources (Zvimba & Chikozho, 2020). There is also an observable reluctance to change among some SME owners and managers, who may prefer traditional methods and remain sceptical about the potential of ICT solutions (Mataruka, 2022). This resistance further contributes to the sector's slow technological progress.

1.3 Justification of the Study

The importance of ICT in enhancing the resilience and growth of SMEs in Zimbabwe cannot be overstated. This research aims to investigate the factors influencing ICT adoption among SMEs and to propose a model tailored to their specific challenges. Several key points justify this study.

SMEs are a cornerstone of Zimbabwe's economy, accounting for over 70% of employment and about 50% of GDP (Zimbabwe National Statistics Agency, 2020). Given their economic significance, strengthening their capabilities through ICT adoption is critical to fostering national economic growth and stability. This study directly addresses this need by exploring how ICT can be strategically utilized to support SME development. Despite the known advantages, widespread ICT adoption among SMEs in Zimbabwe remains limited. The study aims to thoroughly identify and analyse the barriers SMEs face, such as infrastructure gaps, financial difficulties, and skill shortages (Munyuki, 2021). The insights gained will help inform practical interventions and policy recommendations that can facilitate successful ICT integration.

In an increasingly globalized market, adopting innovative digital technologies is essential for competitiveness. Research shows that ICT enhances performance by increasing

efficiency, market reach, and adaptability (Mavhiki et al., 2013). By proposing a context-specific ICT adoption model, this study aims to equip Zimbabwean SMEs with tools to compete more effectively at both local and international levels. The findings will also have significant implications for national policy. A clearer understanding of ICT dynamics within SMEs will aid in the formulation of supportive policies, such as those improving access to infrastructure and training (Chigunha & Chikozho, 2020). Evidence from this study can be used to create more conducive environments for SME digitalization.

While ICT adoption is widely researched globally, there is a scarcity of literature focused on Zimbabwe. This study will fill that gap by offering a detailed examination of ICT usage within the country's unique economic and social context (Kabanda & Brown, 2017). Lastly, the study seeks to provide actionable recommendations for SME leaders. By outlining practical strategies and best practices, it will help businesses optimize technology use for greater efficiency and sustainability. The aim is to ensure that the research has real-world impact, beyond academic value.

In summary, the study is warranted by the crucial role SMEs play in Zimbabwe's economy, the numerous barriers they face in ICT adoption, and the urgent need for innovative strategies. It intends to generate valuable insights for academics, policymakers, and business owners, ultimately supporting the long-term sustainability and growth of the SME sector.

1.4 Aim of study

The primary aim of the study is to explore and develop a comprehensive understanding of the factors that influence the adoption of ICT among small and medium enterprises in Zimbabwe using a case study of three SMEs that is Prime galaxy investments, Adel's cleaning services and Max Plumbing solutions and create a model for effective ICT adoption that is specifically designed to address the unique challenges and opportunities faced by SMEs in Zimbabwe.

1.5 Research Objectives

This study aims to achieve several objectives, which are as follows:

1. To explore the key factors that influence ICT adoption among SMEs in Zimbabwe

2. To develop a model for effective ICT adoption tailored to the local context, considering the specific challenges faced by Zimbabwean SMEs.

3. To assess the impact of ICT adoption on the survival and growth of SMEs, providing empirical evidence of its significance in enhancing business resilience.

1.6 Research Questions

To guide the investigation, this study seeks to address the following research questions:

1. What are the key barriers to ICT adoption for SMEs in Zimbabwe?

2. What factors facilitate successful ICT adoption among SMEs, particularly in the context of Zimbabwe?

3. How does ICT adoption affect the survival and competitiveness of SMEs in the Zimbabwean market?

1.7 Significance of the Study

ICT tools and applications are currently revolutionizing the way organisations are doing business and have become the most critical factor linked to gaining a competitive edge (Mutseyakwa, 2012). The importance of ICT in the attaining of SME goals in Zimbabwe cannot be overstated. Presently, there is an absence of a formal outline and guideline that the government, through the Ministry of ICT and SMEs, can use to enhance ICT adoption in Zimbabwean SMEs (Chimhangwa, 2012).

This research contributes substantially to the academic literature on ICT adoption in developing countries, particularly focusing on the Zimbabwean SME context. It offers practical insights for policymakers, SME owners, and stakeholders, highlighting the critical importance of ICT for business resilience. By identifying barriers and facilitators of ICT adoption, the findings may influence policy formulation and implementation to support SME development, promoting broader economic growth in Zimbabwe (Mataruka, 2022)

This study aims to fill a gap in existing research regarding ICT adoption within the context of SMEs in Zimbabwe. While there is a growing body of literature on ICT in both

developed and developing countries, specific research focusing on Zimbabwean SMEs remains limited. By providing empirical data and a comprehensive analysis of the barriers and facilitators to ICT adoption, the study will enhance the academic understanding of technology integration in businesses operating in challenging economic environments. This contribution is particularly valuable for scholars seeking to explore technology's role in business resilience in emerging markets.

The findings of this research will offer practical insights for SME owners and managers regarding effective strategies for ICT adoption. By identifying the key barriers that limit technology integration, the study will enable SMEs to develop targeted approaches for overcoming these challenges. Furthermore, the proposed model for ICT adoption will provide a framework that can be customized to suit the unique needs of SMEs in Zimbabwe, fostering improved operational efficiency, productivity, and competitiveness. Understanding the barriers to ICT adoption and the potential benefits associated with technology integration will have significant implications for policymakers. The study's outcomes can serve as a valuable resource for government agencies and institutions involved in SME development. By highlighting the specific challenges faced by SMEs, this research can inform policy development and implementation strategies that promote enhanced access to technology, training, and financial support. The insights gained will be crucial for designing interventions that align with the needs of SMEs and contribute to the broader economic development goals of Zimbabwe.

In the face of economic challenges, fostering the adoption of ICT among SMEs is essential for enhancing their resilience and sustainability. This study will underscore the critical importance of technology in enabling SMEs to navigate economic fluctuations and market uncertainties. By promoting ICT adoption, the research aims to contribute to building a more robust SME sector, which in turn can support job creation, income generation, and overall economic stability in Zimbabwe. The impact of this research extends beyond the economic realm; it also plays a vital role in societal development. SMEs are key drivers of local economic growth and poverty alleviation, particularly in developing countries. By enabling SMEs to leverage ICT, the study can help enhance their capacity to provide employment opportunities and improve living standards within communities. As SMEs

innovate and become more competitive, they contribute to the development of a more vibrant and inclusive economy, with positive ripple effects on social welfare.

This study will highlight a relevant, comprehensive and validated framework as well as benchmarking tools that the government of Zimbabwe will use to support ICT adoption efforts in SMEs. The framework will also address the ICT adoption challenges that the SMEs face by also including an accountability system and continuous improvement methods. The research will also result in the crafting of guidelines that the government will employ to equip SME owners to leverage on sophisticated ICT tools and features that facilitate staff training and development in order to close the tech-skills gap in most SMEs.

Lastly, the study will provide a foundation for future research in the field of ICT and SME development. By exploring the dynamics of technology adoption in the context of Zimbabwean SMEs, this research can inspire subsequent studies that investigate related themes, such as the role of digital marketing, e-commerce, or the impact of specific ICT tools on business performance. The findings can also serve as a basis for comparative studies across different regions or sectors, adding depth to the understanding of ICT adoption in varied contexts.

Furthermore, the study's outcomes can help SMEs craft strategies for integrating technology into their operations, ultimately leading to enhanced performance and sustainability. The identification of a tailored ICT adoption model is expected to serve as a valuable resource for understanding and navigating the unique challenges faced by SMEs in the region (Chiripanhura & Nyangairi, 2018)

1.8 Limitations of the study

While this study aims to develop a practical model for the adoption of Information and Communication Technologies (ICT) to support SME survival in Zimbabwe, several limitations must be acknowledged.

Firstly, the study focuses on a single case study, Prime Galaxy Investment, which may limit the generalizability of the findings across the broader SME sector (Yin, 2018). Although valuable insights can be drawn from the case, the specific circumstances, sectoral dynamics, and management practices of Prime Galaxy Investment may not fully represent the diverse

experiences of SMEs operating in different industries or regions (Stake, 1995). Secondly, the research is conducted within the Zimbabwean context, characterized by unique economic challenges such as hyperinflation, currency instability, and infrastructural constraints (Munyanyi, 2017; Zindiye et al., 2012). These contextual factors may influence the ICT adoption process in ways that differ significantly from SMEs operating in other developing economies.

Thirdly, the study primarily employs qualitative methods, including interviews and document analysis, which may be subject to respondent bias or incomplete disclosure (Creswell & Poth, 2018). Participants may overstate or understate the extent of ICT adoption due to social desirability bias or concerns over confidentiality. Finally, this study focuses on ICT adoption specifically from a business survival perspective and does not extensively address related dimensions such as cybersecurity challenges, long-term scalability, or the broader regulatory environment influencing SME digital transformation (Mutula & Van Brakel, 2006).

Despite these limitations, the study contributes valuable knowledge on the critical factors influencing ICT adoption among SMEs and offers a conceptual framework that can be adapted and expanded through further empirical research.

1.9 Delimitations of the study

Delimitations are boundaries set by the researcher to narrow the focus of the study and make it more manageable (Creswell & Creswell, 2018). The study was limited to specific location that is Bulawayo, Zimbabwe, focusing on Prime galaxy investments. Other regions were excluded due to time and resource constraints (Yin, 2018). Only specific institutions were studied. Other financial institutions or government organizations were not included to maintain a consistent contextual framework (Maxwell, 2013). The research concentrated specifically on [theme, e.g., emotional labour and service delivery/IPSAS implementation and financial reporting], and did not explore other related areas like organizational culture in depth, in line with the need for a focused inquiry (Marshall & Rossman, 2016).

Data collection was restricted to [specific groups, e.g., boundary spanners/frontline employees/finance officers]. Other groups, such as customers or external auditors, were not

included in the sample. The study covered developments between [year] and [year]. Events outside this period were not considered, consistent with best practices in temporal delimitation of social research (Bryman, 2016). A mixed method] approach was adopted, with tools such as [e.g., semi-structured interviews or surveys. Other research strategies were excluded to ensure methodological coherence (Creswell & Creswell, 2018).

1.10 Structure of the Dissertation

Chapter 1 discusses the background of this study and highlights the research motivation and significance. It introduces the problem statement and research objectives of investigating ICT adoption and use in Zimbabwean SMEs. Chapter 2 reviews existing literature on ICT adoption, focusing on theoretical frameworks, challenges, and benefits related to SMEs in both global and local contexts. Chapter 3 outlines the research design, data collection methods, and the rationale for selecting specific case studies in Zimbabwean SMEs. It critically evaluates the research method that is used and discusses the sampling procedure and instruments used for data collection. Research assumptions, the research design and its suitability are also discussed here. A critical analysis of ICT usage and adoption data is discussed, including ethical factors associated with the methodology. Chapter 4 presents a detailed analysis of a Zimbabwean SME that successfully adopted ICT that is Prime Galaxy Investments, exploring the factors that contributed to its success. Outlines the research findings and how they relate to the literature. This chapter includes a themed thematic analysis that gives a comprehensive picture of ICT adoption in Zimbabwean SMEs. The chapter also contains in-depth background information on the sampled SMEs. Chapter 5 analyses the findings from the case studies and discusses their implications in relation to existing literature and the research objectives and summarizes the key findings, provides actionable recommendations for SMEs and policymakers, and outlines potential areas for future research. n Chapter Five, an overall summary of the research findings is introduced. The chapter reveals how research questions would have been answered and gives recommendations on ICT adoption and utilisation in Zimbabwean SMEs. This chapter also features a tentatively proposed implementation framework that stimulates ICT use and adoption.

1.11 Chapter summary

This chapter has provided an overview of the significance of ICT adoption for SMEs in Zimbabwe, emphasizing the challenges they face and the urgent need for tailored approaches to enhance business survival in a complex economic landscape. As the following chapters will reveal, understanding the dynamics of ICT adoption within the context of Zimbabwean SMEs is pivotal to fostering sustainable economic development and resilience among these enterprises. The first chapter covers an introduction to the research and has highlighted the objectives of the research topic. It has presented the research questions that will be answered during the course of the research. The literature reviewed as part of the background of the research revealed there is a paramount need for research on ICT adoption and its impact on Zimbabwean SMEs. The significance of the research was highlighted and pointed out the critical nature of the research's relevance to all stakeholders within the Zimbabwean SME sector. Finally, the overview of the research's structure was presented, giving a brief description of what is contained in each chapter. It is anticipated that the findings of this study will contribute towards the adoption and enhanced utilisation of ICT by Zimbabwean SMEs

CHAPTER TWO

LITERATURE REVIEW

2.0 Chapter Introduction

The performance of SMEs worldwide has led to a growing interest and recognition of this sector by many researchers who have gone on to widely investigate this area and these include Apulu (2012), Brown (2000), Abor and Quartey (2010), and Staley and Morse (2012). This chapter aims at presenting different trends that are found in literature and seeks to identify theoretical fundamentals for this study as it reveals significant findings from other scholars related to the field that is under consideration. These fundamentals will facilitate the identification of key constructs that will be part of the ICT adoption framework. This chapter presents a review of existing literature related to the adoption of Information and Communication Technologies (ICT) by Small and Medium Enterprises (SMEs), particularly in developing economies such as Zimbabwe. The review aims to explore and synthesize key concepts, definitions, theoretical frameworks, and empirical studies that are relevant to the research. It begins by defining and characterizing SMEs, followed by an analysis of the role of ICT in SME operations and survival. It then explores the barriers and challenges faced by SMEs in adopting ICT, particularly in the Zimbabwean context. The chapter also discusses prominent theoretical models that explain ICT adoption, before concluding with a conceptual framework to guide the research.

2.1 Introduction

Digital transformation involves the reorganization or integration of an organization to align its operations with advancements in digital technologies (Widnyani et al., 2021). According to Putri et al. (2022), organizations must embrace digital transformation by effectively restructuring their systems and processes to manage and integrate various challenges.

However, this transformation presents both challenges and opportunities, particularly for SMEs, which need to proactively prepare for and navigate the evolving digital environment (Listiyoningsih et al., 2022). Enhancing the ICT skills of SME personnel is one practical approach to support this transformation (Wening & Santosa, 2022). Successfully managing digital transformation requires SMEs to adopt emerging technologies and apply critical thinking (Amoah et al., 2023; Wening & Santosa, 2022). The benefits of digital transformation in SMEs can be significantly enhanced by addressing interconnected factors such as improving operational efficiency, fostering customer engagement, encouraging innovation, expanding market reach, and adapting to changing market conditions (Lutfi et al., 2022; Alraja et al., 2021). SMEs can maximize their potential through strategies like cloud computing, digital marketing, e-commerce, data analytics, and strengthening digital competencies (Brodny & Tutak, 2022; Trawnih et al., 2021).

Ritchie and Brindley (2005:203) describe ICT as a set of primarily digital technologies designed to collect, organize, store, process, and communicate information both within and outside an organization, including SMEs. Examples of such technologies include telephones, point-of-sale systems, standalone or networked computers, the Internet, and credit facilities. They further note that ICT is a broad concept encompassing Information Systems (IS), Information Technology (IT), and digitalization. Other scholars, such as Martin and Matlay (2001) and Fulanteli & Allegra (2003), support Ritchie and Brindley's view that ICT influences global information flow, customer behaviour, and options, with SMEs benefiting through reduced transaction costs, improved inventory and quality controls, access to broader markets, and leveraging economies of scale. Moodley (2002) emphasized ICT's contribution to the "global networking" economy, which offers SMEs a wide array of opportunities to enhance competitiveness, access new markets, and obtain specialized information services worldwide. Duncombe and Heeks (2001) define ICT as the electronic methods of capturing, processing, storing, and disseminating information. Ndlovu (2009) describes ICT as an umbrella term encompassing all technologies involved in the manipulation and communication of information.

While there is no universally accepted definition of SMEs, many scholars define them based on the number of employees. Southern and Tilley (2000) categorize SMEs as

businesses with 150 or fewer employees that are not subsidiaries of public limited companies. Taylor and Murphy (2004), along with Martin and Matlay (2001), acknowledge the uniqueness of each SME, emphasizing that definitions should consider the specific context and purpose of ICT adoption. A common theme is that SMEs are often owner-managed, with owners playing a central role in business decisions.

The Bolton Committee (1971) offered an economic and statistical definition, describing small firms as those with a relatively small market share, managed personally by owners or part-owners rather than through formal management structures, and independent from large enterprises. The European Commission (2003) defines SMEs based on both employee numbers and independence criteria.

In Zimbabwe, Mukras (2003:60) highlights that the government uses employment numbers to classify enterprises. For instance, SEDCO defines SMEs as businesses employing up to 75 people (SEDCO, 2003). The Confederation of Zimbabwe Industries (CZI) defines small businesses as those with 1 to 20 employees and annual turnover under US$4 million, while medium enterprises employ 21 to 35 people with turnover between US$4 million and US$4.5 million (CZI Newsletter, 2010). This study adopts Mukras' (2003) employment-based classification, considering enterprises with fewer than five employees as microenterprises, five to twenty as small, and between twenty-one and seventy-five as medium enterprises. All businesses in Harare's Central Business District (CBD) in this research are classified as SMEs, using employee count as the defining measure.

2.2 Characteristics of SMEs

SMEs are recognized as crucial drivers of economic growth, job creation, poverty alleviation, and innovation, especially in developing countries. Zindiye, Chiliya, and Masocha (2012) note that SMEs in Zimbabwe contribute significantly to employment and GDP, particularly in the informal sector. Despite their importance, SMEs often face challenges such as financial instability, inconsistent regulations, and inadequate infrastructure. Definitions of SMEs vary by country, sector, and context. The OECD (2005) generally classifies SMEs based on employee numbers, turnover, and asset value. In Zimbabwe, the Ministry of Small and Medium Enterprises defines SMEs as enterprises with fewer than 100 employees and annual turnover under US$1 million (SMEAZ, 2020).

These enterprises typically experience limited access to finance, informal operations, and a strong reliance on owner-manager decisions.

Aruwa and Gugong (2007) point out that the definition of SMEs is dynamic and varies due to diverse criteria. Rahman (2001) suggests sales volume, structure, age, location, and size as key defining factors. Kim and Gallent (2000) argue that the expected economic role of SMEs influences their definitions. Although no universal definition exists, turnover and employee numbers remain the most common criteria (Mutula & van Brakel, 2007). Hill (2001) defines SMEs economically as entities with informal management, small market share, independence from large firms, and usually owner-operated. In Europe, SMEs are categorized into micro (up to 10 employees, turnover £2m), small (up to 50 employees, turnover £10m), and medium (up to 250 employees, turnover £43m-£50m) (Arokiasamy & Ismail, 2009). In Asia, SMEs are defined by employee thresholds: up to 100 in China and 200 in Thailand and Singapore, with considerations for assets and sales volume (Djatikusumo, Talukder & Quazi, 2012).

2.3 The Nature of SMEs

The term "nature" refers to the essential characteristics of SMEs (Djatikusumo et al., 2012). Due to varying national economies, a universal SME definition is difficult, but certain traits are common, especially in developing countries where capital is scarce and labour abundant (Cronje, Du Toit & Motlatla, 2010):

- SMEs tend to be more labour-intensive than larger firms.
- They generate more direct and indirect employment per unit of capital invested.
- In services, capital invested per job is even lower.
- SMEs utilize the talents and entrepreneurship of individuals unable to reach full potential in large firms.
- Smaller firms often succeed by serving niche or localized markets unattractive to larger companies.
- They foster entrepreneurship and new ventures.

- SMEs contribute to economic competitiveness.
- They support social stability and typically cause less environmental harm than large manufacturers.
- They encourage personal savings, rural success, and broader economic participation.

SMEs provide opportunities for personal initiative, innovation, and improved products and services. Through competition, SMEs enhance free markets by limiting monopolies and promoting quality and choice (Longenecker, Moore & Petty, 2012).

SMEs also complement large firms by offering specialized products or services that large companies may not provide, often targeting specific niches or geographic areas to avoid direct competition (Longenecker et al., 2012). For many entrepreneurs, SMEs represent entry points into business. In some cases, SMEs supply critical goods and services in sparsely populated or marginalized regions (Longenecker et al., 2012).

In Zimbabwe, the Ministry of Small and Medium Enterprises classifies small enterprises as those with up to 20 employees, and medium enterprises as those with 21 to 100 employees (Tsarwe, 2014).

2.3.2 SMEs' impact on World Economy

Abor and Quartey (2010) emphasize that small and medium-sized enterprises (SMEs) are responsible for generating over 70% of new employment opportunities in many global economies and play a crucial role in boosting GDP. Kuratko (2005) notes that the growth of entrepreneurship today is largely driven by SMEs, which offer adaptability to changing market conditions. In developed nations, SMEs have become a vital and influential driver of economic growth and job creation (Quaddus & Hofmeyer, 2007). Furthermore, the global expansion of the SME sector has outpaced the industrial sector overall, mainly because SMEs require less capital investment and have high employment potential.

Kongolo (2010) highlights that SMEs contribute to economic efficiency by utilizing idle resources such as raw materials, capital, and labour, thereby improving industrial system efficiency. Quaddus and Hofmeyer (2007) add that SMEs facilitate the discovery and development of entrepreneurs and future industry leaders. According to Kongolo (2010),

SMEs also play a significant role in manpower and wealth development through capital accumulation. Efforts toward national self-sufficiency often benefit from SME growth, which frequently achieves notable prominence in many economies worldwide (Kuratko, 2005). SMEs further contribute significantly to social and economic development in emerging countries by generating income and advancing societal welfare, which supports poverty alleviation (Abor & Quartey, 2010). Olutunla and Obamuyi (2008) also observe that SMEs account for approximately 98% of industrial enterprises in most industrialized nations.

Kongolo (2010) argues that SMEs are key drivers of innovation and important contributors to expanding the tax base in any economy. He points out that SMEs act as primary channels for entrepreneurs to improve the socio-economic environment through new ideas, innovation, and skill development. Normah (2007) concurs that SMEs hold significant potential for promoting socio-economic prosperity globally, although this potential remains underexploited due to cultural, institutional, and governance challenges. In Asia, SMEs are recognized as foundational to thriving industrial sectors, drawing attention from both academics and policymakers regarding their role in industrial development (Radaev, 2001). For instance, in Russia and Poland, SMEs have effectively filled market gaps abandoned by large enterprises, influencing rural development and decentralization strategies (Radaev, 2001). Malaysia's SME sector has seen substantial growth recently, contributing over 32% to GDP and employing 57% of the workforce (Omar, Arokiasamy & Ismail, 2009). Surveys indicate that more than 76% of Malaysian SMEs experienced a 10% increase in revenue in recent years (Levy & Powel, 2015).

In India, SMEs contribute about 35% of manufacturing output and over 33% of exports (Levy & Powel, 2015). Thailand and Vietnam recorded a surge in SME numbers in 2012, generating over one million new jobs (Zindiye & Roberts-Lombard, 2012). Indonesian data from 2003 showed nearly 43 million SMEs contributing 56.7% to GDP (Radaev, 2004). In China, just over 10 million SMEs comprise almost 99% of all enterprises, accounting for 60% of industrial production and 70% of GDP (Levy & Powel, 2015).

European SMEs number around 23 million, representing 93% of all EU businesses and employing more than 100 million people (Zindiye & Roberts-Lombard, 2012). This has

encouraged cross-border knowledge sharing and subcontracting relationships with large firms amid rising economic globalization in Europe (Zindiye & Roberts-Lombard, 2012). In the Netherlands, SMEs account for 98% of the private sector and contribute 32% to GDP (Indarti & Langenberg, 2008). Italy's SMEs employ over 2.2 million people and contribute more than US$35 million in exports (Levy & Powel, 2015).

Across Africa, SMEs are key drivers of economic growth, prompting many governments to develop policies supporting their role (Ayanda & Laraba, 2011). They assist in optimizing resource use and addressing rural-urban migration (Ahiawodzi & Adade, 2012). SMEs improve inventory and resource management for large enterprises, foster innovation, and strengthen economic development frameworks in African economies (Oh, Cruickshank & Anderson, 2009). However, SMEs in Africa still confront numerous political, social, economic, and technological challenges that limit their full growth potential (Zindiye & Roberts-Lombard, 2012).

2.4 ICT in SMEs

Sheehy (2008) notes that adopting Information and Communication Technologies (ICT) presents considerable challenges for SMEs. Similarly, Hockerts et al. (2008) report a common perception among European SMEs that ICT is more burdensome than beneficial. Modimogale and Kroeze (2011) describe ICT as a set of digital tools used for gathering, storing, organizing, processing, and sharing information within and beyond organizations. Sahlfeld (2013) supports this view, defining ICT as the scientific and technological resources involved in information processing and communication. These tools range from telephones and desktop computers to e-commerce platforms, tablets, and software applications (Modimogale & Kroeze, 2011).

Makanyeza and Ndlovu (2016) argue that ICT can be leveraged to collect and analyse data that helps businesses identify market opportunities, improve competitiveness, and expand market share. They also stress that ICT enables firms to build stronger relationships with clients, partners, and suppliers, while supporting marketing efforts to boost campaigns and transactions. The impact of ICT on business performance varies by sector; their study found ICT investments significantly improve productivity more in the services sector than in manufacturing.

Makiwa's (2018) research identified three key ways ICT influences SME operations: improving efficiency through prompt and effective data processing; reducing operational costs, especially through communication tools; and enhancing forecasting, planning, and focus, facilitated by software such as inventory and project management systems.

Many SMEs worry they may struggle to meet the social and environmental standards set by buyers and supply chains without losing competitiveness in domestic and international markets (Maloni & Brown, 2008). They recognize that failing to comply with these requirements could limit access to foreign markets and large international buyers with strict corporate ethics codes.

In recent times, technological advances, particularly those related to the internet, have drastically transformed global information exchange, commerce, investment, and industrial competition (Comb, 1995). Understanding ICT requires considering not only the physical tools (hardware and software) but also the embedded knowledge and skills—termed "knoware"—needed for their effective use (Castells, 1996). This broad perspective moves beyond just the technical tools to highlight human expertise.

Castells (1996) explains that ICT represents a convergence of fields such as microelectronics, computing, telecommunications, and optoelectronics. Thus, ICT should be seen not merely as devices but as evolving systems requiring technical skills and ongoing learning for efficient use. Dutton (1998) notes that the rapid spread of ICT has reshaped how individuals, organizations, and institutions access information, interact, and operate. These technologies influence not only consumption of information but also global knowledge creation, storage, and dissemination.

Moreover, ICT has transformed the delivery and structure of goods and services, affecting what is consumed, how it is accessed, and by whom. This evolution causes some traditional businesses to become obsolete while fostering new industries (Dutton, 1998). The interdependence of ICT components—such as needing both a computer and internet connection for online services—illustrates their layered nature. ICT also reshapes communication and social structures by enabling new interactions and expanding social and professional networks (Castells, 1996).

Another viewpoint suggests that the rise of internet and mobile technologies since the late 20th century has revolutionized communication and driven economic growth. These technologies have accelerated the knowledge economy by digitizing information and enabling its global distribution (Munyanyi, 2017). With globalization intensifying, companies must stay informed about both local and international markets, requiring an ICT-competent workforce capable of adapting to rapid changes (Chavhunduka & Chinyamurindi, 2021).

The knowledge economy's dependence on ICT has elevated the role of "knowledge workers" and expanded ICT-related industries. Information technology is now a key force in transforming the world into a digitally connected "global village." For SMEs, integrating ICT is crucial not only to boost productivity but also to establish effective information systems that support decision-making and communication with stakeholders (Hicks, 1993).

Strong information systems enable SMEs to collect, analyse, and share data critical for operations, strategic planning, and performance evaluation. In fast-changing and competitive environments, timely and accurate information is fundamental for sound management. Hicks (1993) stresses that decision-making at all levels depends heavily on information quality and availability. Consequently, SMEs' ability to meet their goals is closely linked to their capability to acquire, interpret, and use relevant information aligned with their organizational objectives

2.5 Impact of ICT in SMEs

Some scholars assert that companies adopting ICT practices are often perceived as considerate and equitable toward employee welfare. This perception fosters a favourable psychological impression among job seekers interested in such organizations (Djelic and Etchanchu, 2015). Bashir et al. (2012) revealed that when employees observe their organizations actively involved in ICT initiatives, they tend to develop favourable perceptions of the company. This positive outlook strengthens their loyalty and commitment toward the organization's goals. Furthermore, employees in ICT-focused firms often emulate the positive values exhibited by their companies, cultivating deep admiration and respect for the leadership (Zafar and Farooq, 2014). Companies that support community initiatives and openly publicize their ICT engagements tend to enhance their

goodwill. Numerous studies linking ICT activities to customer satisfaction suggest that an organization's active role in social development improves its public image (Nareeman and Hassan, 2013).

The rapid evolution of Information and Communication Technologies (ICTs), especially internet-based developments, has profoundly reshaped how information is shared globally, transformed business transactions, and redefined competitive advantages across various industries (Yousefi, 2011). ICT comprises a wide array of elements, including software, hardware, and the expertise necessary to effectively use them. This comprehensive view emphasizes that possessing the tools alone is insufficient—knowledge and skills in applying these technologies are equally critical. Castells (1996) highlighted that ICTs represent a fusion of innovations from fields such as microelectronics, informatics, telecommunications, and optoelectronics, illustrating their diverse and integrated nature.

Within developing nations like Zimbabwe, the adoption of ICT by Small and Medium Enterprises (SMEs) has been crucial for boosting efficiency, expanding market reach, and enhancing competitiveness. Research by Makiwa and Steyn (2020) pointed out that although ICT uptake among Zimbabwean SMEs is relatively low, its application has led to improved operational procedures and decision-making. Nonetheless, barriers such as poor infrastructure, inadequate financial resources, and minimal government support continue to restrict widespread adoption.

Additionally, the deployment of ICT solutions has been positively associated with greater productivity and economic growth. Gupta and Kumar (2018) demonstrated that in India, ICT integration in informal manufacturing businesses substantially boosted labour efficiency. Similarly, Adeleke and Adeleke (2023) found that using websites and email communication contributed positively to the productivity levels of Micro, Small, and Medium Enterprises (MSMEs) in Africa’s emerging economies.

However, despite the numerous advantages, ICT integration within SMEs is still hampered by challenges like low digital literacy, financial limitations, and a lack of awareness of the potential benefits. In Uganda, Kyakulumbye and Pather (2021) emphasized that SMEs’ initial attitudes and beliefs greatly influence their willingness to embrace ICT, with

technophobia and scepticism emerging as significant deterrents. Tackling these issues calls for specific interventions such as training initiatives, financial support schemes, and policies designed to nurture a favourable ICT environment.

According to Porter's model of competitive forces, an enterprise's ability to succeed or fail depends on how well it reacts to its external environment (Laudon and Laudon, 2009). Numerous studies suggest that SMEs utilizing ICT can effectively adapt to external challenges (Katz and Green, 2010). ICT enables SMEs to gain a competitive edge in four major areas, as explained by D'Atri and Sacca (2009) and Dhillon (2009): maintaining cost leadership, pursuing product differentiation, targeting niche markets, and enhancing relationships with customers and suppliers.

Through ICT, SMEs can minimize operational costs, leading to more competitively priced products and services—creating difficulties for competitors and new entrants trying to match prices. These cost savings can then be redirected toward other pressing areas within the business, facilitating both local and international expansion. Additionally, ICT provides SMEs with the capacity to develop unique products or services that are difficult for rivals to replicate. By targeting specific customer segments instead of broad markets, SMEs can leverage ICT to gather detailed consumer data, thereby tailoring offerings to meet distinct needs. Supply chain management (SCM) systems enhance supplier relationships, while customer relationship management (CRM) tools strengthen client engagement.

Hence, SMEs can utilize these systems to foster robust supplier and customer ties. Katz and Green (2010) argue that such systems offer SMEs immense strategic advantages. Furthermore, Datta (2007) highlights that SMEs' agility and smaller scale work to their advantage. Due to their relatively simple organizational structures, they can swiftly adapt to new ICT solutions without significant structural overhauls. As emphasized by Galliers (2003), organizations typically go through multiple phases in ICT adoption, indicating a progressive journey toward full digital integration.

In summary, while ICT offers substantial potential for SMEs in developing regions to enhance competitiveness and efficiency, these benefits can only be fully realized if structural barriers are addressed. Investment in infrastructure, promotion of digital skills,

and creation of enabling policy environments are vital to facilitate a successful digital transformation of SMEs and broader economic development.

2.6 ICTs Utilized by SMEs

Emerging technologies—particularly the internet—are fundamentally altering the flow of information, trade dynamics, investment patterns, and competition across both local and international markets (Comb, 1995; Chikumbirike, 2013). ICT must be understood not only in terms of tools and applications but also in relation to the knowledge and skills (knoware) required for effective usage. Castells (1996) and Chikumbirike (2013) describe ICT as a merger of microelectronics, computing, telecommunications, and optoelectronics, representing not just tools but an ongoing development process grounded in user capability.

Dutton (1998) observed that ICT is reshaping how information and services are accessed, transforming industries and creating economic opportunities while displacing outdated business models. Because ICT components are interdependent, having access to one often necessitates access to others, and these technologies significantly improve communication and social connectivity. Some scholars maintain that mobile and internet technologies revolutionized communication and spurred economic growth around the dawn of the 21st century (Chikumbirike, 2013). These tools are pivotal to the knowledge economy, elevating the significance of ICT literacy and the value placed on skilled knowledge workers, which in turn drives growth in the ICT sector.

ICT is central to the global integration of economies. SMEs require robust information systems to manage stakeholder interactions and support strategic decision-making (Hicks, 1993; Chikumbirike, 2013). Information is an essential resource for effective management, and a business's ability to achieve its objectives hinges on how well it processes and uses relevant data. ICT usage among SMEs includes simple tools like mobile phones and computers as well as more advanced systems like enterprise resource planning (ERP), point of sale (POS) systems, customer relationship management (CRM), and cloud-based solutions (Mungai & Bichanga, 2019). In Zimbabwe, mobile technologies—such as EcoCash—have enabled real-time communication and financial transactions, even in underserved regions (Chikumbirike, 2020), thereby facilitating digital inclusion and supporting formalization of informal enterprises.

Other scholars argue that by the late 20th and early 21st centuries, internet and mobile technologies did more than just transform communication—they significantly accelerated economic advancement. Computers and the internet fuelled the rise of the knowledge economy by making it easy to digitize and transmit knowledge globally. ICT has increased the pace of globalization and added complexity to business operations, requiring businesses to be aware not only of local conditions but also of global developments (Chikumbirike, 2013). Competing in the knowledge economy demands a strong base of ICT-proficient individuals capable of innovation and rapid adaptation.

Information technology is instrumental in shaping a globally interconnected economy. SMEs are expected to develop effective information systems that can deliver timely and relevant data to various stakeholders, aiding managerial decision-making and supporting daily business operations. Information plays a critical role in strategic planning, organizing, staffing, administration, and controlling business functions to achieve organizational goals (Hicks, 1993:648; Chikumbirike, 2013). The extent to which SMEs can realize their goals depends largely on how efficiently they acquire, analyse, evaluate, and utilize information to drive internal processes.

ICT enhances SME productivity, competitiveness, and operational efficiency, especially in resource-constrained environments like Zimbabwe. SMEs employ a range of ICT tools, from basic mobile phones and desktop computers to more sophisticated systems like ERP, POS, CRM, and cloud platforms (Mungai & Bichanga, 2019). Among these, mobile technology stands out as the most widely utilized. Services such as EcoCash allow small businesses to perform transactions, communicate with clients, and manage finances in real-time—even in remote areas lacking access to formal banking infrastructure (Chikumbirike, 2020). Moreover, applications like WhatsApp Business are becoming essential for marketing, customer interaction, and order management, offering cost-effective digital solutions (Maphosa & Mataruse, 2022).

Computers and internet connectivity are equally vital. SMEs use them to store and manage data, design marketing content, conduct research, and maintain digital business records. Internet access facilitates email communication, online marketing, and e-commerce operations. Chisango and Muzamhindo (2021) found that many Zimbabwean SMEs in

urban areas now use social media platforms such as Facebook Marketplace and Instagram to broaden their customer base and remain competitive.

Cloud computing is an increasingly important ICT innovation for SMEs, offering cost-effective and scalable solutions. Cloud-based services like accounting software and inventory management systems provide real-time data access, which enhances agility and decision-making capabilities. Kiveu et al. (2019) argue that cloud platforms help SMEs grow without substantial capital outlay. Formalized SMEs are also adopting more complex technologies like POS and ERP systems to monitor sales, track inventory, and generate analytical reports, leading to more informed business strategies and improved financial transparency. While adoption in Zimbabwe is still constrained by infrastructure and financial challenges, those SMEs that implement these tools report better performance and customer service (Nyoni & Bonga, 2017).

Despite the benefits, several obstacles limit ICT uptake. High costs, unreliable internet, power outages, low digital skills, and lack of training are significant barriers. Many SME operators do not fully understand how to leverage ICT for strategic planning or customer engagement. Therefore, enhanced support from government and private sectors—in the form of training, incentives, and policy reform—is essential to drive adoption and unlock the transformative potential of ICT in SMEs (Mutasa & Gambera, 2020).

2.7 Advantages and disadvantages of ICT in SMEs

The incorporation of Information and Communication Technology (ICT) into Small and Medium Enterprises (SMEs) is increasingly acknowledged as a vital factor for business expansion, resilience, and long-term sustainability, especially within developing countries like Zimbabwe. ICT covers a wide range of tools, systems, and infrastructures—such as mobile technology, internet services, cloud-based computing, enterprise software, and e-commerce systems—which help SMEs to optimize operations, enhance communication, and penetrate broader markets. In a setting marked by economic instability, inflation, and infrastructural limitations, ICT presents a strategic means for SMEs to boost efficiency and maintain competitiveness. In Zimbabwe's context, adopting ICT transcends being merely

a growth tactic and becomes essential for business survival (Chavhunduka & Chinyamurindi, 2021; Masocha, 2018).

A core advantage of ICT in SMEs is the improvement of operational effectiveness. ICT solutions enable automation of tasks like accounting, stock control, salary management, and internal communication, which cuts down the time and costs involved in manual handling. This leads to more precise documentation and more informed business decisions. Apulu and Latham (2011) note that SMEs utilizing ICT generally perform better in terms of productivity and profitability than those that do not. In the resource-constrained and economically unstable Zimbabwean environment, effective ICT use often determines whether a business remains viable or fails (Zhou, 2013).

Additionally, ICT plays a vital role in enhancing customer relations and service provision. Platforms like WhatsApp Business, email campaigns, and Customer Relationship Management (CRM) software help SMEs stay connected with clients, thus boosting satisfaction, loyalty, and customer retention. For instance, Prime Galaxy Investment utilizes WhatsApp and social media for marketing, customer interaction, and order processing, which minimizes the necessity for in-person contact and lowers business running costs. This shift to digital operations proved critical during the COVID-19 lockdowns and ongoing currency instability, which disrupted traditional business models (Munyanyi, 2017).

Moreover, ICT enables businesses to broaden their market access. Through online marketing, digital storefronts, and e-commerce tools, SMEs can reach both local and international customers beyond their immediate geographic boundaries. This diversification is particularly important in fragile economies where domestic demand is often erratic. According to Chirisa, Mutsindikwa, and Mandizvidza (2021), Zimbabwean SMEs that utilize digital platforms have better prospects of scaling their operations and engaging diaspora-linked markets, which are playing an increasingly vital role in the national economy.

Despite its vast potential, ICT use among Zimbabwean SMEs remains limited due to several key obstacles. The high cost of ICT infrastructure—including software, internet

data, and equipment—poses a significant barrier. Moreover, many SME operators and employees lack adequate digital literacy, preventing effective utilization of technology. Chigora and Guzura (2020) assert that most SMEs in Zimbabwe operate informally and may not immediately recognize the value of investing in digital technologies. Additionally, erratic electricity supply and poor internet connectivity, especially in peri-urban and rural regions, further limit the implementation of digital tools. These infrastructural shortcomings significantly reduce the benefits that ICT could offer and hinder widespread uptake.

Another major hindrance is the limited availability of financial resources. Zimbabwean SMEs frequently lack access to collateral and banking relationships required to obtain funding for technological upgrades. According to the Reserve Bank of Zimbabwe (2020), only a small fraction of SMEs has access to formal credit lines, and an even smaller number can benefit from fintech solutions that could support ICT development. This financial exclusion restricts their ability to acquire even the basic technological tools necessary for modern business functionality.

To address these challenges, the Zimbabwean government and development stakeholders have introduced initiatives to foster ICT integration among SMEs. Frameworks such as the National ICT Policy and the Digital Economy Strategy advocate for the digital transformation of the informal sector and support entrepreneurship based on innovation. These measures aim to improve digital infrastructure, technological skills, and affordability of ICT solutions. However, inconsistent implementation has weakened these efforts, and deeper engagement with SMEs is essential for successful policy execution (Government of Zimbabwe, 2021).

Among SMEs, the adoption of ICT has been slowing yet deliberate. Businesses have adopted basic tools such as accounting software, spreadsheets for stock control, and mobile payment systems like EcoCash and ZIPIT for financial operations. These have greatly enhanced business reliability and operational efficiency. Nevertheless, issues like limited broadband access, inconsistent electricity, and lack of advanced data analytics still prevail. Even with these challenges, management acknowledges the necessity of expanding ICT use to increase competitiveness and scale operations going forward.

To sum up, ICT brings both benefits and obstacles to SMEs in Zimbabwe. It has the capacity to improve operational efficiency, broaden market access, and fortify customer engagement. However, deep-rooted challenges including infrastructural deficits, lack of funding, and digital illiteracy continue to impede widespread adoption. For firms like Prime Galaxy Investment, thriving in the digital era requires a well-planned embrace of ICT, reinforced by supportive policies and tailored capacity-building measures. The long-term success and viability of Zimbabwean SMEs are closely tied to how well they can integrate digital technologies in an increasingly interconnected, tech-driven global economy.

2.8 Adoption of ICT by SMEs for Business Survival

In her study, Tsikirai (2021) stresses the importance of human capital development through upskilling programs that equip employees with an understanding of how technology works and the benefits it brings for business growth and survival. Based on her 2021 findings, she argues that the government also has a critical role in ensuring that national ICT infrastructure is upgraded to facilitate ICT adoption by SMEs. Tsikirai (2021) further noted that the COVID-19 pandemic has underscored the necessity of integrating technology into business operations, given the substantial restrictions on physical interactions.

In research conducted by Makiwa (2018), government support emerged as a crucial factor in enabling Zimbabwean SMEs to adopt and use ICT effectively. His 2018 findings indicate that SMEs are generally open to any kind of government assistance when it comes to ICT adoption. Nonetheless, there is a considerable lack of such support. Makiwa (2018) also highlighted barriers to ICT adoption, including financial limitations, lack of ICT knowledge, electricity issues, poor internet infrastructure, insufficient government backing, and corruption.

According to a study by Mazikana and Muziso (2019), to encourage ICT adoption at all business levels, the Zimbabwean government should introduce tax incentives for SMEs that embrace digital technologies. Their findings suggest that such incentives could motivate SMEs to adopt ICT in a legal, ethical, and efficient manner aimed at enhancing organizational performance through robust regulatory frameworks.

2.9 Theoretical Framework

To explore the dynamics of ICT adoption within SMEs, this research employs two well-regarded theoretical models: the Technology-Organization-Environment (TOE) Framework and the Diffusion of Innovation (DOI) Theory.

2.9.1 Technology-Organization-Environment (TOE) Framework

Developed by Tornatzky and Fleischer (1990), the TOE framework offers a comprehensive perspective on technology adoption by evaluating three principal dimensions. The **technological** context pertains to both existing and novel technologies available to a business, including their perceived benefits and complexity. The **organizational** context refers to aspects such as business size, internal structure, financial capacity, and leadership characteristics. The **environmental** context encompasses external influences like market dynamics, regulatory demands, and available support infrastructure. This framework is especially applicable to SME studies as it integrates both internal and external determinants of technology uptake.

Tornatzky and Fleischer (1990), as cited by Idris et al. (2017), designed the TOE framework to identify the factors influencing a firm's decision to implement new technologies. Idris et al. (2017) further elaborate that the model suggests three distinct categories—technological, organizational, and environmental—affect how innovation is adopted within organizations.

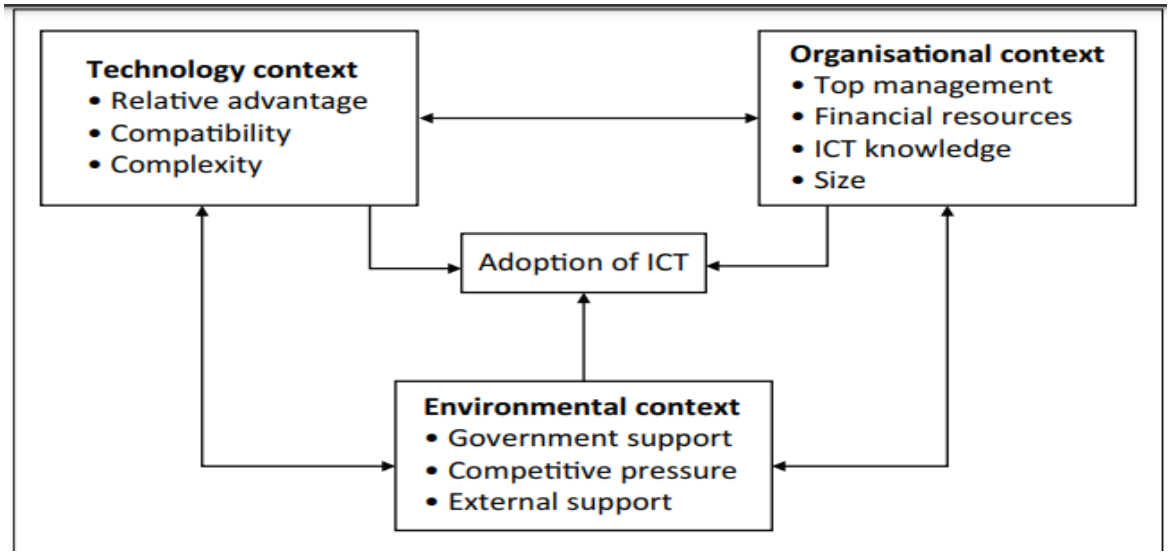


Figure 2.2: Technology Organisation Environment Model (Jere and Ngidi, 2020)

Organizational context, according to Jere and Ngidi (2020), is the definition of the elements that make up an organization, including its size, degree of centralization, formalization, and the complexity inherent in an organization's management structure, its communication pathways, and decision-making mechanisms plays a critical role in shaping technology adoption. Jere and Ngidi (2020) further elaborate that the environmental dimension examines aspects such as the industrial structure, the availability of technological service providers, and the presence of environmental constraints. Environmental factors comprise elements like governmental regulations, market structure, and the technical infrastructure in place. According to Lippert and Govindarajulu (2006), the technological context encompasses both the attributes of the technology itself and its accessibility. Baker (2012) asserts that successful technology adoption within an organization necessitates a robust IT infrastructure, technically proficient personnel, and sufficient user time to support implementation.

Numerous studies investigating the uptake of ICT in SMEs have utilized the Technology-Organization-Environment (TOE) framework. For example, Huy, Rowe, and Truex (2012), as cited by Idris et al. in their research, employed the TOE framework to identify the determinants of IT adoption among SMEs in Vietnam. Their findings highlighted several primary barriers to e-commerce adoption, including a shortage of skilled personnel, inadequate financial and infrastructural resources, communication gaps between SMEs and support entities, limited e-banking facilities, and cultural obstacles related to online purchasing. Huy et al. (2012) commended the TOE framework for providing a structured basis to understand the full spectrum of factors influencing ICT adoption by SMEs.

Awa, Ukoha, and Emecheta (2012) argue that integrating the TOE framework with the Technology Acceptance Model (TAM) would yield a more comprehensive conceptual model for understanding ICT adoption among African SMEs. Gangwar, Date, and Raoot (2014) reaffirmed this proposition following an extensive literature review on both TOE and TAM frameworks.

2.9.2 Diffusion of Innovation (DOI) Theory

Rogers' (2003) Diffusion of Innovation (DOI) theory offers insights into the mechanisms through which innovations are adopted and disseminated within a social system over time. The theory identifies five core attributes that affect the speed of innovation adoption: relative advantage, compatibility, complexity, trialability, and observability. Additionally, the theory delineates the innovation-decision process, which unfolds through stages including knowledge acquisition, persuasion, decision-making, implementation, and confirmation. In the context of SMEs, the DOI theory helps explain how business owners evaluate and decide to adopt new technological solutions.

LaMorte (2019) expounds that Rogers' DOI theory elucidates how a new idea or product gradually gains traction and spreads within a social structure, ultimately leading individuals within that system to adopt new ideas, behaviours, or technologies. According to LaMorte (2019), the process of diffusion involves the transmission of an innovation through a particular social structure over time. The stages of adoption include knowledge (where an individual becomes aware of and understands an innovation), persuasion (where attitudes—either favourable or unfavourable—are formed), decision (activities that lead to accepting or rejecting the innovation), implementation (putting the innovation to use), and confirmation (seeking reinforcement for the decision made).

Idris et al. (2017) reaffirm that the DOI theory posits that the adoption of an innovation is not an instantaneous event but a gradual process. Their study further revealed that the five characteristics—relative advantage, complexity, compatibility, observability, and trialability—significantly influence the adoption rate. LaMorte (2019) further classifies adopters into five categories: innovators, early adopters, early majority, late majority, and laggards. Innovators are the first to embrace new innovations, early adopters are opinion leaders, early majority individuals adopt innovations after observing their utility, late majority members adopt out of necessity and often with scepticism, while laggards are deeply rooted in tradition and resist change.

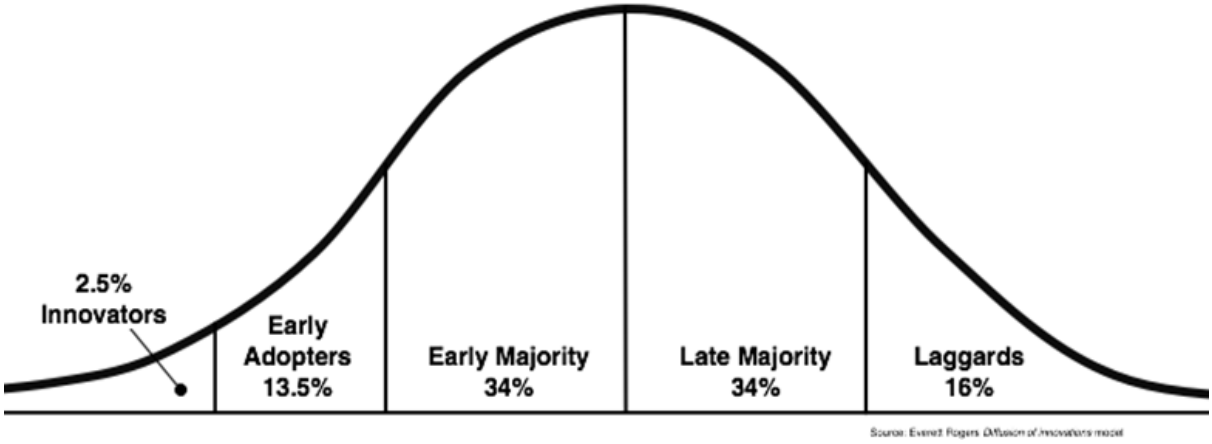


Figure 2.8: Diffusion of Innovation Theory (LaMorte, 2019)

According to Parker and Castleman (2009), even though the model didn't explicitly address e-commerce, In the research on SME e-commerce adoption, the DOI hypothesis is one of the most often cited diffusion hypotheses. It has been used in several studies on SME adoption. Idris et al. (2017) cite the studies of Poorangi, Khui, Nikoonejad, and Kardevani (2013) for example of a way to use the concept to observe and explain the various elements of SMEs` adoption of e-trade in Malaysia. According to the authors, it has been demonstrated that the majority of DOI adoption criteria have an impact on e-trade adoption.

The DOI supports this research by providing further information on the elements that influence technology adoption and efficient communication avenues that would enable ICT adoption by Zimbabwean SMEs. The integration of elements mentioned in the TAM and TOE models with those mentioned in the DOI theory would help create a framework that is consistent with the utilisation of technology by small businesses in Zimbabwe.

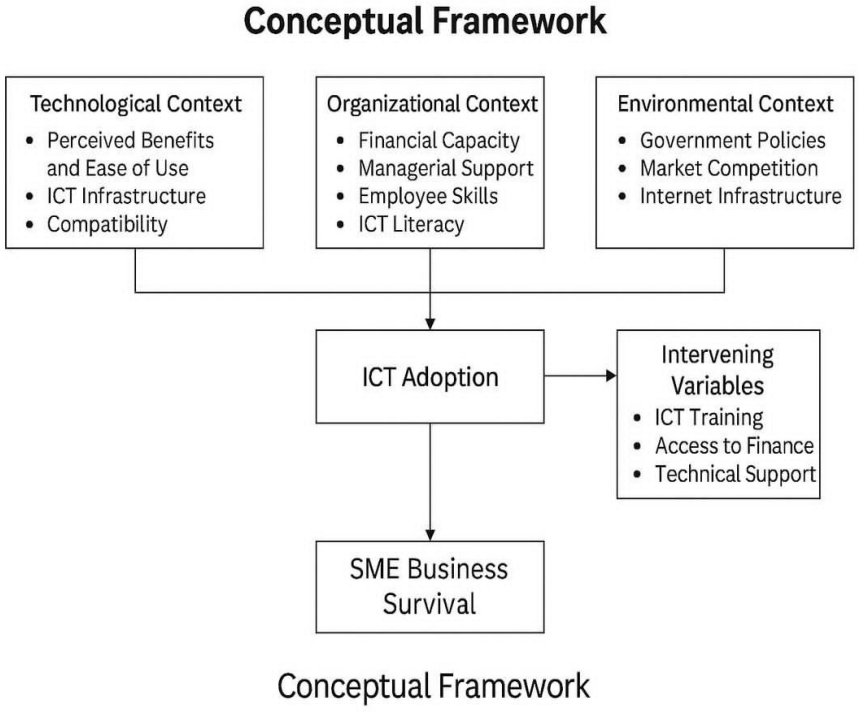
Together, the TOE and DOI frameworks provide a comprehensive theoretical basis for analysing ICT adoption among Zimbabwean SMEs. While TOE emphasizes the structural and contextual factors influencing adoption, DOI focuses on the perception and behavioural aspects of adopters.

2.10 Conceptual Framework

The conceptual framework for this study is built upon the intersection of technology adoption theories and the unique operational dynamics of SMEs in Zimbabwe. It serves to

map out the key variables, their interrelationships, and the mechanisms through which ICT adoption can influence the survival and performance of small and medium enterprises (SMEs). The framework integrates components from the Technology-Organization-Environment (TOE) Framework (Tornatzky & Fleischer, 1990), the Diffusion of Innovation (DOI) Theory (Rogers, 2003), and contextual insights specific to developing economies, particularly Zimbabwe.

Fig 2.9 shows the framework which illustrates the relationship between technological, organizational, and environmental factors influencing ICT adoption in SMEs highlighting how ICT adoption moderated by intervening variables such as access to finance, ICT literacy and technical support, contributes to the business survival and competitiveness of SMEs in Zimbabwe



Conceptual Framework

Figure 2.9 visualizes the framework, illustrating how technological, organizational, and environmental elements shape ICT adoption in SMEs. It also highlights the role of moderating factors such as access to finance, ICT literacy, and technical support in enhancing SME competitiveness and sustainability.

At the core of the framework lies the **dependent variable**: SME business survival. This refers to the capacity of SMEs to continue operations, expand, and remain competitive amid economic and environmental volatility. Business survival is theorized to be directly influenced by ICT adoption, the **primary independent variable**, which includes tools like mobile money platforms, digital marketing, accounting software, cloud-based systems, and e-commerce technologies.

The TOE framework informs the categorization of ICT adoption determinants across three dimensions:

- The **technological** context involves perceived usefulness, ease of use, compatibility with existing operations, and ICT infrastructure availability.
- The **organizational** context comprises internal enablers such as financial resources, managerial commitment, staff competency, and digital literacy.
- The **environmental** context reflects external influences like regulatory policies, market dynamics, vendor support, and broadband infrastructure (Oliveira & Martins, 2011).

Drawing from Rogers' DOI theory, the framework incorporates the effect of innovation attributes—namely relative advantage, complexity, and trialability—on ICT adoption rates. For example, digital tools that promise tangible business benefits like cost savings, market penetration, or customer retention are more likely to be adopted. Additionally, tools that are easy to use and can be trailed on a limited basis before full-scale implementation often witness faster acceptance (Rogers, 2003).

Furthermore, the framework incorporates **intervening variables**—such as ICT training, financial access, and technical assistance—which mediate the relationship between ICT adoption and business outcomes. These mediators are particularly pertinent in Zimbabwe, where disparities in digital literacy and capital access are pronounced (Mutasa & Gambera, 2020).

In essence, the framework posits that ICT adoption—mediated by technological, organizational, and environmental factors—positively affects SME longevity and success.

Through improved efficiency, enhanced market access, and strengthened client relations, ICT serves as a critical driver of resilience and growth for SMEs operating in challenging economic environments. This conceptual model will steer the empirical phase of the study and help interpret variability in ICT adoption and business performance across three selected Zimbabwean SMEs

2.11 Chapter Summary

This chapter provided a comprehensive review of literature relevant to the adoption of Information and Communication Technologies (ICTs) by Small and Medium Enterprises (SMEs), with a particular focus on Zimbabwe. It began by defining key concepts such as SMEs, ICT, and business survival, followed by a theoretical grounding using the Technology-Organization-Environment (TOE) framework and the Diffusion of Innovation (DOI) theory. These models helped explain how various internal and external factors influence the decision and ability of SMEs to adopt ICT tools. The chapter also examined the role of ICT in enhancing SME efficiency, market access, and resilience in the face of economic challenges. It outlined the benefits of ICT adoption, such as improved communication, operational automation, customer engagement, and access to broader markets. However, it also highlighted the constraints hindering adoption, including limited financial resources, inadequate digital skills, and infrastructural challenges—particularly relevant in the Zimbabwean context. Furthermore, a conceptual framework was developed to guide the study, showing the interplay between technological, organizational, and environmental factors, and how they affect ICT adoption and, consequently, SME business survival. The framework also incorporated intervening variables such as ICT literacy and access to finance, which can influence outcomes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights and discusses the research methodology employed for this study, as well as the theoretical foundations, the research design, the data collection methods, and the validity and reliability of the acquired data with a focus on Prime Galaxy Investment SME A, Robyns investments SME B and Adel one stop shop SME C. This chapter also covers the ethical concerns. The chapter describes the research design, methodology and procedures used to collect analyse and interpret da. It also presents the rationale for selecting the case study approach and explains how the study ensures validity and reliability.

3.2 Research Philosophy

According to Saunders, Mark, Lewis, and Thornhill (2009), research philosophy is a framework that establishes guidelines for conducting research based on assumptions about reality and the nature of knowledge. Interpretivism approach was used as it was necessary to research among people as opposed to objects. According to Žukauskas, Vveinhardt and Andriukaitienė (2018), interpretivist research theory holds that the social world may be perceived subjectively and that knowing how individuals experience the social world is assigned the utmost importance. There are relationships within the study that require the approach so as to produce qualitative results and thus the need for interpretivism approach.

3.3 Research Approach

The researcher chose to primarily employ qualitative research approach to obtain responses and comprehend the responses of the respondents on the use of ICT in their businesses and their opinion on factors that limit the adoption of ICT and factors that drive the successful adoption of ICT in their businesses. Thakur (2021) claims that qualitative research tries to

provide explanations for why and how something is occurring. It typically involves open-ended survey questions and highly descriptive responses that are challenging to measure and communicate through figures. It's a fantastic approach to get more sophisticated data and investigate people's attitudes and behaviours. According to Thakur (2021), it is frequently utilized to generate ideas, make predictions, and decipher numerical data. Quantitative research was used in the study to collect and analyse numerical data that explained patterns, relationships and trends to the adoption of ict by SMEs in Zimbabwe. The approach enabled the researcher to test the hypotheses and assess the extent to which ICT tools contribute to business efficiency, growth and resilience.

3.4 Study Population

According to Whaley (2010), the target population is the whole population or group that a researcher is interested in examining and analysing; it stands for the total population that any specific study seeks to look into. From this target population, a sample frame is subsequently selected. The study population of this research comprises all the owners, management and employees from the SMEs from which this research is based.

SME	**Study population**
SME A	25
SME B	25
SME C	25

Table 3.4: Study Population

3.5 Sampling

A sample, according to Bhandari (2020), is a particular group from whom the researcher would gather data, and the size of the sample is never the same as the size of the entire population. The researcher made use of purposive sampling in choosing the sample size for the data collection. According to McCombes (2019), purposive sampling involves the researcher using their expertise to choose a sample that is most helpful to the research's goals. It is frequently used in qualitative type of research where preference is to learn extensive details about a specific occurrence over drawing general conclusions from

statistics or when the population is relatively small and focused. The researcher chose to use purposive sampling because the aim was to include respondents who are highly knowledgeable about the operations of the business so as to obtain more reliable data. A total of 75 questionnaires were distributed equally to three SMEs.

SME	**Sample size**
SME A	25
SME B	25
SME C	25

Table 3.5: Sample size

3.6 Data collection instruments

The tools used by the researcher for gathering information are referred to as data collection instruments. The researcher used a combination of close-ended questionnaires, open-ended questionnaires and interview. The researcher made use of these instruments so as to obtain information which includes the opinions and perspectives of the respondents which cannot be obtained through quantitative methods.

3.6.1 Questionnaire

According to Trobia (2008), the questionnaire is the main tool used in survey research to collect data. It is made up mostly of a group of uniform questions, often known as items, that follow a pre-set pattern to collect specific information about one or more specific themes.

There are essentially two types of questionnaires, according to Aryal (2022): unstructured questionnaires, which include open-ended and ambiguous opinion-type questions, and structured questionnaires, which include options to choose from. According to Bhandari (2021), closed-ended or restricted-choice questions provide respondents a predetermined range of options to choose from and are the most effective for gathering information on categorical or quantitative variables. Long-form, open-ended inquiries let respondents react in their own terms.

The researcher used open ended questionnaires in order to obtain opinions and the points of view from the respondents. The researcher used closed-ended questions to ask respondents about how ICT their ability to run their enterprises. The respondent's thoughts and opinions on the obstacles preventing the adoption of ICT in their firm as well as the variables they believe may enable them to effectively embrace ICT were gathered using open-ended questions.

3.6.2 Interviews

Interviews were used by the researcher to gather information from the respondents on the overview of operations of their businesses. The main respondents of these interviews where the owners and managers as they are more suitable to provide in-depth understanding of the business operations.

3.6.3 Data collection procedure

In order to ensure control, the researcher physically administered the questions. This made it simpler to send the surveys to the right persons who are knowledgeable about the topics being studied. Interviews with the respondents were also performed by the researcher directly.

3.7 Data sources

Primary and secondary data are the two types of data utilized in research. Primary data were used by the researcher for the study.

3.7.1 Primary Data

Persaud (2010) defined a primary data source as an initial data origin where the data are directly collected by the researcher for a specific study objective or project. Self-administered surveys, interviews, field observations, and experiments are all examples of this sort of data collecting. Self-administered questionnaires and interviews will be utilized to gather the majority of the data for this study. The target population is those who actively participate in the operations of the organizations, contribute, attend business meetings, and write and analyse cost-related budgets, therefore respondents supplied first-hand information through interviews and questionnaires.

3.8 Reliability and validity

In order to judge the quality of research and demonstrate how well a technique, methodology, or test measure something, the phrases' reliability and validity are utilized, according to Middleton (2019). Validity is concerned with a measure's correctness, whereas reliability is concerned with its consistency.

3.8.1 Reliability

According to Middleton (2019), by assessing the coherence of outcomes, reliability may be assessed. When a study is repeated under the same conditions, reliability shows the extent to which the findings can be duplicated. To assure reliability, the researcher chose a target demographic that included the management and those in charge of operations.

3.8.2 Validity

Validity as highlighted by Middleton (2019), is determined by comparing the results to other measures of the same topic and known theories to see whether the results actually reflect what they are trying to measure.

3.9 Ethical considerations

The participants were given a clear explanation of informed consent and voluntary involvement, stressing in particular how they might leave at any time if they felt uncomfortable. In order to assure compliance with relevant legal frameworks, authorization for participation was appealed for and granted through a consent form. The names of participants were kept a secret and their information was treated with the strictest confidentiality.

3.10 Data analysis and presentation

Wong (2008) claims that qualitative data is frequently arbitrary, composed of in-depth information and delivered in written form. To analyse qualitative data, a lot of records must be reviewed in search of parallels or differences, followed by identifying themes and creating categories. Categorising the data can also be referred to as coding. The result of the coding or analysis procedure is an explanatory theory of the behavioural pattern under study., according to Busetto, Wick, and Gumbinger (2020).

Thematic analysis was used to examine the information obtained from the open-ended questions. According to Braun and Clarke (2006) and Kiger & Varpio (2020), thematic analysis is a method for analysing qualitative data that entails searching through a data collection to identify, investigate, and report recurrent themes. In this study, themes were found by looking for recurring motifs across the data that had been collected. The themes were also derived from the reviewed literature.

The identified themes for this research include:

- Importance of ICT and levels of utilisation
- Utilisation of advanced ICT
- Impact of ICT on costs and performance
- Management attitude towards ICT
- Government role in ICT adoption
- Limiting factors to utilisation of technology
- Factors influencing the successful adoption of ICT

The data collected from the respondents was presented for analysis using tables, charts and graphs.

3.11 Chapter summary

The study methodology was the focus of the chapter, which was built on the principles of research philosophy, study design, sampling, data collecting techniques, and data presentation. In this chapter, reliability, validity, and ethical concern were all explained. The chapter detailed the research methodology used to investigate the adoption of information communication technologies for the survival and growth of SMEs in Zimbabwe focusing on the three SMEs. The chapter provided a clear roadmap for how the research was conducted and laid the foundation for presenting and analysing the results in the next chapter. The presentation and data analysis of the key study findings is covered in the following section.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Chapter Introduction

This chapter presents an analysis and a discussion of the findings of the data collected by the researcher using interviews and some questionnaires. As highlighted in chapter 3, the interviews were done with the management and the owners of the SMEs, and the questionnaires were also administered to the owners and managers of the SMEs, and they sought to get information on how ICT has enhanced SME businesses in Zimbabwe.

4.2 Response rate

This refers to the percentage of the sample that cooperates and participates in the interviews and questionnaires (Dillion, Madden& Firtle 1993). The researcher used both interviews and questionnaires to collect the data.

Questionnaires	**Owners**	**Managers**	**Workers**	**0verall**
Sent	5	5	25	35
Received	4	6	20	30
Response rate %	80	83	80	86
Interviews				
No of interviews scheduled	3	3	9	15

No of interviews done	3	2	4	9
Response rate %	100	67	40	56

Table 4.2 Response rate

The researcher utilized both questionnaires and interviews to collect data from various SME stakeholders, including owners, managers, and employees. A total of 35 questionnaires were distributed—5 to owners, 5 to managers, and 25 to employees. Out of these, 30 questionnaires were returned completed, resulting in an overall response rate of 86%, which reflects a strong level of participation. Breakdown of the response rates shows 80% from owners, 83% from managers, and 80% from employees, indicating relatively consistent engagement across all groups.

Regarding interviews, 15 sessions were arranged among the different respondent categories. All 3 planned interviews with owners were conducted successfully, yielding a 100% response rate. Among managers, 2 out of the 3 scheduled interviews took place, representing a 67% response rate. For employees, only 4 of the 10 planned interviews were completed, giving a lower response rate of 40%. Overall, the interview response rate was 56%. This variation suggests that while owners and managers were generally cooperative and available for interviews, employees were more challenging to reach, possibly due to time constraints or work responsibilities.

In summary, questionnaires were more effective in obtaining responses compared to interviews, with owners being the most responsive group across both methods. The high overall response rate strengthens the reliability of the data collected for this research.

4.3 Demographic Characteristics of Respondents

The study focused on SME owners and managers in Harare Central Business District and Bulawayo to explore how information communication technology has supported SME business growth in Zimbabwe. Accordingly, demographic data were gathered in the initial section of both the questionnaire and interview guide. This section presents findings on respondent composition, gender distribution, and age.

4.3.1 Composition of Respondents

The sample comprised owners, managers, and workers, as illustrated in the figure below.

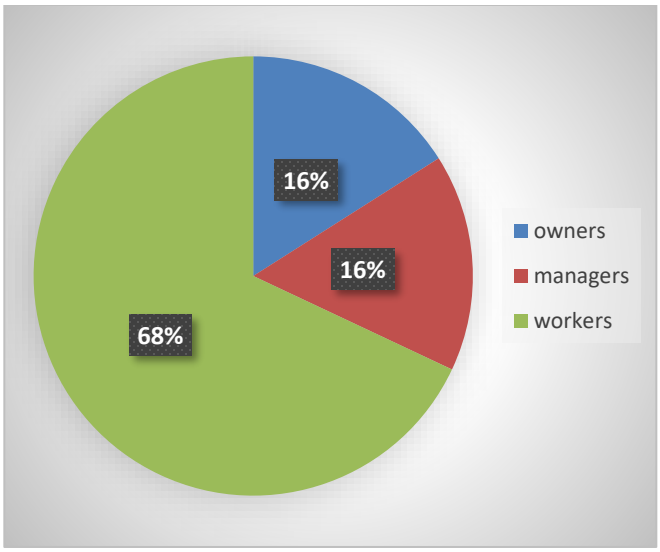


Fig 4.3 Composition of respondents

The fig shows that the most responds came from the workers more with a percentage of 68%.

4.3.2 Distribution of the Respondents by Gender.

The study aimed to determine the gender of the respondents. The sample was expected to include both male and female owners or managers. Therefore, participants were asked to specify their gender by selecting the appropriate option provided in the questionnaire. From the 30 completed questionnaires and 9 conducted interviews, the gender distribution of the respondents is presented below.

Gender of the respondent	**No of respondents**	**Percentage**
Male	24	61.5
Female	15	38.4
Total	39	100

Table 4.3 Gender respondents

Accordingly, 61.5% of the respondents were male while 38.4% of them were female. If this information can be generalized it could indicate that t the majority of the owners and/ or managers of the SMEs in Zimbabwe are males. Males are believed to be early adopters of ICT than females.

4.3.4 Distribution of Respondents by Age

The role of information communication and technology (ICT) in improving SME businesses in Zimbabwe revolves around technological advancements that may be adopted differently across various age groups. To minimize bias, this study examined the age distribution of respondents to assess their level of familiarity with ICT in supporting SME growth. Participants were asked to specify their age categories, and the findings on respondents' age brackets are presented in Table 4.4.

Table 4.4 Age brackets of respondents

Age range	No of respondents	Percentage
20-30	15	30
31-40	15	30
41-50	10	20
51-60	10	20
Total	50	100

The table shows that majority of respondents were within 20 to 30 years and 31 and 40 years with a percentage of 30 followed by age group 41 to 50 and 51 to 60. This shows that the SMEs are dominated with young middle-aged people.

4.4 Years in operation as SME using ICT

The respondents were asked on the time they have been using ICT and the findings are shown in Figure 4.3 below

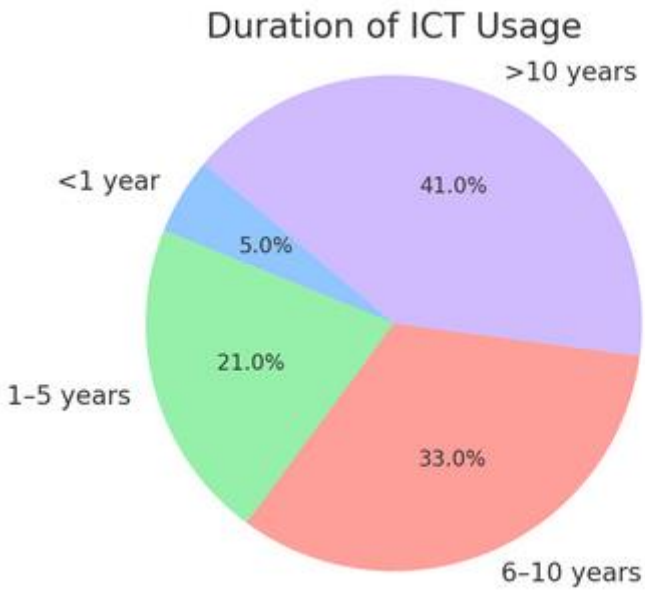


Figure 4.3: Years in Operation using ICT, author 2025

The findings indicate that 5% of the respondents have been utilizing ICT for less than one year, while those who have used ICT for a period between one and five years make up 21%. Respondents who have operated as SMEs for more than five years and have used ICT are represented by two groups: those with six to ten years of ICT usage, constituting 33%, and those with over ten years, contributing 41%, as illustrated in Figure 4.1. From this data, it can be deduced that the respondents possess an adequate level of understanding and

experience to provide reliable insights for the research. Their responses are likely to accurately reflect the impact ICT has had on their businesses over time. Particularly, most respondents with more than five years of ICT experience are presumed to have a comprehensive awareness of how ICT has improved their business operations. Consequently, their feedback is expected to represent a well-informed perspective, making it a true reflection of the study's focus.

4.5 FINDINGS

4.5.1 ICT Tools Used in Daily Business Operations

Information Communication Technology (ICT) comprises a wide range of primarily digital technologies aimed at collecting, organizing, storing, processing, and communicating information both within and beyond an organization. Respondents were asked about the ICT tools they currently use in their business activities, with the results presented in Figure 4.4 below:

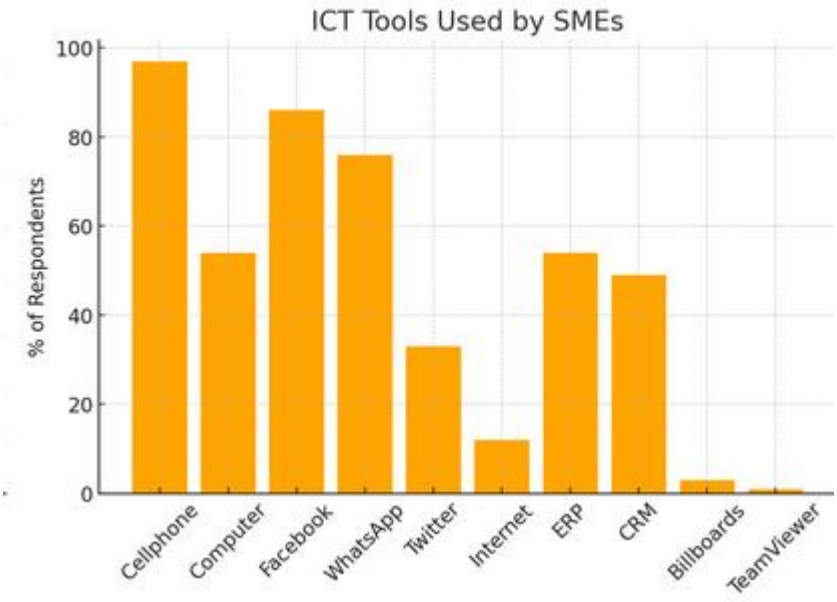


Figure 4.4: ICT tools used by SMEs. Author,2025

The general use of ICT among SMEs included a variety of technologies such as computers, the Internet, cell phones, Facebook, WhatsApp, Twitter, websites, Enterprise Resource Planning (ERP) systems, Customer Relationship Management (CRM) software, electronic billboards, and TeamViewer. The findings revealed that 97% of SME owners or managers owned a cell phone, 54% had a computer, 86% had access to Facebook, and 76% used WhatsApp, while 33% accessed Twitter. All of these respondents accessed these platforms primarily through their cell phones, which accounted for 97% of SMEs owning such devices. Internet access was available to only 12% of the sampled SMEs. Among those using accounting software, 54% utilized ERP systems, and 49% had CRM software. A small proportion (3%) reported having electronic billboards, and 1% used TeamViewer, although limited information was obtained about how TeamViewer was used in their operations.

The majority of respondents indicated that they use ICT tools in their daily business activities, reflecting a general awareness of the importance of these technologies. This was further supported by interview data, where one participant noted that having a website enhanced their market presence and subsequently improved business performance. This suggests that most participants recognize the significance of ICT and actively integrate these tools into their everyday operations. Only a small number of interviewees reported not using any ICT tools, which was mainly attributed to the perception that most ICT solutions are costly.

4.5.2 Distribution and Gathering of Information

Respondents were also asked to state whether they agree or disagree that ICT has helped them in the distribution and collection of information. Their responses are illustrated diagrammatically on the following page:

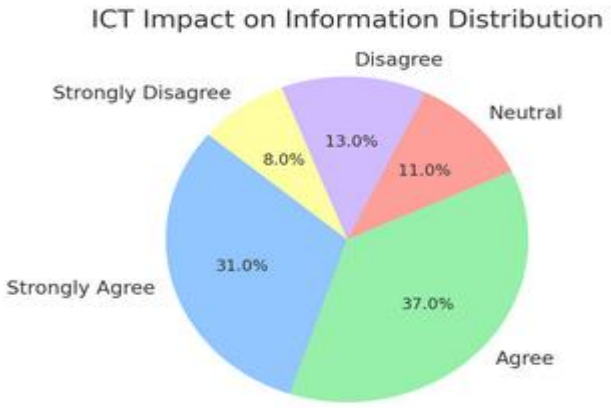


Figure 4.5: Distribution and Information gathering, author, 2025

The findings reveal that 37% of the respondents agreed that ICT improved their processes of information distribution and gathering, while 31% strongly agreed with this statement. Eleven percent (11%) remained neutral, which may be due to the fact that a combined 68% expressed a positive view on how ICT has aided them in these areas. Information distribution commonly occurs through bulk SMS services provided by telephone companies, as well as through cell phones and emails. Respondents who had Internet access reported using it as a tool for gathering information, and websites were also noted as platforms that enhanced information distribution. However, a minority of respondents did not believe ICT had helped them in distributing or gathering information, with 13% disagreeing and 8% strongly disagreeing. It was found that those who disagreed generally either did not use ICT due to financial constraints or lacked the necessary resources. Since information is vital for business success, it is crucial for SMEs to stay updated on market developments. This explains why a significant majority agreed that ICT has supported them in both gathering and distributing information.

4.5.3 ICT and Operational Efficiency and Effectiveness

Respondents were also asked whether they agree or disagree that ICT enhances their business's operational efficiency and effectiveness. The results are presented in Figure 4.5 below:

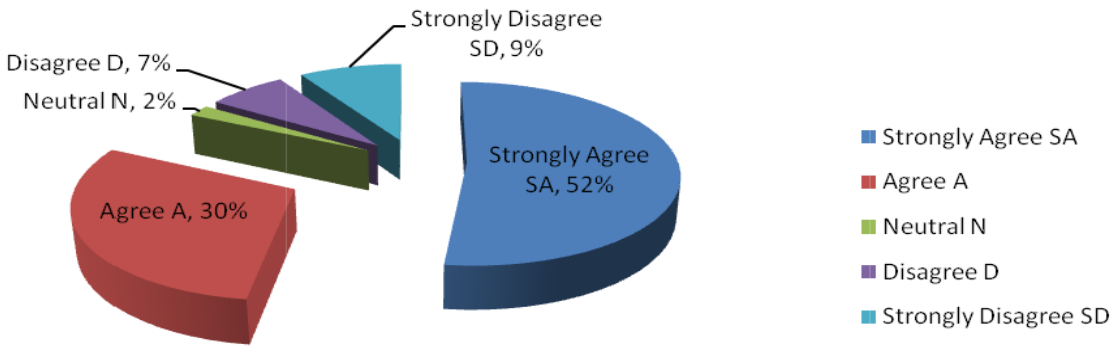


Figure 4.6: ICT and SME efficiency & Effectiveness

From the findings all of the respondents either strongly agreed (30%), that using ICT has enhanced their operational efficiency and effectiveness in one way or another. It can be inferred from these results that the respondents were aware of the advantages that ICT can bring to the SMEs. This is in line Shinks (2003:78) highlighted when he stated that information technology has a history of cutting costs and raising output by automating basic repetitive operations.

4.5.4 Effective and improved communication

The respondents were asked about their communication, and most of them confirmed that it has actually improved because of social network platforms like WhatsApp, twitter and Facebook. Generally, most of the respondents concurred that ICT has improved their communication. This is shown in figure 4.6 below

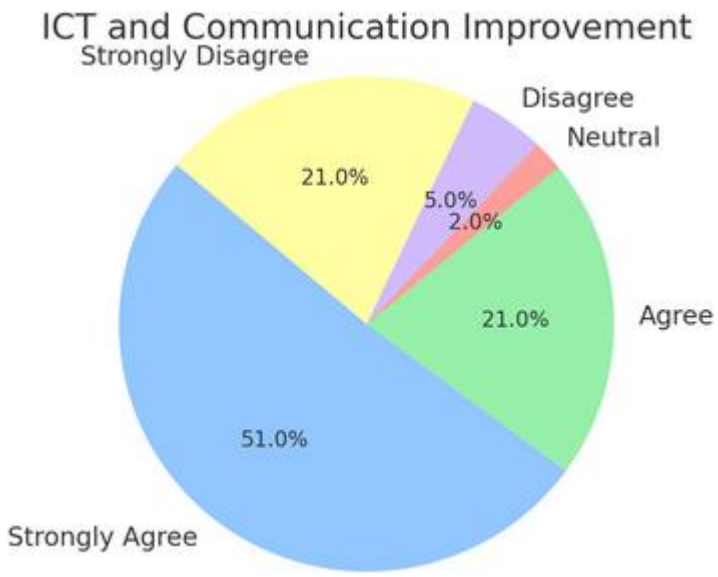


Figure 4.7 Effective and Improved Communication

There is a strongest agreement that ICT has brought effective and improved communication for the SMEs using it. Fifty one percent (51%), strongly agreed to the sentiment that indeed ICT has improved their communication. Twenty one percent (21%) agreed to the statement another 21% strongly disagreed whereas 5% just disagreed. 2% were neutral. This shows that in general the higher percentage of the SMEs were in agreement that ICT has improved communication, and that communication has become very effective as a result of ICT tools used. The interviews confirmed these findings and they said in general, the benefits of ICT systems offer, not only increased decision making-speed, improved co-operations and costs, and cost reduction, but also more importantly improved information dissemination (Davenport 2000:8).

4.5.5 ICT and access to new markets

The respondents were further required to indicate their level of agreement with various statements about increased access to new markets Figure 4.7 shows the results on the respondents' agreement with various statements on increased access to new markets. The findings are presented on figure 4.7 below:

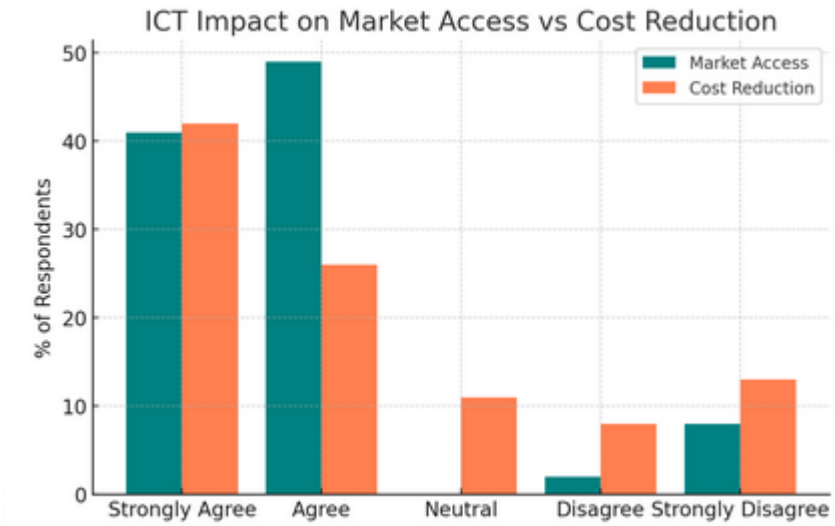


Figure 4.8 ICT and access to new markets

The study revealed that 49% of respondents agreed that ICT has facilitated increased access to new markets, primarily through the use of the Internet. Internet and mobile technologies are playing a crucial role in bridging the gap between large organizations and SMEs. Additionally, 41% of respondents acknowledged that ICT helped them access new markets. On the other hand, 2% disagreed with this view, while 8% strongly disagreed. These findings clearly indicate that ICT has been instrumental in enabling SMEs to reach new markets. The interview data supported these results, with participants attributing their expanded market access to the use of the Internet and websites. They confirmed that through these digital platforms, they have successfully accessed new customer bases.

4.5.6 Cost Control Resulting from ICT

The researcher also investigated whether the use of ICT has contributed to significant control over operational costs. Respondents were asked to state their level of agreement with the claim that ICT has helped reduce costs, and their responses are illustrated in Figure 4.8 below:

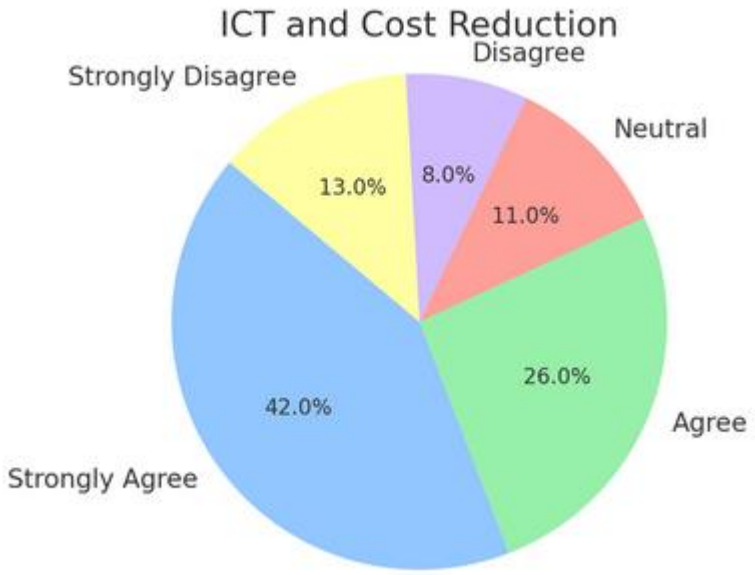


Figure 4.9 Costs controlled as a result of ICT.

Although the cost of implementing certain ICT tools was frequently mentioned as being very high, many respondents who had adopted these technologies reported experiencing cost savings in their business operations. Specifically, 42% of respondents strongly agreed that ICT has contributed to reducing costs. This sentiment was supported by interview feedback from two participants who noted:
"Costs have decreased because of tools we use like the Internet… We are reaching a broader market through website advertising, which has cut our advertising expenses by approximately 27%."
From the same data set, 26% agreed that costs were lowered, 11% were neutral, while 8% disagreed and 13% strongly disagreed. Despite acknowledging the significant initial investment required to establish ICT systems, the majority concurred that ICT use has led to cost reductions.

4.5.7 Working Remotely

ICT tools such as the Internet, WhatsApp, and cell phones are widely considered to facilitate remote business operations. The researcher investigated whether SMEs agreed with this perspective. Interviews confirmed that those utilizing cell phones and accessing platforms like Facebook and WhatsApp are able to operate away from their physical offices. This is reflected in a respondent's statement:

"Of course, we can now work even while in transit, and that's a positive development brought by these smartphones. I carry my computer, Internet, and all my databases—all in one device—because of this gadget."
Another participant echoed this view, stating:
"I can send emails to all my suppliers and customers, and receive payments via Ecocash, so I don't need a physical office. All I require is my smartphone and Internet access."
These responses confirm that ICT enables SMEs to work remotely, aligning with global trends where business transcends geographical boundaries in today's "flat" world.

4.5.8 ICT and Decision-Making

Decision-making is a vital aspect of any business operation. According to existing literature, ICT enhances decision-making processes. Respondents were asked whether their decision-making had been influenced by ICT use. Most users of Enterprise Resource Planning (ERP) systems agreed, noting:
"The ERP solution integrates all aspects of our operational environment, giving us control over our financial status as well as our relationships with customers, suppliers, and employees."
This illustrates that ICT has supported many respondents in improving their decision-making capabilities. ICT tools also aid in record-keeping, enabling quicker decisions. With readily available information through the Internet, websites, and other ICT platforms, SMEs are well-positioned to make informed decisions about their business activities.

4.5.9 Collaboration with Customers and Suppliers

ICT tools such as Customer Relationship Management (CRM) software were recognized by many respondents as essential for managing interactions between their businesses and customers, potential clients, suppliers, and even internal team members. This highlights the important role ICT plays in connecting businesses with their customers and suppliers. SMEs can also maintain customer databases on their cell phones, allowing them to contact clients directly via calls or messages to share promotions and relevant information. Furthermore, these tools enable SMEs to track business activities like sales, contributing to overall business growth.
As businesses continuously evolve, modernization is crucial for competitiveness. ICT tools,

especially cell phones and tablets, help SMEs reach broader markets and facilitate real-time, face-to-face interactions with customers.

4.5.10 Improved Marketing Strategies

With the introduction of websites and Internet technologies, most respondents agreed that ICT has enabled them to expand their marketing efforts and enhance their strategies. One respondent highlighted, "Our advertising has improved because our company now has a website." SMEs have successfully leveraged these ICT tools to bring their products to market, conduct research and development with greater ease, access more information, and adopt new practices such as e-marketing and e-billing.

4.6 Challenges faced by SMES in using ICT

The respondents were required to indicate the various challenges faced by SMEs in adopting and using different ICT tools. The results were presented in the table 4.7 below:

Table 4.7: Challenges Faced by the SMEs in using ICT

Factors	% Of respondents
Lack of financing options	47%
Lack of ICT Knowledge	32%
Inadequate awareness campaigns	12%
Poor communication infrastructure	9%
TOTAL	100%

The findings reveal that the majority of SMEs not utilizing ICT attribute this to financial constraints (47%), while a significant portion (32%) cited a lack of ICT knowledge as the main barrier. Additionally, 12% of respondents pointed to insufficient awareness campaigns that emphasize the benefits of ICT adoption as a reason for non-use. Meanwhile, 9% indicated the absence of necessary infrastructure to support ICT tools as a limiting factor.

These insights were further corroborated by interview responses, where a consensus emerged that lack of financial resources is the most prominent obstacle to ICT adoption. One respondent expressed this clearly:
"I don't have money, my friend, to invest in those tools; I rely on my manual system… We cannot secure bank funding, so how can we be expected to use ICT? It's only affordable for large organizations."

Another participant reinforced the funding challenge, stating:
"My friend, do you know how much we spend just to bring our stock from Dubai? Then you ask me if I have internet or a computer? Sorry, we just can't afford that now. Please, leave my office and let me worry about paying my workers."

The emotional tone of this respondent when discussing ICT use highlighted the financial hardship hindering ICT integration in his business. This interaction underscores how funding is a critical challenge for adopting ICT.

Among the 32% who indicated they lack ICT knowledge; interview feedback echoed this point. These respondents confirmed that their lack of ICT skills prevents them from incorporating ICT tools in their operations. One individual explained:
"I can't even use computers because I'm old. I just want to know if we're making profits. I don't even know how to switch on this computer—it's been sitting there collecting dust since it was bought because I can't operate it."

A small number of respondents stated that they do not use ICT due to lack of infrastructure and because they believe ICT is unnecessary for their business activities. One remarked:
"I don't need a computer to make money; the Internet is for Internet cafes. What for? I just want to make sure people get their food and are satisfied."

These responses align with MacGregor and Vrazalic's (2006) findings that barriers to ICT adoption are both socio-economic and technological. They also noted that these barriers can stem from both external and internal organizational factors.

4.9 Conclusion

This chapter has presented and discussed the study's findings, focusing on demographic data, benefits derived from ICT use, its relevance to SMEs, and the challenges faced by SMEs not using ICT. Overall, it is clear that ICT has positively impacted SME businesses in Zimbabwe. The following chapter will provide detailed conclusions and recommendations based on these findings.

CHAPTER FIVE

CONCLUSIONS, ANALYSIS AND RECOMMENDATIONS

5.1 Chapter Introduction

This chapter outlines the summary of the findings, discussions and conclusions drawn from the research as well as the recommendations based on the analysis of the results in Chapter Four. The interpretation is the researcher's own analytical views about the findings. The findings are expected to be useful to policy makers in the Ministry of ICT and SMEs, support institutions and the SMEs in embracing ICTs in Zimbabwe. This study is based on the interviews of current owner/managers, the responses from questionnaires and hence its immediate relevance. The chapter finally presents the suggestions for further studies. The specific objectives of this study were to investigate how ICT has enhanced SME businesses in Zimbabwe.

5.2 Summary of Key Findings

This study explored the adoption of Information and Communication Technologies (ICT) for the survival and growth of Small and Medium Enterprises (SMEs) in Zimbabwe, focusing on Prime Galaxy Investment and other selected SMEs as case studies. The study was grounded in the context of Zimbabwe's challenging economic environment, characterized by inflation, infrastructure deficiencies, and limited access to finance—factors which have significantly influenced the pace and pattern of ICT adoption. Using both qualitative and quantitative approaches, the research investigated the key factors influencing ICT adoption, the barriers that hinder implementation, and the resulting impact on SME operations.

The literature review established that ICT is a critical enabler of operational efficiency, customer relationship management, market expansion, and business resilience. It also highlighted that despite the known benefits of ICT, SMEs in Zimbabwe face substantial challenges, including high implementation costs, limited digital skills, poor infrastructure, and lack of government support. The study adopted the Technology-Organization-Environment (TOE) Framework and the Diffusion of Innovation (DOI) theory to understand the internal and external factors influencing technology adoption.

Findings from interviews and questionnaires revealed that while some SMEs, like Prime Galaxy Investment, have taken strategic steps to incorporate ICT—such as using mobile platforms, social media, and accounting software—many others remain at the basic or moderate stages of adoption. Common barriers include high internet costs, unreliable power supply, lack of ICT training, and limited access to capital. However, where ICT has been implemented effectively, SMEs reported improved efficiency, better market outreach, and enhanced customer engagement.

5.3Conclusion

The findings of this study have led to several critical conclusions regarding the adoption of ICT by SMEs in Zimbabwe. First and foremost, it is evident that ICT adoption plays a fundamental role in enhancing SME resilience, competitiveness, and long-term survival. In a challenging economic environment like Zimbabwe's—marked by inflation, currency instability, erratic power supply, and limited access to capital—ICT serves as both a survival tool and a strategic asset. It enables SMEs to optimize operations, reach broader markets through digital platforms, improve internal communication, enhance customer service, and make data-driven decisions. For SMEs such as Prime Galaxy Investment, ICT has allowed the business to maintain visibility and streamline customer engagement through platforms like WhatsApp, Facebook, and accounting software, even during periods of economic turmoil.

However, the study also concludes that the extent of ICT adoption remains uneven across Zimbabwean SMEs, with the majority either underutilizing ICT or lacking digital

infrastructure altogether. Factors such as the cost of ICT hardware and software, inadequate digital skills, lack of awareness, and poor internet connectivity continue to hamper progress. Even when SME owners are aware of the benefits of ICT, many are constrained by the lack of financial resources to invest in digital tools or the technical know-how to integrate these tools effectively into their business models.

In examining the influencing factors, the study confirms the relevance of the Technology–Organization–Environment (TOE) framework and the Diffusion of Innovation (DOI) theory as appropriate lenses through which to understand ICT adoption behaviour. From a technological perspective, SMEs are more inclined to adopt tools that are perceived as easy to use, cost-effective, and compatible with their existing processes. Organizationally, businesses with strong leadership, committed management, and a culture of innovation are more likely to adopt ICT effectively. Environmentally, external factors such as government policy, competitive pressure, customer expectations, and infrastructural availability play a significant role in enabling or hindering ICT integration.

A further conclusion is that digital transformation within the SME sector cannot be viewed in isolation from broader socio-economic and policy dynamics. The lack of supportive government policy, fragmented ICT strategies, and minimal institutional support have slowed down the adoption process. This suggests that improving ICT uptake among SMEs is not solely a technological challenge but a systemic one that requires coordinated efforts across multiple sectors.

Moreover, the research shows that ICT adoption is not merely about survival, but also about growth and innovation. Those SMEs that have invested in digital tools reported enhanced agility in responding to market demands, improved access to customer feedback, better inventory and financial management, and increased confidence in entering new markets. This demonstrates that ICT adoption has the potential to transform Zimbabwean SMEs from fragile, survivalist entities into scalable and sustainable contributors to national economic development.

In conclusion, ICT adoption is both a necessity and an opportunity for SMEs in Zimbabwe. While significant progress has been made by a few enterprises, a large proportion remain digitally marginalized due to systemic barriers. Without deliberate efforts by stakeholders—including government, financial institutions, academic bodies, and private sector actors—to address the multifaceted challenges faced by SMEs, the potential benefits of digital transformation will not be fully realized. It is therefore imperative to view ICT not simply as a support function, but as a central component of SME development and national economic policy.

5.4Recomendations

To effectively enhance ICT adoption among Small and Medium Enterprises (SMEs) in Zimbabwe, a multi-faceted approach is necessary. The following recommendations are proposed to address the existing barriers and foster a supportive ecosystem for SME digital transformation:

1. Capacity Building and Training

A critical enabler of ICT adoption is the development of digital skills among SME owners and employees. It is recommended that government ministries, development agencies, academic institutions, and ICT firms collaborate to design and implement comprehensive training programs tailored to the needs of SMEs. These programs should cover foundational digital literacy, hands-on training on widely used business management software (e.g., accounting, inventory, customer relationship management systems), cybersecurity best practices, and e-commerce operational skills.

Such capacity-building initiatives could include workshops, online courses, and mentorship schemes, delivered through accessible channels such as community centres and online platforms. For example, partnering with universities and technical colleges to incorporate practical ICT training modules for entrepreneurs can ensure sustainability. Continuous skills upgrading is also essential given the fast pace of technological change.

2. Improved Access to Finance

Limited access to affordable financing is a significant obstacle to SME investment in ICT infrastructure and services. Financial institutions, including banks and microfinance providers, should develop innovative, SME-friendly financing products specifically aimed at ICT adoption. These could take the form of low-interest loans dedicated to purchasing digital equipment and software, lease-to-own schemes that reduce upfront costs, and grant programs for startups and SMEs that demonstrate innovative use of ICT.

Moreover, government-backed credit guarantee schemes could mitigate lenders' risks, encouraging them to extend credit to SMEs that might otherwise be perceived as high risk. For example, introducing a digital transformation fund with concessional financing terms would enable more SMEs to invest confidently in ICT.

3. Infrastructure Development

Robust ICT infrastructure forms the backbone of digital adoption. The government must prioritize investments in expanding high-speed broadband coverage, especially targeting rural and underserved urban areas where connectivity remains poor or prohibitively expensive. Alongside internet access, reliable electricity supply is crucial to support continuous digital operations without costly disruptions.

Efforts should include public investment in fibre-optic networks, incentives for private telecom providers to extend services to marginal areas, and regulatory reforms to foster competitive data pricing. Reducing the cost of internet data will directly enhance SMEs' ability to engage in online transactions, cloud computing, and digital marketing.

4. Policy Support and Incentives

A conducive policy environment is necessary to accelerate ICT adoption among SMEs. Policymakers should develop clear and supportive frameworks that incentivize SME digitalization. Examples of such incentives include tax breaks or deductions for ICT-related capital investments, import duty exemptions or reductions on computers, networking devices, and software licenses, and subsidies or vouchers to reduce the cost burden of acquiring digital tools.

Additionally, policies should encourage the adoption of digital payments and e-commerce by SMEs through streamlined regulatory processes and consumer protection laws that build trust. Transparent and stable policy frameworks signal government commitment and reduce uncertainties that could otherwise deter SME investment in ICT.

5. Development of ICT Adoption Models

Recognizing the diversity among SMEs, sector-specific ICT adoption models should be developed to provide tailored guidance. These models would include step-by-step roadmaps, benchmarking standards, and best practice case studies for different industries such as retail, manufacturing, and services.

For example, a manufacturing SME might focus initially on implementing inventory management software and automated production tracking, while a retail SME might prioritize e-commerce platforms and digital payment solutions. These models should be practical, scalable, and adaptable to firm size and resource levels, thereby enabling SMEs to chart feasible digital transformation pathways.

6. Foster Innovation Hubs and Networks

Innovation hubs, technology incubators, and SME clusters act as vital ecosystems where knowledge exchange, mentorship, and collaboration flourish. Expanding these platforms across Zimbabwe can help SMEs gain access to cutting-edge ICT solutions, technical expertise, and market intelligence.

These hubs can organize regular workshops, networking events, and collaborative projects, creating vibrant communities that accelerate learning and adoption. For instance, a hub specializing in fintech innovation could help SMEs integrate digital payment systems and improve financial management, while agritech hubs could promote precision agriculture tools. Partnerships with universities, industry experts, and international development organizations can further enrich the innovation ecosystem.

7. Promote Public-Private Partnerships (PPPs)

Leveraging the strengths of both the public and private sectors is key to overcoming resource constraints and scaling ICT adoption initiatives. Strategic alliances should be encouraged between government agencies, private companies, non-governmental organizations, and donor agencies to mobilize funding, technical expertise, and implementation capacity.

PPPs can facilitate pilot programs demonstrating the value of ICT tools for SMEs, co-fund infrastructure projects, and support training and awareness campaigns. For example, telecom companies partnering with government ministries can offer subsidized data packages for SMEs or develop mobile applications tailored to SME needs. Such collaborations ensure more efficient use of resources and broader reach, accelerating the pace of digital transformation.

5.5 Recommendations for further studies

The study has explored the role of information communication and technology in enhancing SME businesses in Zimbabwe, looking at the benefits, the challenges in adopting it and the position of those which are not using it. The study looked at the sample in Harare's CBD, but the researcher recommends that future researches look at SMEs which are outside Harare. The researcher also recommends that:

1. Study be carried out using SMEs in the same industry
2. Research is done with the involvement of the Ministry of Youth, Gender and Employment Creation, as this will give the policy makers an indication of the trends of ICT and how it can assist in some policies like the indigenisation policy.

5.6 Chapter summary

This chapter has discussed the major findings from the study, with a focus on how ICT is enhancing SMEs in Zimbabwe. It validated the initial research proposition that effective ICT adoption improves SME performance. The discussion highlighted both the benefits and barriers to ICT adoption, concluding with practical and policy-oriented recommendations. It is hoped that the insights gained from this study will inform stakeholders—policymakers, SME owners, and development partners—on how to better support SMEs in leveraging ICT for business survival and growth.

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APPENDIX

Questionnaire for SME Owners/Managers

Dear Respondent

I'm Destine Zvapera. I am pursuing a Bachelor's degree of Accountancy at BUSE. As part of my studies, I am conducting a survey on the use of ICT in SMES. The results of the study will benefit the Ministry, SMEs, the workers and the researcher. The results will inform the SME sector on effective implementation of competitive strategies. Please be assured that the information you provide will be strictly confidential and used purely for academic purposes.

This questionnaire comprises six (6) sections. Your input and participation are valuable to this study and is greatly appreciated.

Thank you for your cooperation.

SECTION A: Demographic Information

1. Gender:

☐ Male ☐ Female

2. Age Group:

☐ Below 25 ☐ 25–34 ☐ 35–44 ☐ 45–54 ☐ 55 and above

3. Level of Education:

☐ Primary ☐ Secondary ☐ Diploma ☐ Degree ☐ Postgraduate

4. Business Sector:

☐ Retail ☐ Services ☐ Manufacturing ☐ Agriculture ☐ Other (specify): ___

5. Number of Years in Operation:

☐ Less than 1 year ☐ 1–5 years ☐ 6–10 years ☐ Over 10 years

—

SECTION B: ICT Adoption

(For each question, tick the appropriate option)

6. Which ICT tools does your business currently use? (Tick all that apply)

☐ Cell phones ☐ Internet ☐ Computers ☐ Facebook ☐ WhatsApp ☐ Twitter

☐ ERP systems ☐ CRM software ☐ Websites ☐ Electronic Billboards ☐ TeamViewer

7. For how long has your business used ICT tools?

☐ Less than 1 year ☐ 1–5 years ☐ 6–10 years ☐ Over 10 years

8. How often does your business use ICT in daily operations?

☐ Rarely ☐ Occasionally ☐ Frequently ☐ Always

—

SECTION C: Impact of ICT on Business Survival and Performance

To what extent do you agree with the following statements?

(1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Statement	1	2	3	4	5
9. ICT has improved communication with customers and suppliers.	☐	☐	☐	☐	☐
10. ICT has increased access to new markets.	☐	☐	☐	☐	☐
11. ICT tools have reduced operational costs.	☐	☐	☐	☐	☐
12. ICT enhances decision-making and information sharing.	☐	☐	☐	☐	☐
13. My business would struggle to survive without ICT.	☐	☐	☐	☐	☐

—

SECTION D: Challenges in ICT Adoption

Statement	1	2	3	4	5
14. High cost of ICT tools limits their adoption.	☐	☐	☐	☐	☐

15. Lack of ICT training is a challenge in my business. ☐ ☐ ☐ ☐ ☐

16. Poor internet connectivity affects ICT use in my business. ☐ ☐ ☐ ☐ ☐

17. I am concerned about security risks with ICT usage. ☐ ☐ ☐ ☐ ☐

18. There is limited technical support available to assist with ICT. ☐ ☐ ☐ ☐ ☐

—

SECTION E: Strategies to Enhance ICT Adoption

Statement 1 2 3 4 5

19. Government support is necessary to promote ICT among SMEs. ☐ ☐ ☐ ☐ ☐

20. I need training to fully utilize ICT tools in my business. ☐ ☐ ☐ ☐ ☐

21. Affordable ICT infrastructure would improve my adoption of ICT. ☐ ☐ ☐ ☐ ☐

22. Partnerships with ICT providers would enhance access to technology. ☐ ☐ ☐ ☐ ☐

23. I am open to future investments in ICT for business growth. ☐ ☐ ☐ ☐ ☐

SECTION F: Additional Comments

24. Please share any other thoughts or experiences regarding ICT use in your business:

Interview Questions per Objective:

Objective 1: To assess the level of ICT adoption among SMEs in Zimbabwe

1. What types of ICT tools or systems are currently in use in your business? (e.g., Internet, social media, accounting software)
2. When did you begin using ICT tools in your operations?
3. How frequently do you use ICT in your day-to-day business activities?
4. Do you think your business is keeping up with the latest ICT trends?
5. What influenced your decision to adopt ICT in your business?

—

Objective 2: To evaluate how ICT contributes to the survival and performance of SMEs

1. How has ICT improved the efficiency or productivity of your business?

2. Have you noticed any increase in revenue or customer base after adopting ICT?

3. In what ways has ICT helped your business survive economic or market-related challenges?

4. Can you provide examples of how ICT has enhanced communication with customers or suppliers?

5. Do you believe your business would struggle to survive without ICT? Why or why not?

—

Objective 3: To identify the challenges faced by SMEs in adopting ICT

1. What are some of the challenges you faced when trying to adopt ICT in your business?

2. Are cost and infrastructure major concerns when implementing ICT solutions?

3. Do you or your employees experience difficulties in using ICT due to lack of skills or training?

4. Have you encountered any security or privacy issues related to ICT usage?

5. How supportive is the local or national government in helping SMEs adopt ICT?

Objective 4: To suggest strategies for enhancing ICT adoption among SMEs

1. What support (financial, technical, training, etc.) would encourage your business to expand ICT use?

2. In your view, what should the government or NGOs do to promote ICT among SMEs?

3. What types of ICT training or capacity building would be most helpful for you and your staff?

4. Are there any partnerships (e.g., with tech firms or business networks) that could enhance ICT adoption?

5. What advice would you give to other SMEs that are hesitant to adopt ICT?