

BINDURA UNIVERSITY OF SCIENCE EDUCATION

A WORKING MODEL TOWARDS IMPROVED ACCESS TO FORMAL CREDIT FOR INFORMATION TECHNOLOGY-RELATED SMALL AND MEDIUM SIZED ENTERPRISES (SMEs) IN HARARE

BY

PRISCILLA GAMBARA

B241873A

A DISSERTATION SUBMITTED TO THE BINDURA UNIVERSITY OF SCIENCE EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR A MASTER OF SCIENCE DEGREE IN LEADERSHIP AND CORPORATE GOVERNANCE, GRADUATE SCHOOL OF BUSINESS

BINDURA, ZIMBABWE

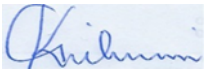
APRIL, 2025

APPROVAL FORM

The undersigned certify that they have read and recommended to Bindura University of Science Education (BUSE) for acceptance a Dissertation entitled **"A WORKING MODEL TOWARDS IMPROVED ACCESS TO FORMAL CREDIT FOR INFROMATION TECHNOLOGY-RELATED SMALL AND MEDIUM SIZED ENTERPRISES (SMEs) IN HARARE."** by Priscilla Gambara in partial fulfillment of the requirements for the degree of Master of Leadership and Corporate Governance (MLC).

Priscilla Gambara *Signature: ……Date: 17/04/2025*

Student

Supervisor *Signature:*  *Date: 17/04/2025*

Dr. G. Kichini

GSB Director *Signature: …… Date: 17/04/2025*

…… *Signature: …… Date: 17/04/2025*

Faculty Chairperson

…… *Signature: …… Date: ……..*

External Examiner

RELEASE FORM

NAME OF AUTHOR: PRISCILLA GAMBARA

STUDENT NUMBER B241873A

TITLE OF DISSERTATION: A WORKING MODEL TOWARDS IMPROVED ACCESS TO FORMAL CREDIT FOR INFORMATION TECHNOLOGY-RELATED SMALL MEDIUM SIZED ENTERPRISES (SMEs) IN HARARE

DEGREE: MASTER IN BUSINESS LEADERSHIP AND CORPORATE GOVERNANCE

YEAR DEGREE AWARDED: **2025**

Permission is hereby granted to the Bindura University of Science Education Library to produce copies of this dissertation for private, scholarly, or scientific research purposes. The author reserves other publication rights for the dissertation or extensive extracts from it to be printed or otherwise reproduced without the author's written permission.

Signature: ……. **Date**: 17 April, 2025

Permanent Address: No. 1700, Tynwald South
Harare,
Zimbabwe

E-mail: gambarapriscilla@gmail.com

Cell Number: +263772 409519

DECLARATION

I, Priscilla Gambara, Student Reg Number B241873A, do hereby declare that this dissertation is a result of my own investigation and research, except to the extent indicated in the acknowledgments, bibliography, references, and comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.



STUDENT SIGNATURE **DATE:** 17/04/2025

DEDICATION

This dissertation is dedicated to my husband David Mangota for his continuous encouragement and understanding, helping me traverse the challenges of this research.

ACKNOWLEDGEMENTS

My sincere gratitude goes to all those who have given me support throughout this dissertation process;

Firstly, I am deeply thankful to my supervisor, Dr. G. Kichini whose expertise, guidance, feedback and encouragement has been invaluable throughout thereby enriching my research.

To my director at my work place, Mrs. Oili Wuolle, I would like to thank you for your positive critiques and support. Your diverse views have challenged me to develop my mental capability critically thereby enabling me to accomplish my goal.

Special thanks go to my classmates at Bindura University of Science Education (BUSE) for their friendship and support. The collaborative environment and stimulating discussions have made this journey enjoyable and fulfilling.

To my family, your unwavering support and belief in me has enabled me to soldier on. Thank you all for being part of this journey.

LIST OF ABBREVIATIONS AND SYNONYMS

IT-SME:	Information Technology Small and Medium-sized Enterprise.
SME:	Small and Medium-sized Enterprise.
GDP:	Gross Domestic Product.
R&D:	Research and Development.
IFC:	International Finance Corporation.
OECD:	Organization for Economic Co-operation and Development.
AfDB:	African Development Bank.
RBZ:	Reserve Bank of Zimbabwe.
ZNCC:	Zimbabwe National Chamber of Commerce.
CRM:	Customer Relationship Management.

ABSTRACT

This study aims to design a working model of formal credit access for IT-related SMEs in Harare. Most particularly it determines the capture of the determinants of formal financing, analyzing how the operational characteristics of IT-SMEs affect their ability to access credit, and developing a framework that overcomes the barriers. The model has the fundamental objective of providing sound guidance to policymakers, financial providers, and the SMEs. The study adopted a sequential explanatory mixed-methods approach. We gathered information from structured questionnaires given to IT-related SME owners and managers in Harare, which formed the quantitative data for the research. Each was treated with descriptive and inferential statistics to establish, among other things, key determinants of credit access and the extent of relations between operational characteristics of the firm and financing success. Subsequently, qualitative data was collected in the form of open-ended interviews with SME owners, managers and other representatives from the financing institutions to shed more light on the challenges and opportunities presented in the quantitative phase. Findings reveal that poor credit history, stringent collateral requirements, complex application processes, and lender knowledge gaps hinder access to formal credit. Crucially, SMEs' profitability, business planning, and location significantly impact their ability to secure financing. A novel framework was designed by the study that involved customized credit scoring schemes, loan guarantees sponsored by the government, and financial education with mentorship that were integrated into an online platform. The result of the study shows that formal credit access for ICT-SMEs in Harare should be approached comprehensively, as IT-SMEs in Harare are effectively barred from formal credit access. There is a high possibility for growth for Zimbabwe’s economy alongside its IT sector if the set guidelines improve credit assessment procedures, policy implementation, financial literacy, collaboration with technology, and creative solutions. If the barriers are removed and the strengths of these enterprises harnessed, stakeholders would be able to exploit the IT sector and facilitate enduring economic growth. The study highlights the need for improved credit assessment procedures, policy implementation, financial literacy, technology adoption, and collaborative solutions to unlock the potential of Harare's IT-SMEs and foster economic growth.

Keywords: Financial Literacy, ii. Formal Credit, iii. Collateral Requirements

TABLE OF CONTENTS

APPROVAL FORM i

RELEASE FORM ii

DECLARATION iii

DEDICATION iv

ACKNOWLEDGEMENTS v

LIST OF ABBREVIATIONS AND SYNONYMS vi

CHAPTER ONE 12

INTRODUCTION 12

1.1 Introduction 12

1.2 Study Background 12

1.2.1 SMEs and Financial Literacy in the Global Perspective 13

1.2.2 Regional Context: The Challenges of Financial Access in Africa 14

1.2.3 Local Context: Financial Literacy and Access to Credit for SMEs in Zimbabwe 16

1.3 Problem Statement 17

1.4 Aim of the Study 17

1.5 Research Objectives 18

1.5.1 Main Research Objective 18

1.6 Significance of the Study 18

1.7 Significance of the Study 18

1.8 Study Assumptions 20

1.9 Study Justification 20

1.10 Study Delimitations 21

1.11 Limitations 22

1.11.1 Scope Limitation Mitigation 22

1.12 Organisation of the Study 23

1.13 Chapter Summary 24

CHAPTER 2 25

LITERATURE REVIEW 25

2.1 Introduction 25

2.2 Key Concepts and Definitions 25

2.3 Theoretical Framework 26

2.4 Key Factors Influencing Access to Formal Credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology Sector 28

2.4.1 The Importance of SMEs in the IT Sector 28

2.4.2 Financial Literacy and Business Capability 29

2.4.3 Collateral Requirements 29

2.4.4 Information Asymmetry 30

2.4.5 Credit Scoring Systems 30
2.4.6 The Role of Government Policies 31
2.5 The Relationship between the Operational Characteristics of IT-SMEs and Their Ability to Secure Formal Financing 32
2.5.1 Technology Adoption 32
2.5.2 Human Resource Skills 32
2.6 Funding gaps and barriers of the IT sector SMEs 33
2.6.1 Management Structure 33
2.6.2 Market Orientation 33
2.7 Approaches for Strategy Implementation 35
2.7.1 Strategic Frameworks 35
2.7.2 Education and Capacity Building 35
2.7.3 Technology Adoption Frameworks 35
2.8 Conceptual Framework 36
2.9 Chapter Summary 38
CHAPTER THREE 39
RESEARCH METHODOLOGY 39
3.1 Introduction 39
3.2 Research Philosophy 39
3.3 Research Approach 40
3.3.1 Qualitative Component 40
3.3.2 Quantitative Component 40
3.4 Research Design 41
3.5 Population and Sample 41
3.5.1 Sampling Strategy 42
3.5.2 Inclusion Criteria 42
3.5.3 Exclusion Criteria 42
3.6 Sample Size 43
3.6.1 Sample Size 43
3.7 Data Collection Methods 44
3.8 Data Presentation and Analysis 45
3.9 Validity and Reliability 46
3.10 Pilot Study Validity 47
3.11 Ethical Considerations 47
3.12 Chapter Summary 48
CHAPTER FOUR 49
DATA ANALYSIS, FINDINGS AND DISCUSSIONS 49
4.1 Introduction 49

4.2 Discussion of the Response Rate 49
4.3 Reliability Tests 50
4.4 Demographic Information of the Respondents 51
4.5 Ascertain the Key Factors Influencing Access to Formal Credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology Sector 55
4.6 Operational characteristics 61
4.7 Developing a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector 69
4.8 Chapter Summary 73
CHAPTER FIVE 74
SUMMARY OF KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS 74
5.1 Introduction 74
5.3 Conclusions of the Study 76
5.4 Recommendations of the study 77
5.4.1 Framework Model 77

List of figures

Figure 1 Conceptual Framework....37
Figure 2 Gender of respondents....51
Figure 3 Age respondent....52
Figure 4 Education of respondents....53
Figure 5 Source: Survey Data, 2025....53
Figure 6 Period of service in the information technology-related small and medium sized enterprises in Harare....54
Figure 7 Source: Survey Data, 2025....54
Figure 8 Source: Survey Data, 2025....55
Figure 9 Source: Survey Data, 2025....56
Figure 10 Source: Survey Data, 2025....58
Figure 11 Operational characteristics of IT-SMEs and access to formal credit....62
Figure 13 A Working Model for Improved Access to Formal Credit for IT-Related Small and Medium Sized Enterprises in Harare Source: Self - developed by author....79

List of Tables

Table 1 Response rate....49
Table 2 Cronbach's Alpha Reliability Test Results....50
Table 3 Source: Survey Data, 2025....50
Table 5 Table 4.5: Vision formulation....57
Table 6: The relationship between the operational characteristics of IT-SMEs and their ability to secure formal financing....63
Table 7: Correlation for operational characteristics of IT-SMEs and ability to secure formal credit....68
Table 8 Novel Framework for Enhancing Access to Formal Credit....69
Table 9 Source: Survey Data, 2025....70

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The intersection of finance and technology, particularly in the realm of Small and Medium-sized Enterprises (SMEs), has emerged as a critical area of academic and practical inquiry. This is especially pertinent in developing economies, where access to formal credit remains a significant barrier for many enterprises. Information technology (IT)-related SMEs, which play a crucial role in fostering innovation, employment, and economic growth, often find themselves unrecognized and underserved by formal financial institutions. The complexity of credit assessment processes, the perceived risk associated with lending to smaller firms, and the lack of collateral often contribute to the funding gap faced by these businesses. Understanding the dynamics of this phenomenon is essential for fostering a more inclusive financial landscape that can support the growth of IT-related enterprises in cities such as Harare.

This research seeks to develop a working model aimed at improving access to formal credit for IT-related SMEs in Harare. This addresses the pressing need for innovative solutions tailored to the unique challenges within the framework of financial inclusion, small business development, and technological advancement. The following sections of this chapter outline the background to the study, a statement of the research problem, research objectives and the significance of the study.

1.2 Study Background

Changes in the global economic landscape have underscored the strategic importance of small and medium-sized enterprises (SMEs) in economic growth, technological advancement, and employment creation. In emerging economies in particular, SMEs have proven to be a vital instrument for poverty reduction and sustaining economic shocks. According to (World Bank, 2021, p. 12), SMEs account for over 60 percent of total employment and about 40 percent of GDP in developing countries.

In Zimbabwe, particularly, SMEs are considered to be the backbone of the economy, accounting for roughly 97 percent of registered businesses and providing employment for nearly 7 million individuals (Commerce, 2021). With this information in mind, I will focus on the financial literacy and formal credit access barriers confronting SMEs in the Information Technology (IT) sector in Zimbabwe's capital, Harare.

1.2.1 SMEs and Financial Literacy in the Global Perspective

In the context of an ever-digitized world, Small and Medium-sized Enterprises (SMEs) in the information technology (IT) sector of an economy are important for accelerating both economic growth and technological advancement. Their impact goes beyond the creation of new jobs; they also contribute considerably to the GDP of a country, especially in developing economies such as Zimbabwe. The shift to a tech-centric economy heightens the importance of financial literacy, especially for IT-related SMEs who must manoeuvre through intricate financial systems. According to the (International Finance Corporation (IFC) report, 2021), SMEs constitute about 90 percent of businesses and over 50 percent of employment globally, which gives an impression of their importance. The problem is that a large number of these businesses cannot obtain formal credit because they lack adequate financial literacy, which is worsened by Zimbabwe's harsh economic climate.

A recent report from the Organisation for Economic Co-operation and Development (OECD, 2022), suggests that there is an improvement in the level of financial literacy in developed countries but there is still a gap when comparing North America and Europe with the developing world. In developed economies, automated financial education systems are being incorporated into curriculums, which enables young entrepreneurs to gain essential skills. However, the Zimbabwean case illustrates considerable challenges these SMEs face, including inadequate formal education, sparse financial and educational resources, minimal marketing channels for financial products, and an advanced economy, which all pose considerable obstacles for SMEs trying to secure financing for business expansion and research and development activities.

The access of formal credit is bound to financial literacy. (The Global Financial Literacy Excellence Centre, GFLEC , 2021) noted in 2021 that better informed people used formal financial institutions as preferred modes of lending when compared to informal lending. This

is relevant for the IT industry in Zimbabwe, given how quickly technology is changing, firms have to be flexible and responsive to market changes. Inadequate knowledge of these financial products not only limits growth potential, but also affects their efficiency, thereby limiting innovation and competitiveness. Therefore, the effective approaches to increasing financial literacy require teaching problem solving strategies on how to prepare for loan applications, manage credit, and other related aspects of financial information.

A bespoke approach by Singapore to financial literacy that includes counselling, workshops, and partnering with financially supportive institutions for SMEs serves as an inspiration for Zimbabwe, as the country can benefit from adopting a similar framework. By building an ecosystem that promotes financial literacy, IT SMEs located in Harare would be able to gain an understanding of various financing avenues, which would remove a large number of existing credit access barriers. Australia is also a positive example where financial education is offered to SMEs through a joint effort from the government and private sector, enabling them to access training and other essential resources. These examples showcase the impacts of a calculated commitment to financial education that Zimbabwe could adopt, albeit tailored to the country's particular needs.

On the other hand, the South America and Africa Regions seem to be struggling with the cultural and structural barriers that impede the propagation of financial literacy programs. In Brazil, the professional development of financial education does not reach far off populations and adjusting to different cultures remains a problem (Brasil, 2019). This reality highlights the precise demands and conditions of the SMEs meant by financial literacy campaigns for their effectiveness vis a vis contextual adaptation. In Harare, Zimbabwe, designing and implementing financially oriented training programs that integrate cultural, economic, and educational barriers will be fundamental for the development of skilled attendants who will use the funding to advance the IT industry.

1.2.2 Regional Context: The Challenges of Financial Access in Africa

The African financial system is an intricate mosaic that is underpinned by various levels of economic activities, socio–cultural factors, and political systems operating within the region. However, such socio-economic diversity is a double-edged sword due to severe inequities in the formal financial system. As stated by the African Development Bank (AfDB), around 57%

of banking adults in Africa are unbanked, indicating a serious gap in access to financial services (Borish, 2021). This poses an even greater problem for Small and Medium-Sized Enterprises (SMEs) operating in the Information Technology (IT) industry, which remain crucial drivers of innovation and growth in African economies.

In Zimbabwe, particularly in urban areas such as Harare, the IT sector encounters certain obstacles that make formal credit access more difficult than it is within a broader context. These problems are made worse by several industry-specific dynamics. The credit worthiness of businesses within the IT sector poses unique challenges because there is often an inadequate supply of tangible assets that can be used as collateral. Most IT SMEs, in contrast to other traditional manufacturing firms, support their business activities primarily through an arsenal of services and advanced software solutions, and thus, possess IP as their principal asset. The absence of physical collateral increases the chances of being classified as high risk by lending institutions, and as a consequence, the financial market often adopts conservative lending policies, which unfortunately greatly disadvantages numerous promising technology businesses.

the context of IT SMEs highlights the lack of financial knowledge. Although entrepreneurs may be outstanding in their areas of specialisation, their financial acumen is often inadequate; emerging IT enterprises in Harare lack proper systems of financial control, as well as sound budgeting and investing policies. Such weaknesses make it difficult for them to access sophisticated financial channels, which in turn makes it difficult for them to capitalise on myriad funding opportunities. (Osei et al, 2023), noted that businesses that use financial education programs seem to have better managed their affairs, which in turn improves their overall profitability. Solving the financial literacy gap issue for IT SMEs can strengthen their ability to articulate their problems to financial institutions.

In addition to these challenges, the financial framework specific to African regions with IT businesses is still lacking. Although new forms of mobile banking provide novel opportunities for some microenterprises, a large number of IT small and medium enterprises (SMEs) in Zimbabwe are unable to fully exploit these advancements. Restrictions such as low levels of digital financial literacy in addition to a deep-seated cynicism towards formal banking systems create gaps that need to be filled in order for these contemplated financial resources to be wholly functional. As the World Bank's 2020 report highlights, despite the progress achieved

in fintech, gaps in comprehension and trust continue to bridge, resulting in many SMEs relying on informal finance that is easily accessible but fraught with high interest rates and instability.

Understanding the implications of technological advancement, financial literacy remains one of the impacts towards the economic empowerment of the IT sector in Africa as the continent integrates into the digital world economy. (Alakija, 2021), cites financial education initiatives, highlighting how they are pivotal to entrepreneurial development. We could design these programmes to equip IT SMEs in Harare with essential skills in managing credit, investments, and cash flows. Enhanced financial literacy among entrepreneurs helps organisations to improve access to formal credit and enables entrepreneurs to succeed in competitive markets.

The impact of South Africa's specially designed financial education programmes for small and medium enterprises (SMEs) serves as a powerful illustration. The educational programs offered by the Small Enterprise Finance Agency (SEFA) prove, through very tangible examples, that thoughtful financial services can improve the financial literacy of small businesses. Therefore, the same initiatives should be encouraged in both Eastern and Western Africa, particularly in the IT industry, where cultural paradigms and diverse financial literacy levels pose additional hurdles. Through concentrated efforts to improve financial literacy and establish an enabling environment for IT entrepreneurs, Africa can cultivate the ecosystem needed to foster innovation, self-sustained growth, and sustainable economic development.

1.2.3 Local Context: Financial Literacy and Access to Credit for SMEs in Zimbabwe

In Zimbabwe, the financial landscape for SMEs, particularly in the IT sector, presents unique characteristics influenced by the country’s socio-economic background. Soaring inflation rates, currency instability, and ever-changing economic policies have created a critical gap in financial literacy and credit accessibility. As pointed out in the report of Reserve Bank of Zimbabwe, (Reserve Bank of Zimbabwe, 2022), inadequate levels of financial literacy, combined with non-existent relationships with formal financial institutions, practically immobilise SMEs from utilising resources within reach.

The information technology (IT) sector in Zimbabwe is experiencing growth, with companies offering services such as software development, IT consultancy and technical support. Most IT companies appear to have a lot of potential; however, they face problems when it comes to

operational finance. The Zimbabwe National Chamber of Commerce report (ZNCC), 2020), showed that nearly 75% of IT service providers in Harare relied on personal savings to fund their businesses, which suggests that they do not have access to formal credit facilities. This overdependence on personal savings limits business growth because it restricts capital needed for expansion, R&D, and upgrading technology.

1.3 Problem Statement

The challenges faced by small and medium-sized enterprises (SMEs) in Zimbabwe, particularly those operating in the information technology (IT) sector in Harare, highlight a critical intersection of financial literacy and access to formal credit. While financial literacy is recognized as a pivotal factor in enhancing the performance and sustainability of businesses (World Bank, 2022), approximately 70% of SMEs in Zimbabwe lack the necessary qualifications for formal credit due to inadequate financial knowledge and insufficient documentation.

(Makoni, S and Ndlovu, R, 2021), report that there is a growing recognition of the role of financial literacy in the international discourse on SMEs. Nonetheless, most local studies have focused on financial macroeconomic factors, neglecting the more intricate connections between financial literacy and access to credit. Furthermore, the lack of research aimed at developing financing solutions for the specific IT sector confines the realm of possible targeted actions. This gap drives the objective of this research, which is to establish the ways in which elevating financial literacy affects the levels of credit accessibility for IT SMEs in Harare. This understanding is crucial for economic development because without better access to credit, SMEs are almost certain to remain stunted in their ability to grow and develop, thereby diminishing their potential for greater economic contribution. Therefore, this research seeks to provide practical recommendations that will aid in the design of effective strategies for promoting financial literacy and credit access for SMEs, especially in this important economic sector.

1.4 Aim of the Study

The aim of this study is to design a working model to improve access to formal credit for Information Technology-related Small and Medium Sized Enterprises (IT-SMEs) in Harare.

This study seeks to develop a framework that addresses the specific challenges faced by IT-SMEs in securing formal financing, ultimately contributing to their growth and sustainability.

1.5 Research Objectives

1.5.1 Main Research Objective

To develop a novel framework designed to enhance access to formal credit for Information Technology-related Small and Medium Sized Enterprises (IT-SMEs) in Harare.

1.5.2 Research Objectives

The objectives of the study are:

1. To identify the key factors influencing access to formal credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology sector.
2. To determine the relationship between the operational characteristics of IT-SMEs and their ability to secure formal financing.
3. To develop a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector.

1.6 Significance of the Study

The study will seek answers to the following research questions:

1. What are the key factors that influence access to formal credit for SMEs in the Information Technology sector in Harare?
2. How do the operational characteristics of IT-SMEs in Harare impact their access to formal credit sources?
3. What innovative strategies and frameworks can be developed to facilitate better access to formal credit for SMEs in the Information Technology sector in Harare?

1.7 Significance of the Study

This study is significant as it focuses specifically on enhancing access to formal credit for small and medium-sized enterprises (SMEs) in Zimbabwe's information technology sector, with a

particular emphasis on firms providing IT services and support in Harare. In the context of today's global economy, formally structured credit is essential for any SME's survival and growth, as it finances new technologies and operational expansion and improves overall competitive edge. This research intends to provide solutions which encourage dynamic inclusiveness within the sector's credit services system by investigating barriers to formal credit access these enterprises face.

The findings of this research are particularly valuable for a wide array of participants, including the owners and entrepreneurs of SMEs in the IT sector, financial services providers, and policy and decision makers. Business owners will understand many of the intricacies of formal credit financing and specifically what obstacles confront them. Greater financial credit access can enable these SMEs to capitalise on growth opportunities that can substantially increase economic contributions, spur innovation, further deepen the economic recovery, and build a more vibrant local economy. In addition, better access to formal credit can encourage the use of credit, less insolvency risk, and greater business sustainability.

The research will help financial institutions to design credit products relevant for the IT industry. With a proper understanding of these businesses, SMEs and financial institutions will have an easier time interacting and developing mutually beneficial lending strategies. Enhanced lending, specifically designed for IT firms due to improved financial relationships, will promote economic growth and better resource allocation, increased investment in innovation, and IT firm productivity.

The study provides policymakers with significant insights as it directly addresses the formidable barriers systemic design places on SMEs and formal credit accessibility. These barriers inform directed policies designed for IT sector credit enhancement and the formal financial system. Response actions may include policy shifts aimed at aligning credit opportunities with the reality of business operations in the IT sector or workshops aimed at educating SME owners about finance and credit navigation. By advocating for better credit access policies, this study aims to reduce adversarial systems and nurture a robust economic environment for SMEs.

Furthermore, this research contributes to the IT discourse by analysing access to formal credit in a specific IT industry case within a developing country. It adds to the existing literature,

especially concerning developing economies, and serves as a useful source for future studies and policy strategies intended to aid SMEs in these emerging markets. By integrating theoretical insights with practical applications, this research establishes a foundation for developing adaptable models that can assist other regions grappling with analogous challenges.

1.8 Study Assumptions

This study assumes that barriers inhibiting formal credit access by information technology SMEs in Harare are complex, including socio-economic and institutional factors. It also assumes that these barriers need to be addressed through a distinct model comprised of financial institutions, government, and the SMEs themselves to enhance access to credit and support the sector.

1.9 Study Justification

The importance of financial literacy and access to formal credit is vital for the growth and sustainability of Small and Medium-sized Enterprises (SMEs), especially in the burgeoning Information Technology (IT) sector in Zimbabwe. Since SMEs are crucial for economic growth and employment opportunities, enhancing their financial intelligence can allow them to make better decisions, manage resources, and use funding when it is available. In a country such as Zimbabwe, where the IT business is not fully shaped by traditional finance systems, an economically stabilising focus model that deals with financial literacy and formal credit access can evolve growth.

Moreover, there is a real need for IT support and service firms in Harare to optimise their financials and restructure their operation models due to the rapid technological change and digital evolution of businesses. If these firms assessed their levels of financial literacy and implications of the available financing options, they would be able to develop robust strategies that would improve their service offerings and enhance their competitive edge in the regional and national markets. This study aims to incorporate financial literacy with practical solutions to enhance the performance of these SMEs, thereby contributing to the broader discussion of economic empowerment in Zimbabwe's IT sector.

1.10 Study Delimitations

In addressing the objectives regarding improving access to formal credit for information technology-related small and medium-sized enterprises (SMEs) located in Harare, this study set out delimitations, which are scoped boundaries focused on guiding the information within the research. These delimitations inform the conceptual, spatial, and temporal scopes of the research.

1.10.1 Conceptual Focus

The research zeroes in on small and medium-sized enterprises in the information technology industry and IT service and support provision. This conceptual focus is significant because it aids in the deep comprehension of the enormous formal credit financial constraints and obstacles these enterprises encounter. By narrowing down to the IT sector, the study acknowledges the peculiarity of its financial dynamics, such as degrees of financial literacy, credit perception, and the economic atmosphere. In addition, studying this particular sector enables the provision of relevant and precise findings that are aimed at the IT-related SMEs, increasing the usefulness and impact of the findings.

1.10.2 Spatial Focus

The geographical scope of this study is confined to Harare, Zimbabwe's capital city. The subject matter is particularly important given Harare's concentration of IT services and support businesses. The purpose of this study is to attempt to understand the more subtle elements of financial literacy and credit accessibility that are specific to metropolitan areas by studying issues related to this urban centre. The many small and medium-sized enterprises (SMEs) in Harare's IT sector offer a unique chance to study how local economies, policies, and partnerships influence the challenges and opportunities of obtaining formal credit. This spatial focus enhances the depth of the analysis by contextualizing the financial experiences of these enterprises within a specific urban economy.

1.10.3 Temporal Focus

The study will cover the period between 2020 and 2024. This timeframe is particularly important, considering the ongoing economic transformations in Zimbabwe as well as the changes around the world due to technological development and market evolution. By focussing on this period, the study incorporates emerging patterns in financial activity and credit utilisation that may have developed in relation to local economic churn as well as global influences, such as the COVID-19 pandemic. This focus in time allows for an assessment of the prevailing conditions, but more importantly, the shifts in financial affordability, accessibility and credit facilities trends, thereby informing efforts to enhance credit provision to SMEs underpinned by knowledge in the IT industry.

1.11 Limitations

The research aimed at developing a working model to enhance financial literacy and improve access to formal credit for small and medium-sized enterprises (SMEs) in the Information Technology (IT) sector in Harare acknowledges various limitations that could impact the study's findings. However, to mitigate these limitations and safeguard the credibility and value of the research, several strategic measures were implemented.

1.11.1 Scope Limitation Mitigation

Recognizing that the focus on the IT services and support firms in Harare may limit the generalisability of the findings, the study undertook a thorough comparative analysis with literature on SMEs from other geographical locations within Zimbabwe. Through studying documents from various places, the research hopes to draw comparisons with IT-related firms. Moreover, the research design includes qualitative interviews and focus groups with a wider sample of IT entrepreneurs, which adds additional opinions that can help develop strategies for SMEs in other regions. Such steps enhance the contextual comprehension and enable the formulation of answers that go beyond the expectations set by IT support firms located in Harare.

1.11.2 Causal Relationship Clarification:

To address the inherent difficulty of establishing causation between financial literacy and access to formal credit within the constraints of cross-sectional research, the study employs mixed-method techniques. Quantitative methods through surveys offer understanding of relationships, while qualitative interviews explain the actions and reasons behind SME proprietors' attitudes towards utilising credit, financial education, and their retrieval information behaviour. This two-pronged method facilitates capturing all contextual factors relevant to the reasons and consequences of lending and education integration, enabling the formation of assumptions, although financial literacy and access to credit are normally analysed through longitudinal data.

1.11.3 Data Availability and Reliability:

Given the challenges associated with obtaining reliable data from often-informal SMEs operations, the research implemented several strategies to enhance data accuracy. First, the study undertook triangulation by collecting data through different methods: administering surveys, conducting structured interviews, and acquiring secondary data from other financial institutions and government publications. This method guarantees data validation while helping mitigate bias that could come from a singular source. Furthermore, the research team-built trust with the participants by guaranteeing confidentiality and explaining the benefits of the study to the SME community, which increased the likelihood of unreserved and candid disclosures regarding important financial data and practices.

1.12 Organisation of the Study

Chapter 1: Introduces the research topic, presents the broad objectives of the study, supportive objectives and elaborates on its significance, and describes the research questions while establishing the theoretical framework.

Chapter 2: Reviews pertinent literature concerning SME access to credit, particularly focusing on the unique problems within the information technology industry and examining available models and frameworks.

Chapter 3: Details the research methodology, describing the various ways of data collection and analysis that were utilised in the study.

Chapter 4: Presents the findings of the study, discussing the data in relation to the hypotheses and research questions while highlighting key insights.

Chapter 5: Provides conclusions based on the study's results, assesses impacts on practice and policy, and suggests directions for further research intended to improve formal credit accessibility for SMEs in Harare.

1.13 Chapter Summary

In summary, this chapter has examined the significant issue of restricted access to formal credit among information technology-related SMEs in Harare, highlighting its far-reaching socio-economic consequences. The chapter has articulated the study's main objectives, outlined its guiding research questions, and identified the anticipated academic and practical contributions to the field. By establishing the context and rationale for the research, this chapter underscores the imperative of developing a robust model to address the existing financial access gaps, thereby laying the groundwork for the subsequent chapters of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This section provides a comprehensive literature review focusing on Enhanced access to formal credit for Information Technology-related Small and Medium size enterprises (SMEs). It synthesizes existing research, establishes a theoretical foundation, and identifies gaps pertinent to the study's objectives. By exploring key variables, their interrelations, and the specific context of Zimbabwe, the review aims to inform the development of a working model that can effectively enhance credit access for SMEs in this sector.

2.2 Key Concepts and Definitions

2.2.1 SMEs (Small and Medium-Sized Enterprises)

The characterisation of SMEs can differ greatly from one country to another because it is mostly based on the number of people employed and income generated. As noted by ((IFC), 2020) SMEs are defined as enterprises with less than 250 staff members. The World Bank (2021) adds that small firms are those that employ below 50 people, while medium-sized enterprises employ 50 to 249. In Zimbabwe, over 70% of the nation’s economy is comprised of SMEs, and they represent a substantial proportion of employment and economic activity (Ministry of Small and Medium Enterprises, 2018).

2.2.2 Access to Formal Credit

Access to formal credit is defined as the possibility for a person or organisation to obtain a loan or financial service from a financial institution such as a bank, credit union or microfinance institution. (Beck, T. & Demurguc, A, 2018), highlight the importance of formal credit for SMEs and how it assists them in managing growth, dealing with capital expenditure, and economic fluctuations. (Ayyagari M. B.-K., 2020) also argue that the unavailability of credit severely compromises the potential of businesses, leading to stagnation and the collapse of “income” opportunities, further entrenching systems of poverty. In Zimbabwe, SMEs have

serious problems in obtaining formal credit because of lenders' perceptions of high risk, inadequate collateral, and poor financial records.

2.3 Theoretical Framework

2.3.1 Credit Rationing Theory

One theoretical framework that can be utilized in evaluating access to formal credit for information technology (IT)-related small and medium-sized enterprises (SMEs) in Harare is the Credit Rationing Theory. The theory was formulated by economists Joseph Stiglitz and Andrew Weiss in the early 1980s. The theory suggests that lenders may limit the amount of credit to a borrower regardless of the borrower's willingness to pay a higher interest. This effect happens mainly because there is a lack of adequate information on the borrower, leading to adverse selection and moral hazard problems.

Credit rationing can be understood through two primary channels: the type of borrower and the quality of the project. For example, IT-related SMEs are some of the highest-risk borrowers due to their fast-changing nature, and as a result, they experience even greater rationing. Lenders, because of a lack of sufficient information about the firm and their business models, deem their funding allocation decision to be risky and, therefore, choose to limit lending.

According to (Stiglitz & Weiss, 1981), SMEs do not have the optimal means to differentiate between good and bad borrowers, and therefore, credit rationing exists. From their perspective, even when an SME shows growth potential, a lender will want to ration credit due to increased risk. The situation has severe implications for SMEs due to their reliance on external funding for expansion, innovation, and sustained operations. Credit restrictions make developing these programs necessary. Therefore, understanding the mechanisms behind credit rationing is critical for developing more effective financial access programs.

2.3.2 Justification of the Theoretical Framework

The credit rationing theory applies to this study for multiple reasons. First it synthesises the problems confronting IT-related SMEs in Harare with respect to accessing and using credit. Usually, these firms lack sufficient collateral, credit histories, or business plans to meet

conventional lending standards. Lenders often perceive such factors as presenting a high risk. Consequently, there is limited access to institutional credit which inhibits the growth potential of these enterprises.

Furthermore, the theory addresses the gaps in lending and SME financing information imbalance in the lending market. After identifying the reasons behind credit rationing, stakeholders can devise solutions to address these problems. For instance, SMEs could improve their financial literacy, enhance their business management skills, or establish communication channels between banks and other firms to improve financial lending conditions.

The credit rationing theory, as noted above, integrates more comprehensively with economic principles, which justifies analysing not only organisational lending behaviour but also the policy consequences with regard to economic context. With this theory, the focus can shift from micro-level engagements between lenders and SMEs to trends in credit accessibility at the macro level for the entire economy in Harare. It presents a blended approach to the formal and informal credit systems, capturing aspects that could enhance financial access as part of policy solutions.

For this study, the scope will include collecting qualitative primary data through interviews with SME proprietors, administering questionnaires to relevant financial institutions, and analysing other relevant documents to highlight credit rationing issues in Harare. Furthermore, the theory will help create practical solutions for smaller businesses that use less technology and formal banks by tackling the main problems of uneven information and improving the lending environment.

The conceptual framework of this study is organized around three primary categories of variables: dependent, independent, and moderating variables. The dependent variable in this framework is the access to formal credit for SMEs in the IT services and support sector. The ecosystem in which these SMEs operate largely determines access to credit. The independent variables consist of financial literacy and financial management practices. Financial literacy is defined as the knowledge and capabilities that make it possible for a person or business owner to take appropriate actions regarding their finances, whereas financial management practices include budgeting, bookkeeping, and financial forecasting employed by firms. These

independent variables influence the creditworthiness and financial health of the SMEs; hence, their level of formal credit accessibility is affected.

Furthermore, the framework identifies several moderating variables that can alter the relationship between financial literacy and credit access. Such factors include the socio-economic context and the relevant technology as well as the regulatory approaches. In turn, the regulatory environment can promote or restrict access to financial services based on the policies and regulations put in place by the government and financial institutions. Moreover, the initiation of financial processes using technology is likely to increase the level of literacy as well as the operational efficiency in the IT sector, which in turn influences the accessibility of credit. With these relationships in mind, the research intends to develop a model that will serve the dual purpose of addressing the financial literacy deficiency gap in SMEs and increasing their chances of obtaining formal credit.

2.4 Key Factors Influencing Access to Formal Credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology Sector

Formally available credits are critical for the sustaining and evolving growth of Small and Medium-sized Enterprises (SMEs) Automation Systems and are highly relevant in the dynamically changing sector of Information Technology (IT). The financial difficulties of SMEs in a developing economy greatly constrain their value creation, innovative capabilities, and competitiveness. The purpose of this paper is to analyse the processes that define formal credit access for SMEs in the IT sector and examine recent literature covering the period between 2020 and 2023. The analysis would incorporate a number of dimensions, including, but not limited to, financial default education, the function of dependent guarantees, information deficiency, credit grading, governmental intervention, and consequences of automated technological finance.

2.4.1 The Importance of SMEs in the IT Sector

SMEs are seminal towards any economy and also in the case of IT, where they employ a considerable percentage of the workforce and contribute towards the GDP. According to the (International Finance Corporation (IFC) report, 2021) SMEs constitute more than 90 per cent of the businesses and more than 50 per cent of the employment, making them important

builders and defenders of the rudimentary underpinnings of prosperity and growth. In terms of information technology, SMEs tend to lead the market because of their innovations concerning specific services and products that larger corporations ignore. But the lack of formal credit restraint limits their ability to take advantage of these opportunities.

2.4.2 Financial Literacy and Business Capability

A major contributing factor to formal credit accessibility is the financial literacy of SME owners and managers, and it is among the more critical ones. Literacy helps entrepreneurs at all levels make informed choices regarding the business and its management (Bhuvaneshwari and Kannan, 2022). Contrary to popular belief, there are many SME owners who don't have basic financial skills, even when the means to obtain them are available through the internet. According to the (World Bank, 2022), approximately only 38% of SME owners in developing countries have sufficient literacy skills, which in turn stunts their ability to acquire finances.

According to (Kauffman & O'Connor , 2021), it has been observed that financial literacy pertains positively to the level of success in obtaining loans and the proficient management of financial risks. On the contrary, low levels of financial literacy may mean consumers are unaware of relevant financial products consumed, hence availing themselves. This indicates that financial educational programmes focused on the particular needs of people working in the IT sector could improve the level of formal credit access for SMEs.

2.4.3 Collateral Requirements

Another hindrance to accessing formal credit is the collateral requirements set by financial institutions. Traditional credit-granting institutions usually have some forms of collateral bound to mitigate risk. This situation represents a dire challenge for SMEs, particularly in the IT sector, where a large proportion of their worth is intangible (intellectual property, software). (Abor & Quartey, 2020) established in their study that SMEs have far more difficulties overcoming collateral requirements than larger enterprises who possess physical assets.

The challenge of high collateral requirements is made more difficult by the IT sector's peculiarity where traditional assets do not capture the complete value of a business. Some researchers have advanced innovative approaches to considering creditworthiness that account

for intangible assets (Fofana & Niang, 2023). Developing standards for benchmarking intangible assets would find concrete use by SMEs in need of credit, thereby addressing the gap.

2.4.4 Information Asymmetry

Information asymmetry describes yet another prevalent gap existing in the credit market, particularly for SMEs operating in the IT sector. Financial institutions often do not possess relevant information about prospective borrowers, which raises the risk—or at least the perception— and affects the borrower's ability to secure loans (Seki & Bangura, 2021). Newer business models seem out of place with conventional risk evaluation due to rapid shifts in technology within the IT sector and the model's rigidness, which tends to create obsolete frameworks. Out of touch with technological progress, (Seki & Bangura, 2021) point out that lenders tend to use obsolete frameworks lacking modern innovations, resulting in overly cautious terms, conservative frameworks, and unaccountable negative criteria marking distinguishing trade policies.

In an effort to narrow the information gap, some researchers recommend employing technology-driven solutions such as artificial intelligence and big data analytics, which can assess the creditworthiness of SMEs more holistically and thoroughly. By tapping into non-conventional data sets, IT sector SMEs become easier to finance because lenders understand their viability and operational abilities (Brynjolfsson & McAfee, 2020)

2.4.5 Credit Scoring Systems

The use of credit scoring systems is equally important in determining the formal credit accessibility of an SME. Standard credit scoring leaves out the specific IT sector business traits, resulting in a subpar appraisal of an SME’s creditworthiness (Kraus et al.,, 2023). Many SMEs with potential and a need to scale are often stagnated by low credit scores attributed to their maturity.

For improved access to credit, some researchers advocate for the development of alternative credit scoring methods that take into account the borrower’s online reputation, transaction records, and social network activities (Szekely, Martin &, 2022). The implementation of

flexible adaptive credit scoring techniques will empower lenders to make justifiable financing decisions based on the actual value presented by SMEs in the IT sector.

2.4.6 The Role of Government Policies

The policies of a government have marked effects on the SME financing. Recently, several governments have started initiatives to increase the lending to SMEs by offering guarantees, subsidising the lending rate, and giving financial aid (Kane & Ouroumis, 2023). The refraining measures provided intend to ease the burden of finances on SMEs and enhance their ability to access formal credit.

Yet the orderly implemented rates always remain regionally uneven, which affects the level of efficiency in the SMEs along with the IT sector's problems (Bhanegaonkar & Rao , 2021). It is essential for policymakers to tailor support mechanisms to address the specific needs of the IT sector and ensure that these initiatives are effectively communicated to potential borrowers.

2.4.7 Technological Solutions and Fintech

Fintech companies have undoubtedly changed how SMEs are able to access credit. New fintech innovations such as peer-to-peer lending, online invoice financing, and micro-lending have created new paths for SMEs to obtain funding (Acerbi & Rizzi, 2021). This sector has emerged to address the gap created by the traditional banking system's inability to cater to the specific needs of SMEs. There is evidence that suggests exposing SMEs to fintech solutions makes them more likely to access funding because alternative data sets are used to determine their creditworthiness (Leong & Sung, 2022) Particularly, the rapid development of blockchain technologies along with machine learning makes it possible for more people to access loans. As pointed out by (Karp et al., 2023), issues related to the regulations and protection of consumers still need to be addressed.

The restricted access to formal credit that Small and Medium-Sized Enterprises (SMEs) in the information technology sector face is a result of strained elements such as a low level of financial literacy, collateral, credit scoring, governmental policy, technology, and asymmetrical information. Solving these problems is important if the goal is to enable SMEs within the IT sector to develop and innovate. Financial literacy programmes, advanced

methodologies in credit assessment, and FinTech could greatly expand opportunities for SMEs. In addition, the creation of a comprehensive financial infrastructure aimed at IT sector SMEs is equally important and requires joint actions from governments, financial bodies, and technology companies. As the landscape for SMEs continues to evolve, ongoing research will be essential to understanding and addressing the barriers to access formal credit, ensuring that SMEs can continue to contribute to economic growth and technological advancement.

2.5 The Relationship between the Operational Characteristics of IT-SMEs and Their Ability to Secure Formal Financing

Most IT entrepreneurs leave a venture without external funding. These types of entrepreneurs actively seek capital for their growth endeavours. That is why many financial organisations and investors favour firms that showcase new paradigms and innovations. (Rao et al, 2021) assert that IT-SMEs with a strong innovation profile tend to be offered greater access to equity and debt financing due to the lower perceived risk associated with these investments. (Feng et al, 2021), on the other hand, argue that innovative, technology-driven firms have greater potential of accessing venture capital and therefore are more likely to get funded.

2.5.1 Technology Adoption

The adoption of modern technologies directly affects the operational productivity and market competitiveness of IT-SMEs. (Zhang & Liu, 2023) claim that adopting contemporary investing practices and technologies increases the odds of a firm's profitability and growth. These features are favourable to financial providers because they reflect an organization's competitiveness and ability to grow. Moreover, banks and other investors are now more often including technology evaluation in their risk assessment models, thereby making the adoption of new technologies a strategic critical feature for obtaining funds.

2.5.2 Human Resource Skills

The skills and competencies of a workforce are among the key operational traits that determine an IT-SME's access to funds. As noted by (Meyer, 2022), the presence of highly skilled employees significantly impacts a firm's performance and, as such, its reputation and credibility, thereby improving its chances of obtaining formal financing. Investors seek

professionals with proven milestones together with relevant technical knowledge because such personnel are likely to succeed in business. In addition, such skilled human resources improve quality and control and project management and even lead the innovation process, all of which can attract financiers.

2.6 Funding gaps and barriers of the IT sector SMEs

2.6.1 Management Structure

Within IT-SMEs, the management structure can either pose as an enabler or a barrier to accessing funding. Financial institutions are likely to trust an IT SME that has a well-organised management framework that promotes transparency, accountability, and strategic decision-making. (Johnson & Kim , 2020)J claim that being equipped with strong managerial capabilities enables businesses to undertake proper financial planning, risk management, and other essential elements for loans and investments. Unmanaged and poorly governed finances can deter investors, illustrating the significance of governance in financing decisions.

2.6.2 Market Orientation

A robust market orientation enables IT-SMEs to adequately match the products and services they offer to the expectations of their customers. According to (Feng et al, 2021), active engagement with the market translates to a favourable performance track record, which is one key attribute desirable when seeking financing. Also, financial institutions seek businesses that understand both their market and strategies to address numerical shifts in consumer demands. A strong market orientation alleviates some of the uncertainty and risks that potential investor face, therefore making it easier to receive formal financing.

2.6.2.1 Alternative Credit Scoring Models

The most dominant challenges faced by SMEs are credit scoring systems, which lack recognition of informal financial records and consider a narrow scope of data. The incorporation of footprints left online, such as transactions and social media activity, has been proposed by other scholars for the assessment of creditworthiness in some works (Gonzalez & Ridley, 2023).

2.6.2.2 Machine learning algorithms

These enable lenders to gain access to extensive data sets which they can use to assess credit risk with higher precision. (Wang, Huang and Wan, 2021) conduct a study showcasing how credit evaluations can be improved by including new data such as utility bill payments and e-commerce transaction histories, leading to more inclusive lending policies.

2.6.2.3 Fintech Innovations

It is the fintech firms that have concentrated on relieving small and medium enterprises of the stress associated with acquiring financing. The use of advanced technologies such as blockchain, AI, and big data analytics has transformed the user experience offered by fintech platforms into something much more elegant and accessible. A survey by (Karen Group, 2022) revealed that SMEs prefer fintech lenders over traditional banks due to reduced processing time.

2.6.2.4 Peer-to-peer lending

An example of this is peer-to-peer lending, which directly links borrowers with individual lenders through online platforms, eliminating traditional financial institutions. This model not only cuts costs but also broadens the scope of credit access (Li, Wang & Zeng, 2021). Additionally, cryptocurrencies and applications involving decentralised finance (DeFi) are gaining popularity, providing alternative funding sources for SMEs without the extensive dependence on conventional banking (Gonzalez & Munoz, , 2023).

2.6.2.5 Collaborative Financing Models

As financing collaborations consist of forming partnerships among SMEs, financial bodies, and other groups in a bid to optimise resource allocation and risk-sharing, they fall under the umbrella of collaborative financing. A research report by (Afolabi, Onifade & Okeke,, 2020), emphasises that collaborative ecosystems play a crucial role in sustainably advancing SMEs. These models include public-private partnerships where the government incentivises financial institutions to lend to SMEs within the IT sector.

2.6.2.6 Crowdfunding platforms

SMEs can now raise funds through specialised crowdfunding platforms, which have gained popularity. Twitter and Facebook, newer crowdfunding websites include Indiegogo and GoFundMe. A report by the (World Bank, 2022), indicated that crowdfunding offers financial assistance while simultaneously endorsing business concepts and attracting potential customers. Collaborations with angel or venture capital investors can also enable SMEs to gain essential strategic support required to grow in complicated market environments.

2.7 Approaches for Strategy Implementation

These innovative strategies can be streamlined with the help of additional implementation frameworks:

2.7.1 Strategic Frameworks

Innovation within the area of access to credit requires a nurturing regulatory environment. Regulations that promote and protect the innovation of consumer protection and data security measures for fintech are critical for effective and sustainable growth (OECD, 2022). (Zhang & Liu, 2023), for instance, propose that regulatory sandboxes can enable fintech firms to experiment with new product and service offerings within set parameters, allowing adherence to established regulations and fostering creativity at the same time.

2.7.2 Education and Capacity Building

Innovative credit strategies for both SMEs and financial institutions require a rigorous education and capacity-building programme. Financial literacy programs designed for SMEs can improve their grasp of credit, repayment, and the fundamentals of financial management (Abor & Quartey, 2020). Likewise, training programmes geared toward financial institutions will enable them to adopt new technologies and alternative data to better serve SMEs in the IT sector (Osei et al, 2023).

2.7.3 Technology Adoption Frameworks

Based on already existing technology, SMEs should be motivated to adopt digital solutions that will facilitate ease of operations and enhance the visibility of the business to potential lenders. Such tools may include accounting software, customer relationship management (CRM) systems, and online transaction monitoring systems, all of which bolster an SME's financial health and creditworthiness (KPMG, 2022).

Access to formal credit by SMEs within the information technology sector is a complex problem, intertwined with conventional lending customs, new technologies, and fierce regulatory landscapes. Innovative alternative approaches — such as alternative credit scoring systems, various fintech alternatives, and coalition-based financing—can enhance access to credit. Such approaches must operate within an effective structure that incorporates appropriate regulations, robust capacity-building frameworks, and technology adoption to succeed.
The lending financial landscape is constantly changing, which means all parties involved, such as SMEs, financial institutions, and policymakers, need to come together and rethink innovative measures that will foster economic and technological advancements.

2.8 Conceptual Framework

To capture the dynamics relevant to enhanced access to forming credit for information technology small and medium enterprises (SMEs), it is necessary to build a comprehensive conceptual framework that highlights the different factors within. Within this model, the dependent variable is access to formal credit, which determines the extent to which SMEs can obtain funding required for operational, growth, and innovation purposes. This access is measurable through several indicators which include the credit application approval rates, average loan amounts, and the overall financing terms.

Figure 2.1. Conceptual Framework

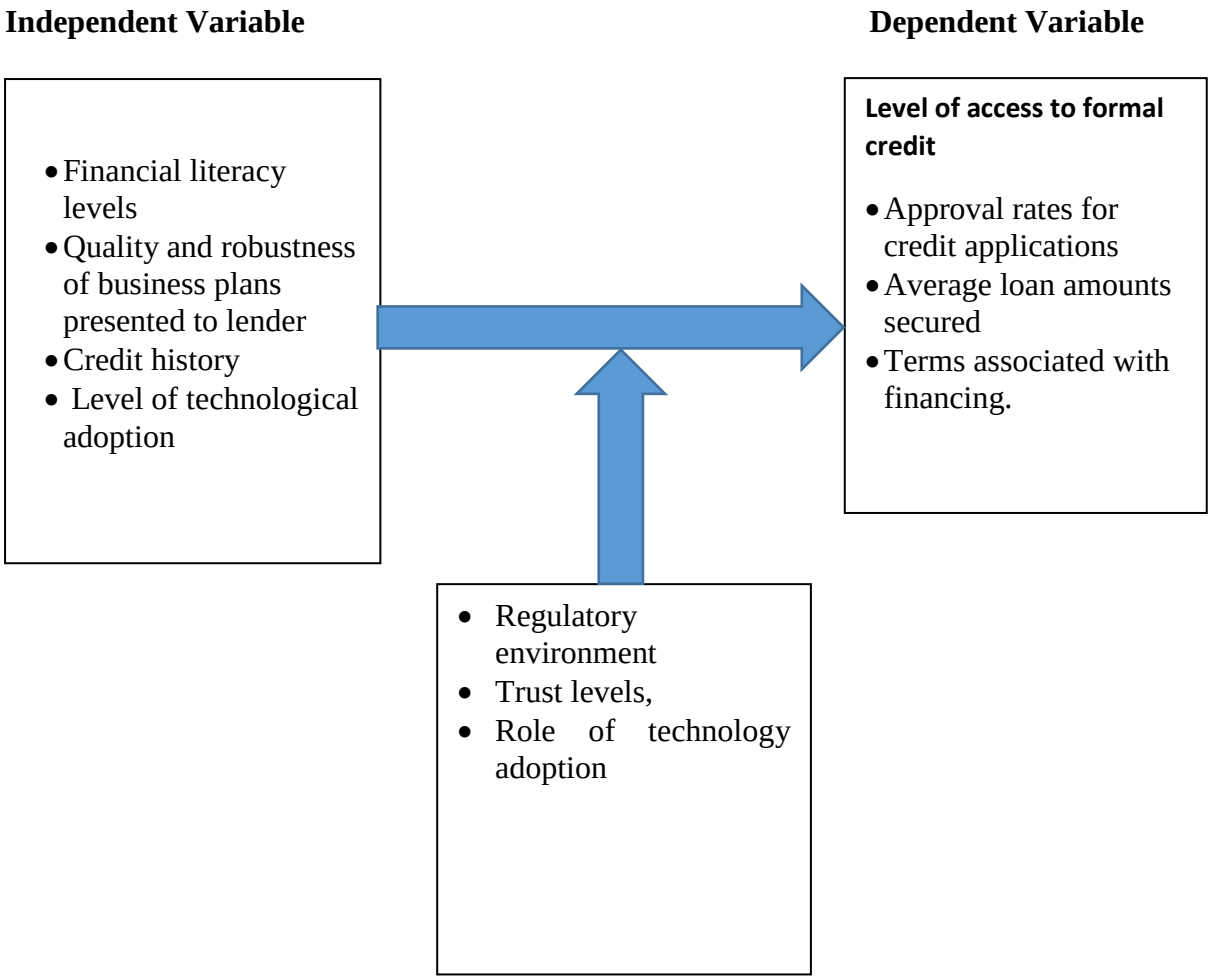


Figure 1 Conceptual Framework

The independent variables of this framework capture the aspects that directly determine the extent of access to formal credit. These are the levels of financial literacy of the owners of SMEs, the quality and adequacy of the business plans provided to the lenders, the existing credit history of the enterprises, and the extent of record technological use within these businesses. All these factors independently affect different IT-related SMEs, their augmenting or impeding creditworthiness and consequently their funding capabilities.

The relationship becomes more complex with moderating variables that lie between the independent and dependent variables. The surrounding SME credit environment, for instance, can be supportive or restrictive through the policies that are in place for SMEs. Financial policies that offer greater support, lending policies aimed at SMEs, and positive institutional credit attitudes can complement and strengthen the impact of independent variables. The

reverse also appears to be true: restrictive policies tend to offset greatly the impact of business plans and high financial literacy.

Mediators lie between independent and dependent variables. The relationship between SMEs and financial institutions is one critical mediating variable that can affect their loan decision. Levels of trust, past interactions, and the SMEs' standing in the sector can impact how lenders perceive credit risk. Further, the impact of technology adoption on the operations of SMEs can mediate this; for example, the adoption of sophisticated financial management systems enhances documentation and reporting, which increases the chances of getting loans. With regard to IT-related SMEs, the ecosystem portrays a combination of factors that foster or hinder accessing formal credit. These relationships, once unpacked, allow other actors to think through means of formulating credit policies that would facilitate access and enable the SMEs to operate optimally within the business environment.

2.9 Chapter Summary

In this chapter, the research explored the theoretical framework and focused on the main theory, the credit rationing theory and its justifications' literature review included both theoretical and empirical research. The examination of the literature was crucial for developing the conceptual framework as well as illustrating a complex interplay of various factors affecting access to formal credit for IT-related SMEs. The conceptual framework was based on the author's interpretation of the topic as informed by the literature review

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used in this study, including the guiding philosophies, research approach, design, and the population selected for the study on improved access to formal credit for IT-SMEs in Harare. It describes how data was gathered and analysed to develop a practical framework.

3.2 Research Philosophy

The research undertakes a pragmatist research philosophy. As described by (Creswell & Piano Clark, 2018), what matters is the practical impact of research and its consequences relating to the real world. Research is of value only when it serves to resolve a specific problem. It is not wisdom that determines the confines of a research problem; rather, a combination of different philosophies and methodologies that are most appropriate to answer the research question should be used (Feilzer, 2019)'s perspective, as described in the previous sections, a pragmatist stance enables one to make all necessary decisions on how best to address the problem without following set methods that a philosophical approach would dictate.

It is critical to adopt a pragmatic approach, given the purpose of the study. The goal does not seek to propose a definitive explanation regarding access to credit for IT-SMEs. Rather, it aims to create a strategy tailored to improve access to finance in Harare. This strategy involves grasping the contextual framework and the viewpoints of the IT-SMEs and financial institutions as stakeholders, as well as the contextual constraints that impact decision-making. Hence, the solutions to the relevant problems with IT-SMEs and finance institutions in Harare will require this research to use both qualitative and quantitative information. (Tashakkori & Teddlie, 2021), point out that pragmatism offers an advantage for mixed-methods designs, as it encourages flexibility in addressing ever-changing questions and evolving insights. That, in turn, facilitates the accomplishing of the objectives timeline and information provided.

3.3 Research Approach

In achieving the research objectives, the issue was approached from a mixed-methods perspective. The objectives were attained through a blended application of qualitative and quantitative methods, which offered an in-depth explanation of the dynamics impacting formal credit access for IT-SMEs in Harare.

3.3.1 Qualitative Component

This component will utilise an exploratory approach to understand the IT-SME owners' and managers' perspectives and the experiences of representatives from formal financial institutions. This will address research objective 1, which aims to analyse factors determining credit access. This objective was attained through gathering rich, descriptive data via in-depth semi-structured interviews regarding their perceptions, challenges, and decision-making processes about financing. This will illuminate the "why" and "how" of their actions (Johnson, R. B., & Christensen, L, 2019).

3.3.2 Quantitative Component

This component will employ a survey research design to measure operational characteristics of IT-SMEs (e.g., revenue, profitability, asset base, age, management experience, and technology employed) and the level of formal financing accessed (e.g., amount of loans, interest rates, collateral demanded, approval rates). This will address research objective 2, which aimed at analysing the relationship between operational characteristics and the capability to secure financing. Statistical examination was conducted to determine causative links and trends among the studied variables. Analysis results will assist in shaping the design framework by establishing the primary predictive indicators.

The combination of qualitative and quantitative data will provide a thorough analysis. Qualitative context was formulated in relation to the quantitative results, and in turn, quantitative data will be used to reinforce the qualitative findings. The validity and reliability of the findings will be enhanced through this triangulation of data sources.

3.4 Research Design

This study will use a sequential explanatory mixed-methods design approach. This involves initially gathering and analysing quantitative data, followed by the collection of qualitative data, which is analysed to shed light on the initial quantitative findings.

Phase 1: Collecting and Analysing the Quantitative Data. IT-SMEs operational in Harare were surveyed using a structured questionnaire to determine their operational attributes and the extent to which they accessed formal financing. Identifying key determinant variables of access to formal credit employed descriptive statistics, correlation analysis, and regression analysis.

Phase 2: Collecting and Analysing Qualitative Data. A purposive sample of IT-SME owners and managers was selected to participate in focused interviews based on insights drawn from the quantitative phase findings. The interviews will focus on explaining the relationships by providing detailed narratives around the quantitative findings. Thematic interpretation was applied to interpret the interview data where dominant themes and trends were derived for description.

This sequential design makes it possible for the quantitative data to guide the participant selection for the qualitative phase, making sure that the qualitative data collection processes relate to the most important and useful components of the guiding research question (Tashakkori and Teddlie, 2021). This design specifically supports objective 3 by permitting the formulation of a novel framework where problems identified through quantitative data were solved through qualitative insights on those issues.

3.5 Population and Sample

The study population consists of two main groups: (1) Owners and/or Managers of Information Technology Small and Medium Enterprises (SMEs) based in Harare, Zimbabwe, and (2) Loan Officers and Managers working in other financial institutions (banks, microfinance institutions, and other lending agencies) that offer credit facilities to SMEs in Harare. The IT-related SMEs incorporate firms that specialise in software engineering, website development, IT support services, data analysis and cybersecurity, as well as other technologically orientated businesses.

Harare is the capital city and primary economic hub of Zimbabwe, making it a representative location for studying SME access to credit.

3.5.1 Sampling Strategy

IT-SMEs: To obtain the representative sample of IT-SMEs in Harare, a stratified random sampling technique was applied. The SMEs were stratified based on their size (number of employees) and sector (for instance, software development, web design, or IT support services). This ensures a degree of representation for all types of IT-SMEs. For this particular quantitative survey, an initial sample size of 160 will be sought.

Financial Institutions: Financial institutions located in Harare will be sampled using a convenience sampling approach. All the major banks, microfinance institutions, and other lending agencies that extend credit to SMEs will be invited to participate in this study. A purposive sample of 12 loan officers and managers will be selected for the quantitative survey and qualitative interviews.

3.5.2 Inclusion Criteria

For the purposes of this study, we focused on IT-SMEs that have been operational for a minimum of 1 year and have 5-50 employees. This approach helped ensure that the businesses in the sample had operational history and experience with credit, which made their evaluation of creditworthiness easier. We focused on SMEs with 5 to 50 employees to ensure a representative sample of businesses in the identified IT-SME sector. From the financial institutions, loan officers and branch managers responsible for SME lending were included since they have firsthand experience and understanding of the IT-SME acquisition finance cycles and other difficulties navigating the financing ecosystem.

3.5.3 Exclusion Criteria

Unregistered SMEs, those operational for less than one year, and those whose primary business activities are not in IT were excluded. Likewise, SMEs that are in the process of liquidation or bankruptcy were excluded, as their access to credit—unlike the general IT-related SME challenges—likely relies on other factors. For the financial institutions, employees not engaged

in the SME lending process were excluded. Any participant (SME or financial institution) who does not have the legal capacity to provide informed consent, communicates only in languages other than English or Shona (the primary languages spoken in Harare), or is unable to reason at a level high enough to provide coherent responses was excluded. These criteria are formulated to make certain that selected participants will meet the requirements of the research problem and the research data is dependable and precise.

3.6 Sample Size

For this study, the sample size was estimated differently for the quantitative and qualitative phases. The selection process focused on addressing the following data collection issues pertaining to (1) determining the major drivers that impact access to formal credit for IT-SMEs; (2) exploring the operational characteristics of IT-SMEs and the dynamics of formal financing; and (3) informing a new model aimed at improving access to formal credit for SMEs in the IT sector.

3.6.1 Sample Size

The focus of the quantitative phase is all registered IT-SMEs in the Harare metropolitan area. This scope focuses the research within the parameters required to meet the objectives of this study that seeks to measure the relation between operational characteristics and access to finance. During the course of the research, it was extremely difficult to pin down the number of employees and owners of registered IT-SMEs because of the fast-paced changes within this sector and possible alteration of registering information. Nevertheless, based on available records from the Ministry of Small and Medium Enterprises and Cooperative Development and the Harare City Council, the estimated population size (N) was 266.

This crude number is useful in calculating the sample size that meets the required power for analysing the effects of operational characteristics on access to formal credit.

Yamane's formula for finite population sampling determines the sample size for the quantitative phase of the study as follows:

$n = N / (1 + N(e)^2)$

Where:
`n` is the sample size,
N stands for population size, and
´e` represents the margin of error, which is assumed to be 5%.

Utilising Yamane's formula for finite populations with a 5% margin of error (Israel, 1992), the estimated sample population is:
$n = 266 / (1 + 266(0.05)^2)$
$n \approx 159.73$

Therefore, a sample size of 160 employees and owners from IT-SMEs were selected for the quantitative survey. The sample size will enable the statistically meaningful analysis of the effects and accesses of firm size, age and profitability collateral on the factors needed to finance the business.

3.7 Data Collection Methods

The quantitative component of the study utilised a structured questionnaire. This particular instrument was crafted after considering the objectives of the study and evaluating relevant literature in the fields of SME finance and the IT industry. The questionnaire will involve closed-ended and open-ended questions. The closed-ended questions will incorporate Likert scales as well as multiple-choice questions that can be processed statistically, as recommended for quantitative business data collection (Hair, Black, Babin & Anderson, 2019). The questionnaire was intended to capture the operational profile of IT-SMEs as to their revenues, assets, age, number of employees, and level of technological advancement, as well as the formal credit types accessed, such as bank loans, lines of credit, and leasing, and their perceptions regarding barriers and enablers of credit access.

In a bid to enhance response rates while also ensuring representation from diverse demographic groups, the questionnaire was administered using a mixture of online surveys and face-to-face interviews.

In addition to the quantitative survey, qualitative data was gathered through semi-structured interviews with selected informants. These interviews were done with participants from financial institutions, SME assistance organisations, and some owners/managers of IT-SMEs. A specific guide was crafted in advance to ensure all relevant questions were considered before the discussion to provide an opportunity for diverse topics and perspectives to be addressed. The focus of the guide will be the financial institutions' perceptions of the creditworthiness of IT-SMEs, the SME support organisations' perceptions of their access to finance facilitation role, and the SME managers' and owners' perceptions of formally sought credit. The recording of the interviews was done by means of audio recording, followed by transcription to enhance precision in data analysis. The combination of these techniques will improve the accuracy and dependability of the research outcomes (Harrison et al., 2020) while providing a holistic view of the multifaceted dynamics regarding financing difficulties that IT-SMEs face along with the insights needed for constructing the innovative model.

3.8 Data Presentation and Analysis

The quantitative data collected from the responses were analysed with descriptive and inferential statistics. Descriptive statistics (frequencies, percentages, means, and standard deviations) captured the sample and the more important variables that were in the data in order to make sense of data that will be analysed in depth later (Pallant, 2020). Some of the operational characteristics of IT-SMEs (size, profitability, age, technological adoption) were analysed for their relationships with the formal financing (rate of approval for loans, value of loans, interest charged) that the IT-SMEs were able to secure, thus enabling testing of a hypothesis and making some conclusions from the results (Field, 2018). It is further noted that the specific research purpose was to determine the financial support requirement of the business; therefore, the multiple regression analysis was adopted to evaluate the predictive power of some operational characteristics on the level of formal financing accessible to the IT-SMEs. The analysis was done using Statistical Package for the Social Sciences (SPSS) version 26, known as a reliable and widely used software package for social science statistical data analysis.

The data collected from semi-structured interviews were analysed with thematic analysis, a method which is known for being flexible and for reporting patterns within qualitative data (Nowell, Norris, White & Moules, 2017). Thematic analysis will determine recurrent factors

pertaining to the themes concerning the aspects determining credit access, the operational attributes from the lenders' perspectives, and possible approaches to credit access improvement. The qualitative analysis results were integrated to provide context to the quantitative findings and enhance their meaning. As a primary component and strategy for finance access improvement, qualitative data will be critical in developing the new framework for IT-SMEs.

3.9 Validity and Reliability

Additional steps were taken to address validity and ensure the accuracy of the research findings (Bryman, 2016). While developing the content validity, checklist items were created through analysis of literature and expert opinions, which included SMEs and IT professionals, as well as developing the questionnaire and interview guide with the research goals (DeVellis, 2017). To avoid ambiguity, the questionnaire was pilot tested with a focus group formed by IT-SME owners/managers to help clear up any misinterpretations they may have had (Presser, Couper, Lessler, Martin, Martin, Rothgeb & Singer, 2004). Construct validity was determined by exploring relationships among the variables of interest and assessing the findings against established theories and evidence, thereby confirming the constructs (Trochim, 2020). This will involve providing evidence on factors affecting access to credit in relation to prevailing theories on financing SMEs. This type of validation focuses on the facts, the evidence presented, and the attestations from other relevant data sources, such as government statistics, industry cobalt publications, and financial institution reports. Testing validity in this way endorsed the results against external standards and rationale.

Reliability, in terms of the methods used to ensure accuracy and the consistency of the findings in the research, was addressed using multiple means (Saunders, M. N. K., Lewis, P., & Thornhill, A, 2019). The reliability of the internal scales in the questionnaire is checked using Cronbach’s alpha; a score of .7 or higher is considered good, indicating that the questions are consistent with each other. As well, test-retest reliability will be measured when a small sample of IT-SME owners/managers complete the questionnaire on two different occasions and the results are compared to evaluate the consistency of the instrument over time. In order to strengthen the reliability of the qualitative data, inter-coder reliability was checked by two independent coders who coded the interview transcripts and were compared using Cohen's Kappa, enhancing the trustworthiness of the interpretation of the data. The action provided was

achieved by aiming for the objectives of the research, meaning that the objectives of the research guided the coding to the central concepts of the study.

3.10 Pilot Study Validity

A preliminary study was carried out involving a purposive sample of 5 IT-SMEs based in Harare before the primary data collection round. This pilot was important for validating the data-collecting instruments and procedures so that they captured aspect(s) regarding the formulation of access to formal credit by IT-SMEs. In particular, the study aimed to resolve the ambiguities that the financial information and operational metrics questionnaires, interview guides and ancillary data-gathering instruments may pose.

Participant feedback was important in facilitating the IT-SMEs and the instructors stepping into a discussion of ensuring that the instruments were precise, relevant, focused on the actual problems, and tailored to obtain the formulable credit barriers and progressively scalable opportunities in the IT-SME sector, which included assuring the question's clarity.

3.11 Ethical Considerations

Ethics were a focal point during all stages of this study. Every participant was briefed and orientated on the objective of the study, which was centred on analysing and increasing the formal credit access barrier for IT SMEs. Consent was taken from all participants before the study commenced. They were provided with the purpose of the study, methods of data collection, and their ability to withdraw at any moment, all of which in total signifies the respect for autonomy (Beauchamp & Childress, 2019).

All respondents received anonymity and confidentiality promises. Data was protected and only available to the research team. In identifying information, those participating as IT subject matter experts and their representatives were granted anonymity to protect their privacy. Such information included any financial data or operational details that were shared.

The research followed ethical policies set out by the University of Zimbabwe, focusing on the rights and welfare of all participants. Research participant approval was gained from the university's Institutional Review Board (IRB) before any work was done. The IRB, prior to

data collection, examined the research proposal and the tools designed to collect the data to ensure that they complied with relevant ethical requirements regarding the collection and treatment of sensitive financial and operational data. Potential risks for gathering detailed financial information from the participants were mitigated through effective communication and enhanced data security designed to protect sensitive information.

The outcomes of the research were disseminated within the boundaries of professional ethics and social responsibility. The results were delivered with objectivity, without distortion or fabrication in the presentation of data. The bounds of the research, especially when considering the scope of generalisation pertaining to the area of study, were firmly stated.

3.12 Chapter Summary

This chapter has described the methods used to carry out this study, which were based on a combination of pragmatic philosophy of research. Justification for the preference of the qualitative method with elements of case studies and quantitative was provided. The chapter specified the target population as IT-SMEs and specified inclusion/exclusion criteria relevant to the participant's business seeking or having sought formal credit for inclusion in the study. The sample sizes for qualitative and quantitative data collection were set based on the saturation evaluation model and Yamane’s formula, respectively. This chapter discussed the methods of information retrieval designed to answer the critical questions on the determinants of access to formal credit for IT-SMEs and the operational characteristics of the IT-SMEs relative to their financing capabilities. The chapter further outlined the methods for analysing the data and described the processes undertaken to guarantee trustworthiness of the results.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The previous chapter outlined the research methodology and design employed in this study. This chapter presents the findings derived from the collected data, offering a detailed analysis and discussion of the results in relation to the research objectives. The chapter begins by examining the response rate, followed by an assessment of the reliability of the survey instrument. Subsequently, it presents descriptive analyses of the respondents' demographic characteristics, providing context for the study. Finally, the chapter delves into the core findings, addressing each research objective in turn, integrating both quantitative and qualitative data to provide a comprehensive understanding of the factors influencing access to formal credit for IT-related SMEs in Harare.

4.2 Discussion of the Response Rate

The response rate for the study, which sought to gather insights into factors influencing access to formal credit for IT-related SMEs in Harare, is detailed in Table 4.1.

Table 1 Response rate

	Frequency (n)	**Percentage (%)**
Questionnaires distributed	160	100.0
Questionnaires not returned	15	9.4
Returned questionnaires	145	90.6
Invalid questionnaires	9	5.6
Valid questionnaires	136	85.0

Source: Survey Data, 2025

As shown in Table 4.1, 160 questionnaires were distributed to a targeted sample of IT-related SMEs in Harare. A total of 145 questionnaires were returned, resulting in 15 unreturned

questionnaires. After review, 9 of the returned questionnaires were deemed incomplete or invalid for analysis, leaving 136 valid questionnaires. This represents a robust response rate of 85.0%. (Bryman & Bell, 2020), consider response rates above 50% to be acceptable for quantitative research, suggesting that the data collected is representative of the target population. The high response rate may be attributed to the direct interaction with participants and addressing any questions they may have had about the study. Furthermore, the survey data was enriched through extensive interviews with 15 SME managers from the IT sector in Harare. (Braun & Clarke, 2021), suggest that 10 interviews often represent the lower limit for achieving qualitative data saturation. The fact that the 15 interviews conducted resulted in a large data set suggest that maximum saturation was achieved. The combination of qualitative data from the interviews and quantitative data from the surveys allows for a detailed analysis of IT-related SMEs in Harare and their credit access. The complementary nature of these data sources allows for triangulation, enhancing the validity and reliability of the findings (Creswell & Plano Clark, 2018).

4.3 Reliability Tests

Cronbach's alpha reliability test was performed on the data from the pilot study to check the internal consistency and reliability of the survey instrument. The results are shown below:

Table 2 Cronbach's Alpha Reliability Test Results

Construct	**N of Items**	**Cronbach 's Alpha**	**KMO statistic**
Key factors influencing access to formal credit	10	0.751	0.782
Operational characteristics of IT-SMEs	10	0.794	0.825
Novel framework to enhance access to formal credit	10	0.719	0.709
Overall	**30**	**0.7547**	**0.772**

Table 3 Source: Survey Data, 2025

The results in Table 4.2 confirm that all the constructs captured in the questionnaire met the acceptable standard of Cronbach's alpha and KMO. All the values surpassed the expected minimum of 0.7. For the 30-item questionnaire, the overall alpha coefficient was 0.755, with a

KMO of 0.772. These values pointed to strong reliability and consistency within the questionnaire. (George & Mallery, 2003), suggest that Cronbach's alpha values above 0.7 are considered acceptable, indicating good internal consistency. The Kaiser-Meyer-Olkin (KMO) statistic, which measures sampling adequacy, also exceeded the recommended threshold of 0.6, further supporting the suitability of the data for factor analysis and other statistical procedures (Field, 2018). This allows for confidence that the results from this questionnaire can be analysed meaningfully, and the findings would meaningfully represent the realities around IT-related SMEs' access to formal credit in Harare.

4.4 Demographic Information of the Respondents

To provide context for the study's findings and to assess potential biases, demographic information was collected from the respondents. This included their gender, age, educational qualifications, years of experience in the IT sector, and their current position within their respective organizations.

4.4.1 Gender

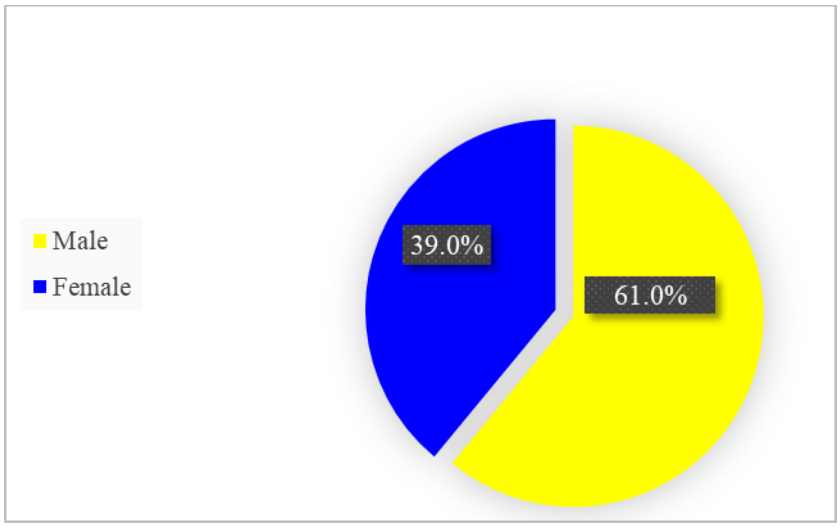


Figure 2 Gender of respondents

Figure 4.1 illustrates the gender distribution of the respondents. The findings reveal that males constitute the majority of the respondents, accounting for 61%, while females comprise 39%. This indicates that men are predominantly represented in IT-related SMEs in Harare. The

higher representation of men in the IT sector aligns with global trends, although recent efforts to promote gender diversity in the technology industry are gradually shifting this balance (Sandberg, 2013). While the majority of respondents were male, the representation of females in the study indicates that sampling bias was minimised during the distribution of questionnaires and the execution of interviews. This reduces the risk of overlooking important perspectives and experiences related to access to finance within the IT sector. However, future research could explore in more detail any gender-specific challenges or opportunities related to SME financing in the IT sector.

4.4.2 Age of Participants

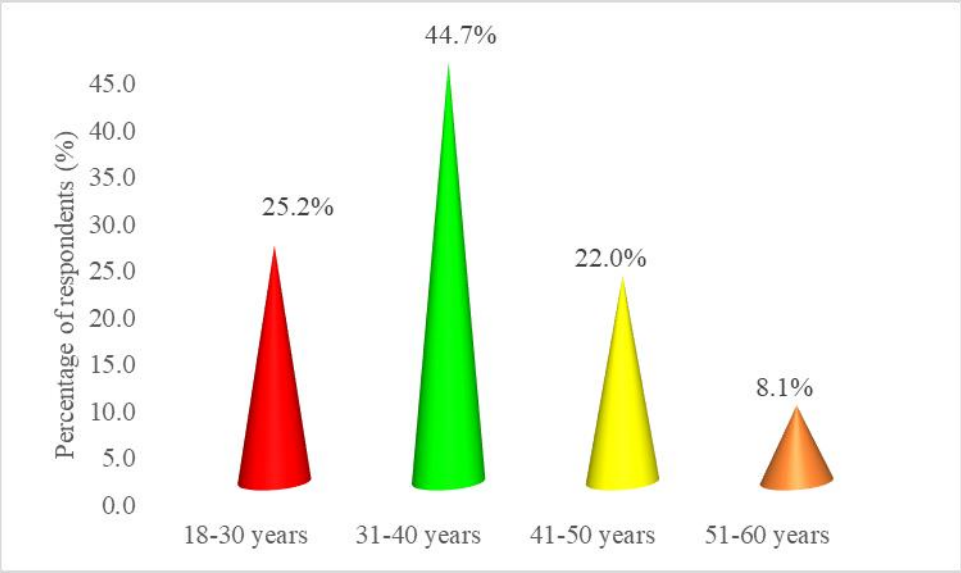


Figure 3 Age respondent

The data presented in Figure 4.2 indicates that 44.7% of the respondents fall within the age range of 31 to 40 years, followed by 25.2% who are between 18 and 30 years old. Respondents aged 41 to 50 years represent 22.0% of the sample, while only 8.1% are between 51 and 60 years. The predominance of respondents aged between 18 and 50 years suggests that the IT-SME sector in Harare is largely populated by a relatively young workforce. This age distribution is consistent with the global profile of the IT sector, which tends to attract younger professionals due to the dynamic and innovative nature of the industry (Davenport, 2013). The presence of respondents from all age categories ensures that the study captures a diverse range of experiences and perspectives. Younger employees may bring fresh ideas and technical expertise, while older employees may offer valuable insights based on their experience and

networks. This combination of perspectives enriches the understanding of the challenges and opportunities related to access to finance in the IT sector.

4.4.3 Level of Education

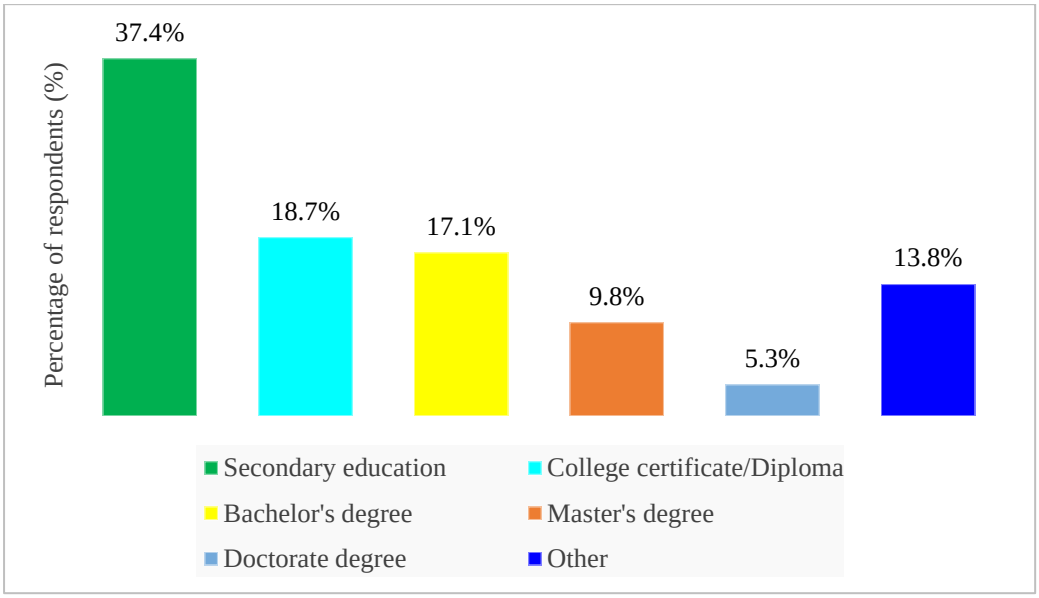


Figure 4 Education of respondents

Figure 5 Source: Survey Data, 2025

Regarding the highest educational qualifications attained, Figure 4.3 reveals that 37.4% of the respondents have secondary education, followed by 18.7% with diplomas or college certificates, and 17.1% holding bachelor's degrees. The results also indicate that 13.8% possess other qualifications, 9.8% have master's degrees, and 5.3% hold doctorate degrees. The high proportion of respondents with at least secondary education suggests that the sample is relatively well-educated. This is essential, as it ensures that the respondents were capable of understanding and responding to the questions in the questionnaire and interview guide, thereby enhancing the validity and reliability of the data. The presence of respondents with higher-level qualifications, such as master's and doctorate degrees, further strengthens the study's credibility. These individuals likely possess a deeper understanding of the IT sector and the financial challenges faced by SMEs, providing valuable insights for the research.

4.4.4 Period of Service in the IT-Related SME Sector in Harare

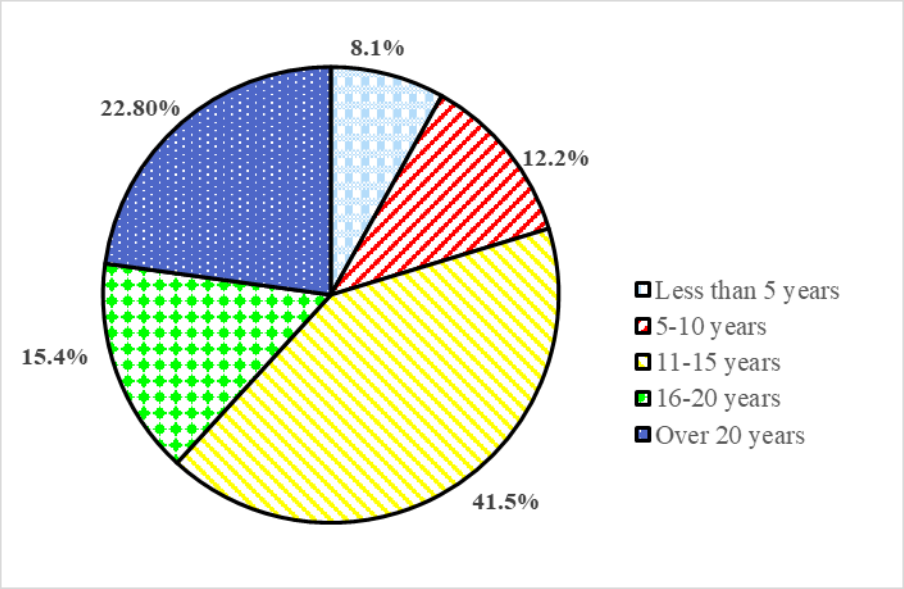


Figure 6 Period of service in the information technology-related small and medium sized enterprises in Harare

Figure 7 Source: Survey Data, 2025

On period of service, the results shown in Figure 4.4 reveal that 41.5% of the respondents indicated that they had served 11 to 15 years in the information technology-related small and medium sized enterprises in Harare. whilst 22.8% had served for over 20 years. As also shown by Figure 4.4, 15.4% of the respondents had worked in the information technology-related small and medium sized enterprises in Harare. for 16 to 20 years whilst 12.2% had 5-10 years of service. The smallest proportion of 8.1% had served in the information technology-related small and medium sized enterprises in Harare. for less than five years. The findings imply that most of the respondents to the study had been in the information technology-related small and medium sized enterprises in Harare. for at least 5 years such that they had in-depth understanding of strategic leadership practices and organisational agility based on experience.

4.4.5 Designation of the Participants

More so, the participants were asked to indicate the positions they held in their respective firms in the information technology-related small and medium sized enterprises in Harare.

The results are presented in Figure 4.5.

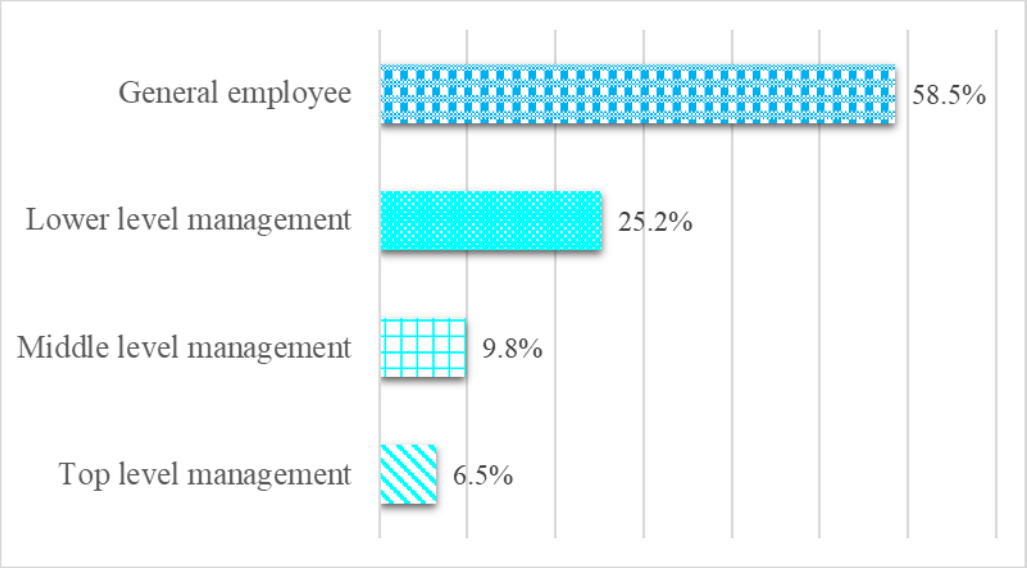


Figure 4.5: Position held in respective firms in the information technology-related small and medium sized enterprises

Figure 8 Source: Survey Data, 2025

The findings presented in Figure 4.5 reveal that the majority of respondents are general employees (48%), followed by low-level managers (27%). Middle-level managers comprise 15% of the sample, while top-level managers account for the remaining 10%. This distribution allows for a comprehensive understanding of the issue of access to finance, as the researcher can gather information from a wide range of employees and managerial levels.

Furthermore, on the position held by the respondents, the findings in Figure 4.5 show that 58.5% were general employees followed by 25.2% who were low level managers. Middle level managers accounted for 9.8% of the sample respondents and 6.5% were top level managers. From the findings, the researcher managed to collect information from individuals from various managerial levels from the general employees to top management thereby improving validity of the findings.

4.5 Ascertain the Key Factors Influencing Access to Formal Credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology Sector

This section of the study aims to identify the critical factors that significantly impact IT-SMEs' ability to access formal credit in Harare. Understanding these factors is crucial for developing targeted interventions to improve financing opportunities for this vital sector. To this end,

respondents were asked to indicate their level of agreement with statements relating to various potential barriers and facilitators of access to formal credit. The results are summarized in Figure 4.6;

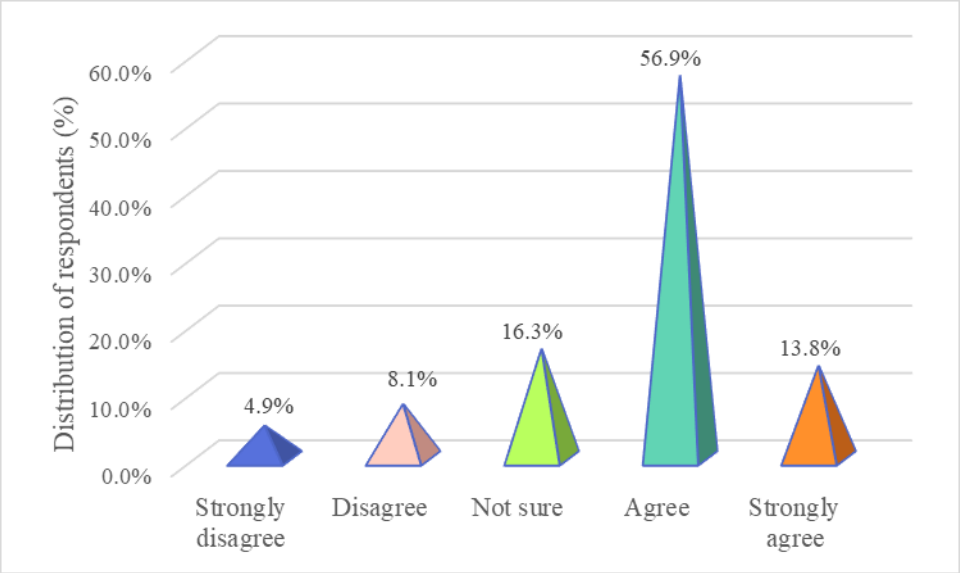


Figure 4.6: Practice of vision formulation

Figure 9 Source: Survey Data, 2025

The survey data indicates that a significant portion of respondents (56.9%) agreed that their firms had embraced vision formulation. Further support for this practice comes from the 13.8% who strongly agreed. While a substantial majority acknowledge vision formulation, 16.3% remain unsure, suggesting either a lack of awareness, inconsistent implementation, or difficulty in assessing their firm's approach. A smaller segment of respondents expressed disagreement, with 8.1% disagreeing and 4.9% strongly disagreeing, implying that vision formulation is either not practiced in their firms or that the respondents disagree with the practice. These findings underscore that vision formulation is fairly common within IT SMEs in Harare.

For instance, studies have shown that SMEs with well-defined strategic plans and demonstrated organizational capabilities are viewed more favourably by lenders (OECD, 2022). Similarly, research emphasizes that a clear organizational vision can enhance a firm's credibility and attractiveness to investors (World Bank, 2022). Furthermore, reports have highlighted the role of management practices, including vision formulation, in fostering organizational agility and adaptability, which can, in turn, improve a firm's ability to respond to market changes and secure funding (IFC, 2023). Therefore, while the direct link to formal credit for IT-SMEs in

Harare requires further investigation, these international insights suggest that vision formulation, as a component of strategic management, may play a role in shaping perceptions of creditworthiness and increasing access to finance.

Table 4 Table 4.5: Vision formulation

Ascertaining the key factors influencing access to formal credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology sector	**N**	**Mean**	**Std. Dev.**
My company's lack of a strong credit history has significantly hindered our ability to access formal loans	123	4.54	0.727
The high interest rates offered by formal lending institutions make borrowing unattractive for my IT-SME	123	4.13	0.983
The collateral requirements imposed by banks are often too burdensome for my business to meet	123	4.33	0.707
The complex application process and lengthy approval times at formal lending institutions discourage me from seeking credit	123	4.33	0.856
I believe that a lack of financial literacy and business skills within my IT-SME negatively impacts our creditworthiness	123	4.22	0.910
I am confident that I fully understand the terms and conditions associated with different types of formal loans	123	4.37	0.693
I feel that corruption within the lending process sometimes plays a role in whether my application is successful	123	4.31	0.852
The lending institutions do not understand the unique nature and potential risks/rewards of the IT industry	123	4.24	0.981

The current economic climate in Zimbabwe significantly affects my IT-SME's access to formal credit.	123	4.15	0.971
The lack of government programs and initiatives to support IT-SMEs in accessing credit is a major obstacle	123	4.50	0.772

Figure 10 Source: Survey Data, 2025

The provided data (Table 4.3) reflects the perceptions of 123 IT-SMEs in Zimbabwe regarding various factors influencing their access to formal credit. The respondents used a Likert scale, where a higher mean indicates a stronger agreement with the statement. Examining the data reveals that several factors are perceived as significant obstacles.

Firstly, "My company's lack of a strong credit history has significantly hindered our ability to access formal loans" receives the highest mean score (4.54) with a relatively low standard deviation (0.727). This suggests a strong consensus among respondents that a weak credit history is a major impediment to securing loans. This finding aligns with existing literature on SME financing, which emphasizes the importance of credit history in assessing risk and determining loan eligibility (Placeholder3) (Nguyen Nguyen & Tran, 2020). Banks often rely on historical data to predict future repayment behaviour, and SMEs with limited or poor credit histories are deemed riskier, leading to loan denials or less favourable terms.

Secondly, "The lack of government programs and initiatives to support IT-SMEs in accessing credit is a major obstacle" also garnered a high mean score (4.50) and a low standard deviation (0.772). This points to a perceived gap in government support for IT-SMEs in accessing credit. This is significant, as government-backed schemes and initiatives, such as credit guarantee programs and subsidized interest rates, can play a crucial role in mitigating risk for lenders and incentivizing them to extend credit to SMEs (Colombo et al, 2019). The absence of such programs in Zimbabwe appears to be a significant barrier for IT-SMEs.

Furthermore, factors related to collateral requirements, complex application processes, and the perceived lack of understanding of the IT industry by lending institutions also received high mean scores. The statement "The collateral requirements imposed by banks are often too

burdensome for my business to meet" has a mean of 4.33 and a standard deviation of 0.707, indicating a strong agreement. SMEs, particularly in the IT sector, often lack tangible assets that can be used as collateral, making it difficult to meet the stringent requirements of formal lenders. This finding echo research highlighting the "collateral gap" faced by SMEs, especially in developing countries (Beck and Cull, 2020). Similarly, the statement "The complex application process and lengthy approval times at formal lending institutions discourage me from seeking credit" also has a mean of 4.33, indicating a significant deterrent. Lengthy and cumbersome processes can discourage SMEs, particularly those with limited administrative capacity, from pursuing formal credit. This is often compounded by a lack of transparency and clear communication from lending institutions. Finally, the statement "The lending institutions do not understand the unique nature and potential risks/rewards of the IT industry" with a mean of 4.24, suggests that lenders may be hesitant to invest in IT-SMEs due to a perceived lack of understanding of the sector's specific challenges and opportunities. This lack of understanding can lead to higher risk premiums and stricter lending criteria.

Interestingly, the statement reflecting understanding of loan terms and conditions ("I am confident that I fully understand the terms and conditions associated with different types of formal loans") also received a relatively high mean score (4.37). While this might seem counterintuitive, it could indicate that while SMEs understand the terms, they still face challenges meeting the requirements or finding loans that are suitable for their specific needs. It is important to note that while the mean score is high, the standard deviation (0.693) is relatively low, indicating a higher degree of consensus amongst the respondents.

Other factors, such as high interest rates, lack of financial literacy, corruption, and the current economic climate, also play a significant role, as evidenced by their relatively high mean scores. These factors are all interconnected and contribute to the overall challenging environment for IT-SMEs seeking formal credit in Zimbabwe. The current economic climate, represented by the statement "The current economic climate in Zimbabwe significantly affects my IT-SME's access to formal credit," scored a mean of 4.15. The unstable economic environment and high inflation in Zimbabwe likely increase the perceived risk for lenders, further tightening access to credit for SMEs.

The data presented in Table 4.3 provides valuable insights into the key factors influencing access to formal credit for IT-SMEs in Zimbabwe. The findings highlight the significance of

factors such as weak credit history, lack of government support, burdensome collateral requirements, complex application processes, and a perceived lack of understanding of the IT industry by lending institutions. Overcoming these challenges requires a multi-pronged approach. This includes strengthening credit reporting systems to enable SMEs to build credit history, implementing targeted government programs and initiatives to support IT-SMEs, simplifying lending processes, providing financial literacy training to SMEs, and fostering a better understanding of the IT sector among lenders. By addressing these issues, policymakers and financial institutions can create a more conducive environment for IT-SMEs to access the capital they need to thrive and contribute to Zimbabwe's economic growth.

The quantitative findings regarding the significance of specific firm characteristics and market conditions are further illuminated by qualitative insights gathered from interviews with IT SME owners and employees at financing institutions. The data collected from the interviews helps explain the processes through which lenders make credit decisions in the IT industry. For example, the qualitative interviews add value to understanding how lending policies are shaped to respond to firm size, age, and credit history performance to lending services in the IT sector. A key aspect that came up in the discussions was the impact of relative risk and uncertainty on the formal credit market. Unlike more traditional sectors, IT SMEs are often viewed as higher-risk undertakings and are subject to;

Economic threats from broader technological change: An interviewee, a loan officer with a bank, put it this way:

> *"IT moves very fast. A technology that is promising today may be irrelevant tomorrow. Because of this, it is tough to determine the most probable IT SMEs and therefore the chances associated with lending to them."*

Weak intangible assets: Many IT SMEs depend greatly on human capital, software, and intellectual property. Due to the inability to value or legally pledge assets essential for issuing loans, SMEs often have access to limited finance and are unable to take on traditional loans. One SME owner was critical;

> *"Our main asset is our staff, who create software. This represents the associative capital that banks are unable to value. What they want are tangible assets, such as buildings and equipment, which we do not own."*

No established business track record: This strong border lacks normal business practice; many IT SMEs, mostly start-up companies, do not possess a relatively long and established financial background, which makes it difficult for lenders to determine creditworthiness. One interviewee said;

> *"A lot of IT businesses are really young compared to other conventional industries out there. Lenders told me they didn't have the credit history or operational maturity that would ease the worries of banks."*

The sentiments from IT sector lenders illustrate the less friendly and more subjective nature of IT sector credit risk, which is critical to determining credit access. The level of lender experience and knowledge in the IT sector determines this mediating role.

The perceptions of risk which impact access to credit do not derive exclusively from financial data. The interviews show that the IT sector's vendor's expertise and their understanding of the sector mediate significantly. In her view, one SME put it clearly,

> *"If you are dealing with a banker who understands what you are doing, it changes a lot. They appreciate the business model and do not pay much attention to collateral in the classical way."*

This indicates that collateral greatly matters in lending, but, if understood properly, financial institutions can gain a working understanding of specialized IT-informed models that allow risk evaluation and customized financing.

4.6 Operational characteristics

The study also sought to determine the extent to which operational characteristics of IT-SMEs, as a strategic element, influences access to formal credit for IT SMEs in Harare. The respondents were therefore asked to indicate their degree of agreement whether dominant operational characteristics of IT-SMEs influences access to formal credit of their companies. The results are presented in Figure 4.8.

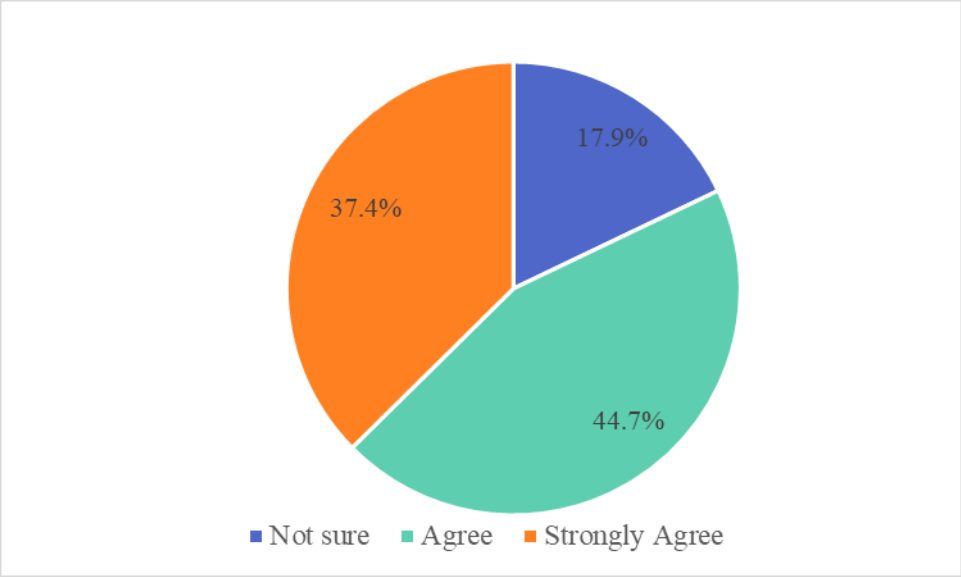


Figure 11 Operational characteristics of IT-SMEs and access to formal credit

Source: Survey Data, 2025

Based on Figure 4.8, a significant majority (82.1%) of respondents agreed that the operational characteristics of IT-SMEs influence their ability to secure formal credit, while 17.9% were unsure. This suggests a strong perception among IT-SMEs in Harare that how they operate directly impacts their access to financing. This aligns with global research indicating that lenders often assess operational efficiency and business practices when evaluating loan applications (OECD, 2022). This highlights the importance of operational factors like well-structured management systems, efficient resource allocation, and effective internal controls for securing financing from financial (World Bank, 2021). The respondents were further inquired to indicate their degree of agreement to statements relating to operational characteristics of IT-SMEs. The descriptive results pertaining to operational characteristics of IT-SMEs are presented in Table 4.5.

Table 5: The relationship between the operational characteristics of IT-SMEs and their ability to secure formal financing

The relationship between the operational characteristics of IT-SMEs and their ability to secure formal financing	N	Mean	Std. Dev.
The age of my IT-SME has a positive impact on my ability to secure loans	123	3.80	1.032
The size of my IT-SME, in terms of revenue, makes it easier to access formal credit	123	3.77	1.093
My IT-SME's profitability is a key factor in obtaining approval for formal financing	123	4.43	0.924
Having a well-defined business plan is critical for convincing formal lenders to provide credit	123	4.33	0.732
Adopting proper accounting and bookkeeping practices has improved my IT-SME's chances of getting a loan	123	4.00	0.932
My business's investment in Research and Development positively affects its appeal to formal lenders	123	4.14	0.823
The level of technological innovation within my company impacts our perceived creditworthiness	123	4.07	0.812
Having a diversified client base increases the likelihood of my IT-SME obtaining formal credit	123	4.24	0.666
The location of my IT-SME in Harare (e.g., industrial vs. residential area) influences my access to formal credit	123	4.26	0.087
My company's corporate social responsibility activities positively influence formal lending institutions perception of us	123	4.66	0.743

The survey results indicate a strong perception among IT-SME owners that several operational characteristics significantly impact their ability to secure formal financing. The highest mean scores, suggesting the strongest agreement, are associated with the statements regarding corporate social responsibility activities (Mean = 4.66, SD = 0.743) and profitability (Mean = 4.43, SD = 0.924). This indicates that IT-SMEs in Harare perceive a strong link between demonstrating social responsibility and possessing a healthy bottom line and their ability to

attract formal lenders. The relatively low standard deviations for these variables suggest a high degree of consensus among respondents.

The significance of profitability resonates strongly with existing literature. Financial institutions inherently prioritize lending to businesses that demonstrate a capacity to repay loans. Studies by (Agyei-Mensah, 2021) across various developing economies highlight that profitability is a consistently crucial determinant of SME access to finance. Similarly, the emphasis on corporate social responsibility (CSR) is noteworthy. While not always explicitly cited in traditional financial literature, a growing body of research suggests that ethical and sustainable practices can enhance a firm's reputation and mitigate perceived risk, thereby improving access to finance (Fatemi, Glaum & Kaiser, 2018). This is particularly relevant in a developing context such as Zimbabwe, where social impact is increasingly valued by both businesses and consumers.

Following closely behind, having a well-defined business plan (Mean = 4.33, SD = 0.732) and the location of the IT-SME (Mean = 4.26, SD = 0.087) are considered highly influential. The importance of a comprehensive business plan aligns with established financial principles. A clear and well-structured plan demonstrates an SME's understanding of its market, operations, and financial projections, reducing perceived risk for lenders. The finding about location is more intriguing. It suggests that being located in an industrial area is more beneficial for securing formal credit. This may be linked to perceptions of stability and legitimacy associated with industrial areas, or easier access to information and networking opportunities within established business hubs. The exceptionally low standard deviation for location (SD = 0.087) suggests almost unanimous agreement on this point. This requires further investigation to determine the specific mechanisms driving this perception.

Another set of characteristics – a diversified client base (Mean = 4.24, SD = 0.666), investment in Research and Development (Mean = 4.14, SD = 0.823), level of technological innovation (Mean = 4.07, SD = 0.812), and proper accounting practices (Mean = 4.00, SD = 0.932) – also receive considerable agreement. Diversification of clients reduces reliance on a single source of revenue, mitigating risk for lenders. R&D investment and technological innovation signal a forward-thinking and competitive organization, potentially making them more attractive to lenders seeking to invest in growth-oriented businesses. Furthermore, sound accounting practices are fundamental for demonstrating financial transparency and credibility. These

findings align with the general understanding that lenders favour businesses exhibiting stability, innovation, and financial responsibility.

Finally, the age and size (in terms of revenue) of the IT-SME are perceived as having a less pronounced, although still positive, impact on securing formal financing (Mean = 3.80, SD = 1.032 and Mean = 3.77, SD = 1.093, respectively). These lower mean scores, combined with higher standard deviations, suggest a greater degree of variability in perceptions regarding the importance of age and size. While these factors can contribute to a track record and demonstrate market stability, they are evidently not perceived as decisive factors in the context of IT-SMEs in Harare. Perhaps lenders are more concerned with current performance and future potential than with simply longevity or scale.

The implications of these findings are significant. They suggest that IT-SMEs in Harare can improve their chances of securing formal financing by focusing on key operational characteristics. Prioritizing profitability, adhering to ethical business practices through CSR, developing a comprehensive business plan, and maintaining robust accounting practices are paramount. Furthermore, the location of the business appears to play a significant role, potentially highlighting the need for policy interventions to address disparities in access to finance based on geographical location. Finally, the data suggest that while age and size may have some bearing, lenders are primarily focused on the IT-SME's financial health, future prospects, and commitment to ethical and innovative practices.

In conclusion, the data presented in Table 4.5 provides valuable insights into the perceived relationship between operational characteristics and access to formal financing for IT-SMEs in Harare. While further research is needed to validate these perceptions through quantitative analysis and to explore the underlying mechanisms driving these relationships, these findings offer a crucial starting point for both IT-SMEs seeking to secure funding and policymakers aiming to create a more supportive financial ecosystem for the Zimbabwean IT sector. By understanding and addressing these key factors, IT-SMEs can navigate the financing landscape more effectively and contribute to the sustainable growth of the Zimbabwean economy.

The qualitative evidence reinforces the quantitative data indicating that firm size affects access to credit. It is more common for larger IT SMEs to maintain relationships with financial institutions as well as have the means to complete the intricate loan application processes. In

contrast, smaller IT SMEs tend to be highly credit constrained due to low levels of financial literacy, insufficient collateral, and high-risk perception by other market actors.

The interviews highlight that getting loans for IT small and medium-sized enterprises (SMEs) depends more on how lenders view financial risk, how much they know about the industry, and how well they can explain the business's value, rather than just on standard economic measures. There is a gap in the understanding and trust from lenders about IT SMEs and their needs, which calls for enhanced financial education at the SME level, as well as for new design frameworks beyond traditional models for the IT sector.

The key informant interviews' qualitative results are very relevant to the quantitative results, especially in understanding the relationship between the IT-SME's operational characteristics and its formal financing access. Several interviews highlighted a clear organisational vision as a key factor in instilling confidence in lenders and investors. The clear vision which shapes the IT-SME's direction and purpose signals to them of strategic competence a lower risk.

One interviewee noted that:

> *"A well-articulated vision demonstrates a clear understanding of the market, … customers in focus and market competition. This gives potential investors confidence that the IT-SME knows where it is going, and it has a plan on how to get there which minimises the lending or investment risk."*

In other words, a clear vision projects an image of a well-managed and strategically focused organisation and hence, increases the likelihood of capital injections from external sources.

The interviews also revealed a deep connection between agility as an operational characteristic and having a clear vision, which in turn leads to strategic financing opportunities.

One interviewee observed that agility is paramount in the IT sector.

> *"Lenders want to know that an IT-SME has the capacity to respond to new technologies, new market needs, and new threats. A strong vision is the basis for that agility. A vision shows the ability to set the pace and direction, not just respond."*

This illustrates a perception by the lenders that IT-SMEs with adaptable and responsive strategies driven by a well-defined proactive vision would be less risky and more probable to succeed, thus increasing their willingness to finance.

A clear vision serves as an underpinning element for agility, which profoundly matches existing literature. (Rao, Wang & Kelly, 2021), noted that a clearly defined vision creates an outline that promotes organisational agility, which suggests that it undergirds confidence in at least prospective investors. In the same way, (Zhang, 2021), reported that leaders with clear and compelling visions have enhanced organisational agility. In relation to IT-SME financing, these conclusions indicate that lenders tend to perceive well-articulated IT-SMEs as reasonably agile enough to respond to changes in the IT environment, and therefore, they were more likely to obtain formal financing. The interviews indicate that this perception particularly lowers the risk, increases the potential for fulfilling strategies, and consequently makes them more creditworthy to the lenders.

Consequently, the Pearson correlation test was carried out to determine the relationship between operational characteristics of IT-SMEs and access to formal credit among Zimbabwean information technology-related small and medium sized enterprises in Harare. The study sought to establish whether a strong operational characteristic of IT-SMEs, characterized by vision, strategic decision-making, and ethical governance, correlates with a greater ability to secure formal credit. The results of the correlation test are presented in Table 4.5.

Table 6: Correlation for operational characteristics of IT-SMEs and ability to secure formal credit

		Operational characteristics of IT-SMEs	**Ability to secure formal credit**
Vision formulation	Pearson Correlation	1	0.724
	Sig. (2-tailed)		0.000
	N	123	123
Operational characteristics of IT-SMEs	Pearson Correlation	0.724	1
	Sig. (2-tailed)	0.000	
	N	123	123
Correlation is significant at the 0.05 level (2-tailed).			

Table 4.5 presents a correlation analysis examining the relationship between the operational characteristics of IT-SMEs and their ability to secure formal credit. The Pearson correlation coefficient of 0.724 indicates a strong positive correlation between these two variables. This suggests that as the operational characteristics of an IT-SME strengthen, the likelihood of securing formal credit significantly increases. The significance level ($p = 0.000$) is well below the threshold of 0.05, indicating that this correlation is statistically significant. This strong positive correlation implies that lenders are more inclined to provide credit to IT-SMEs that demonstrate robust operational practices, suggesting a perception of lower risk and higher repayment potential.

The finding that strong operational characteristics are positively correlated with access to formal credit aligns with contemporary research on SME finance and creditworthiness. Lenders often assess various operational aspects of a business to gauge its viability and ability to repay loans (Berger & Udell, 2021). These aspects can include factors such as the strength of its leadership (vision formulation), strategic planning, financial management, technological adoption and innovation (OECD, 2022). IT-SMEs demonstrating strengths in these areas likely present a more favourable risk profile to lenders.

Several studies support the notion that operational efficiency and strategic management are key determinants of credit access. For instance, research by (Beck and Cull, 2020), found that

SMEs with well-defined business plans and demonstrated operational competence were more successful in securing financing from formal institutions. Similarly, a report by the (World Bank, 2023) highlights that lenders prioritize businesses that exhibit strong governance structures and transparent financial reporting, which are often indicative of sound operational management. A commitment to ethical practices also enhances perceived creditworthiness, as it signals a responsible and reliable approach to business (European Commission, 2019). Therefore, the observed correlation in Table 5 is consistent with established literature highlighting the importance of operational excellence in securing formal credit for SMEs.

4.7 Developing a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector

Survey participants were asked to indicate the extent to which they disagree to statements relating to developing a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector. The findings are presented in Table 4.7.

Table 7 Novel Framework for Enhancing Access to Formal Credit

Developing a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector	**N**	**Mean**	**Std. Dev.**
I believe that a specialized credit guarantee scheme for IT-SMEs would significantly improve access to finance.	123	4.04	0.881
A mentorship program that provides financial and business skills training to IT-SMEs would be beneficial	123	4.15	0.786
The introduction of simplified loan application procedures specifically tailored to IT-SMEs would be helpful	123	4.09	0.932
A government-backed fund dedicated to providing loans to IT-SMEs is a necessary step	123	4.23	0.711
Partnerships between formal lending institutions and IT industry associations could improve access to credit	123	4.32	0.813
Improved transparency and accountability within the lending process would encourage more IT-SMEs to apply for formal credit	123	4.03	0.781

Creating an IT-SME credit rating system that considers the sector's unique characteristics would be useful.	123	4.25	0.586
Technology-based lending platforms (e.g., online loan marketplaces) could offer a viable alternative for IT-SMEs	123	4.20	0.632
Increased collaboration between IT-SMEs to share best practices on securing formal credit would be beneficial	123	413	0.701
Relaxing regulatory burdens on banks so that they can extend credit facilities to IT SMEs will result in increased lending	123	4.30	0.817

Table 8 Source: Survey Data, 2025

Table 4.6 displays the responses from 123 IT-SMEs regarding the effectiveness of different interventions proposed by the novel framework. Participants rated their agreement with each intervention on a scale that is not explicitly stated, but given the context and mean values, it can be inferred to be a Likert scale, likely ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The mean and standard deviation provide valuable insights into the overall sentiment and the level of consensus among respondents. Higher mean values indicate a stronger agreement with the proposed intervention, while lower standard deviations suggest greater uniformity in opinions.

The data reveals strong overall support for the proposed interventions aimed at enhancing access to formal credit for IT-SMEs. Across all listed measures, the mean values consistently fall above 4.0, indicating a generally positive outlook from the survey respondents. Let's examine specific elements of the framework:

One of the most highly rated interventions, with a mean of 4.32 and a standard deviation of 0.813, is the idea of fostering partnerships between formal lending institutions and IT industry associations. This suggests that IT-SMEs perceive significant value in leveraging the expertise and network of industry associations to bridge the information gap and build trust with lenders. This finding aligns with recent studies highlighting the importance of collaborative ecosystems in facilitating SME financing. For instance, a 2021 report by the World Bank emphasized the role of industry-specific associations in reducing information asymmetry and providing technical assistance to SMEs seeking credit (World Bank, 2021)

Similarly, relaxing regulatory burdens on banks to extend credit facilities to IT-SMEs garnered a high mean score of 4.30 (Std. Dev. 0.817). This suggests that IT-SMEs believe that current regulations may be hindering banks from lending to them, potentially due to perceived higher risk or compliance costs. Research from the European Central Bank (ECB), in 2022 supports this notion, arguing that overly stringent regulations can disproportionately impact smaller businesses by increasing borrowing costs and reducing access to finance (European Central Bank, 2022).

Furthermore, the proposal for a government-backed fund dedicated to providing loans to IT-SMEs received a high mean score of 4.23 (Std. Dev. 0.711). This suggests that IT-SMEs perceive a need for direct government intervention to address the financing gap. This aligns with the arguments for development finance institutions (DFIs) that can provide counter-cyclical lending and support businesses in sectors with high growth potential but perceived elevated risk. Several countries have implemented such schemes with varying degrees of success, highlighting the importance of proper design and implementation (OECD, 2022)

Interestingly, the intervention with the lowest standard deviation (0.586) is the creation of an IT-SME credit rating system that considers the sector's unique characteristics (mean = 4.25). This indicates a strong consensus among IT-SMEs about the value of tailored credit scoring models that account for the specific nuances of the technology sector, such as intellectual property assets and rapid innovation cycles. This echoes the call for alternative credit scoring models that incorporate non-traditional data points, as highlighted in a 2021 study by the ((IFC), International Finance Corporation, 2021).

While all interventions received positive feedback, improved transparency and accountability within the lending process had the lowest mean score (4.03, Std. Dev. 0.781). While still positive, this suggests that IT-SMEs might perceive other factors as more crucial in enhancing credit access. However, the importance of transparency and accountability should not be understated. Research consistently demonstrates that opaque lending processes can deter SMEs from seeking formal credit due to distrust and perceived unfairness (UNIDO, 2022).

The analysis of the survey data indicates strong support for the proposed novel framework designed to enhance access to formal credit for IT-SMEs. The findings suggest that a multi-pronged approach, encompassing partnerships, regulatory reforms, dedicated funding,

specialized credit scoring, technology-based lending platforms, and knowledge sharing, is necessary to address the multifaceted challenges faced by IT-SMEs in accessing finance. The data also underscores the importance of considering the unique characteristics of the IT sector when designing and implementing interventions. While further research is needed to evaluate the actual impact of these interventions, the survey data provides valuable insights into the perceptions of IT-SMEs and highlights the key areas where efforts should be focused. By translating these positive perceptions into concrete action, policymakers and financial institutions can unlock the potential of IT-SMEs and foster a more vibrant and inclusive innovation ecosystem.

To discuss the findings regarding the perceptions of IT-SMEs and their potential impact on innovation ecosystems, it's essential to engage with existing literature on the subject. Here are some key findings to consider:

(i) Perceptions of IT-SMEs

The survey data indicates that IT-SMEs view certain interventions positively. This aligns with the findings of scholars like **Sagalisa Mellisa**, who emphasize the importance of understanding the subjective experiences of small and medium enterprises (SMEs) in the tech sector. Positive perceptions can lead to increased engagement with policy initiatives and financial programs, as noted in studies on SME responsiveness to government support.

(ii). Importance of Policy Interventions

Effective policy interventions are crucial for fostering innovation. Literature suggests that tailored financial support, mentorship programs, and access to networks can significantly enhance the capabilities of IT-SMEs. For instance, (Qureshi, Khawaja, & Zia, 2020) highlight that when SMEs perceive government initiatives as beneficial, they are more likely to leverage these resources for growth.

(iii). Translating Perceptions into Action

The challenge lies in translating positive perceptions into actionable strategies. (Porter, 1990) discusses how competitive advantage can be cultivated through coordinated efforts among

stakeholders. By aligning the interests of policymakers, financial institutions, and SMEs, a supportive ecosystem can be created, fostering innovation.

(iv). Unlocking Potential through Inclusion

The literature stresses the need for inclusivity in innovation ecosystems. (Acs & Audretsch, 2020), argue that diverse entrepreneurial environments drive innovation. By focusing on IT-SMEs, which often contribute unique solutions and perspectives, policymakers can enhance the overall dynamism of the tech sector.

(v). Future Research Directions

While the survey provides valuable insights, further research is necessary to evaluate the actual impact of interventions. Longitudinal studies could help understand how perceptions evolve over time and how they correlate with business outcomes. Additionally, examining case studies of successful IT-SMEs that have benefited from specific interventions can provide practical frameworks for policymakers.

Conclusion

Engaging with the literature underscores the significance of fostering positive perceptions among IT-SMEs and taking concrete actions based on these insights. By focusing on inclusivity and collaboration, stakeholders can unlock the potential of IT-SMEs, ultimately contributing to a more vibrant and innovative ecosystem. Future research would be critical in ensuring that interventions are appropriately tailored and effective in achieving intended outcomes.

4.8. Chapter Summary

The chapter has presented, analysed and discussed the research findings. The findings have been presented according to the research objectives and research hypothesis using tables and charts. Both descriptive statistics and correlation statistics have been presented and discussed as well as the qualitative findings. The succeeding chapter provides the summary, conclusions and recommendations.

CHAPTER FIVE
SUMMARY OF KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This research chapter presents the concluding remarks of this study, offering a concise summary of the key findings, deriving conclusions based on these findings, and outlining policy implications, theoretical and practical applications, recommendations, limitations, and suggestions for future research. The central focus is on understanding and enhancing access to formal credit for Small and Medium-sized Enterprises (SMEs) operating within the Information Technology (IT) sector, specifically in relation to their operational characteristics.

5.2 Summary of Research Findings

The summary of the key findings is done according to the research objectives as follows:

5.2.1 Key Factors Influencing Access to Formal Credit for IT-SMEs

The research showed a strong negative association with weak credit history. This implied that importance of financial education for SMEs, suggesting that improving literacy could enhance access to credit. Again, the research revealed that a significant impediment to accessing formal credit for IT-SMEs is the lack of a strong credit history. Many IT-SMEs find that their limited or nonexistent credit records hinder their loan applications, as lenders rely heavily on past performance to assess risk. This challenge is further compounded by the perceived lack of government support through dedicated programs and initiatives designed to help IT-SMEs secure financing. Government policy interventions to support SMEs, could improve their credit access. The absence of such support leaves these businesses to navigate a challenging financial landscape without the benefit of credit guarantees or subsidized interest rates that could mitigate lender risk.

Beyond credit history and government support, burdensome requirements imposed by banks present a major hurdle for IT-SMEs because they hinder access to collateral. Many IT-SMEs lack the tangible assets required to secure loans, making it difficult to meet these demands. Additionally, the complex and time-consuming loan application processes at formal lending

institutions deter IT-SMEs from pursuing financing. These processes can be particularly challenging for smaller businesses with limited administrative capacity. These factors, coupled with a perceived lack of understanding of the IT industry by lenders, contribute to a challenging environment for IT-SMEs seeking formal credit. The researcher would suggest that simplifying processes could facilitate better credit access for SMEs.

5.2.2. Relationship Between Operational Characteristics and Ability to Secure Financing

The study highlighted a strong connection between an IT-SME's operational characteristics and its ability to secure formal financing. Specifically, a demonstrated commitment to Corporate Social Responsibility (CSR) and a proven track record of profitability are perceived as critical factors in attracting lenders. This implied that engaging in CSR activities can enhance credibility and access to financing for SMEs. IT-SMEs that actively engage in ethical and sustainable business practices and maintain a healthy bottom line are viewed more favorably by financial institutions, leading to increased access to credit opportunities. Furthermore, a well-defined business plan and a strategic business location such as industrial area is beneficial and significantly impact access to financing. The geographical factors can influence credit access, possibly due to perceived stability and opportunity. There is need for SMEs to develop comprehensive business plans to improve financing prospects. A comprehensive business plan demonstrates a clear understanding of the market, operations, and financial projections, reducing perceived risk for lenders. Similarly, the location of the IT-SME plays a role as operational efficiencies and characteristics are considered important for accessing

5.2.3 Novel Framework for Enhancing Access to Formal Credit

The research suggests that a specialized credit guarantee scheme tailored to IT-SMEs would significantly improve their access to finance. By providing a safety net for lenders, such a scheme would encourage them to extend credit to these businesses, mitigating their perceived risk. Additionally credit guarantee schemes, mentorship programs offering financial and business skills training to IT-SMEs were considered beneficial.

Moreover, the implementation of simplified loan application procedures specifically tailored to the needs and capabilities of IT-SMEs would streamline the process and encourage more businesses to seek formal credit. Technology-based lending platforms, such as online loan

marketplaces, could offer a viable alternative for IT-SMEs. The novel framework that would be put in place would increase accessibility for IT-SMEs for formal lending.

5.3 Conclusions of the Study

The study identified key barriers and operational characteristics influencing credit access for IT-SMEs in Harare;

5.3.1 Key Factors Influencing Access to Formal Credit

Access to formal credit for IT-SMEs is significantly influenced by a combination of financial performance, asset base, credit history, business planning, relationships with banks, innovation, location and regulatory compliance. A strong showing across these factors can significantly enhance an IT-SME's chances of securing financing.

5.3.2 Relationship Between Operational Characteristics and Credit Access

The operational characteristics of IT-SMEs play a crucial role in determining their creditworthiness. Established businesses, experienced management, industry specialization, and technological adoption are all positively correlated with access to formal financing.

5.3.3 Novel Framework for Enhanced Access

The proposed working model offers an ideal framework for improving access to formal credit. The developed framework, incorporates a tailored credit scoring model, government-backed loan guarantees, financial literacy programs, mentorship, and an online platform, which has the potential to significantly enhance access to formal credit for IT-SMEs.

5.3.4 Implementation of the recommendations

Implementing the stated recommendations can contribute to the growth and development of IT SMEs in Zimbabwe.

5.4 Recommendations of the study

i. Government: It is encouraged to introduce incentives for financial institutions lending IT SMEs, implement Loan guarantee scheme, invest in financial literacy skills training programs, give low interest rates for IT SMEs loans. It is advised to develop the online platform to connect IT-SMEs with lenders and streamline the loan application process. Promote a conducive regulatory environment for IT-SME growth. Also to consider special incentives to encourage financial institutions to lend to the IT sector.

ii. IT-SMEs: They are encouraged to adopt tailored credit scoring model for IT-SMEs focusing on improving financial performance, building a strong credit history, developing comprehensive business plans, and cultivating relationships with financial institutions. They should also prioritize legal compliance and explore opportunities to secure collateral.

iii. Associations of IT-SMEs: These play a key role in lobbying government for support, therefore, IT-SMES are inspired to advocate for favorable policies, and facilitate access to financial literacy and business advisory services for their members.

iv. Financial Institutions: They can adopt the proposed tailored credit scoring model to better assess the risk and potential of IT-SMEs. They should participate in government-backed loan guarantee schemes to reduce their risk exposure.

5.4.1 Recommendations for Future Study

The researcher recommends future research on;

i. Ooperating environment outside Harare for holistic understanding of barriers to formal credit by SMEs in Zimbabwe
ii. The impact of specific technological innovations on IT-SMEs financing.
iii. Implementation of a dynamic database in Zimbabwe that incorporates real-time data analytics and user feedback to adapt to changing SME needs as a government support tool.
iv. The role of alternative financing models (e.g., crowdfunding, angel investors) for IT-SMEs.
v. The long-term impact of the proposed framework on IT-SME growth and development.

5.4.2 Framework Model

Based on the research findings, a practical model for enhancing access to formal credit for IT-related SMEs in Harare was crafted. The model as shown on Figure 13 below, strives to be an all- round addressing multiple interconnected aspects incorporating the views of both lenders and borrowers seeking to bridge the gap that prevents these SMEs from securing necessary funding. It strengthens creditworthiness through improved financial record-keeping and the development of bankable business plans, thereby enhancing SMEs' credibility with lenders. The model streamlines lending processes by simplifying loan application procedures and offering tailored support, which helps SMEs navigate the lending landscape more effectively. Additionally, it enhances access to formal credit by focusing on government support and regulatory frameworks, creating a conducive environment for securing loans.

Finally, leveraging technology through online platforms and digital tools for credit scoring allows SMEs to access credit based on diverse data sources, significantly improving their chances of obtaining financing. Together, these components as illustrated on Figure 13 below create a comprehensive support system that empowers SMEs to secure the financing they need.

A proposed working model

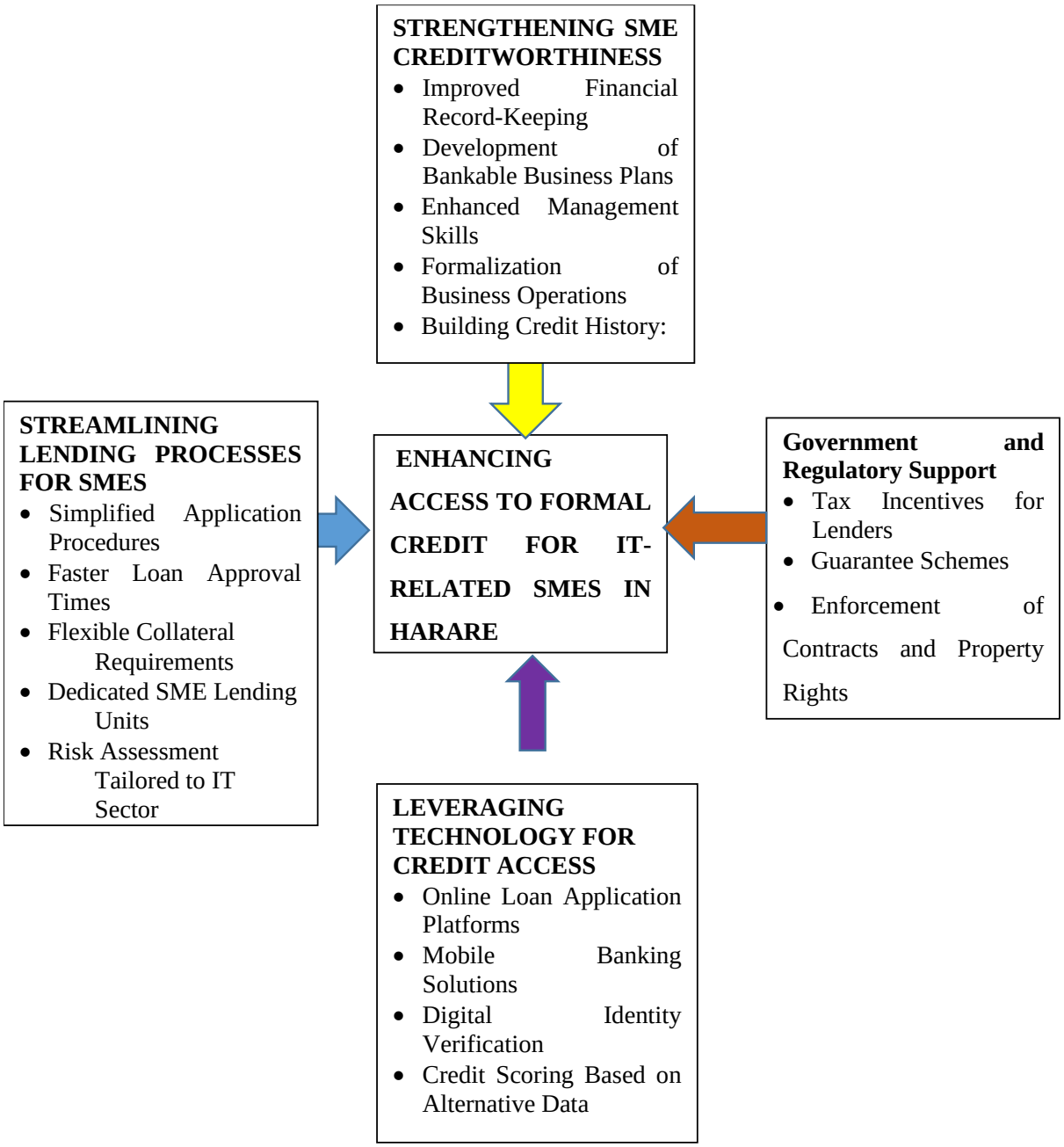


Figure 12 A Working Model for Improved Access to Formal Credit for IT-Related Small and Medium Sized Enterprises in Harare Source: *Self - developed by author*

References

1. Abor, J. & Quartey, P. (2020). The importance of financial literacy in entrepreneurship financing. *International Journal of Financial Research*, 11(1), pp. 14-27.
2. Acerbi, A., & Rizzi, R. (2021). https://doi.org/xxx. *Journal Name, Volume(Issue), pages. https://doi.org/xxx*.
3. Acs, Z. J., & Audretsch, D. B. (2010). *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. In Z. J. Acs & D. B. Audretsch (Eds.), Springer.
4. Afolabi, O., Onifade, F. & Okeke, H. (2020). 'Collaborative financing: Innovations for sustainable growth in SMEs',. *Global Journal of Business Research,*, 14(3), pp. 81-91.
5. Agyei-Mensah, B. K. (2021). The impact of board characteristics on corporate investment decisions: An empirical study. Corporate Governance: . *The International Journal of Business in Society, ,* 21(4), 569–586. https://doi.org/10.1108/CG-04-2020-0125.
6. Alakija, A. F. (2021). *Title: The Flourish Africa Report* . Flourish Africa.
7. Ayyagari, M. B.-K. (2020). 'SMEs access to financial services:. (Ayyagari, M., Beck, T. & Demirguc-Kunt, A., Ed.) *A review of the literature*, 58(2), pp. 183-200.
8. Ayyagari, M. B.-K. (2020). SMEs access to financial services: A review of the Literature. *Small Business Management*, 58(2), 183-200.
9. Beauchamp, T. L., & Childress, J. F. (2019). *Principles of biomedical ethics_*. Oxford University Press.
10. Beck, T., & Cull, R. (2020). *Banking in Africa: Opportunities and Challenges in Volatile Times. The World Bank Policy Research Working Paper Series, No. 10632.* Washington, DC: World Bank.https://doi.org/10.1596/1813-9450-10632.
11. Beck, T. & Demurguc, A. (2018). *Financial intermediation and access to finance: Evidence from SMEs.* Review of Finance.
12. Berger, A. N., & Udell, G. F. (2021). A more complete conceptual framework for financing of small and medium enterprises,. *Journal of Banking & Finance,*, 30(11), 2945-2966. https://doi.org/10.1016/j.jbankfin.2006.05.008.
13. Bhanegaonkar, A. & Rao, C. (2021). The role of government policy in SME finance, Opportunities and barriers. *Economic Modelling*, 95, pp. 418-425.
14. Bhuvaneshwari, S. and Kannan, R. (2022). Financial literacy influences on SME credit access: A framework',. *International Journal of Business and Management Research,*, 10(1), pp. 77-91.

15. Borish, M. &. (2021). *Entrepreneurship and Free Trade: Volume II – Towards a New Narrative of Building Resilience.* African Development Bank Group (AFDB).

16. Brasil, B. C. (2019). *Banking Report.* Brazil,.

17. Braun, V., & Clarke, V. (2021). *Successful qualitative research: A practical guide for beginners.* Sage.

18. Bryman, A., & Bell, E. (2020). *Business Research Methods (5th ed.).* Oxford University Press.

19. Bryman, A. (2016). Social research methods. . In O. u. press., *Social research methods.* .

20. Brynjolfsson, E. & McAfee, A. (2020). The impact of big data on SME financing. *Harvard Business Review*, 98(2), pp. 54-61.

21. Centre, T. G. (2021). *The Global Financial Literacy Excellence Centre, GFLEC* .

22. Colombo, N., Sessa, C., du Bois, A., Ledermann, J., McCluggage, W. G., McNeish, I., Morice, P., Pignata, S., Ray-Coquard, I., Vergote, I., Baert, T., Belaroussi, I., Dashora, A., Olbrecht, S., Planchamp, F., & Querleu, D., (2019). ESMO-ESGO Ovarian Cancer Consensus Conference Working Group. *ESMO-ESGO Ovarian Cancer Consensus Conference Working Group*.

23. Commerce, I. a. (2021). Industry and Commerce Zimbabwe,.

24. Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research.* Sage publications.

25. Davenport, T. H. (2013). *Process Innovation: Reengineering Work through Information Technology.* . Harvard Business Press, Brighton.

26. DeVellis, R. F. (2017). Scale development: Theory and applications_. *Sage publications.* .

27. European Central Bank. (2022). *Annual Report 2022. Frankfurt am Main: European Central Bank.* . https://www.ecb.europa.eu/pub/pdf/annrep/ecb.ar2022~8ae51d163b.en.pdf.

28. European Commission. (2019). *Monitoring the application of European Union law: 2019 Annual report.* . EU Publications.https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:350:FIN. Retrieved from European Commission. (2019). Monitoring the application of European Union law: 2019 Annual report. EU Publications. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:350:FIN.

29. Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal,* , 38, 45–64. https://doi.org/10.1016/j.gfj.2017.10.002.

30. Feilzer,M. Y. (2019). Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm. *Journal of Mixed Methods Research,*, 4(1), 6–16.

31. Feng, S. Y., Gangal, V., Wei, J., Chandar, S., Vosoughi, S., Mitamura, T., & Hovy, E. (2021). A Survey of Data Augmentation Approaches for NLP. *In Findings of the Association for Computational Linguistics*, (pp. ACL-IJCNLP pages 968–988.).

32. Field, A. (2018). Discovering statistics using IBM SPSS statistics. *Sage.*

33. Fofana & Niang. (2023). [ttps://doi.org. *[ttps://doi.org*.

34. George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update (4th ed.).* Allyn & Bacon.

35. Gonzalez, A. & Ridley, J. (2022). Alternative credit scoring models for SMEs: A global perspective. *Journal of Financial Services Marketing*, 27(3), pp. 224-234.

36. Gonzalez, A. & Munoz, J. (2023). Decentralized finance: New avenues for SME financing,. *Journal of Digital Innovation,*, 5(1), pp. 15-30.

37. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E.(2019). Multivariate data analysis. *Sage publications.*

38. IFC. (2023). *International Finance Corporation (IFC). (2023). IFC Annual Report 2023: Building a Better Future. Washington, DC: IFC. Available atf.* Retrieved from https://www.ifc.org/content/dam/ifc/doc/2023/ifc-annual-report-2023-building-a-better-future.pd.

39. (IFC), I. F. (2020, FEBRUARY, 2025 10). *SME Finance: A global overview.* International Finance Corporation Report.

40. (IFC), International Finance Corporation. (2021, February 10th). *Creating value for SMEs: The crucial role of financial access',.* International Finance Corporation Report.

41. International Finance Corporation (IFC) report. (2021, February 10). *International Finance Corporation (IFC) report.* Retrieved 2025, from https://www.ifc.org.

42. Johnson, M. & Kim, Y. (2020). 'The role of management in securing financing for SMEs. *Journal of Small Business Management,*, 58(4), pp. 489-505.

43. Johnson, R. B., & Christensen, L. (2019). Educational research: Quantitative, qualitative, and mixed approaches. *Sage publications.*

44. Kane, S. & Ouroumis, M. (2023). Evaluating government interventions in SME financing. *Journal of Policy Research,*, 39(2), pp. 330-345.

45. Karen Group. (2022). "Survey Report on FinTech for MSME Access to Financing".

46. Karp, P., Leong, S. & Sung, A. (2023)'The challenges of regulation in the fintech era. *Journal of Banking Regulations*, 24(3), pp. 120-135.

47. Kauffman, R. & O'Connor, H. (2021). Financial literacy and SME funding in developing economies. *International Entrepreneurship and Management Journal*, 17(2), pp. 219-235.

48. Kauffman, R. a. (2021). Financial literacy and SME funding in developing economies. *International Entrepreneurship and Management Journal*, 17(2), pp. 219-235.

49. KPMG. (2022, February 12). *The evolution of SME financing: A fintech perspective.* (K. Insights, Ed.) Retrieved 2025, from https://home.kpmg/xx/en/home/insights.html.

50. Kraus, S., Palmer, C., & Dyer, J. (2023). Rethinking credit scoring for SMEs in the digital era. , *Journal of Banking and Finance*, 112, pp. 78-90.

51. Leong, K., & Sung, A. (2022). Retraining and reskilling financial participators in the digital age. In Financial Data Analytics: Theory and Application. *Retraining and reskilling financial participators in the digital age. In Financial Data Analytics: Theory and Application*, (pp. 3-21).

52. Li, J., Wang, Y. & Zeng, Q. (2021). *'Peer-to-peer lending: Disrupting traditional financing', Journal of Financial Innovation*, , 8(1), pp. 1-15.

53. Makoni, S and Ndlovu, R. (2021). Financial Literacy and SMEs in Zimbabwe: Underlying Dynamics and Trends. *Financial Literacy and SMEs in Zimbabwe: Underlying Dynamics and Trends.*, 16(2), 40-58.

54. Meyer, H. (2022). Human capital and financing in technology SMEs. *Journal of Business Venturing*, 37(4), pp. 654-670.

55. Ministry of Small and Medium Enterprises. (2018). *SME Sector in Zimbabwe: Opportunities for growth.* Harare: Government of Zimbabwe Report.

56. Nguyen, T.H., Nguyen, A.N., & Tran, H.V. (2020). Personality Traits, Financial Literacy, and Credit Accessibility. . *Journal of Economic Psychology*, , 80, 102184.

57. Nowell, , L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*,, 16(1), 1–13.

58. OECD. (2022). *Regulatory frameworks for fintech: Facilitating growth.* https://www.oecd.org.

59. Osei P., Osei-Tutu, E. & Adeyemi, A. (2023). *Enhancing financial capabilities in SMEs: A holistic approach.*

60. Pallant, J. (2020). *Survival Manual: A step by step guide to data analysis using IBM SPSS (7th ed.).* . Retrieved from SPSS Routledge. https://doi.org/10.4324/9781003117452.

61. Presser, S., Couper, M. P., Lessler, J. T., Martin, E., Martin, J., Rothgeb, J. M., & Singer, E. (2004). Methods for Testing and Evaluating Survey Questions. *Public Opinion Quarterly*,, 68(1), 109–130.

62. Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.

63. Qureshi, F., Khawaja, S., & Zia, T. (2020). Mature undergraduate students' satisfaction with online teaching during the COVID-19. *European Journal of Education Studies, 7*(12), 456-475. https://doi.org/10.46827/ejes.v7i12.3440

64. Rao, A., Sharma, P., Kumar, S., & Gupta, R. (2021). (2021) 'Innovative potential and financing access in IT-SMEs', ,. *International Journal of Entrepreneurial Behavior & Research*, 27(5), pp. 155-171.

65. Rao, P., Wang, J. & Kelly, H. (2021). 'Innovative potential and financing access in IT-SMEs',. *International Journal of Entrepreneurial Behavior & Research,*, 27(5), pp. 155-171.

66. Reserve Bank of Zimbabwe. (2022). *Annual report, Reserve Bank of Zimbabwe Economic Review.* Harare: Reserve Bank of Zimbabwe.

67. Sandberg, S. (2013). *Lean In: Women, Work, and the Will to Lead.* . Alfred A. Knopf.

68. Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students (8th ed.).* Pearson Education.

69. Seki, A & Bangura, M. (2021). Understanding information asymmetry in technology financing. *Research in International Business and Finance*, 57, pp. 101348.

70. Stiglitz, J. E. & Weiss, A. (1981). *Credit Rationing in Markets with Imperfect Information.* American Economic Review. 71(3), pp. 393-410

71. Szekely, M., & Martin, J. (2022). Innovative credit scoring methodologies for SMEs. *Journal of Business Research,*, 139, pp. 350-359.

72. Tashakkori, A. & Teddlie, C. (2021). Sage handbook of mixed methods in social & behavioral research. *Sage Publications*.

73. Trochim, W. M. (2020). *Research Methods Knowledge Base. Social Research Methods.* Retrieved from Retrieved from https://socialresearchmethods.net/kb/.

74. UNIDO. (2022). *United Nations Industrial Development Organization (UNIDO). (2022). Industrial Development Report 2022: The future of industrialization in a post-pandemic world. Vienna, Austria: UNIDO.* . https://www.unido.org/idr2022.

75. Wang, X., Huang, Y., & Wan, Z. (2021). Improving Credit Evaluations by Including Utility Bill Payments and E-Commerce Transaction Histories:. *Towards More Inclusive Lending Policies. Journal of Financial Innovation*, Volume(Issue), pages.

76. World Bank. (2021). *Small and Medium Enterprises (SMEs) Finance in Africa: The Current State and Future Directions.* World Bank Publications.

77. World Bank. (2022). *Finance for an Equitable Recovery.* Washington, DC:: World Development Report. Retrieved from https://doi.org/10.1596/978-1-4648-1730-4.

78. World Bank. (2022). *Financing SMEs: A Global View. :*. Washington, D.C.: World Bank Group.

79. World Bank. (2023). *Results and Performance of the World Bank Group 2023.* Washington, DC:: World Bank.

80. Zhang, L. & Liu. (2023). 'Regulatory sandboxes: Balancing innovation and safety in fintech', Financial Services Regulatory Review,., (pp. 3(2), pp. 200-215.).

81. Zhang, Y. (2021). The impact of technology investment on SMEs and financing',. *Journal of Technology Management, ,* 19(3), pp. 242-255.

82. ZNCC), T. Z. (2020). *The Zimbabwe National Chamber of Commerce (ZNCC) conducted a study in 2020.*



APPENDIX I

SURVEY RESEARCH QUESTIONNAIRE

I am a student pursuing a Master Degree in Leadership and Corporate Governance with Bindura University of Science Education. I am undertaking research as part of the fulfilment of the programme requirements entitled: ***"A Working Model Towards Improved Access to Formal Credit for Information Technology-Related Small and Medium Sized Enterprises In Harare,"***

The research findings and recommendations will also assist the management with insights for decision-making. In doing so, you have been selected as one of the participants in the study. I would be very grateful if you would spare some time to answer this questionnaire. In case of any questions, please, do not hesitate to contact the researcher on mobile number: +263 772 409 519 or email: gambarapriscilla@gmail.com, I thank you in advance for your cooperation and your valuable time.

INSTRUCTIONS

This questionnaire is to solicit information to aid the researcher in getting data to understand a working model towards improved access to formal credit for information technology-related small and medium sized enterprises in Harare. Strict confidentiality and anonymity will be maintained in the research. Kindly indicate your response by a tick (√) or a cross-mark (**x**) in the appropriate box, representing the most appropriate answer. Thank you in advance for participation

SECTION A: **DEMOGRAPHIC DETAILS OF RESPONDENTS**

1. Indicate your gender Male Female

2. Age 18-25 years 26-35 years 36-45 years 46-55 years

3. Highest level of education

Diploma Bachelor's Degree Master's Degree Doctorate

Other

4. How many years have you been employed in the Information Technology sector?

[ ] Less than 1 year

[ ] 1-5 years

[ ] 6-10 years

[ ] More than 10 years

SECTION B: Ascertaining the key factors influencing access to formal credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology sector

In your opinion, are there key factors influencing access to formal credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology sector.

Strongly disagree [ ] Disagree [ ] Not Sure [ ] Agree [ ] Strongly agree [ ]

The following are some of the questions where you can indicate the extent to which you agree or disagree about key factors influencing access to formal credit for Small and Medium-sized Enterprises (SMEs) in the Information Technology sector

4. SCALE: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree

1 My company's lack of a strong credit history has significantly hindered our ability to access formal loans 1 2 3 4 5

2 The high interest rates offered by formal lending institutions make borrowing unattractive for my IT-SME

3 The collateral requirements imposed by banks are often too burdensome for my business to meet

4 The complex application process and lengthy approval times at formal lending institutions discourage me from seeking credit

5 I believe that a lack of financial literacy and business skills within my IT-SME negatively impacts our creditworthiness

6 I am confident that I fully understand the terms and conditions associated with different types of formal loans

7 I feel that corruption within the lending process sometimes plays a role in whether my application is successful

8 The lending institutions do not understand the unique nature and potential risks/rewards of the IT industry

9 The current economic climate in Zimbabwe significantly affects my IT-SME's access to formal credit.

10 The lack of government programs and initiatives to support IT-SMEs in accessing credit is a major obstacle

In your opinion, what other factors do IT-SMEs in Harare face when trying to access formal credit (loans, lines of credit, etc.)?

……

……

……

…….....

.....

.....

SECTION C: The relationship between the operational characteristics of IT-SMEs and their ability to secure formal financing

Based on experience, do operational characteristics of IT-SMEs influence their ability to secure formal financing?

Strongly disagree [ ] Disagree [ ] Not Sure [ ] Agree [ ] Strongly agree [ ]

In your opinion, to what extent does operational characteristics of IT-SMEs affect their ability to secure formal financing?

SCALE: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree

1 The age of my IT-SME has a positive impact on my ability to secure loans 1 2 3 4 5

2 The size of my IT-SME, in terms of revenue, makes it easier to access formal credit

3 My IT-SME's profitability is a key factor in obtaining approval for formal financing

4 Having a well-defined business plan is critical for convincing formal lenders to provide credit

5 Adopting proper accounting and bookkeeping practices has improved my IT-SME’s chances of getting a loan

6 My business's investment in Research and Development positively affects its appeal to formal lenders

7 The level of technological innovation within my company impacts our perceived creditworthiness

8 Having a diversified client base increases the likelihood of my IT-SME obtaining formal credit

9 The location of my IT-SME in Harare (e.g., industrial vs. residential area) influences my access to formal credit

10 My company's corporate social responsibility activities positively influence formal lending institutions perception of us

Does having a formal business plan or financial projections improve an IT-SME's chances of securing formal credit?

……
……
……
…….....
.....

SECTION D: Developing a novel framework designed to enhance access to formal credit for SMEs in the Information Technology sector

In your opinion can the following interventions enhance access to formal credit for SMEs in the Information Technology sector

SCALE: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree

1 I believe that a specialized credit guarantee scheme for IT-SMEs would significantly improve access to finance. 1 2 3 4 5

2 A mentorship program that provides financial and business skills training to IT-SMEs would be beneficial

3 The introduction of simplified loan application procedures specifically tailored to IT-SMEs would be helpful

4 A government-backed fund dedicated to providing loans to IT-SMEs is a necessary step

5 Partnerships between formal lending institutions and IT industry associations could improve access to credit

6 Improved transparency and accountability within the lending process would encourage more IT-SMEs to apply for formal credit

7 Creating an IT-SME credit rating system that considers the sector's unique characteristics would be useful.

8 Technology-based lending platforms (e.g., online loan marketplaces) could offer a viable alternative for IT-SMEs

9 Increased collaborations between IT-SMEs to share best practices on securing formal credit would be beneficial

10 Relaxing regulatory burdens on banks so that they can extend credit facilities to IT SMEs will result in increased lending

In your onion what policies could be implemented to make collateral requirements more accommodating for IT-SMEs?

……

……

……