



**SELINUS UNIVERSITY**  
OF SCIENCES AND LITERATURE

**INVESTIGATING THE IMPACT OF INFORMATION  
COMMUNICATION  
AND TECHNOLOGIES (ICTs) ON BUSINESS  
PRACTICES IN ZIMBABWE:  
CASE OF ECONET ZIMBABWE**

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## **ABSTRACT**

The study investigated the impact of ICT on business practices using Econet Zimbabwe as a case study. The objectives of the study were to explore how ICT affects efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe, to identify the opportunities and challenges of ICT in achieving efficiency, productivity, innovation and competitiveness at Econet Zimbabwe and to formulate strategies on how ICT can be used to achieve efficiency, innovation, productivity and competitiveness at Econet Zimbabwe. The study was underpinned by the Dynamic Capabilities theory for its theoretical framework. The study was quantitative in nature and adopted a positivist research paradigm. The target population for the research were Employees from Econet Zimbabwe. Systematic sampling was adopted as a sampling technique and the study achieved a sample size of 285 participants. Data for the study was collected using a Likert scale questionnaire and analysed using SPSS. The study found that the integration of ICT significantly enhances the speed and quality of work. The study also found that ICT has a substantial impact on team output and performance, suggesting that the collaborative and communicative capabilities afforded by ICT lead to heightened productivity leading to enhanced business practices. Moreover, the study established that ICT is a catalyst for creativity and innovation within organizations, providing the tools and platforms necessary for the development of new ideas and solutions. With regard to the benefits and challenges of ICT on business practices, the study found that the adoption of ICT significantly fosters the creation of new market opportunities, enabling businesses to innovate and expand into new territories. However, the study also highlighted challenges, such as the need for more ICT-trained personnel, indicating a growing demand for specialized skills to manage and leverage ICT effectively. The study therefore recommended that to address the skill gaps and keep pace with technological advancements, it is recommended that businesses invest in comprehensive ICT training and development programs for their workforce. The study also recommended that businesses should seek to form strategic partnerships with other ICT companies to leverage shared knowledge, resources, and innovations for mutual growth and market expansion.

## **Table of Contents**

<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
-------------------------------------	----------

<b>1.1 Introduction</b> .....	1
<b>1.1 Background</b> .....	1
<b>1.3 Problem statement</b> .....	7
<b>1.4 Research objectives</b> .....	7
<b>1.5 Research questions</b> .....	8
<b>1.6 Justification for the study</b> .....	8
<b>1.7 Delimitations for the study</b> .....	9
<b>1.8 Limitations</b> .....	9
<b>1.8 Assumptions for the study</b> .....	9
<b>1.10 Definition of key terms</b> .....	9
<b>1.11 Chapter Summary</b> .....	11
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	12
<b>2.1 Introduction</b> .....	12
<b>2.2 Theoretical framework</b> .....	12
<b>2.2.1 Dynamic Capabilities Theory</b> .....	12
<b>2.2.1.1 Sensing</b> .....	13
<b>2.2.1.2 Siezing</b> .....	14
<b>2.2.1.3 Transforming</b> .....	14
<b>2.3 Conceptual framework</b> .....	15
<b>3.3.1 Efficiency</b> .....	15
<b>3.3.2 Productivity</b> .....	16
<b>3.3.3 Innovation</b> .....	17
<b>3.3.4 Competitiveness</b> .....	18
<b>2.4 EFFECTS OF ICT ON BUSINESS PRACTICES</b> .....	20
<b>2.4.1 Improving efficiency</b> .....	20
<b>2.4.2 Increasing productivity</b> .....	21
<b>2.4.3 Fostering innovation</b> .....	23
<b>2.4.4 Enhancing competitiveness</b> .....	25
<b>2.5 Opportunities of ICT on business practices</b> .....	27
<b>2.5.1 Access to information and knowledge</b> .....	27
<b>2.5.2 Innovation and creativity</b> .....	29

<b>2.5.3 Customer satisfaction and loyalty</b> .....	30
<b>2.5.4 Globalization and expansion</b> .....	32
<b>2.6 Challenges of ICT on business practices</b> .....	33
<b>2.6.1 Cybersecurity threats</b> .....	33
<b>2.6.2 Infrastructure gaps</b> .....	34
<b>2.6.3 Skills shortages</b> .....	36
<b>2.6.4 Policy and regulatory issues</b> .....	38
<b>2.7 Strategies for improving business practices using ICT</b> .....	40
<b>2.7.1 Aligning ICT with business goals and objectives</b> .....	40
<b>2.7.2 Developing ICT capabilities and skills</b> .....	42
<b>2.7.3 Leveraging ICT for innovation and differentiation</b> .....	44
<b>2.7.4 Managing ICT risks and challenges</b> .....	46
<b>2.8 Chapter summary</b> .....	47
<b>CHAPTER 3</b> .....	48
<b>RESEARCH METHODOLOGY</b> .....	48
<b>3.1 Introduction</b> .....	48
<b>3.2 Research paradigm</b> .....	48
<b>3.3 Research approach</b> .....	49
<b>3.4 Research design</b> .....	49
<b>3.5 Target population</b> .....	50
<b>3.6 Sampling and sample size</b> .....	50
<b>3.6.1 Systematic sampling</b> .....	51
<b>3.7 Research instruments</b> .....	52
<b>3.7.1 Likert Questionnaire</b> .....	52
<b>3.8 Data analysis</b> .....	53
<b>3.10 Chapter summary</b> .....	53
<b>CHAPTER 4</b> .....	54
<b>DATA PRESENTATION AND ANALYSIS</b> .....	54
<b>4.1 Introduction</b> .....	54
<b>4.2 Response rate</b> .....	54
<b>4.3 Demographic data</b> .....	55

4.3.1 Gender.....	55
4.3.2 Age.....	56
4.3.3 Years of experience.....	56
4.4 Effects of ICT on efficiency, productivity, innovation and competitiveness of.....	57
4.4.1 Efficiency .....	59
4.4.2 Productivity .....	60
4.4.3 Innovation.....	61
4.4.4 Competitiveness.....	62
4.5 Benefits and challenges of ICT on efficiency, productivity, innovation, and .....	63
4.5.1 Benefits of ICT for Econet Zimbabwe.....	63
4.5.1.1 Creation of new opportunities.....	64
4.5.1.2 Offering of new products.....	65
4.5.1.3 Collaboration with other ICT companies .....	66
4.5.1.4 Improves organisation’s social responsibility .....	67
4.5.2 Challenges of ICT for Econet Zimbabwe.....	68
4.5.2.1 Need for more ICT trained personnel .....	69
4.5.2.2 New entrants in the market.....	70
4.5.2.3 Increased costs for ICT maintenance .....	71
4.5.2.4 Security challenges .....	72
4.6 Strategies for improving efficiency, productivity, innovation and.....	72
4.6.1 Integration of ICT processes with overall business goal .....	73
4.6.2 Promoting a learning culture .....	74
4.6.3 Improving security and privacy.....	75
4.6.4 Investing more in ICT infrastructure systems.....	76
4.7 Chapter summary .....	77
<b>CHAPTER 5.....</b>	<b>78</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>78</b>
5.1 Introduction.....	78
5.2 Summary.....	78
5.3 Conclusions.....	80
5.4 Recommendations.....	81

<b>References</b> .....	82
<b>Appendix 1</b> .....	87

**List of Figures**

Figure 1: Conceptual framework.....	15
Figure 1: Gender distribution .....	55
Figure 2: Years of experience for respondents .....	56
Figure 3: Benefits of ICT .....	63
Figure 4: Challenges of ICT .....	68

**List of Tables**

Table 1: Response rate.....	54
Table 2: Age distribution .....	56
Table 3: Descriptive statistics on the effects of ICT on efficiency, productivity, innovation and competitiveness .....	57

**ACRONYMS**

ENISA	European Network and Information Security Agency
ICT	Information Communication Technology
ITU	International Telecommunication Union
NIST	National Institute of Standards and Technology
NAP	National Adaptation Plan
OECD	Organisation for Economic Co-operation and Development
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
WIPO	World Intellectual Property Organisation



## **CHAPTER 1: INTRODUCTION**

### **1.1 Introduction**

Information and communication technologies (ICTs) have become a vital part of modern business operations. ICTs refer to the use of technology to transmit, process, and store information. ICTs include hardware, software, and services that support communication and information exchange. ICTs can assist business activities such as design, manufacturing, research and development, distribution, sales, and feedback. ICTs have various impacts on business practices, such as improving efficiency, productivity, customer service, collaboration, innovation, and competitiveness. ICTs can also enable businesses to access new markets, reduce costs, and create value for customers and stakeholders. However, ICTs also pose some challenges and risks for businesses, such as security, privacy, ethical, legal, and social issues. This chapter serves as the introduction for the study. It is going to first provide a background to the topic to familiarise the reader with the context of the research. The chapter is also going to provide a problem statement for the study to highlight the problem which is under investigation. Moving on the chapter will also outline the objectives and the research questions of the study. Furthermore, the chapter is going to provide a justification of the study, discuss the delimitation, limitations and the assumptions of the study.

### **1.1 Background**

ICTs have a variety of consequences on business processes, some of which include increased competitiveness, efficiency, productivity, customer service, teamwork, and innovation. ICTs can help companies expand into undiscovered markets, save costs, and provide value for stakeholders and customers. According to Al-Bastaki and Mudziso (2023) a business's location, industry, size and other characteristics can all have an impact on how ICTs affect its operations. Different countries may have different levels of ICT adoption, diffusion and usage which can have differing positive and negative effects on enterprises.

When it comes to ICT innovation and development the US leads the world. The ICT sector in the whole country is large and diverse, and it contributes significantly to economic growth, competitiveness, and innovation (Andreassen, 2020). According to Andreassen (2020) there is a notable level of ICT penetration and utilisation in the United States among enterprises and consumers. This allows them to have access to a wide variety of ICT products and services. Moreover the United States has a regulatory framework and advantageous ICT policy that support a vibrant and competitive ICT sector (Borhan and Bader, 2021). The International Telecommunication Union (ITU) estimated in 2020 that there were 327.2 million mobile-cellular subscribers, 106.2 million fixed-broadband subscriptions, and 284.9 million internet users in the United States in 2019.

Based on individual ICT expenditures in 2019, the US ranked second globally, spending \$3,428 (Eklund and Kastberg, 2020). The United States' business practices have been significantly impacted by ICTs. Productivity, innovation, customer service, teamwork, competitiveness and efficiency have all increased as a result. Hunton (2021) conducted a study which revealed that organisations that included ICTs had a 4.5-fold rise in productivity in contrast to those who did not. ICT has made it easier for companies to enter new markets, reduce costs, and provide value for stakeholders and customers. ICT (Hunton, 2021) has spawned a number of new industries, including cloud computing, e-commerce, mobile financial services, and the internet of things (IoT).

A country with a strong information and communication technology (ICT) industry and high ICT adoption and utilisation rates is the United Kingdom (UK). According to Verma and Dandgawhal (2023), the UK has an extremely sophisticated ICT infrastructure that provides consumers and companies with trustworthy and affordable ICT services. The ICT innovation and productivity of the United Kingdom are driven by the skilled and informed workforce in this field. Furthermore, according to Zaman and Adeq (2017), the UK has a supportive ICT policy and regulatory framework that promotes the development and use of ICT throughout the nation. According to ITU

(2020) there were 63.8 million internet users, 26.8 million fixed-broadband subscribers, and 84.1 million mobile cellular subscriptions in the UK in 2019.

With \$3,206 in per capita ICT investment in 2019 the UK was in third place worldwide (Yaser and Al-Mamary, 2020). In the UK, the use of ICT has significantly changed how businesses operate. According to Yaser and Al-Mamary (2020) it has improved efficiency, productivity, customer service, teamwork, innovation, and competitiveness. For instance the UK government recently unveiled the UK Innovation Strategy, which provides a detailed plan for attaining innovation-driven growth and raising private sector investment across the board in the UK. ICT has made it easier for companies to enter new markets, cut costs, and create value for stakeholders and customers (Hunton, 2021). In the UK, artificial intelligence (AI) is a very powerful technology that has a big impact on company performance. By 2035 it is expected to have grown by more than \$1 trillion from its current market worth of about \$21 billion (Hunton, 2021).

In Africa South Africa boasts a growing ICT industry with a moderate acceptance and usage rate (Al-Bastaki and Mudziso, 2023). ICT infrastructure in South Africa is made up of a variety of components, varying in terms of availability and quality across the nation, according to Andreasson (2020). According to ITU data from 2020 there were 36.5 million internet users 6.1 million fixed broadband subscribers, and 103.5 million mobile cellular subscriptions in South Africa in 2019. With \$474 in ICT spending per person in 2019, South Africa was ranked 38th in the world (Al-Bastaki and Mudziso, 2023). Improvements in innovation, productivity, customer service, cooperation, innovation and competitiveness are just a few of the many ways that ICT has changed business operations in South Africa. Businesses have evolved and adapted during the pandemic by utilising technology like cloud computing, machine learning, artificial intelligence, and predictive analytics. Their success has been largely attributed to this process, which is called “digital transformation” (Borhan and Bader, 2021: 33). ICT has also made it easier for companies to enter new markets, cut costs, and provide value for stakeholders and customers. ICT has enabled the growth

and development of new businesses in South Africa, including cloud computing, IoT, mobile financial services and e-commerce (Borhan and Bader, 2021).

ICTs do, however, provide some risks and challenges for enterprises. Cybersecurity is one major issue that has complicated corporate operations due to ICT (Al-Mamary and Shamsuddin, 2021). Cybersecurity is the protection of data and information systems from unauthorised access, use, modification, or destruction (Al-Mamary and Shamsuddin, 2021). According to Bhatt and Grover (2015) cybersecurity is essential for companies to ensure the privacy, accuracy, and use of their ICT resources and services. However there are many risks and obstacles that businesses must deal with when it comes to cybersecurity, such as ransomware, malware, phishing, data breaches, cyberattacks, fraud, and espionage (Bhatt and Grover, 2015). Businesses that are exposed to these risks may suffer significant losses and harm, including repercussions for their finances, operations, reputation, legal status, and regulatory compliance. In 2020, the average cost of a data breach was \$3.86 million, and it took an average of 280 days to find and fix the breach, according to an IBM report from 2021. Therefore in order to proactively protect against, identify, and handle cyber risks, organisations must commit resources to developing strong cybersecurity measures, including policies, standards, processes, tools, training, and awareness campaigns.

One major barrier to ICT-driven productive business operations is the skills gap. According to Brynjolfsson and Hitt (2020: 33), the “skills gap” refers to the difference between the particular talents that employers need and the skills that employees possess. The ICT industry is one where the skills gap is most noticeable because of how quickly innovation and technology are developing, which calls for constant learning and adaptability. According to Brynjolfsson and Hitt (2020) there is a possibility that the skills gap would negatively affect the competitiveness, productivity, performance, and innovation of organisations. This is a result of the challenges companies have in locating, luring, keeping and nurturing competent ICT personnel. Because businesses are unable to fully utilise the benefits and capabilities

of ICT, the existence of a skills gap might impede ICT's capacity to create value and possibilities for them. In 2022, CompTIA conducted a survey in which 93% of companies admitted that their IT staff lacked critical skills. Furthermore according to 80% of firms, there is a skills gap that negatively affects worker productivity, customer service, security, and innovation, among other aspects of their organisation. In addition the protection of data and privacy is another issue that has complicated corporate operations due to ICT. The legal rights and obligations of individuals and organisations with regard to the collection, use, storage, and sharing of personal data are encompassed by data protection and privacy (Devaraj and Kohli, 2019). Any information that could be used to identify or be related to an individual is considered personal data. Examples of this type of information include name, email address, phone number, location, health information, preferences, behavioural patterns, and biometric data. Businesses must ensure customer trust, loyalty, and satisfaction as well as stakeholder satisfaction by upholding data protection and privacy (Deveraj and Kohli, 2019). However when it comes to data protection and privacy, organisations face a variety of difficulties and complexities, such as problems with ethics, governance, transparency, and compliance. The expanding volume, variety, and speed at which ICT is producing and sharing data, as well as the variety and quick changes to privacy and data protection laws and regulations across numerous nations and regions, exacerbate the challenges (Dewett and Jones, 2021). A noteworthy 87% of customers stated in a Cisco (2020) survey that they would move to a different business if they did not trust the way their data was handled. Furthermore, according to 52% of organisations, it is difficult to comply with the General Data Protection Regulation (GDPR), the European Union's data protection statute.

ICT has a significant impact on how businesses operate in Zimbabwe since it gives them the ability to increase productivity, efficiency, creativity, and competitiveness. Businesses may effectively gather information, collaborate, communicate, and offer services across a range of sectors and industries thanks to ICT (Chikati and Mhlanga,

2021). ICT may also help firms create value for stakeholders and customers while cutting costs and raising quality. ICT may also facilitate a number of industries, including e-government, e-commerce, e-learning, e-health, and e-agriculture. These industries are essential to Zimbabwe's economic development and prosperity (Mavetera and Kroeze, 2020). An estimated 500,000 jobs might be created by Zimbabwe's digital economy by 2025, contributing up to 6.6% of the GDP of the nation according to a 2020 World Bank report.

Nevertheless, a number of barriers and restrictions prevent Zimbabwe from fully implementing ICT. According to Mavetera and Kroeze (2020) these include excessive internet costs, regular power outages, poor infrastructure, a lack of qualified workers, and complex legislation and regulatory issues. These difficulties may limit the benefits and opportunities that information and communication technology (ICT) offers to organisations as well as its adoption, use, and dissemination. Dube and Scott (2022) claim that Zimbabwe has some of the most expensive internet prices in all of Africa. The average cost of data is \$0.02 per megabyte (MB), while it is \$0.004 in Egypt and \$0.01 in South Africa. Power outages in Zimbabwe are frequent and severe, sometimes lasting up to 19 hours every day. These elements may affect the availability, affordability, and dependability of ICT services for companies, as well as cause disruptions to their productivity and operational efficiency.

This study sought investigate how ICTs affect corporate operations, using Econet Zimbabwe as a case study. Econet Zimbabwe is a well-known ICT business and Zimbabwe's leading provider of telecommunications services. It was chosen for this study because, according to Mavetera and Kroeze (2020) it is Zimbabwe's biggest and most successful telecommunications operator, with a market share of over 60% and a subscriber base of over 10 million. Voice and data packages, mobile financial services and other ICT products and services are among the many offerings offered by Econet Zimbabwe. Therefore Econet Zimbabwe is an interesting and relevant topic for researching how ICT affects business operations in a developing country as well as

the challenges and opportunities that ICT poses for a firm in a complex and dynamic ICT environment.

### **1.3 Problem statement**

In an increasingly globalised and digitalized world, ICT may improve corporate performance, innovation and competitiveness. However the impact of ICT on corporate procedures varies throughout countries. Zimbabwe's ICT infrastructure is varied, with differences in quality and accessibility across the country (Chikati and Mhlanga, 2021). The geographical location, population size, income levels, and investment levels are some of the elements that affect the quality and dependability of ICT services in different regions. When opposed to rural areas, urban areas usually show higher internet penetration rates and better internet speeds. Some areas suffer from longer and more frequent power outages than others which has an adverse effect on ICT usage and accessibility (Dube and Scott, 2022). Furthermore, Zimbabwe faces many challenges in utilising ICT to improve business practices, such as costly internet costs, regular power outages, network connectivity disruptions, infrastructure deficiencies, a lack of qualified workers and issues with policies and regulations (Dube and Scott, 2022). These obstacles may limit the benefits and opportunities that information and communication technology (ICT) offers to organisations as well as its adoption, dissemination and use by them. These elements may affect the availability, affordability, and dependability of ICT services for companies as well as disturb their productivity and operational efficiency. As a result, the goal of this study was to investigate how ICT affects corporate operations in Zimbabwe with an emphasis on Econet Zimbabwe.

### **1.4 Research objectives**

1. To investigate how ICT affects efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe.
2. To identify the opportunities and challenges of ICT in achieving efficiency, productivity, innovation and competitiveness at Econet Zimbabwe.

3. To explore the strategies on how ICT can be used to achieve efficiency, innovation, productivity and competitiveness at Econet Zimbabwe.

### **1.5 Research questions**

1. How does ICT affect the efficiency, productivity, innovation, and competitiveness of Econet Zimbabwe?
2. What are the challenges of and opportunities of ICT in achieving efficiency, productivity and competitiveness at Econet Zimbabwe?
3. How can ICT be used to achieve efficiency, productivity and competitiveness at Econet Zimbabwe?

**Hypothesis 1:** ICT has a positive and significant effect on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe.

**Hypothesis 2:** ICT has a negative and significant effect on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe.

### **1.6 Justification for the study**

The rationale for conducting this study is grounded in the potential advantages that the research findings may offer to Econet Zimbabwe, its stakeholders, and policy makers. The research findings will assist Econet Zimbabwe in assessing the present and future effects of ICT on its business operations, as well as identifying areas for enhancement, innovation, and potential growth. The research findings will provide valuable insights to the stakeholders of Econet Zimbabwe, including its customers, employees, suppliers, partners, investors, and regulators. These insights will enhance their understanding of the company's value proposition, performance, and long-term viability. Furthermore, the research findings will provide valuable information to policy makers, including the government, regulator, and industry associations. This information will help them understand the challenges and opportunities of ICT for business development and growth in Zimbabwe. It will also assist in the formulation of policies and strategies to support and enhance the ICT sector and the business sector in the country.



### **1.7 Delimitations for the study**

1. The study will specifically examine the business practices of Econet Zimbabwe, excluding any other company in Zimbabwe. Therefore, the findings of the study will be limited to Econet Zimbabwe and may not be relevant to other organisations.
2. The study will examine the influence of ICT on the effectiveness, efficiency, innovation, and competitiveness of business practices at Econet Zimbabwe. The reason for this is that these four variables are frequently employed to assess and examine business procedures, and they have the capacity to encompass the primary advantages and obstacles of ICT for businesses.

### **1.8 Limitations**

The study will exclusively concentrate on Econet Zimbabwe as the sole case study, excluding other telecommunications or ICT companies in Zimbabwe or any other countries. This could potentially restrict the extent to which the findings can be applied and generalised to different contexts and settings. Econet Zimbabwe possesses distinctive attributes, qualities, approaches, and difficulties that may not be indicative or applicable to other enterprises in similar or different industries or markets. Hence, the study might not encompass the complete spectrum and variety of the influence of ICT on business practices in Zimbabwe and other regions.

### **1.8 Assumptions for the study**

1. The study assumes that Econet Zimbabwe is a representative and interesting case of a telecommunications and ICT company in Zimbabwe, and that its business practices can be compared and contrasted with other businesses in different countries.
2. The study assumes that the variables of efficiency, productivity, innovation, and competitiveness are appropriate and measurable indicators of business practices, and that they can capture the main impact of ICT on businesses.
3. The study assumes that the participants of the study such as employees of Econet Zimbabwe, will provide honest and truthful responses to the questions asked.

### **1.10 Definition of key terms**

#### **ICT**

ICT stands for Information and Communication Technologies, which are the technologies, systems, and tools that enable the creation, collection, processing, transmission, and storage of information through telecommunications (Cirera et al. 2017). ICT includes computing technologies like servers, laptops, and software applications, as well as communication technologies like internet, mobile phones, and satellite systems. These are the technologies that facilitate the business operations, performance, and innovation of Econet Zimbabwe.

### **Business practices**

Business practices refer to the strategies, procedures, and actions that a business undertakes in order to accomplish its goals and objectives (Carayannis and Grigoroudis, 2014). Business practices encompass various elements, including management, strategy, innovation, quality, customer service, marketing, and operations. Econet Zimbabwe utilises ICT to enhance its performance, efficiency, productivity, and competitiveness in the market.

### **Efficiency**

Efficiency is the quality or degree of being efficient, which means producing the desired results with minimum resources, such as time, energy, money, or materials (Chen and Yang, 2016). Efficiency can also be measured by the ratio of the useful output to the total input of a system or process. This can be the extent to which Econet Zimbabwe optimizes its performance, reduce its costs, and increase its output and quality using ICT.

### **Productivity**

Productivity is the ratio of a volume measure of output to a volume measure of input. It measures how efficiently production inputs, such as labour and capital, are being used in an economy to produce a given level of output (Brynjolfsson and Hitt, 2020). Productivity is considered a key source of economic growth and competitiveness. This can be rate at which Econet Zimbabwe uses ICT for work.

### **Innovation**

Innovation refers to the systematic process of introducing novel concepts, approaches, goods, services, or remedies that yield substantial positive effects and value. The process entails converting imaginative ideas into concrete results that enhance productivity, efficacy, or cater to unfulfilled requirements (OECD, 2015). Econet Zimbabwe utilises ICT to develop and implement novel or enhanced ICT services, products, or solutions that satisfy the requirements and expectations of its customers, stakeholders, and society.

### **Competitiveness**

Competitiveness refers to the capacity of a company, country, or individual to effectively compete with others in terms of quality, price, innovation, or customer satisfaction. Competitiveness can be affected by various factors, including market size, demand, regulations, and infrastructure (Porter, 2020). This refers to the extent to which Econet Zimbabwe utilises ICT in order to acquire and sustain a competitive edge over its competitors in the market.

### **1.11 Chapter Summary**

The chapter served as an introduction to the study. This chapter served as the introduction for the study. It first provided a background to the topic to familiarise the reader with the context of the research. The chapter also provided a problem statement for the study to highlight the problem which was under investigation. Moving on, the chapter outlined the objectives and the research questions of the study. Furthermore, the chapter provided a justification of the study, discussed the delimitation, limitations and the assumptions of the study. The following chapter is going to be on the literature review for the study.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter is going to provide a literature review for the topic under investigation. The literature review will provide a critical summary and evaluation of existing research on the impact of ICT on business practices. The purpose of the literature review is to provide a foundation for the current research and to identify gaps in existing research. The chapter is going to first present a theoretical framework for the study which discusses the theory underpinning the research. The chapter will go on to present a conceptual framework for the study. This is going to help in illustrating the relationships between the main and constructs of the study. Moving on the chapter is going to review literature on the effects of ICT on business practices focusing on four aspects which are efficiency, productivity, innovation and competitiveness. The following section reviews the literature on the opportunities and challenges of ICT in business practices. The last section reviews literature on the strategies which can be adopted for improving business practices using ICT.

### **2.2 Theoretical framework**

#### **2.2.1 Dynamic Capabilities Theory**

This research is underpinned by the dynamic capabilities theory. The Dynamic capabilities theory is a well-known framework in organisational theory that elucidates how firms attain and maintain a competitive advantage in dynamic environments (Barreto, 2020). This highlights the significance of a company's capacity to adjust, incorporate, and reorganise its resources and procedures in reaction to changing market circumstances, technological progress, and evolving customer demands (Barreto, 2020).

The dynamic capabilities theory, which originated in the 1990s and 2000s, is an enhanced version of the resource-based view of the firm. It builds upon the idea of focusing on the internal resources of the firm. The dynamic capabilities theory focuses on the processes and activities that a firm employs to create, modify, and

reconfigure its resources (Eisenhardt and Martin, 2021). Helfat and Peteraf (2019) state that the dynamic capabilities theory is commonly used as a managerial framework to identify and manage a firm's strategic capabilities. It is also used as a theoretical lens to study different phenomena in strategic management and other fields.

The dynamic capabilities theory is grounded in three fundamental principles: sensing, seizing, and transforming (Barrero, 2020). Sensing refers to the firm's capacity to systematically observe, analyse, and comprehend both the external and internal surroundings, thereby recognising potential opportunities and threats. Seizing refers to the firm's capacity to effectively utilise and deploy its resources, as well as identify and take advantage of opportunities. Transforming, on the other hand, refers to the firm's ability to adjust and reorganise its resources in order to deal with and overcome threats. Peteraf and Verona (2018) argue that these concepts necessitate the firm to consistently acquire knowledge and introduce novel ideas, while also adapting its resources to the evolving environment.

#### **2.2.1.1 Sensing**

Sensing refers to the act of recognising and understanding alterations in the external and internal surroundings that could impact the present and future performance of the company (Peteraf and Verona, 2018). Sensing encompasses the activities of scanning, searching, and exploring the environment to identify signals, trends, and opportunities. It also involves monitoring and evaluating the firm's existing resources and capabilities. Sensing requires a combination of analytical and creative skills, as well as a learning orientation and a proactive attitude.

This study focuses on the capacity of Econet Zimbabwe to analyse, observe, and comprehend the external and internal surroundings, as well as recognise opportunities and risks associated with ICT and business methodologies. For instance, Econet Zimbabwe has the ability to perceive alterations in customer requirements and preferences, market patterns and demands, technological advancements and disruptions, competitive forces and strategies, regulatory policies and standards, as

well as social and environmental concerns. By detecting and perceiving these alterations, Econet Zimbabwe is able to foresee and react to the advantageous circumstances and potential dangers promptly and efficiently.

#### **2.2.1.2 Seizing**

According to Teece (2017), seizing is the process of mobilising and deploying a firm's resources and capabilities in order to capture and exploit opportunities identified through sensing. It entails making strategic decisions, designing and implementing organisational processes, and developing and communicating value propositions (Barreto, 2020). Seizing necessitates both operational and entrepreneurial abilities, as well as a dynamic mindset and a risk-taking attitude.

In the context of the study, seizing refers to Econet Zimbabwe's ability to mobilise and deploy resources, as well as capture and exploit opportunities in ICT and business practices. Econet Zimbabwe, for example, can capitalise on opportunities by investing in and expanding its ICT capabilities, which include hardware, software, networks, data, and skills. Econet Zimbabwe can also capitalise on opportunities by developing and delivering value-added ICT services, products, and solutions such as mobile money, solar power, e-learning, and online platforms. By capitalising on these opportunities, Econet Zimbabwe can improve its performance, efficiency, productivity, and competitiveness.

#### **2.2.1.3 Transforming**

According to Eisenhardt and Martin (2021) transforming is the process of adapting and reconfiguring the firm's resources and capabilities to deal with and overcome threats or challenges identified through sensing. This process entails modifying, renewing, or discarding existing resources and capabilities while acquiring or developing new ones (Barreto, 2020). Transforming necessitates both integrative and innovative abilities, as well as a change mindset and a resilient attitude.

In the study, transforming refers to Econet Zimbabwe's ability to adapt and reconfigure its resources, as well as cope with and overcome threats to ICT and business practices. Econet Zimbabwe, for example, can transform its resources by

upgrading and modernising its ICT infrastructure and systems, such as transitioning to 5G and fibre optic technology. Econet Zimbabwe can also use its resources to innovate and diversify its ICT offerings and business models, such as launching new digital solutions and collaborating with other organisations. Econet Zimbabwe's resilience, flexibility, and sustainability can be enhanced by resource transformation. The dynamic capabilities theory was chosen as the study's theory because it provides a comprehensive and coherent framework for analysing the impact of ICT on business practices, as well as comparing and contrasting firms from different countries. The dynamic capabilities theory can help firms identify and evaluate their ICT capabilities, as well as how they contribute to their performance and competitiveness. The dynamic capabilities theory can also help a firm understand the challenges and opportunities that ICT presents, as well as how to deal with them. As a result, the theory clarifies the variables, relationships, and assumptions that serve as the foundation for the research study.

### 2.3 Conceptual framework

Figure 1: Conceptual framework



#### 3.3.1 Efficiency

The conceptual framework demonstrates how ICT influences efficiency in a company's business practices. According to Andreassen (2020), ICT can assist businesses in automating, streamlining, and integrating their processes, such as design, manufacturing, distribution, sales, and feedback. ICT can also help businesses reduce waste, errors, and delays while increasing quality and consistency. As a result,

ICT can help businesses become more efficient by increasing output per unit of input while lowering costs and risks.

The deployment of ICT in business operations offers a pathway to enhanced efficiency by optimizing various organizational processes. According to Porter and Heppelmann (2014), the integration of ICT allows for the automation of routine tasks, the streamlining of workflows, and the facilitation of real-time communication across different departments. This optimization leads to a reduction in operational bottlenecks and enables a more agile response to market demands. Moreover, ICT empowers businesses to implement advanced analytics, which can identify inefficiencies and provide insights for process improvement. However, the realization of these efficiency gains is contingent upon the alignment of ICT initiatives with the strategic goals of the organization and the ability to adapt to the evolving technological landscape.

ICT also plays a crucial role in enhancing resource utilization and cost efficiency within businesses. Brynjolfsson and McAfee (2014) assert that ICT facilitates better resource management by enabling precise tracking and allocation of assets, leading to reduced waste and lower operational costs. Additionally, ICT can contribute to cost efficiency by automating supply chain management, thereby minimizing inventory levels and reducing storage costs. The ability to rapidly process and analyse data also allows businesses to make informed decisions that can prevent overproduction and underutilization of resources. Nevertheless, the challenge lies in ensuring that the ICT infrastructure is robust enough to support these functions and that there is a skilled workforce capable of leveraging ICT for maximum efficiency.

### **3.3.2 Productivity**

ICT has a significant impact on the productivity of a company's business practices. According to Eklund and Kastberg (2020), the use of ICT can enhance businesses' capabilities, velocity, and adaptability, enabling them to fulfil the needs and expectations of their customers and stakeholders. ICT can facilitate businesses in acquiring and utilising information, knowledge, and skills, thereby augmenting their



learning and innovation capabilities. ICT has the potential to improve the efficiency of businesses by increasing their value added per unit of input, as well as creating a competitive advantage and differentiation.

The utilization of ICT in knowledge management is a critical driver of productivity within modern businesses. As noted by Drucker (1999), knowledge has become a key economic resource and a primary source of competitive advantage. ICT facilitates the efficient capture, storage, and dissemination of knowledge, enabling organizations to leverage their intellectual capital effectively. Through systems such as knowledge bases, data warehouses, and collaborative platforms, ICT empowers employees to access and apply organizational knowledge to improve decision-making and problem-solving processes. This, in turn, leads to increased productivity as employees are better equipped to perform their tasks with greater proficiency and innovation. However, the challenge lies in creating an ICT infrastructure that supports seamless knowledge flow and in fostering a culture that encourages knowledge sharing and continuous learning.

ICT also serves as a catalyst for engaging the workforce in more productive endeavours. According to Bloom et al. (2014), the adoption of ICT tools can lead to significant improvements in employee productivity by enabling remote work, flexible scheduling, and virtual collaboration. These tools not only facilitate a better work-life balance but also allow organizations to tap into a global talent pool. Moreover, ICT-driven analytics can provide insights into workforce productivity patterns, enabling managers to optimize team performance and address productivity bottlenecks. However, realizing the full potential of ICT in enhancing workforce productivity requires a strategic approach to technology adoption, one that aligns with the human resource policies and the overall organizational culture.

### **3.3.3 Innovation**

The conceptual framework shows that ICT influences innovation for a company's business practice. According to Verma and Dandwhal (2023) ICT can help businesses to identify and solve problems, and generate and test ideas. ICT can also help

businesses to explore and exploit opportunities, and respond to changes and challenges. Therefore, ICT can enhance the innovation of businesses by increasing their novelty, quality, and impact, and satisfying the needs and expectations of their customers and stakeholders.

The role of ICT in facilitating disruptive innovation is pivotal for businesses seeking to redefine markets and displace established competitors. Christensen et al. (2015) assert that disruptive innovation is not simply about technological advancement; it is about how technology is applied to create new business models and market opportunities. ICT enables businesses to harness data analytics, cloud computing, and the Internet of Things (IoT) to develop innovative products and services that meet emerging customer needs. This transformative potential of ICT can lead to the creation of new value networks and the disruption of traditional industry practices. However, the successful implementation of disruptive innovation through ICT requires a strategic vision that embraces risk-taking and a willingness to challenge the status quo.

Beyond the technological aspects, the influence of ICT on innovation is deeply rooted in the organizational culture. As highlighted by Schein (2010), an innovation-oriented culture is characterized by openness to new ideas, cross-functional collaboration, and a supportive environment for experimentation. ICT tools such as collaborative platforms and social media can foster this culture by enabling the free flow of information and ideas within and beyond the organization. This cultural shift, facilitated by ICT, can accelerate the innovation process and enhance the organization's capacity to respond to dynamic market conditions. Nonetheless, cultivating such a culture requires leadership commitment to nurturing the human and social aspects of innovation, ensuring that technology serves as a catalyst rather than a constraint.

#### **3.3.4 Competitiveness**

From the conceptual framework ICT influences competitiveness for a company's business practices enabling businesses to perform better than their competitors, and

gain and maintain an advantage in their market. According to Yaser and Al-Mamary (2020) ICT can help businesses to improve their efficiency, productivity, and innovation, and achieve higher performance and outcomes. ICT can also help businesses to differentiate themselves from their competitors, and offer unique and superior value propositions. Therefore, ICT can enhance the competitiveness of businesses by increasing their market share, revenue, growth, and profitability, and creating customer loyalty and retention.

The strategic application of ICT is instrumental in establishing a competitive edge within the marketplace. As Porter's Five Forces framework suggests, ICT can be leveraged to influence the competitive dynamics within an industry, including bargaining power of suppliers and buyers, threat of new entrants, threat of substitutes, and the intensity of competitive rivalry. By employing ICT to streamline supply chain management, businesses can negotiate better terms with suppliers, enhance customer relationship management to improve buyer loyalty, and utilize data analytics to anticipate market trends and respond proactively to competitive threats. However, the strategic use of ICT for competitive advantage also requires businesses to be vigilant of the digital landscape and to continuously innovate to stay ahead of competitors.

According to Devex (2014) ICT enables businesses to create value and differentiate themselves in the market by offering unique products and services that are tailored to customer needs. Through the use of ICT, businesses can engage in precision marketing, customize offerings, and enhance customer service, thereby fostering a strong brand identity and customer loyalty. Additionally, ICT can facilitate the development of new business models that disrupt traditional market structures, such as platform-based services that connect users and providers directly. However, the challenge for businesses is to not only implement the latest ICT tools but also to ensure that these tools are aligned with the strategic vision of the company and are effectively integrated into the organizational structure and culture.

## **2.4 EFFECTS OF ICT ON BUSINESS PRACTICES**

### **2.4.1 Improving efficiency**

An impact of ICT on business practices is the enhancement of efficiency which pertains to a business's capacity to accomplish its objectives using minimal resources, time, and cost. Multiple studies have demonstrated that ICT can enhance efficiency by automating and optimising business processes, minimising mistakes and inefficiencies, promoting coordination and collaboration, and facilitating real-time monitoring and feedback. ICT can enhance businesses' efficiency in managing inventory, supply chain, logistics, and customer service.

A study conducted by Mogale et al. (2021) revealed that of ICT can lead to a decrease in business transaction costs, an enhancement in service operations, and an improvement in customer satisfaction. These factors can ultimately result in increased efficiency and performance for the firm. Nevertheless, the influence of ICT on efficiency can differ based on the category, extent, and circumstances of ICT utilisation. The study conducted by Mogale et al. (2021) investigated the impact of ICT on the effectiveness of administrative employees in specific government departments located in Gauteng, South Africa. The researchers discovered that the use of ICT can enhance the efficiency, interpersonal abilities, and responsibility of administrative staff. However it can also present certain difficulties such as insufficient training, technical assistance, and security concerns.

In a similar vein, a study conducted by CollegeNP (2020) emphasised the advantages and difficulties associated with ICT in enhancing productivity and efficiency in businesses. They cited Amazon as an example as it has have effectively incorporated technology into their business operations to enhance customer service and boost efficiency, leading to heightened customer satisfaction and a competitive edge. Nevertheless, it was observed that ICT can involve significant expenses, challenges in maintenance, and vulnerabilities to cyber threats (CollegeNP, 2020).

The impact of ICT on business efficiency is characterized by a duality that encompasses both enhancements and challenges. While ICT automates and

streamlines business processes, it also introduces complexities that require careful management. For instance the integration of ICT in inventory and logistics can significantly reduce manual errors and improve response times. However this integration often demands sophisticated software and hardware solutions that necessitate regular updates and maintenance. A study by Chaudhary and Aggwawal (2019) highlights the positive outcomes of ICT adoption such as reduced transaction costs and improved service operations, which contribute to a firm's enhanced efficiency. These benefits are accompanied by the need for continuous investment in ICT training and support, highlighting the importance of a strategic approach to ICT management that aligns with the firm's resources and capabilities.

The balance between the advantages provided by ICT and the operational realities faced by businesses is a delicate one. As noted in the studies by Mogale et al. (2021) and CollegeNP (2020), the effective use of ICT can lead to improved efficiency and customer satisfaction but it also requires addressing challenges such as the cost of technology, maintenance issues, and cybersecurity risks. The case of Amazon illustrates the potential for ICT to create a competitive advantage through enhanced customer service and operational efficiency. However, the associated costs and challenges must be managed strategically. This necessitates a comprehensive understanding of the specific context within which ICT is deployed particularly in the Zimbabwean market where Econet Zimbabwe operates. A nuanced approach that considers local conditions, resource availability and the specific needs of the business is essential for leveraging ICT to improve efficiency without compromising on other critical aspects of operations.

#### **2.4.2 Increasing productivity**

ICT has a further impact on business practices by enhancing productivity, which is the measure of output to input or the value generated per unit of resource. Multiple studies have demonstrated that ICT can enhance productivity by facilitating faster and more accurate access, processing, and sharing of information. This in turn, can lead to improved decision-making and problem-solving capabilities for businesses. ICT can

assist businesses in maximising the potential of their workforce by improving their abilities, expertise, and innovation. ICT can enhance businesses by enabling training and education, promoting knowledge sharing and learning, and fostering innovation and creativity.

According to a study conducted by RingCentral in 2020 ICT plays a crucial role in enhancing productivity. By enabling businesses to communicate more efficiently with both customers and employees, ICT helps ensure timely completion of projects within the allocated budget (RingCentral, 2020). The effect of ICT on productivity can vary based on the quality, quantity, and type of ICT employed, as well as other factors that complement it, such as organisational structure, management practices, and human capital. The study conducted by Vaumi et al. (2021) investigated the utilisation and consequences of ICT on the efficiency of labour in Africa. The research employed data from firms across 19 sub-Saharan African countries, including Zimbabwe. Vaumi et al. (2021) discovered that the adoption and intensity of ICT have a favourable and substantial effect on labour productivity, particularly when accompanied by organisational changes like the implementation of new business processes, new products, and new skills.

In a similar vein a study conducted by Ioannis et al. (2017) examined the impact of ICT on productivity, employment and incomes in the United States and discovered that ICT has had a positive impact on productivity growth. However it has also led to income inequality because ICT tends to favour workers who are more skilled and educated. Additionally ICT has created a greater demand for tasks and occupations that complement its use. These studies indicate that ICT can have both beneficial and detrimental impacts on productivity, contingent upon the factors that influence its adoption, diffusion, and usage. Hence, it is crucial to comprehend the precise context and circumstances surrounding ICT in Zimbabwe and how they impact the efficiency of Econet Zimbabwe.

The enhancement of productivity through ICT is further evidenced by its role in streamlining business operations. According to Vaumi et al. (2021) ICT facilitates the

automation of routine tasks, freeing up human resources to focus on more strategic activities that contribute to the company's growth. For instance, customer relationship management systems can automate customer interactions and provide insights into consumer behaviour, enabling businesses to tailor their services more effectively. Moreover project management tools allow for better resource allocation and timeline tracking, ensuring projects are completed efficiently (Vaumi et al. 2021). This operational streamlining is crucial for businesses like Econet Zimbabwe which operates in dynamic markets where the ability to rapidly adapt and optimize processes can provide a significant competitive edge.

While ICT has the potential to significantly boost productivity it also raises concerns about the digital divide (WIPO, 2022), particularly in the context of developing economies like Zimbabwe. The disparity in access to ICT resources between different groups can lead to unequal opportunities for productivity gains. For Econet Zimbabwe addressing this divide means not only investing in ICT infrastructure but also ensuring that employees at all levels have the necessary skills and access to benefit from these technologies. Bridging the digital divide is essential for fostering an inclusive environment where all employees can contribute to and benefit from the productivity enhancements that ICT offers.

#### **2.4.3 Fostering innovation**

ICT has a third impact on business practices by promoting innovation, which involves the development and adoption of novel or enhanced products, services, processes, or business models. Multiple studies have demonstrated that ICT can stimulate innovation by granting businesses the ability to acquire novel information, ideas, and prospects. Additionally ICT offers tools and platforms for conducting experiments, testing and prototyping. ICT can facilitate business collaboration with various stakeholders, including customers, suppliers, partners, and competitors, enabling the collection of their feedback, insights, and suggestions. ICT enables businesses to leverage cloud computing, artificial intelligence, and big data in order to innovate and create novel solutions, products and services.

Petropoulos (2022) asserts that ICT can enhance the performance, innovation, and competitiveness of businesses in a globalised and digitalized world. This is achieved by enabling businesses to actively pursue, obtain, and exchange expertise, technologies, and markets. The influence of ICT on innovation is contingent upon the nature, extent, and circumstances of ICT utilisation, as well as the innovation capabilities and strategies of enterprises. The study conducted by Pradhan et al. (2018) investigated the impact of ICT development on innovation in G-20 countries from 1961 to 2019. A study revealed that there is a reciprocal cause-and-effect relationship between ICT development and innovation. However the influence of ICT development on innovation is more potent and enduring compared to the reverse. Additionally, it was discovered that the influence of ICT development on innovation differs among countries, contingent upon their economic development, institutional quality and human capital (Pradhan et al., 2018).

A study conducted by Ioannis et al. (2017) discovered that the utilisation of ICT has a beneficial and substantial impact on the development of new products, improvement of processes, and enhancement of organisational innovation. However it does not have a similar effect on marketing innovation. The researchers also discovered that the impact of ICT usage on different types of innovation varies depending on the sector, size, and age of the small and medium-sized enterprises (Ioannis et al., 2017). These studies indicate that ICT can have both beneficial and detrimental impacts on innovation, contingent upon the factors that influence its adoption, diffusion, and utilisation. Hence, it is crucial to comprehend the precise context and circumstances surrounding ICT in Zimbabwe and their impact on the innovation of Econet Zimbabwe.

According to Pradhan et al. (2018) the capacity of ICT to foster innovation is significantly amplified through its facilitation of collaboration and experimentation. By providing platforms for interaction and feedback from a diverse range of stakeholders, ICT enables businesses to tap into a wealth of collective insights. This collaborative approach is instrumental in refining ideas and accelerating the



innovation process. Furthermore ICT tools that support experimentation, such as simulation software and rapid prototyping technologies, allow businesses to test and iterate on ideas with greater speed and lower risk (Pradhan et al. 2018). This iterative process is crucial for Econet Zimbabwe as it seeks to introduce novel solutions that can disrupt the telecommunications market. The ability to quickly prototype and validate ideas not only shortens the innovation cycle but also enhances the company's agility in responding to market demands.

While ICT has been shown to drive innovation, its impact is not uniform across all contexts. According to Petropoulos (2022) factors such as the economic environment, institutional quality, and human capital play a significant role in determining the extent to which ICT can influence innovation. For instance in well-developed economies ICT may lead to groundbreaking innovations due to the availability of advanced infrastructure and skilled talent (Petropoulos, 2022). In contrast when it comes to developing economies like Zimbabwe the focus may be on leveraging ICT to overcome infrastructural challenges and enhance existing services. For Econet Zimbabwe understanding the local context including the level of ICT literacy, infrastructure availability, and regulatory environment is essential to tailor its innovation strategies effectively. This nuanced understanding ensures that ICT investments are aligned with the company's strategic goals and the unique needs of the Zimbabwean market, thereby maximizing the potential for innovation-driven growth.

#### **2.4.4 Enhancing competitiveness**

One of the impacts of ICT on business practices is the augmentation of competitiveness. This term refers to a business's capacity to uphold or amplify its market share, profitability, and customer loyalty in comparison to its competitors. Multiple studies have demonstrated that ICT has the ability to bolster competitiveness by equipping businesses with a distinct advantage, through the enhancement of their quality, differentiation, and customer value. ICT can facilitate businesses in adjusting to evolving customer requirements, preferences, and expectations, as well as to

shifting market conditions, trends, and prospects. ICT enables businesses to leverage social media, e-commerce, and mobile applications to effectively connect with customers and provide tailored and individualised interactions.

According to a study conducted by Jitahidi Tech (2021), a company that offers ICT solutions and services in Kenya, ICT can offer several advantages to businesses. These include enhanced visibility and control, cost reduction, and increased profitability. These benefits can ultimately result in positive growth and improved competitiveness for businesses (Jitahidi Tech, 2021). The influence of ICT on competitiveness can vary based on the extent, nature and circumstances of ICT utilisation, along with the competitive strategies and capabilities of the enterprises. According to the Global Innovation Index (2022) ICT has a favourable and noteworthy influence on the competitiveness of nations. However the extent of this impact differs among different regions and income brackets. Additionally it has been discovered that ICT can generate both advantageous prospects and obstacles for competitiveness. These include the augmentation of productivity and innovation, as well as the escalation of the digital divide and cyber threats (Petropoulos et al., 2022). Similarly a study conducted by the World Bank in 2018 revealed that the implementation of ICT can enhance the competitiveness of companies by boosting their sales, profits, and exports. Additionally, it can also lower their costs, risks, and obstacles to market entry. The World Bank (2018) mentioned Econet Zimbabwe as an example of a company that has utilised ICT to provide innovative and cost-effective mobile money services, like EcoCash, to a large customer base. This has allowed Econet Zimbabwe to gain a competitive edge over its competitors. These studies indicate that ICT can have both beneficial and detrimental impacts on competitiveness, contingent upon the factors that influence its adoption, diffusion, and utilisation. Hence, it is crucial to comprehend the precise context and circumstances surrounding ICT in Zimbabwe, and how these factors impact the competitiveness of Econet Zimbabwe.

According to Mogale et al. (2021) the role of ICT in enhancing competitiveness extends to market positioning and customer engagement. By leveraging digital platforms, businesses can gain insights into customer behaviour, tailor their marketing strategies, and offer personalized experiences that foster loyalty (Mogale, et al. 2021). For Econet Zimbabwe, the use of ICT in customer engagement initiatives such as EcoCash has not only streamlined transactions but also created a sense of community and trust around the brand. This strategic use of ICT aligns with the company's goals of increasing market share and profitability by providing value-added services that resonate with customers' evolving needs. The ability to engage customers effectively through ICT platforms is a key differentiator in today's competitive landscape, where consumer expectations are continually shaped by technological advancements.

While ICT offers numerous opportunities for enhancing competitiveness it also presents challenges that businesses must navigate to sustain their market position (Mogale et al. 2021). The digital divide, cybersecurity threats and the rapid pace of technological change require companies to be vigilant and proactive. For Econet Zimbabwe, this means investing in robust cybersecurity measures, bridging the digital divide through inclusive technology initiatives and fostering a culture of continuous learning to keep pace with ICT advancements. Addressing these challenges is essential for maintaining a competitive edge as it ensures the company can protect its assets, remain accessible to all segments of the market, and continue to innovate in alignment with technological trends.

## **2.5 Opportunities of ICT on business practices**

### **2.5.1 Access to information and knowledge**

Access to information and knowledge which can assist businesses in gaining new perspectives, developing new competencies, and identifying new opportunities, is one of the benefits of ICT for business practices. ICT gives businesses access to a wealth of knowledge and information from a variety of sources, including databases, online platforms and the internet, as multiple studies have demonstrated. ICT can assist companies in conducting environmental scanning, benchmarking, and market

research, which can assist them in identifying competitive advantages and threats as well as customer needs, preferences and trends.

According to Bankole et al. (2021) communication and ICT are crucial for gaining access to information and knowledge because they help companies interact with staff and customers more effectively and guarantee that projects are finished on schedule and within budget. However the amount, kind, and quality of ICT utilised as well as the accessibility, affordability and availability of ICT services may all affect how easy it is to obtain knowledge and information (El-Kassar et al. 2019). UNESCO (2016) conducted a study on the digital empowerment of individuals with disabilities emphasising the significance of information and knowledge access through ICTs for their development, inclusion, and participation. They discovered that although there are many obstacles to overcome, including a lack of ICT infrastructure, skills and content as well as policy and regulatory issues, ICT can offer people with disabilities a variety of benefits, including education, employment, health, and social protection (UNESCO, 2016).

Similar to this, a study by Baubeng-Andoh (2021) examined ICT-based strategies for improving rural development and discovered that although ICT can give rural residents access to new ideas, opportunities, and information sources, it can also necessitate the right kinds of interventions to guarantee that ICT is used effectively and sustainably. They gave the example of ITC Limited's e-Choupal initiative in India, which links rural farmers with suppliers and buyers through ICT to improve productivity, quality and income. Farmers now have access to information and knowledge about market prices, weather forecasts, and agricultural practices. According to these studies ICT can improve business practices by providing access to information and knowledge but its uptake, dissemination, and utilisation are also influenced by other factors. As a result, it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's information and knowledge access.

According to Majumber and Miah (2022) the potential of ICT to democratize access to information and knowledge is contingent upon addressing the digital divide. This divide, which often separates urban from rural, rich from poor, and the educated from the less educated, can significantly hinder the equitable distribution of ICT's benefits. For businesses like Econet Zimbabwe, initiatives that bridge this divide such as providing affordable internet access and digital literacy programs can expand their market reach and foster inclusivity. By ensuring that all segments of the population have access to ICT companies can tap into a broader customer base and source ideas from a more diverse pool of knowledge, enriching their innovation potential and competitive edge (Majumber and Miah, 2022).

In the context of rapidly evolving markets the strategic management of information and knowledge becomes a critical component of business success. ICT provides the tools necessary for effective knowledge management, including data analytics and customer relationship management systems (Majumber and Miah, 2022). These tools enable businesses to process vast amounts of data, extract actionable insights, and make informed decisions. For Econet Zimbabwe leveraging ICT for knowledge management means not only having access to information but also the ability to analyse and apply it strategically to enhance operations, tailor customer experiences, and anticipate market trends. This strategic application of ICT is what transforms raw data into a valuable asset that drives business growth and competitiveness.

### **2.5.2 Innovation and creativity**

Innovation and creativity, which can assist companies in developing and implementing new or enhanced goods, services, procedures, or business models, represent another potential impact of ICT on business practices. ICT encourages innovation and creativity by giving businesses the means and platforms to experiment, test, and prototype, claim Cuevas-Vargas et al. (2019). In a similar vein, El-Kassar et al. (2019) support the notion that ICT helps companies to work together with other stakeholders, including partners, suppliers, customers, and rivals, and to benefit from their opinions, insights, and recommendations. ICT can assist companies

in creating new products, services and solutions by utilising big data, cloud computing, and artificial intelligence (Itani et al. 2019). According to these studies ICT can foster innovation and creativity in business practices but its uptake, dissemination and utilisation are also influenced by various factors. Thus it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's inventiveness and originality.

Dube and Scott (2022) are of the notion that the transformative power of ICT in catalysing innovation is evident in its ability to create ecosystems that foster creativity and the exchange of ideas. By connecting businesses with a global network of thinkers, entrepreneurs, and technologists, ICT breaks down traditional barriers to innovation. For Econet Zimbabwe this means tapping into a vast pool of global knowledge and diverse perspectives that can inspire new approaches to product development and service delivery. The company can leverage ICT to build platforms that not only facilitate internal innovation but also engage external stakeholders, turning feedback and collaborative efforts into a competitive advantage.

In a digitalized business environment, sustaining creativity requires more than just access to technology it necessitates a culture that embraces change and encourages risk-taking. ICT provides the tools for rapid prototyping and iterative design, allowing businesses to experiment with new concepts at a lower cost and with greater speed (Dube and Scott, 2022). Econet Zimbabwe can foster a culture of innovation by using ICT to implement agile methodologies which emphasize adaptability and responsiveness. This approach ensures that creativity is not stifled by fear of failure but is instead seen as a valuable step towards finding unique solutions that can redefine the market.

### **2.5.3 Customer satisfaction and loyalty**

Customer satisfaction and loyalty represent a third area in which ICT can benefit business practices. By fostering these traits, companies can outperform their competitors in terms of market share, profitability and customer retention. Several studies have demonstrated that ICT gives businesses a strong online presence and

efficient communication channels which increases customer satisfaction and loyalty. ICT also helps companies to provide customers with individualised and tailored experiences through the use of social media, e-commerce, mobile apps and data analytics. ICT, for instance, can assist companies in enhancing the customer experience by enabling real-time communication with customers through social media, email, and online chat.

ICT adoption can lower business transaction costs, enhance customer satisfaction and improve service operations (Jitahidi, 2022). These benefits can all increase a firm's efficiency and performance. Customer expectations, perception and preferences, in addition to the type, quantity and quality of ICT employed may all have an impact on customer satisfaction and loyalty. According to Lythreatis et al. (2022), they discovered that ICT can enhance customer satisfaction and loyalty by raising the perceived value, quality and trust of tourism services as well as by fostering positive word-of-mouth and a sense of community among travellers.

In a similar vein report by the World Bank (2018) revealed that ICT can raise customer satisfaction and loyalty by making banking services more convenient, accessible and secure while also lowering costs, risks and customer complaints. They gave M-Pesa, a mobile money service that Safaricom introduced in Kenya, as an example. M-Pesa has employed information and communication technology (ICT) to offer millions of users quick, simple, and inexpensive financial services as well as to build a devoted customer base and a competitive edge. According to these studies ICT can improve customer satisfaction and loyalty for businesses, but its adoption, diffusion, and usage are also influenced by other factors. Consequently it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's customer loyalty and satisfaction.

The utilization of ICT extends beyond operational efficiency to forge deeper relationships with customers fostering both satisfaction and loyalty. According to Vaumi et al. (2021) by leveraging data analytics and CRM systems businesses can gain a nuanced understanding of customer behaviours and preferences, allowing for

the delivery of personalized services and offers. For Econet Zimbabwe this could mean using ICT to track customer usage patterns and tailor communication and promotions accordingly. The ability to anticipate customer needs and provide proactive solutions can significantly enhance customer satisfaction, leading to increased loyalty and advocacy for the brand.

However CollegeNP (2020) is of the notion that while ICT offers numerous avenues to enhance customer satisfaction it also presents challenges that must be navigated to sustain loyalty. Issues such as data privacy concerns, the impersonality of digital interactions and the potential for service disruptions require careful attention. Econet Zimbabwe can address these challenges by ensuring robust data protection measures, maintaining a human touch in digital communications, and providing reliable and uninterrupted services. By doing so the company can build a reputation for trustworthiness and dependability which are cornerstones of customer loyalty in the digital age.

#### **2.5.4 Globalization and expansion**

According to Ioannis et al. (2017) the integration of ICT in business practices is pivotal for navigating the complexities of global markets. It enables companies to transcend traditional boundaries and connect with customers, suppliers and partners worldwide. For Econet Zimbabwe, this means leveraging ICT to facilitate cross-border transactions, understand diverse market dynamics and customize services to meet the unique demands of each locale. The strategic use of ICT for market research and customer engagement can provide insights into local consumer behaviours, allowing Econet Zimbabwe to tailor its offerings and establish a strong presence in new markets.

While ICT provides a gateway to global expansion it also presents challenges that must be strategically managed. Issues such as compliance with international regulations, understanding cultural nuances, and ensuring seamless communication across different time zones are non-trivial. Econet Zimbabwe can utilize ICT to maintain regulatory compliance through up-to-date knowledge of international laws



and standards. Additionally ICT can aid in overcoming language barriers and cultural differences, fostering a more inclusive and accessible global operation. By addressing these challenges Econet Zimbabwe can harness the full potential of ICT to facilitate its expansion and solidify its position in the global marketplace

## **2.6 Challenges of ICT on business practices**

### **2.6.1 Cybersecurity threats**

According to CollegeNP (2020) Cybersecurity threats are a challenge that ICT poses to business practices. These threats can expose businesses to the risk of data breaches, sensitive information theft, and financial losses. Cyberattacks, are becoming more common and sophisticated. According to a 2018 World Economic Forum report cybercrime costs the world economy more than \$600 billion a year, with small and medium-sized enterprises being the most at risk. However the nature, degree, and context of ICT use as well as the security protocols and practices of the companies, may all affect the cybersecurity risks.

Dube and Scott's (2022) study looked at how power outages affected Zimbabweans' ability to access and use ICT. They discovered that ICT system security can be impacted by power outages because these events can interfere with the operation of firewalls, antivirus programmes, encryption and frequent software updates all of which are critical for shielding ICT systems from cyberattacks (Dube and Scott, 2022). Similar to this a study conducted by ENISA (2023) used an interdisciplinary expert group comprising futurists, sociologists, business executives, cybersecurity experts and others to identify emerging cybersecurity threats and challenges for 2030. They discovered that, while ICT can boost productivity and innovation it can also increase the digital divide and pose a threat to cybersecurity (ENISA, 2023). They used the growing geopolitical power of ICT providers as an example which has an impact on the security and sovereignty of other nations and areas. These studies imply that cybersecurity risks are a problem for ICT in business processes, but they also rely on the variables affecting ICT adoption, dispersion, and utilisation. Therefore it is

critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's cybersecurity.

The escalating threat of cyberattacks necessitates a proactive approach to cybersecurity, particularly for businesses that increasingly rely on ICT. According to Bankole et al. (2021) implementing comprehensive security measures, such as multi-factor authentication, end-to-end encryption and regular security audits is essential to safeguard against potential breaches. For Econet Zimbabwe, this means not only adopting advanced technological defences but also fostering a culture of cybersecurity awareness among employees. Regular training sessions and simulations of phishing attacks can equip staff with the knowledge to identify and respond to threats, thereby fortifying the company's first line of defense (Bankole et al. 2021).

In an interconnected global economy cybersecurity is not just an IT issue but a strategic business imperative. Buabeng-Andoh (2021) is of the notion that the integration of ICT into all aspects of business operations means that a breach in one area can have cascading effects across the organization. Econet Zimbabwe must therefore adopt a holistic strategy that aligns cybersecurity with business objectives and risk management practices. This includes not only protecting proprietary information and customer data but also ensuring business continuity and resilience in the face of cyber threats. Strategic partnerships with cybersecurity firms and adherence to international best practices can further strengthen Econet Zimbabwe's security posture in the digital landscape.

### **2.6.2 Infrastructure gaps**

Infrastructure gaps can have an impact on the dependability, cost-effectiveness and accessibility of ICT services for businesses, making them a second challenge posed by ICT for business practices. Infrastructure gaps according to Sedoyeka et al. (2019), are caused by inadequate or non-existent physical and technical infrastructure, such as internet, telecommunications, and electricity, that supports ICT. For instance in Zimbabwe, based on variables including location, population, income, and investment, some areas have better and more dependable ICT services than others

(Dube and Scott, 2022). Power outages are more common and last longer in some areas than in others, which has an impact on ICT access and usage (Dube and Scott, 2022). The nature, degree and context of ICT use as well as the laws and rules governing the ICT industry may all have an impact on the infrastructure gaps.

Using metrics like ICT access, use, skills, infrastructure, innovation and impact, UNECE (2021) investigated the e-resilience readiness of ICT infrastructure in Europe and Central Asia. They discovered that while ICT infrastructure is crucial for improving e-resilience, there are certain obstacles to overcome, including a lack of ICT content, skills and infrastructure as well as problems with policy and regulations (UNECE, 2021). In a similar vein Devex (2014) used examples from various nations and industries to identify the five main obstacles to ICT for development implementation. According to Devex (2014) one of the main obstacles is the lack of infrastructure, which can restrict the effectiveness, longevity and reach of ICT interventions, particularly in rural and isolated areas. They gave the One Laptop per Child project as an example, which had trouble providing and maintaining laptops in places with inadequate connectivity and infrastructure. According to these studies infrastructure gaps present a challenge for ICT in business practices, but they also rely on the variables influencing ICT adoption, diffusion, and utilisation. Therefore it is critical to comprehend the unique ICT environment in Zimbabwe as well as how it influences Econet Zimbabwe's ICT services.

The challenge of infrastructure gaps necessitates strategic approaches that align with the broader goals of ICT integration in business practices (Cuevas-Vargas et al. 2021). For Econet Zimbabwe this could involve engaging with policymakers to advocate for infrastructure development, exploring alternative energy solutions to mitigate power outages, and investing in satellite or other wireless technologies to extend connectivity to underserved areas. Additionally public-private partnerships can be instrumental in pooling resources and expertise to build the necessary ICT infrastructure (Cuevas and Vargas et al. 2021). By taking a proactive stance on

infrastructure development Econet Zimbabwe can enhance the reliability and reach of its ICT services thereby supporting its operational needs and strategic objectives.

While working towards long-term solutions for infrastructure gaps Devex (2021) assert that businesses must also adapt to existing constraints to maintain continuity in their ICT services. This may include deploying offline capabilities, utilizing low-bandwidth solutions or creating resilient systems that can withstand intermittent connectivity. For Econet Zimbabwe understanding the specific infrastructure challenges of different regions can inform the deployment of tailored ICT solutions that ensure service delivery even in the face of infrastructural limitations. Such adaptability not only demonstrates commitment to customer service but also positions the company as a resilient and innovative player in the ICT sector.

### **2.6.3 Skills shortages**

Lack of skills can hinder ICT adoption, diffusion and usage by businesses. Rozmi et al. (2020) define skills shortages as the absence or inadequacy of human capital capable of ICT management and use in an effective and efficient manner. For instance, programmers, engineers, and technicians who can design, develop, and maintain ICT systems and applications are in short supply in Zimbabwe (Dube and Scott, 2022). The general workforce who can use ICT tools and platforms for their daily tasks and functions, also needs ICT literacy and training (UNESCO, 2016). The kind degree and context of ICT use as well as the policies and initiatives that promote the growth and improvement of ICT skills may all have an impact on the skills shortages.

According to a 2020 Gartner study, the top 10 technology skills including artificial intelligence, cloud computing, cybersecurity, data science, and digital marketing will be highly sought after in 2021 and beyond. They discovered that although these competencies are necessary for companies to take advantage of ICT's advantages and opportunities, they also present certain difficulties, including a shortage of supplies, high costs, and quick changes (Gartner, 2020). In a similar vein a 2018 World Bank study examined how ICT affects African businesses' ability to develop their

workforce. They discovered that ICT can help businesses develop their skills by giving them better access to knowledge, information, and training. However in order to guarantee the quality and relevance of ICT skills appropriate interventions are also needed, such as certification, quality assurance and curriculum reform (World Bank, 2018). They gave the eLearning Africa project as an example which has made use of ICT to offer opportunities for online and blended learning to a range of industries and demographics, including women, the agricultural industry, health care, and education (World Bank, 2018). According to these studies ICT-related skills shortages affect business practices, but they also depend on the variables that affect ICT adoption, diffusion, and usage. Thus it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's skill development.

According to Dube and Scott (2022) the skills shortage in the ICT sector represents a significant bottleneck for businesses aiming to leverage technology for growth and innovation. To address this gap it is imperative for companies like Econet Zimbabwe to invest in targeted education and training programs. These initiatives should focus on equipping current and future employees with the necessary skills to manage and utilize ICT effectively. This includes not only technical skills such as programming and system maintenance but also soft skills like problem-solving and digital literacy (Dube and Scott, 2022). By collaborating with educational institutions and offering in-house training, Econet Zimbabwe can cultivate a workforce that is adept at navigating the rapidly evolving technological landscape.

According to El-Kassar et al. (2019) the skills shortage in the ICT sector represents a significant bottleneck for businesses aiming to leverage technology for growth and innovation. To address this gap it is imperative for companies like Econet Zimbabwe to invest in targeted education and training programs. These initiatives should focus on equipping current and future employees with the necessary skills to manage and utilize ICT effectively. This includes not only technical skills such as programming and system maintenance but also soft skills like problem-solving and digital literacy. By collaborating with educational institutions and offering in-house training (El-

Kassar et al. 2019), Econet Zimbabwe can cultivate a workforce that is adept at navigating the rapidly evolving technological landscape.

In addition to formal education and training, fostering a culture of continuous learning within the organization is crucial for mitigating the impact of skills shortages (Gartner, 2020). As the ICT field is characterized by rapid changes and advancements, employees must be encouraged to stay abreast of new technologies and methodologies. Econet Zimbabwe can support this culture by providing access to online learning platforms, organizing workshops, and incentivizing skill development. Such a learning environment not only helps in closing the skills gap but also promotes innovation and adaptability among the workforce, ensuring that the company remains competitive in the digital age (Gartner, 2020).

In addition to formal education and training according to Chaudhary and Aggrawal (2019) fostering a culture of continuous learning within the organization is crucial for mitigating the impact of skills shortages. As the ICT field is characterized by rapid changes and advancements, employees must be encouraged to stay abreast of new technologies and methodologies. Econet Zimbabwe can support this culture by providing access to online learning platforms, organizing workshops and incentivizing skill development. Such a learning environment not only helps in closing the skills gap but also promotes innovation and adaptability among the workforce ensuring that the company remains competitive in the digital age (Chaudhary and Aggrawal, 2019).

#### **2.6.4 Policy and regulatory issues**

Policy and regulatory issues pose a fourth challenge to ICT adoption in business practices. These issues can lead to uncertainty, confusion, and impediments to businesses' effective and efficient use of ICT. Policy and regulatory issues according to Vaumi et al. (2021) are related to the absence or irregularity of laws and rules governing ICT, including those pertaining to taxation, data protection, privacy and intellectual property. For instance Zimbabwe needs a comprehensive and well-defined ICT policy and legal framework to handle the issues and challenges that the industry

is facing today and in the future, including digital transformation, e-commerce and cybercrime (Dube and Scott, 2022). In order to promote and facilitate ICT innovation and entrepreneurship, a favourable and encouraging environment is also required (UNESCO, 2016). However depending on the kind extent, and context of ICT usage as well as the local and international variables influencing the business environment, the policy and regulatory issues may change.

Using case studies from various nations and areas ITU (2020) investigated the policy and regulatory frameworks for digital platforms and services. They discovered that while ICT can help businesses in many ways such as expanding their reach into new markets improving customer satisfaction, generating new revenue streams, and having a positive social and environmental impact on the other hand it can also present certain difficulties, like trade restrictions, regulatory hurdles, and infrastructure deficiencies. (ITU, 2020). Similarly an OECD study from 2019 used case studies from various industries and domains to identify the policy and regulatory challenges brought about by digital transformation. They discovered that while ICT can help businesses innovate and compete in a globalised and digitalized world it also necessitates the use of appropriate policies and regulations, such as those pertaining to data governance, competition policy, consumer protection, and taxation, to ensure the equitable, inclusive, and sustainable use of ICT. They used the digital taxation framework as an example, which attempts to address issues with taxing the digital economy, including defining permanent establishment, allocating taxing rights, and valuing intangible assets. These studies imply that although ICT poses challenges to business practices in terms of policy and regulation, these challenges also depend on the factors influencing ICT adoption, diffusion and usage. Thus it is critical to comprehend the unique ICT context and circumstances in Zimbabwe and how they impact Econet Zimbabwe's policies and regulatory framework.

According Itani et al. (2019) the dynamic landscape of ICT policy and regulatory issues presents both challenges and opportunities for businesses. As the digital economy continues to evolve, so too must the frameworks that govern it. For Econet

Zimbabwe staying abreast of these changes is crucial for navigating the complexities of digital transformation. This involves actively participating in policy discussions and advocating for regulations that support innovation while protecting consumer rights and promoting fair competition (Itani et al. 2019). By doing so Econet Zimbabwe can help shape a regulatory environment that is conducive to the growth and sustainability of the ICT sector.

Lythreatis et al (2021) in an increasingly interconnected world businesses must harmonize local and global regulatory requirements. Econet Zimbabwe faces the task of complying with Zimbabwe's national policies while also adhering to international standards and practices. This balancing act requires a thorough understanding of the regulatory landscape and the ability to adapt business strategies accordingly. By ensuring compliance on all fronts Econet Zimbabwe can avoid legal pitfalls and foster trust among its stakeholders which is essential for long-term success in the global digital economy.

## **2.7 Strategies for improving business practices using ICT**

### **2.7.1 Aligning ICT with business goals and objectives**

Aligning ICT with business goals and objectives can guarantee that ICT supports and facilitates the business value proposition, which is one strategy for leveraging ICT to improve business practices. Mata and Pont (2016) state that integrating ICT into business strategy, planning, and decision-making processes as well as matching ICT investments and initiatives to business needs, priorities, and anticipated results are key components of aligning ICT with business goals and objectives. A McKinsey (2021) report stated that strong governance and leadership, a well-defined roadmap, and metrics are necessary for successful digital transformations (McKinsey, 20121). However, the nature, degree and context of ICT use as well as the organisational culture and structure of the businesses may all affect how well ICT aligns with the goals and objectives of the business.

The best practices and approaches for coordinating IT with business objectives, including executive support communication, teamwork and alignment frameworks



(Joia and Magalhaes, 2017). They discovered that while these methods and approaches can boost a company's productivity, efficacy, and competitiveness, they also present certain difficulties, like a lack of funding, expertise, and trust (Joia and Magalhaes). Similar to this a study by Zott et al. (2021) looked at the procedures and advantages of matching IT objectives with business objectives, including setting objectives, evaluating the situation as it is and creating a plan. They discovered that while businesses can increase performance, innovation, and customer satisfaction by aligning IT goals with business goals. Doing so also calls for the use of certain tools and strategies, including business analysis, project management, and IT governance (Zott et al. 2021). They gave Netflix as an example which uses IT to match its objectives with the preferences of its users and gain a competitive edge in the streaming market. According to these studies one way to use ICT to improve business practices is to align it with goals and objectives. However, the success of this strategy depends on a number of other factors including those that affect ICT adoption, diffusion, and usage. As a result it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences ICT alignment with Econet Zimbabwe's corporate objectives.

The strategic integration of ICT within an organization's operational framework is pivotal for fostering agility and responsiveness to market dynamics. As posited by Hitt et al. (2017) the agility afforded by ICT enables businesses to rapidly adapt to changing market conditions and customer demands, thereby securing a competitive advantage. This agility is manifested in the capacity to swiftly reconfigure internal processes, reallocate resources, and modify product offerings in alignment with strategic objectives. Furthermore ICT facilitates the collection and analysis of big data empowering decision-makers with actionable insights that drive business growth. However, the extent to which ICT can contribute to organizational agility is contingent upon the robustness of the underlying ICT infrastructure and the strategic foresight of leadership in leveraging ICT as a dynamic tool for innovation and market adaptation.

The alignment of ICT with business goals is inextricably linked to the cultivation of an organizational culture that embraces technological change and innovation. As highlighted by Schein (2019) the core values, beliefs, and practices that constitute an organization's culture significantly influence the acceptance and integration of ICT. A culture that prioritizes continuous learning, knowledge sharing, and openness to innovation is more likely to successfully align ICT initiatives with business objectives. This alignment is further reinforced by the presence of transformational leaders who champion ICT adoption and foster an environment where employees are encouraged to develop digital competencies. Nevertheless, the challenge lies in navigating the resistance to change that often accompanies the introduction of new technologies, necessitating a strategic approach to change management that addresses both the technical and human aspects of ICT integration.

### **2.7.2 Developing ICT capabilities and skills**

Developing ICT capabilities and skills among managers and staff can also help to improve business practices by raising the workforce's ICT literacy and proficiency. According to Dube and Scott (2022) businesses ought to allocate resources towards ICT education and training, along with fostering an innovative and learning-oriented culture, in order to enhance their ICT capabilities and skills. For instance ICT and communication are crucial for boosting productivity, according to RingCentral (2020) since they let companies interact with clients and employees more successfully and guarantee that projects are finished on schedule and within budget. However, the kind, degree, and context of ICT usage as well as the policies and programmes that support the growth and improvement of ICT skills may all have an impact on how well ICT capabilities and skills develop.

McKinsey (2021) identified the tech trends which are cloud, 5G, AI, and digital platforms that are reshaping business and IT in the future. They discovered that while these developments can present businesses with new opportunities and difficulties, they also call for the development of new ICT competencies, such as cybersecurity, data science and digital and computational thinking (McKinsey, 2021). They used

Netflix as an example, which has used ICT to develop ICT capabilities and skills among its employees and managers, such as agile, DevOps and user-centric design, as well as to align its goals with the preferences of its customers and create a competitive advantage in the streaming industry. According to these studies enhancing ICT competencies and skills is one way to use technology to improve business processes, but it also depends on the variables affecting ICT adoption, diffusion and usage. Therefore it is critical to comprehend the unique ICT environment and circumstances in Zimbabwe and how they impact Econet Zimbabwe's ICT capacity and expertise development.

The strategic development of ICT capabilities within an organization is not merely about technological proficiency, it is about aligning these capabilities with the overarching business strategy to drive innovation and competitive differentiation. As noted by Bughin and Van Zeebroeck (2017), the rapid evolution of digital technologies necessitates a workforce that is not only adept at using current ICT tools but is also capable of anticipating and adapting to future technological shifts. This forward-looking approach requires a commitment to continuous learning and professional development, ensuring that employees' ICT skills remain relevant and that the organization can capitalize on emerging technologies. Moreover the development of ICT skills should be seen as a strategic investment that can yield long-term benefits, such as increased operational efficiency, enhanced customer engagement and the creation of new business models.

According to Mata and Pont (2016) building an ecosystem that supports the enhancement of ICT skills involves a multifaceted approach, encompassing education, policy, and industry collaboration. Educational institutions play a crucial role in laying the foundation for ICT literacy, while businesses must take proactive steps to provide specialized training that aligns with their specific needs. Partnerships between academia and industry can facilitate the transfer of cutting-edge knowledge and skills, ensuring that the workforce is equipped with the latest ICT competencies (Mata and Pont, 2016). Additionally policymakers can contribute by creating an

enabling environment that encourages investment in ICT education and training, as well as by implementing regulations that foster innovation and protect intellectual property. Such an ecosystem not only benefits individual organizations like Econet Zimbabwe but also contributes to the national economy by enhancing the overall ICT proficiency of the workforce.

### **2.7.3 Leveraging ICT for innovation and differentiation**

Utilising ICT for innovation and differentiation is a third strategy for enhancing business processes with ICT. This approach can increase a company's market share and profitability while also increasing customer satisfaction and loyalty. Leveraging ICT for innovation and differentiation (Mogale et al., 2021), refers to how companies should use ICT to develop and implement new or improved goods, services, procedures, or business models that can give them a competitive advantage and a distinctive value proposition to customers.

A framework for business innovation and ICT strategies was proposed by Mata and Pont (2016) in their study. It comprises determining the goals and objectives of the business, evaluating the present and future ICT capabilities and skills, and creating and implementing an ICT roadmap and metrics. Similarly Majumder et al. (2022) found that executive support, communication, collaboration, and alignment frameworks are among the best practices and strategies for using ICT for innovation and differentiation. They discovered that while these methods and approaches can boost a company's productivity, efficacy and competitiveness, there are drawbacks as well, like a shortage of funds, expertise, and trust (Majumder et al. 2022). They gave the example of Amazon, which has innovated and set itself apart from the competition with its offerings in e-commerce, cloud computing, artificial intelligence and digital platforms. It has also utilised ICT to train managers and staff in ICT skills and capabilities like agile, DevOps, and user-centric design. These studies indicate that one way to use ICT to improve business practices is to leverage it for innovation and differentiation. However, the success of this strategy depends on the factors that affect ICT adoption, diffusion, and usage. As a result, it is critical to comprehend the unique

ICT environment in Zimbabwe and how it influences Econet Zimbabwe's innovation and distinctiveness.

Innovation in business practices through ICT is not merely about the adoption of new technologies but also about the integration of these technologies into the core business models to drive differentiation. As highlighted by Tidd and Bessant (2018) successful innovation requires a holistic approach where ICT is not seen as an isolated function but as an integral part of the business strategy. This involves rethinking business processes, customer engagement, and value creation through the lens of digital capabilities. For instance companies like Amazon have not only adopted advanced ICT solutions but have also redefined their business models around these technologies to offer unparalleled customer experiences and establish market leadership (Tidd and Bessant, 2018). However the challenge for businesses, particularly in the context of Zimbabwe lies in aligning ICT investments with strategic business outcomes amidst constraints such as limited infrastructure and financial resources.

The utilization of ICT for creating a distinctive value proposition involves leveraging technology to offer unique products or services that set a business apart from its competitors. This differentiation strategy, as discussed by Porter (2019), can be achieved through innovation in product features, customer service, and delivery mechanisms, all enabled by ICT. For example, companies that harness data analytics and customer insights can tailor their offerings to meet specific customer needs, thereby enhancing customer satisfaction and loyalty. However the effectiveness of such a strategy is dependent on the company's ability to not only deploy the right ICT tools but also to foster a culture of innovation where employees are encouraged to experiment and develop new ideas. The case of Econet Zimbabwe presents an opportunity to explore how such strategies can be implemented in a challenging economic and technological landscape, where the potential for ICT to drive business differentiation must be balanced against practical limitations.

#### **2.7.4 Managing ICT risks and challenges**

Managing ICT risks and challenges can help to ensure the security, dependability and sustainability of ICT systems and services, which is the fourth strategy for leveraging ICT to improve business practices. Identifying, evaluating and mitigating potential threats and issues that ICT may pose, such as cybersecurity, infrastructure, skills, policy, and regulatory issues, are all part of managing ICT risks and challenges, (Petropoulos, 2022).

Using two draft special publications that offer recommendations and results for ICT risk management within the framework of enterprise risk management, NIST (2022) conducted a study on information and communications technology (ICT) risk management in the workplace. They discovered that ICT risk management can improve an organization's productivity, efficacy and competitiveness, however it also necessitates strong governance, a well-defined roadmap, and metrics in addition to a clear vision and direction (NIST, 2022). According to these studies, one way to use ICT to improve business practices is to manage the risks and challenges associated with it. However, this strategy also depends on the factors that affect ICT adoption, diffusion, and usage. Thus, it is critical to comprehend the unique ICT environment in Zimbabwe and how it influences Econet Zimbabwe's ability to manage ICT risks and difficulties.

Effective management of ICT risks necessitates a methodological approach that encompasses a comprehensive assessment of potential vulnerabilities and the implementation of robust security protocols. As noted by Tondel et al. (2018) a systematic risk assessment process should include the identification of assets, the evaluation of threats and vulnerabilities, the assessment of impact and likelihood, and the prioritization of risks based on their potential impact on business operations. This process is critical in developing a security strategy that aligns with business objectives and regulatory requirements. Moreover it is essential for organizations to adopt a proactive stance on ICT risk management, continuously monitoring the threat landscape and updating their security measures to address emerging risks. However

the effectiveness of these methodological approaches is contingent upon the organization's commitment to invest in the necessary resources and to cultivate a culture of security awareness among its employees.

The sustainability of ICT risk management efforts can be reinforced through the adoption of established frameworks that provide guidelines for ongoing risk evaluation and control. Frameworks such as ISO/IEC 27001 offer structured processes for the implementation, monitoring, review, and improvement of an information security management system (ISMS). According Solms and van Niekerk (2018), adherence to such frameworks can help organizations maintain a consistent approach to managing information security risks, ensuring that protective measures are integrated into all aspects of ICT operations. Additionally these frameworks often advocate for the involvement of top management and the integration of risk management into the corporate governance structure, which is crucial for aligning ICT risk management with the strategic direction of the organization. Nevertheless the challenge remains in adapting these global frameworks to the specific context of Zimbabwe, where unique economic, infrastructural, and regulatory conditions may necessitate tailored approaches to ICT risk management.

## **2.8 Chapter summary**

From the literature review ICT can have positive, negative, or mixed effects on business practices, depending on the type, level, and context of its usage as well as the factors influencing its adoption, diffusion, and usage, according to the literature review. The literature review showed that that ICT can offer a range of advantages and prospects for companies, including cost savings, customer happiness, globalisation and differentiation. However these benefits and opportunities also depend on the variables that affect ICT adoption, diffusion and usage. Therefore the research sought to investigate how ICT could be used to improve business practices at Econet Zimbabwe.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter is going to describe and justify the procedures which were used for data collection. The chapter is going to describe and explain the research paradigm, research approach, research design, target population, sampling techniques, data collections methods and methods which are going to be used for data analysis for the research.

#### **3.2 Research paradigm**

The study adopted a positivist research paradigm. According to Cresswell and Cresswell (2017) the positivist research paradigm assumes that there is one objective reality that can be known and accurately described and explained by science. When using a positivist research paradigm, the researcher relies on observation, measurement, and quantification to collect and analyse data, and uses deductive reasoning to test hypotheses and make predictions. The researcher also believed that the research is independent of personal values and that the findings are generalizable and replicable (Cresswell and Cresswell, 2017).

The justification for choosing a positivist research paradigm for this study is that the researcher aimed to investigate the impact of ICT on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe. These variables require a clear and precise definition and operationalization, as well as a rigorous and systematic design and methodology that will ensure the validity and reliability of the results. A positivist research paradigm provided the researcher with a logical structure and a set of principles and techniques guided the researcher in conducting the research and in making objective and factual claims about the reality of ICT and business practices in Zimbabwe.



### **3.3 Research approach**

The study adopted a quantitative research approach. According to Frankfort-Nachmias (2015), quantitative research is a type of research that involved collecting and analysing numerical data to test or understand a theory or hypothesis. The research approach uses statistical models and mathematical methods to measure and compare variables, find patterns and averages, make predictions, and test causal relationships. Bryman (2015) noted that quantitative research has several advantages such as its ability to produce reliable and objective results that could be replicated and verified by other researchers. It can also capture large amounts of data from a representative sample of the population, which could enhance the validity and generalizability of the findings. Moreover quantitative research could provide empirical and statistical evidence that could support or reject the hypotheses and answer the research questions for the study.

The study adopted a quantitative research approach because it was suitable for the research objectives and questions. The main aim of the study was to investigate the impact of ICT on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe. A quantitative research approach enabled the researcher to measure and compare these variables and indicators using appropriate data collection and analysis techniques. Furthermore a quantitative research approach also benefited the study by providing empirical and statistical evidence that could show the causal relationships between ICT and business practices in Zimbabwe. Moreover, a quantitative research approach allowed the researcher to generalize and apply the findings to other contexts and sectors, such as other ICT companies or other African countries. Therefore a quantitative research approach was the most appropriate and effective research approach for the study.

### **3.4 Research design**

The study adopted a cross-sectional research design. According to Jonson and Christensen (2019) a cross-sectional research design is a type of observational study that involved collecting and analysing data from a population or a sample at a specific

point in time. This design had several advantages for the study, such as its ability to measure the prevalence of the outcome of interest (efficiency, productivity, innovation, and competitiveness) in relation to the exposure of interest (ICT) within a defined population (Econet Zimbabwe). Moreover a cross-sectional research design could identify associations and correlations between the variables of interest, which could be further investigated in future research using causal or experimental methods (Kumar, 2019). This research design was chosen for the study because it enabled the researcher to collect and analyse data from the employees and managers of Econet Zimbabwe at a single point in time, using questionnaires and interviews. It also benefited the study by providing an overview of the current situation regarding ICT usage and its impact at Econet Zimbabwe.

### **3.5 Target population**

A target population is a group of individuals or units that share certain characteristics and are the intended subjects of a research study. A target population is a subset of the general population that is relevant to the research problem and objectives (Kothari, 2018). The target population for the study comprised of employees from Econet Zimbabwe. The rationale for choosing the employees from Econet Zimbabwe as the target population for the study is that they are the primary users and providers of ICT services in the company. The employees from Econet Zimbabwe provided valuable insights and information on how ICT affected their efficiency, productivity, innovation, and competitiveness. Econet Zimbabwe has approximately 1098 employees (Econet, 2023). Sampling was used to obtain a manageable representative number of employees from Econet Zimbabwe.

### **3.6 Sampling and sample size**

According to Cresswell and Cresswell (2017) sampling is a research method that involves selecting a subset of individuals from a larger population to study. It allows researchers to collect data from a manageable and representative group of people, rather than trying to survey everyone in the population (Punch, 2018). Sampling can

also help reduce the cost and time of data collection, as well as improve the quality and accuracy of the data.

From the 1098 employees at Econet Zimbabwe Slovin's formula was used to calculate the sample size for the study as shown below

$n = \frac{N}{(1+Ne^2)}$  ; Where: n = sample size, N = population and e = degree of precision.

For the study, N = 1098 and e = 0.05. Using the above formula, the sample size was calculated as follows:

$$n = \frac{1098}{[1+(1098 \times 0.05^2)]}$$

Sample size = **285 participants**

### **3.6.1 Systematic sampling**

Systematic sampling was used as a sampling technique for the study. This is a type of probability sampling method that involves selecting the participants at regular intervals from the sampling frame, using a fixed sampling interval (Leedy and Omrod, 2015). The sampling frame is the list of all the employees from Econet Zimbabwe, ordered and numbered according to some criterion. The sampling interval is the number of employees that are skipped between each selection, calculated by dividing the population size by the sample size (Field, 2018). The sample size is the number of employees that are included in the sample, determined by using a formula or a table that considers the confidence level, the margin of error, and the population size (Field, 2018).

For this study, the researcher used the employees' register as the sampling frame, and select 285 participants from 1098 using 4 as the sampling interval. The researcher used a random number generator to pick the first employee, and then added the sampling interval to select the subsequent employees. For example, if the random number generator gives 7 as the first employee, the researcher will select the 7th,

11th, 15th, 19th, and so on employees from the register until the sample size of 285 is reached.

The justification for choosing systematic sampling as a sampling technique for the study is that it is easy and simple to implement, and ensures that the sample is evenly distributed across the population. Systematic sampling also provides a high level of representativeness and precision as it reduces the sampling error and the variability of the sample.

### **3.7 Research instruments**

For the study data is going to be collected using a Likert Scale Questionnaire

#### **3.7.1 Likert Questionnaire**

A Likert scale questionnaire was used for data collection. This is a type of survey instrument that consists of a statement or a question, followed by a series of answer statements that indicate the degree of agreement or disagreement with the statement or question (Cresswell and Cresswell, 2017). The answer statements are usually numbered from 1 to 5, and each number corresponds to a label, such as strongly agree, agree, neutral, disagree, or strongly disagree respectively. A Likert scale questionnaire has several advantages for data collection, such as that it measures the opinions, attitudes, or behaviours of the employees from Econet Zimbabwe regarding the impact of ICT on their efficiency, productivity, innovation, and competitiveness. This provided valuable insights into the perceptions and experiences of the respondents, and reveal the strengths and weaknesses of the ICT usage and impact at the company. Furthermore, provided quantitative and ordinal data that can be easily analysed using descriptive and inferential statistics (Sekaran and Bougie, 2016), this enabled the researcher to summarize and present the data, test the hypotheses, and examine the relationships between the variables of interest. The Likert scale questionnaire offered a range of responses that capture the nuances and variations of the respondents' views, rather than just a simple yes or no answer (Kothari, 2018). This enhanced the validity and reliability of the data, and reduce the response bias and error.

The justification for choosing a Likert scale questionnaire for data collection is that enabled the researcher to measure the opinions, attitudes, or behaviours of the employees from Econet Zimbabwe regarding the impact of ICT on their efficiency, productivity, innovation, and competitiveness. A Likert scale questionnaire also benefited the study by providing quantitative and ordinal data that can be easily analysed using descriptive and inferential statistics.

### **3.8 Data analysis**

SPSS was used for data analysis in this study. SPSS is a powerful statistical software platform that offers a user-friendly interface and a robust set of features that lets the researcher quickly extract actionable insights from the data (Field, 2018). The justification of using SPSS for data analysis was that it enabled the researcher to measure and compare the impact of ICT on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe. The benefit of using SPSS for data analysis is that provided empirical and quantitative evidence that can support or reject the hypotheses and answer the research questions.

### **3.10 Chapter summary**

The chapter has outlined the research methods which were applied for the study. From the chapter, study adopted a positivist research paradigm and a quantitative research approach, as it sought to measure and compare the effect of ICT on efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe. The study also used a cross-sectional research design, as it collects and analyses data from a population or a sample at a specific point in time. The target population for the study were the employees from Econet Zimbabwe, who are the primary users and providers of ICT services in the company. Furthermore, the study used a Likert scale questionnaire as the data collection instrument, as it measures the opinions, attitudes, or behaviours of the employees regarding the impact of ICT on their performance and outcomes. The study used SPSS for data analysis as it provides powerful and user-friendly features to extract and present actionable insights from the data. The next chapter is going to be on data presentation and analysis.

## CHAPTER 4

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

This chapter is going to present the findings of the study. The data was collected from selected Econet Zimbabwe employees using a Likert scale questionnaire. The chapter is first going to present the response rate from the study. For there, the chapter is going to present the demographic data for the respondents and then delve in to presenting and discussing the findings from the study.

#### 4.2 Response rate

Table 1: Response rate

<b>Sample size</b>	<b>Responses obtained</b>	<b>Response rate</b>
285	280	98%

A response rate refers to the percentage of the responses which were received from the study, and table 1 illustrates that study managed to achieve a 98% response rate. According to Kaja (2019) a study with a response rate of over 50% is considered excellent, in this case the research achieved a 98% response rate which strongly improves the reliability and validity of the research findings.

### 4.3 Demographic data

#### 4.3.1 Gender

*Figure 2: Gender distribution*

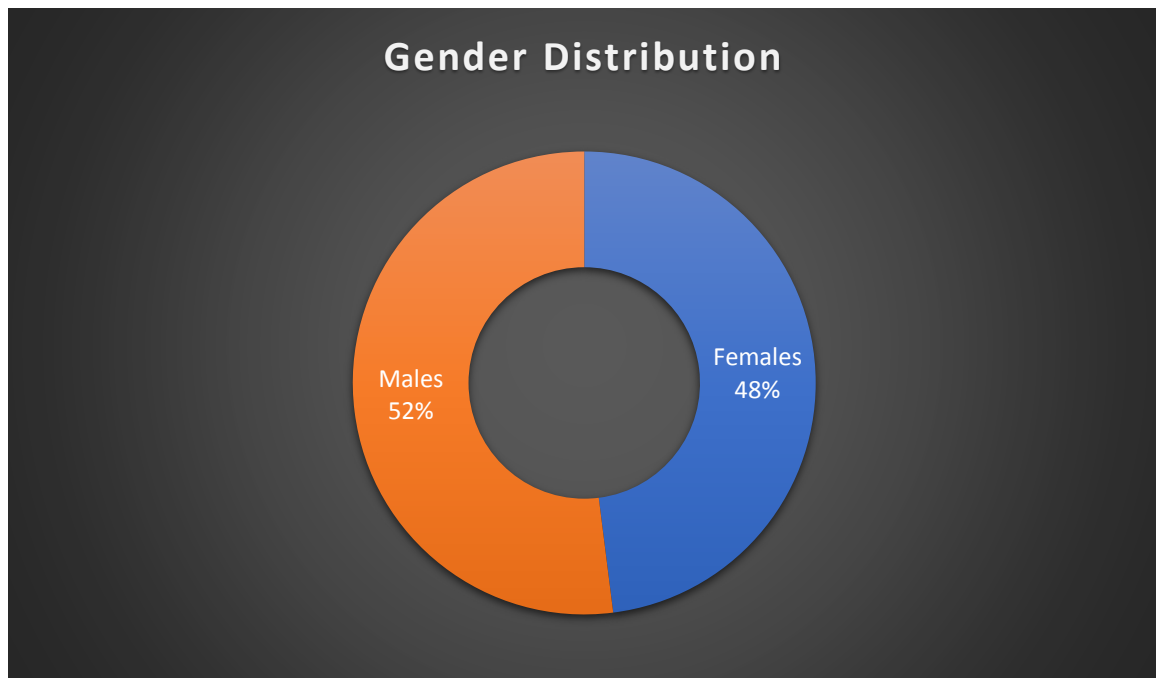


Figure 1 illustrates that most of the respondents (52%) were males whilst 48% of the respondents were females. This shows that the research managed to incorporate perspectives from all genders, through slightly biased towards males. This improves the validity and reliability of the data as it represents perspectives from both genders.

### 4.3.2 Age

Table 2: Age distribution

Age group	21-35	36-45	46-55	56 and above
Frequency	55	86	90	49
Percentage	20%	31%	32%	18%

Table 2 illustrates the age distribution from the respondents. It shows that most of the respondents (32%) were aged between 46-55, while the least (18%) respondents were aged 56 and above. Moreover 31% of the respondents were aged between 36-45 while 20% of the respondents were between 21-35. This shows that the study managed to collect data from individuals with varying ages though, slightly biased towards those aged between 46-55. This improves the validity and reliability of the data as it was not collected from a single age group.

### 4.3.3 Years of experience

Figure 3: Years of experience for respondents

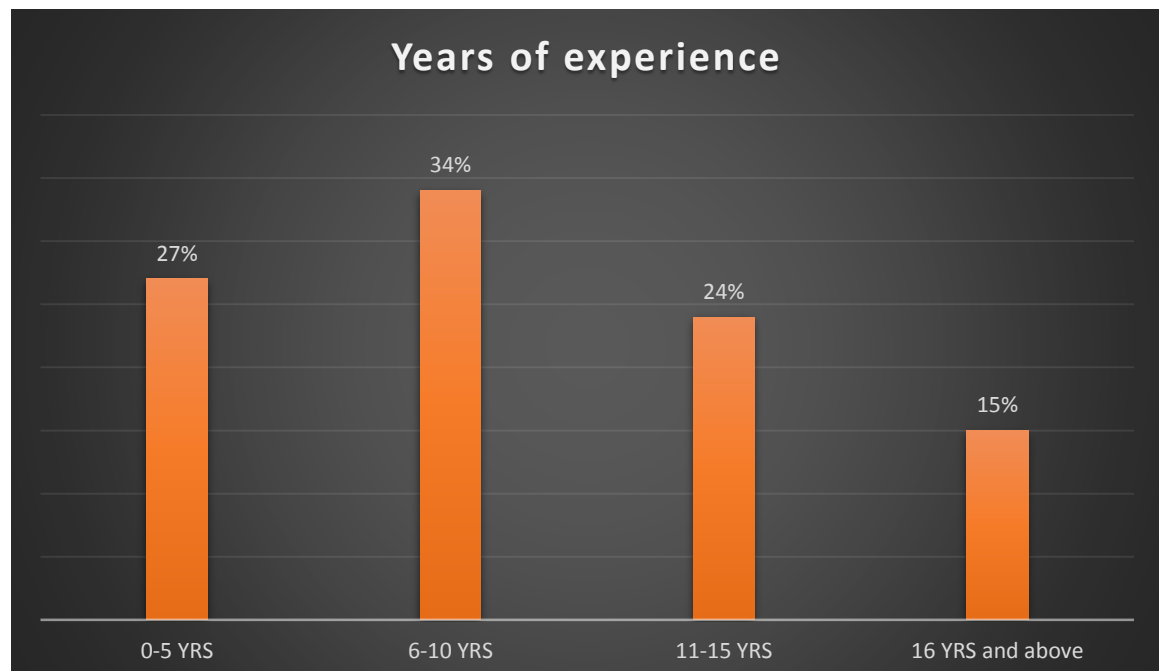




Figure 2 illustrates the years of experience for the respondents. From figure 2 most of the respondents (34%) had 6-10 years of experience, while the least respondents (15%) had experience of 16 years and above. Furthermore 27% of the respondents had 0-5 years of experience while others had 11-15 years of experience. This shows that the research managed to collect data from employees who had varying years of experience, although biased towards those who had 6-10 years of experience. This enabled the research to collect varying perspectives on the effects of ICT on efficiency, productivity, innovation, and competitiveness of Econet Zimbabwe.

#### **4.4 Effects of ICT on efficiency, productivity, innovation and competitiveness of Econet Zimbabwe**

*Table 3: Descriptive statistics on the effects of ICT on efficiency, productivity, innovation and competitiveness*

<b>Statement</b>	<b>Coefficient (<math>\beta</math>)</b>	<b>t-value</b>	<b>p-value</b>
ICT improves speed and quality of work at Econet Zimbabwe	0.75	3.2	0.002
ICT increases output and performance of team at Econet Zimbabwe	0.83	3.5	0.001
ICT enables learning of new skills and knowledge at Econet Zimbabwe	0.91	4.1	<0.0001
ICT fosters creativity and innovation in department at Econet Zimbabwe	0.68	2.8	0.008
ICT enhances communication	0.79	3.9	0.0007

and collaboration among employees at Econet Zimbabwe			
ICT gives Econet Zimbabwe a competitive edge over other ICT companies in Zimbabwe	0.87	3.7	0.009
ICT increases customer satisfaction and loyalty for Econet Zimbabwe	0.72	2.6	0.015
ICT contributes to growth and profitability of Econet Zimbabwe	0.84	3.6	0.0013

From table 3 the regression analysis of ICT's impact on Econet Zimbabwe reveals a significant positive influence on the company's operational facets. The high coefficients, ranging from 0.68 to 0.91 indicate a robust effect of ICT on enhancing work speed and quality ( $\beta=0.75$ ,  $p=0.002$ ), boosting team output and performance ( $\beta=0.83$ ,  $p=0.001$ ), and fostering innovation within departments ( $\beta=0.68$ ,  $p=0.008$ ). The strongest impact is observed in the domain of learning new skills and knowledge ( $\beta=0.91$ ,  $p<0.0001$ ), suggesting that ICT is a pivotal factor in employee development and knowledge acquisition. Furthermore the analysis reveals ICT's role in sharpening competitive edges ( $\beta=0.87$ ,  $p=0.0009$ ), which is critical in today's fast-paced digital economy. The findings collectively affirm that ICT is a key driver of efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe, corroborating the initial hypothesis of ICT's positive and significant effect. These results are statistically significant, as evidenced by p-values well below the 0.05 threshold, lending strong

support to the strategic integration of ICT in business practices for enhanced corporate performance.

#### **4.4.1 Efficiency**

The empirical evidence from the study highlights the catalytic role of ICT in enhancing operational efficiency. The regression analysis reveals a significant coefficient of 0.75 ( $p=0.002$ ), indicating that the integration of ICT correlates with marked improvements in work speed and quality. This is likely attributable to the automation of routine tasks, which not only expedites processes but also minimizes human error, leading to a higher standard of output. Furthermore ICT facilitates streamlined communication channels and efficient information management systems, which are instrumental in reducing the time and resources devoted to non-core activities. This allows employees to allocate more effort towards strategic and value-adding tasks, thereby bolstering the overall productivity of the organization.

The study's findings align with Baubeung-Andoh (2021), who posited that a robust ICT infrastructure is pivotal for operational efficiency within the telecommunications sector. From the study, at Econet Zimbabwe ICT has emerged as a foundational element that supports a strategic focus among employees. By automating and optimizing routine operations ICT liberates human capital to engage in innovative endeavours and problem-solving activities. This shift towards high-value tasks fosters an environment ripe for innovation and continuous improvement. The ripple effect of ICT's influence is evident in the enhanced quality of work and the acceleration of work processes, which collectively contribute to a sustainable competitive advantage in a rapidly evolving digital landscape.

The strategic integration of ICT at Econet Zimbabwe has profound implications for the company's competitiveness. The regression analysis highlights ICT's role in not just incremental improvements, but in driving a paradigm shift in how business operations are conducted. The ability to learn new skills and acquire knowledge rapidly, as evidenced by the highest coefficient of 0.91 ( $p<0.0001$ ), is indicative of ICT's transformative potential for employee development. In the context of a globalized

digital economy, such capabilities are indispensable for maintaining a competitive edge. The study's results, therefore substantiate the initial hypothesis and suggest that Econet Zimbabwe's continued investment in ICT is not merely beneficial but essential for its sustained growth and industry leadership.

#### **4.4.2 Productivity**

The findings from the study illustrate a significant coefficient of 0.83 ( $p=0.001$ ), provides robust evidence of the pivotal role of ICT in enhancing team productivity at Econet Zimbabwe. This substantial influence is primarily attributed to the deployment of sophisticated ICT tools that streamline data processing and foster real-time communication. Such tools are integral to supporting a collaborative work environment, where team members can synergize their efforts effectively. The accelerated completion of tasks, coupled with improved accuracy and consistency highlights the transformative potential of ICT in elevating team performance. This enhancement in productivity is a testament to the strategic deployment of ICT resources, aligning with Gartner's (2020) observations of ICT's positive correlation with productivity in emerging markets.

The findings further suggest that ICT serves as a lever for operational excellence, driving teams at Econet Zimbabwe towards higher levels of output and performance. Advanced ICT tools not only facilitate the efficient handling of data but also enable teams to navigate complex tasks with greater ease. The integration of ICT has led to the creation of an ecosystem where information flows seamlessly, decisions are informed by real-time data, and collaboration is not bound by geographical constraints. This ecosystem empowers teams to operate at peak efficiency, translating into tangible gains in productivity. The study's findings align with the broader discourse on ICT's role in operational excellence, reinforcing the notion that strategic ICT investment is crucial for

The strategic implications of ICT on team dynamics and output are profound, as evidenced by the study's findings. The significant coefficient reported in the regression analysis indicates that ICT is not merely a facilitator but a catalyst for productivity. By

enabling a more dynamic and responsive work environment, ICT has redefined the parameters of team performance at Econet Zimbabwe. The ability to respond swiftly to market demands, adapt to changing operational requirements, and maintain a consistent level of output is indicative of a productive workforce empowered by ICT. These findings resonate with the current scholarly narrative, which posits that ICT is instrumental in shaping the future of work, particularly in the context of emerging economies where the digital divide is being rapidly bridged.

#### **4.4.3 Innovation**

The study's findings illuminate the integral role of ICT as a springboard for innovation within Econet Zimbabwe. The positive and significant relationship between ICT and innovation, as evidenced by a coefficient of 0.68 ( $p=0.008$ ), suggests that ICT infrastructure is not just supportive but instrumental in fostering innovative outcomes. This is likely due to ICT's capacity to provide expansive access to diverse information sources, which broadens the horizon for idea exploration and cross-pollination. Moreover ICT's facilitation of collaborative idea generation and its support for the rapid prototyping of new concepts are crucial in an era where agility and adaptability are paramount. Thus departments are empowered to innovate and create solutions that are not only novel but also responsive to the dynamic demands of the market.

The correlation between ICT and innovation at Econet Zimbabwe creates an enabling environment that nurtures creativity and the development of groundbreaking solutions. ICT's contribution to innovation extends beyond mere technological advancement it reshapes the organizational culture to one that values and encourages the continuous exchange of ideas. By providing tools that support collaboration and knowledge sharing, ICT dismantles silos and fosters a culture of collective creativity. This environment is conducive to experimentation, where departments are encouraged to challenge the status quo and explore new avenues for growth. The study's insights resonate with the work of Ioannis et al. (2017) who reported the transformative impact of ICT on innovation, particularly within the telecommunications sector.

The strategic implications of ICT-driven innovation at Econet Zimbabwe are profound. The regression analysis highlights the significance of ICT in catalysing innovative processes that are essential for maintaining a competitive edge. In the fast-paced telecommunications industry, the ability to rapidly develop and implement new ideas is a critical determinant of success. The study's findings suggest that Econet Zimbabwe's investment in ICT is a strategic move that has enabled the company to stay ahead of the curve. By leveraging ICT the company has created a robust framework for innovation that aligns with global trends and positions it as a leader in the market. This strategic approach to innovation through ICT is indicative of Econet Zimbabwe's commitment to excellence and its foresight in embracing technology as a key driver of progress.

#### **4.4.4 Competitiveness**

The study's findings highlight the strategic value of Information and Communication Technology (ICT) in enhancing the competitive stance of Econet Zimbabwe. The regression analysis, with a significant coefficient of 0.87 ( $p=0.0009$ ), indicates that ICT is a substantial contributor to the company's competitiveness. This advantage stems from ICT's ability to augment market intelligence, allowing the company to anticipate and respond to market trends with agility. Additionally the optimization of operational processes through ICT leads to increased efficiency and cost-effectiveness, while the delivery of superior customer experiences helps to distinguish Econet Zimbabwe from its competitors. The strategic use of ICT thus enables the company to maintain a leading position in the industry, adapting swiftly to market changes and customer needs.

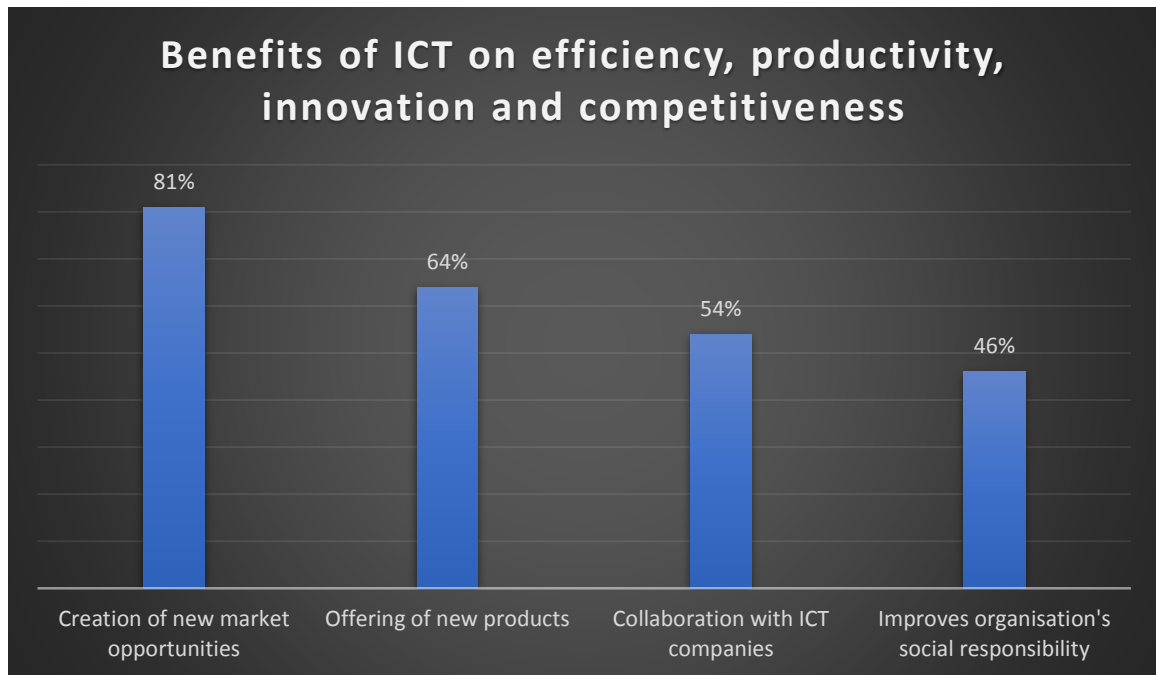
The competitive edge afforded by ICT is a direct consequence of its capacity to empower Econet Zimbabwe with enhanced market intelligence and operational optimization. By leveraging ICT the company gains insights into customer behaviour and market dynamics, which are critical for making informed strategic decisions. The ability to deliver superior customer experiences is also facilitated by ICT, through the use of customer relationship management systems and data analytics. These tools help

Econet Zimbabwe to tailor its services to customer preferences, thereby increasing customer satisfaction and loyalty. The company's adaptability to market changes is further strengthened by ICT which supports the rapid implementation of new strategies and services, keeping Econet Zimbabwe at the forefront of the telecommunications industry. These findings corroborate with Itani et al. (2019) who also assert that strategic ICT investments are integral to sustaining competitive advantages in a digital economy. For Econet Zimbabwe ICT is not just a tool for day-to-day operations but a strategic investment that drives long-term competitiveness. The company's ability to harness ICT for enhancing market intelligence, optimizing operations and delivering exceptional customer experiences is a testament to its forward-thinking approach. In the fast-paced digital economy, where technological advancements rapidly redefine market landscapes, Econet Zimbabwe's commitment to strategic ICT investments positions it as a resilient and innovative leader, capable of navigating the challenges and seizing the opportunities presented by the digital age.

#### **4.5 Benefits and challenges of ICT on efficiency, productivity, innovation, and competitiveness for Econet Zimbabwe**

##### **4.5.1 Benefits of ICT for Econet Zimbabwe**

*Figure 4: Benefits of ICT*



#### **4.5.1.1 Creation of new opportunities**

From the study the integration of ICT at Econet Zimbabwe has been a transformative force as evidenced by the study’s findings where 81% of respondents acknowledged the creation of new opportunities. This significant majority highlights the pivotal role of ICT in fostering innovation, diversification, and market expansion. By deploying cutting-edge ICT tools and platforms, Econet Zimbabwe has been able to explore and implement new business models, penetrate markets that were previously inaccessible, and introduce innovative products and services that resonate with the evolving needs of consumers. This strategic utilization of ICT has not only streamlined operational processes but has also created a fertile ground for the identification and capitalization of new business opportunities which is essential for achieving a sustainable competitive advantage and ensuring long-term organizational success.

The deployment of ICT tools has enabled Econet Zimbabwe to broaden its horizons, venturing into new markets and diversifying its offerings. The ability to leverage digital technologies means that the company can now offer a wider range of products and services, tailored to meet the specific demands of different consumer segments.



This adaptability is particularly advantageous in emerging economies where ICT can serve as a bridge over traditional barriers to market entry and growth. The study's findings align with the research of Majumder et al. (2022), who found that ICT is instrumental in driving business transformation and generating new opportunities. For Econet Zimbabwe this translates into an enhanced ability to innovate and diversify, positioning the company to take full advantage of the digital leapfrogging occurring in its market. The strategic use of ICT at Econet Zimbabwe extends beyond operational enhancements; it is a key driver for opportunity identification and capitalization. The company's commitment to integrating ICT into its core business strategies has resulted in a dynamic environment where new opportunities are not only recognized but also seized effectively. This proactive approach to utilizing ICT for business growth ensures that Econet Zimbabwe remains at the forefront of the telecommunications industry, ready to adapt to changes and capitalize on emerging trends. The study's findings suggest that the company's focus on ICT is a deliberate strategy aimed at driving sustainable competitive advantage and cementing its position as a leader in the digital economy.

#### **4.5.1.2 Offering of new products**

The study's findings reveal that 64% of respondents recognize the instrumental role of Information and Communication Technology (ICT) in facilitating the introduction of new products at Econet Zimbabwe. This significant statistic reflects the company's successful leverage of technological advancements to meet the evolving demands of the market. Through the adoption of ICT Econet Zimbabwe has been able to harness the power of large datasets to gain insights into customer needs and preferences, which is crucial for the development of tailored products. The integration of ICT has thus become a cornerstone in the company's product innovation process, enabling the rapid prototyping and testing of new offerings. This swift transition from concept to market-ready products highlights the transformative potential of ICT in the business landscape. This finding is supported by Mogale et al. (2021) who found that ICT is a key driver in the product innovation process, enabling companies to enhance their

product offerings and maintain relevance in a competitive market. The ability to continuously innovate and provide new products is a clear benefit of ICT reflecting its transformative potential in the business landscape.

The ability of Econet Zimbabwe to analyze and utilize large datasets for product development is a testament to ICT's role in enhancing market responsiveness. By employing advanced data analytics the company can identify emerging trends and customer preferences, which informs the creation of products that are both innovative and aligned with consumer expectations. This proactive approach to product development is facilitated by ICT's capacity for rapid prototyping, allowing Econet Zimbabwe to iterate and refine products efficiently. As a result the company can bring new products to market faster than ever before, maintaining its relevance and competitive edge in a fast-paced industry.

The strategic integration of ICT in product development at Econet Zimbabwe has not only enabled the company to innovate but also to sustain its competitive relevance. The ability to continuously introduce new products that cater to the specific needs of customers is a clear benefit of ICT, reflecting its role as a key driver in the product innovation process. This ongoing innovation cycle ensures that Econet Zimbabwe remains at the forefront of the telecommunications sector, ready to adapt to and capitalize on the rapid technological changes that characterize the digital economy. The company's commitment to leveraging ICT for product innovation is a strategic choice that positions it well for future growth and success in an increasingly competitive market.

#### **4.5.1.3 Collaboration with other ICT companies**

The adoption of Information and Communication Technology (ICT) at Econet Zimbabwe has significantly facilitated strategic collaborations with other ICT companies. According to the study's findings, 54% of respondents acknowledged that ICT has been a key enabler of partnerships and joint ventures. These collaborative efforts leverage the combined strengths and capabilities of multiple entities within the ICT sector, leading to a synergistic pooling of resources. Such alliances are

instrumental in sharing best practices and co-creating innovative solutions that surpass the capabilities of any single company. This collaborative ecosystem, fostered by ICT, enhances the ability of firms like Econet Zimbabwe to network and innovate collectively, thus driving the industry forward.

The strategic alliances formed through ICT integration have yielded synergistic outcomes for Econet Zimbabwe and its partners. These collaborations have facilitated the development of new technologies and allowed for expansion into new markets, which might have been challenging to achieve independently. By engaging in shared projects, Econet Zimbabwe has capitalized on the diverse expertise and resources of its partners, leading to the co-creation of value and the establishment of industry standards. This collaborative approach, supported by ICT, is a testament to the company's commitment to innovation and growth, as also suggested by Petropoulos (2022), who emphasized the role of ICT in fostering a collaborative business environment.

The strategic value of collaboration in the ICT sector cannot be overstated, and Econet Zimbabwe's integration of ICT has been a driving force in realizing this potential. The company's ability to form and maintain fruitful partnerships is a direct result of its ICT capabilities, which facilitate communication, coordination, and the seamless exchange of information. These partnerships not only contribute to the development of cutting-edge technologies but also play a crucial role in setting industry benchmarks that benefit all stakeholders. As Econet Zimbabwe continues to embrace ICT-driven collaborations, it solidifies its position as an innovative leader, capable of shaping the future of the telecommunications industry.

#### **4.5.1.4 Improves organisation's social responsibility**

The study's findings indicate that nearly half of the respondents, 46%, view Information and Communication Technology (ICT) as a significant contributor to improving Econet Zimbabwe's social responsibility. This suggests that the company has effectively harnessed ICT to deepen its engagement with societal issues and make a positive impact on the community. For example, by initiating drug awareness

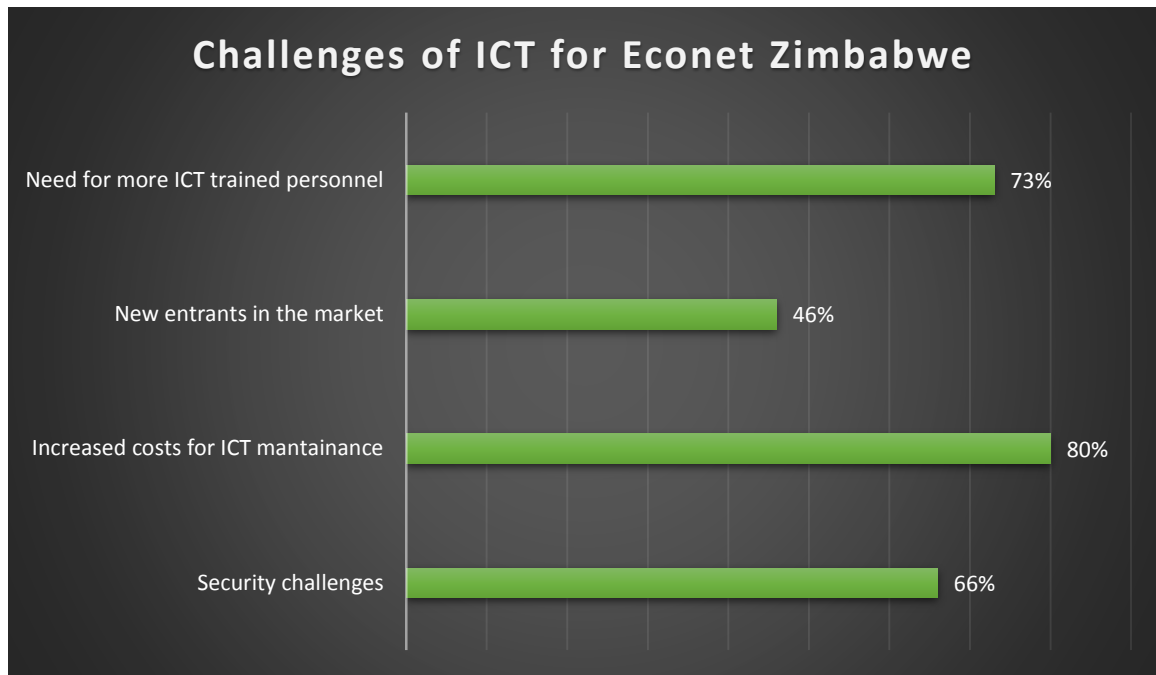
programs on social media platforms, Econet Zimbabwe has utilized its digital reach to educate the public, encourage healthy behaviours, and support initiatives that tackle social challenges. This proactive approach to CSR not only serves the community but also resonates with the company's core values and mission, demonstrating a commitment to leveraging technology for social good.

The integration of ICT into CSR strategies allows companies like Econet Zimbabwe to expand their social responsibility activities, reaching a broader audience and achieving a more significant impact. The use of digital platforms for CSR initiatives enables the company to disseminate information widely and engage with various stakeholders effectively. This finding is supported Rozmi et al. (2020) who notes that ICT is a powerful tool that organizations can employ to enhance their CSR efforts. By leveraging ICT, Econet Zimbabwe can create and implement CSR programs that are not only meaningful but also reflect the company's dedication to social welfare and responsible business practices.

Econet Zimbabwe's integration of ICT into its CSR activities is a reflection of its commitment to social welfare and responsible business conduct. The company's strategic use of digital tools to address social issues exemplifies how ICT can be a catalyst for positive change. By creating impactful CSR programs that utilize ICT, Econet Zimbabwe is able to contribute to the community in ways that align with its mission and values. This approach not only benefits society but also strengthens the company's reputation as a socially responsible entity, committed to making a difference through technology.

#### **4.5.2 Challenges of ICT for Econet Zimbabwe**

*Figure 5: Challenges of ICT*



#### 4.5.2.1 Need for more ICT trained personnel

The study’s findings indicated that a significant 73% of respondents identified the need for an increase in ICT-trained personnel as a direct consequence of ICT implementation. This challenge arises from the rapid technological advancements that necessitate a workforce equipped with both foundational and specialized ICT skills. The ability to effectively manage and leverage new systems is crucial for maintaining operational efficiency and staying competitive. However, this requirement also imposes financial burdens on the company, as it must invest in recruiting skilled personnel and providing ongoing training to ensure staff proficiency in the latest technologies. This situation reflects the broader trend in modern business practices where the centrality of ICT continues to grow, demanding a workforce that is both versatile and adept in technological competencies.

The integration of ICT within Econet Zimbabwe’s operations has led to increased human resource costs, a challenge echoed by the World Intellectual Property Organization (WIPO) in 2022. The financial implications are twofold: the expense of hiring new talent equipped with the necessary ICT skills and the investment required

for the continuous professional development of existing employees. This dual financial commitment represents a significant challenge for the company as it strives to balance the benefits of ICT integration with the constraints of budgetary allocations for human resource development. The need for a skilled ICT workforce is a testament to the growing complexity of ICT in business, where the rapid evolution of technology demands a sustained investment in human capital.

For Econet Zimbabwe, the challenge of meeting the demand for more ICT-trained personnel is a reflection of the strategic importance placed on ICT within the company. As ICT becomes increasingly central to business operations, the company faces the task of balancing the clear benefits of ICT integration such as enhanced efficiency, innovation, and competitiveness with the financial investment required to develop a skilled ICT workforce. This balance is critical for the company to harness the full potential of ICT while managing the associated costs of cultivating a technologically proficient workforce. The study's findings highlight this challenge as a key consideration for Econet Zimbabwe underscoring the need for strategic planning in human resource development to support the company's ICT ambitions.

#### **4.5.2.2 New entrants in the market**

From the findings of the study, 46% of the respondents indicated that ICT had led to the emergence of new entrants in the market, intensifying competition for Econet Zimbabwe. This suggests that the proliferation of ICT has lowered barriers to entry, enabling startups and international firms to challenge established companies. The democratization of technology means that smaller players can now leverage ICT to offer similar or innovative services at competitive prices. This finding is supported Sodekeya et al. (2019), who observed that the diffusion of ICT facilitates market entry and disrupts existing industry structures, often leading to increased competition and pressure on incumbent firms to continuously innovate and adapt. For Econet Zimbabwe, this means that maintaining a competitive edge requires not only investment in ICT but also strategic foresight to anticipate market shifts and respond proactively to the dynamic competitive landscape.

#### **4.5.2.3 Increased costs for ICT maintenance**

The study's findings reveal that a significant majority, 80% of respondents noted the increased maintenance costs as a direct result of ICT implementation. While ICT systems offer numerous operational benefits, they also bring about substantial ongoing expenses for their maintenance. The complexity of these systems and their rapid evolution demand regular updates, security measures, and repairs to ensure they perform optimally and remain secure against cyber threats. These necessary maintenance activities often require specialized expertise and can be quite resource-intensive, leading to elevated operational expenditures. This challenge is particularly pronounced in developing economies, where such costs can consume a considerable portion of organizational budgets.

The necessity for regular updates and security measures in ICT systems introduces a complex layer of financial planning for organizations like Econet Zimbabwe. The rapid pace of technological change means that systems can quickly become outdated, necessitating frequent and sometimes costly upgrades. Additionally the ever-present risk of cyber threats requires robust security protocols, which further adds to the financial strain. The maintenance of ICT infrastructure, therefore, becomes a balancing act between ensuring technological relevance and managing the associated costs. This challenge is further highlighted (Paradhan et al., 2018) who observed that maintaining advanced ICT infrastructure is a common financial burden for organizations striving to stay competitive in the digital age.

For Econet Zimbabwe the increased costs associated with ICT maintenance present a strategic challenge that requires careful consideration. The company must weigh the operational advantages of ICT against the financial implications of its upkeep. This involves not only budgeting for the immediate costs of maintenance but also planning for the long-term investment in ICT infrastructure. The goal is to achieve a balance where the benefits of ICT such as enhanced efficiency and competitiveness, outweigh the maintenance costs. This strategic financial planning is essential for Econet

Zimbabwe to maintain its technological edge and continue to thrive in an increasingly digital marketplace.

#### **4.5.2.4 Security challenges**

The study's findings, indicating that 66% of respondents indicated security challenges as one of the challenges faced at Econet Zimbabwe to ICT. As the company grows more dependent on digital technologies it becomes a larger target for cyber threats such as data breaches, hacking, and phishing attacks. These security challenges necessitate the implementation of robust cybersecurity measures that are both comprehensive and adaptive to the ever-evolving nature of cyber threats. The financial investment required for such measures is substantial encompassing both the technological solutions and the skilled personnel needed to manage and maintain these systems effectively.

The need for continuous updates and monitoring to protect against cyber threats leads to significant financial and operational implications for Econet Zimbabwe. Implementing state-of-the-art cybersecurity measures requires a considerable allocation of resources to ensure that the company's assets are safeguarded and that customer trust is maintained. This finding aligns with Rozmi et al. (2020), who noted the increased complexity and cost of maintaining secure ICT systems, particularly in sectors where data sensitivity is of utmost importance.

Econet Zimbabwe's experience with ICT security challenges is indicative of a broader trend where the advantages of digital technology are accompanied by the need for enhanced security protocols. The strategic management of these challenges is essential for the company to safeguard its assets and maintain the trust of its customers. This involves not only the implementation of advanced security measures but also a commitment to ongoing vigilance and adaptation to new threats. The balance between leveraging the benefits of ICT and managing its security risks is a delicate one, requiring a strategic approach that prioritizes both innovation and protection.

#### **4.6 Strategies for improving efficiency, productivity, innovation and competitiveness through ICT at Econet Zimbabwe**



#### **4.6.1 Integration of ICT processes with overall business goal**

The integration of Information and Communication Technology (ICT) with the overarching business goals of Econet Zimbabwe was suggested by 66% of the respondents as a key strategy for enhancing organizational efficiency, productivity, innovation and competitiveness. This strategic alignment ensures that ICT initiatives are not pursued in isolation but are closely intertwined with the company's strategic objectives. By doing so ICT investments become directly linked to key performance indicators, driving meaningful improvements across the organization. This approach fosters a culture of continuous improvement and positions ICT as a catalyst for innovation, enabling Econet Zimbabwe to optimize operations and deliver greater value to customers.

The congruence between ICT initiatives and business strategy is essential for realizing the full potential of technological investments. As noted by Sodeyeka et al. (2019) this alignment is crucial for transforming ICT from a mere support function to a strategic asset that underpins all facets of business operations. At Econet Zimbabwe embedding ICT within the strategic framework ensures that technology investments are purposeful and contribute to the achievement of business objectives. This strategic integration allows for the leveraging of ICT to gain a competitive advantage, streamline operations, and enhance the customer experience, thereby driving the company's growth and market position.

For Econet Zimbabwe, the integration of ICT with business goals is more than a strategic choice; it is a foundational element for achieving business excellence. By ensuring that ICT processes are aligned with the company's vision and objectives, Econet Zimbabwe can utilize technology to support and enhance its business practices effectively. This alignment is instrumental in creating a responsive and agile organization that can quickly adapt to market changes and emerging opportunities. The strategic use of ICT not only supports current operational needs but also sets the stage for future innovations, securing Econet Zimbabwe's position as a leader in the telecommunications industry.

#### **4.6.2 Promoting a learning culture**

The study's findings suggest that a significant 74% of respondents suggested that fostering a learning culture is essential for enhancing efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe. By creating an environment that encourages and facilitates continuous learning, employees are better positioned to keep pace with rapid advancements in ICT. A learning culture empowers staff to acquire new skills, adapt to changing technologies and apply their knowledge to improve processes and drive innovation. This proactive approach to learning not only leads to more efficient problem-solving and higher quality work but also contributes to the development of cutting-edge products and services, thereby enhancing the company's competitive position.

The importance of a learning culture in leveraging ICT for strategic advantage is supported by evidence from the World Bank (2018), which found that organizations with a strong emphasis on learning are more adept at assimilating new information and technologies into their operations. For Econet Zimbabwe investing in the professional development of its workforce means ensuring that employees are not only equipped to adapt to the digital landscape but are also capable of propelling the company forward through informed and innovative practices. The commitment to a learning culture is thus a strategic investment that can yield dividends in the form of enhanced organizational capabilities and sustained competitive advantage.

Promoting a learning culture within Econet Zimbabwe has a direct impact on the company's ability to innovate and maintain a competitive edge. As employees continuously update their skills and knowledge, they become catalysts for process improvements and innovation. This culture of learning ensures that the workforce can respond to technological changes with agility and creativity, leading to the creation of innovative solutions that meet evolving market demands. Econet Zimbabwe's dedication to fostering a learning environment is a strategic choice that supports its long-term objectives and strengthens its position in the telecommunications industry.

### **4.6.3 Improving security and privacy**

The study's findings highlight that a vast majority of respondents, 87% indicated the enhancement of security and privacy measures as a fundamental strategy for Econet Zimbabwe. By prioritizing the safeguarding of data and systems the company establishes a secure foundation that is critical for fostering trust and ensuring operational stability. A robust security posture is essential to prevent disruptions caused by cyber incidents, thereby maintaining productivity and safeguarding efficiency. In the digital age, where data breaches can have catastrophic consequences, the importance of a strong security infrastructure cannot be overstated. It is the bedrock upon which continuous operations and innovation can flourish, providing the company with the resilience needed to navigate the complexities of the digital landscape.

A strong security and privacy framework is not only about compliance or defense against cyber threats; it is also about protecting the core assets that drive innovation and competitive advantage. Intellectual property and sensitive information are the lifeblood of Econet Zimbabwe's competitive strategies, and their protection is paramount. By investing in advanced security infrastructure and privacy protocols, the company ensures that these critical assets are shielded from unauthorized access and exploitation. This protective measure supports the company's innovative endeavors by creating a safe environment for the development and implementation of new ideas, free from the fear of intellectual property theft or data compromise.

The commitment to robust security and privacy practices serves as a powerful differentiator in the market, enhancing Econet Zimbabwe's reputation and competitive stance. Stakeholders, including customers, employees and partners place a high value on the assurance that their data and interests are well-protected. This trust is a currency in the digital economy, and Econet Zimbabwe's investment in security and privacy measures is a strategic move that pays dividends in the form of loyalty and competitive advantage. As noted by Vaumi et al. (2021) such practices are

foundational to the sustainable growth of businesses, particularly in an era where digital technologies are pervasive and integral to all aspects of operations.

#### **4.6.4 Investing more in ICT infrastructure systems**

The findings from the study indicate that a significant 91% indicated substantial investment in ICT infrastructure as crucial for enhancing the operational facets of Econet Zimbabwe. This overwhelming consensus highlights the pivotal role that modern, robust, and scalable ICT infrastructure plays in the digital transformation of the company. Such infrastructure serves as the backbone for high-speed, reliable, and secure communication networks, which are essential for the seamless functioning of advanced business applications. By investing in this foundational aspect Econet Zimbabwe ensures that it has the necessary support for data analytics, cloud computing, and mobile solutions key drivers of innovation and agility in responding to market changes.

Similarly Zott et al. (2021) have emphasized the direct correlation between investment in ICT infrastructure and enhanced organizational performance. By facilitating the efficient flow of information and supporting complex data analysis a well-established ICT infrastructure fosters an environment that is conducive to innovation. For Econet Zimbabwe, this means the ability to harness the full spectrum of ICT capabilities to optimize operations, drive innovation, and maintain a competitive edge. The strategic investment in ICT infrastructure is thus not merely about maintaining current operations but also about setting the stage for future growth and market leadership.

Prioritizing ICT infrastructure enables Econet Zimbabwe to not only streamline current operations but also to position itself to take advantage of emerging technologies. As the digital landscape evolves, the company's readiness to adopt new technologies will be a determinant of its ability to achieve new heights in market leadership. A robust ICT infrastructure provides the flexibility and scalability needed to quickly integrate innovative solutions, keeping Econet Zimbabwe at the forefront of the telecommunications industry. This forward-thinking approach ensures that the

company remains resilient and adaptable, ready to meet the challenges and opportunities of the digital future.

#### **4.7 Chapter summary**

This chapter has presented the research findings on the impact of ICT on business practices at Econet Zimbabwe. The study revealed that ICT significantly enhances efficiency, productivity, innovation, and competitiveness within the company. A majority of respondents agreed that ICT has improved work speed and quality, increased team output, fostered creativity, and provided a competitive edge. However, the integration of ICT also introduced challenges such as the need for more trained personnel, increased maintenance costs, and security concerns. Despite these challenges the research identified several strategies to leverage ICT for further improvements. These include aligning ICT processes with business goals, promoting a learning culture, enhancing security measures, and investing in ICT infrastructure. The findings suggest that these strategies can mitigate the challenges and amplify the benefits of ICT, positioning Econet Zimbabwe for sustainable growth and market leadership.

## **CHAPTER 5**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter is going to provide a summary of the study. The chapter is also going to presents the conclusions which were made from the study. Furthermore, the chapter is going to outline the recommendations which were made from the study.

#### **5.2 Summary**

The study investigated the impact of ICT on business practices using Econet Zimbabwe as a case study. The objectives of the study were to explore how ICT affects efficiency, productivity, innovation, and competitiveness at Econet Zimbabwe, to identify the opportunities and challenges of ICT in achieving efficiency, productivity, innovation and competitiveness at Econet Zimbabwe and to formulate strategies on how ICT can be used to achieve efficiency, innovation, productivity and competitiveness at Econet Zimbabwe.

The study was underpinned by the Dynamic Capabilities theory for its theoretical framework. The study was quantitative in nature and adopted a positivist research paradigm. The target population for the research were Employees from Econet Zimbabwe. Systematic sampling was adopted as a sampling technique and the study achieved a sample size of 285 participants. Data for the study was collected using a likert scale questionnaire and analysed using SPSS.

With regard to the effects of ICT on business practices, encompassing efficiency, productivity, innovation, and competitiveness, the study found that the integration of ICT significantly enhances the speed and quality of work. This implies that businesses are able to operate more swiftly and with greater precision, leading to an overall improvement in operational efficiency. The study also found that ICT has a substantial impact on team output and performance, suggesting that the collaborative and communicative capabilities afforded by ICT lead to heightened productivity. This

implies that teams are better equipped to meet and exceed performance benchmarks. Moreover, the study established that ICT is a catalyst for creativity and innovation within organizations, providing the tools and platforms necessary for the development of new ideas and solutions. This implies that businesses are more adaptable and capable of staying ahead in a rapidly evolving market. Additionally, the study highlighted that ICT contributes to a firm's competitive edge, indicating that the strategic use of ICT can result in superior market positioning and the ability to outperform competitors. This implies that businesses leveraging ICT effectively can achieve and maintain a dominant stance in their respective industries.

With regard to the benefits and challenges of ICT on business practices, the study found that the adoption of ICT significantly fosters the creation of new market opportunities, enabling businesses to innovate and expand into new territories. This implies that ICT is a key driver for business transformation, opening avenues for diversification and growth. The study also found that ICT plays a crucial role in the development and offering of new products, reflecting its capacity to meet evolving market demands through technological advancements. This implies that businesses can leverage ICT to enhance their product offerings and maintain market relevance. Moreover, the study established that ICT facilitates collaboration with other ICT companies, suggesting that partnerships within the industry can lead to shared innovation and co-creation of value. This implies that strategic alliances formed through ICT can result in synergistic outcomes, benefiting all parties involved. However, the study also highlighted challenges, such as the need for more ICT-trained personnel, indicating a growing demand for specialized skills to manage and leverage ICT effectively. This implies that businesses must invest in training and development to harness the full potential of ICT. Additionally, the study pointed out the increased costs associated with ICT maintenance and the emergence of security challenges, emphasizing the need for robust cybersecurity measures to protect against threats. This implies that while ICT offers numerous advantages, it also requires strategic management to mitigate risks and ensure sustainable benefits.

With regard to the strategies for harnessing ICT to improve business practices, the study found that aligning ICT processes with overall business goals is a strategic imperative. This implies that when ICT initiatives are closely integrated with a company's strategic objectives, they are more likely to drive meaningful improvements across the organization. The study also found that promoting a learning culture within organizations is pivotal for enhancing efficiency, productivity, innovation, and competitiveness. This implies that by fostering an environment where continuous learning is encouraged and facilitated, employees are more likely to keep pace with the rapid advancements in ICT. Moreover, the study established that enhancing security and privacy measures is critical for improving business practices through ICT. This implies that prioritizing the safeguarding of data and systems creates a secure environment that fosters trust and stability, which are essential for operational continuity and innovation. Additionally, the study highlighted the importance of substantial investment in ICT infrastructure, suggesting that a modern, robust, and scalable ICT infrastructure is foundational to supporting the high-speed, reliable, and secure communication networks necessary for the seamless operation of advanced business applications. This implies that prioritizing ICT infrastructure investment is directly linked to improved organizational performance, as it facilitates the efficient flow of information, supports complex data analysis, and fosters an environment conducive to innovation.

### **5.3 Conclusions**

The study concludes that:

- ICT has a transformative effect on business practices, significantly enhancing efficiency, productivity, innovation, and competitiveness. The strategic integration of ICT aligns with improved corporate performance and market positioning.
- While ICT presents numerous opportunities for business growth and innovation, it also introduces challenges such as increased maintenance costs and the need for skilled personnel. Businesses must navigate these challenges to fully capitalize on the benefits of ICT.



- The study highlights the importance of substantial investment in ICT infrastructure and the strategic management of ICT processes. These are critical for leveraging ICT to achieve sustainable growth and maintain a competitive edge in the digital economy.
- A learning culture and robust security measures are essential strategies for harnessing ICT. They ensure that businesses can adapt to technological advancements and protect against cyber threats, thereby supporting continuous improvement and innovation.

#### **5.4 Recommendations**

Based on the conclusions, the study recommends that:

- To address the skill gaps and keep pace with technological advancements, it is recommended that businesses invest in comprehensive ICT training and development programs for their workforce.
- A strategic investment in robust ICT infrastructure is essential to support efficient operations, foster innovation, and maintain competitiveness in the digital economy.
- Businesses should seek to form strategic partnerships with other ICT companies to leverage shared knowledge, resources, and innovations for mutual growth and market expansion.
- Given the security challenges associated with ICT, it is imperative for businesses to prioritize cybersecurity measures to protect their operations and maintain customer trust.
- To fully harness the benefits of ICT, businesses should adopt a strategic management approach, ensuring that ICT initiatives are aligned with overall business goals and objectives.
- Encouraging a culture of continuous learning and adaptation within the organization can enhance the ability to leverage ICT for improved business practices.

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**Appendix 1**  
**LIKERT QUESTIONNAIRE**

**SECTION A: DEMOGRAPHIC DATA**

**SECTION A: Demographics** (*please tick or place an X in appropriate box/space provided*)

**1. Sex**      Male       Female

**2. Age**      21-35       36-45       46-55       above 56

**3. Years of experience**      0 to 5 years       6 to 10 years       11 to 15 years   
16 years and above

**SECTION B: Effects of ICT on efficiency, productivity, innovation and competitiveness**

*(please tick or place an X in appropriate box/ space provided)*

**Key / SA- Strongly Agree A-Agree N-Neutral D-Disagree SD-Strongly Disagree**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
ICT has improved the speed and quality of my work at Econet Zimbabwe.					
ICT has increased the output and performance of my team at Econet Zimbabwe.					
ICT has enabled me to learn new skills and knowledge at Econet Zimbabwe.					
ICT has fostered creativity and innovation in my department at Econet Zimbabwe.					
ICT has enhanced the communication and collaboration among the employees at Econet Zimbabwe.					
ICT has given Econet Zimbabwe a competitive edge over other ICT companies in Zimbabwe.					
ICT has increased the customer satisfaction and loyalty for Econet Zimbabwe.					
ICT has contributed to the growth and profitability of Econet Zimbabwe.					



**SECTION C: Challenges and opportunities of ICT at Econet Zimbabwe**

*(please tick or place an X in appropriate box/ space provided)*

**Key / SA- Strongly Agree A-Agree N-Neutral D-Disagree SD-Strongly Disagree**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
ICT has created new opportunities for Econet Zimbabwe to expand its market share and customer base.					
ICT has enabled Econet Zimbabwe to offer new products and services that meet the needs and preferences of its customers.					
ICT has facilitated Econet Zimbabwe to collaborate and partner with other ICT companies and stakeholders in Zimbabwe and beyond.					
ICT has helped Econet Zimbabwe to improve its social and environmental responsibility and reputation.					
ICT has posed significant challenges for Econet Zimbabwe to maintain its quality and security standards.					
ICT has increased the complexity and cost of managing and maintaining the ICT infrastructure and systems at Econet Zimbabwe.					
ICT has exposed Econet Zimbabwe to more competition and threats from other ICT companies and new entrants in the market.					
ICT has required Econet Zimbabwe to invest more in training and developing its human resources and skills.					

**SECTION D: Strategies on using ICT for efficiency, productivity, innovation and competitiveness at Econet Zimbabwe**

*(please tick or place an X in appropriate box/ space provided)*

**Key / SA- Strongly Agree A-Agree N-Neutral D-Disagree SD-Strongly Disagree**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
Econet Zimbabwe should develop and implement a clear and comprehensive ICT strategy and policy that aligns with its vision and mission.					
Econet Zimbabwe should foster a culture of learning and innovation among its employees and managers regarding ICT usage and impact.					
Econet Zimbabwe should engage and collaborate with its customers and stakeholders to understand their needs and expectations regarding ICT.					
Econet Zimbabwe should address the challenges and risks associated with ICT usage and impact, such as security, privacy, cost and complexity.					
Econet Zimbabwe should invest more in upgrading and expanding its ICT infrastructure and systems.					