

**The experience of small medium, and micro- enterprises (SMMEs) owners in
improving opportunities through the adoption of Fintech services.**

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Master of Philosophy

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Abstract

Many small medium, and micro enterprises (SMMEs) owners do not have a rich credit history to build credibility, and they do not have sufficient collateral for security to be considered by the financial institutions and therefore leads to these businesses to be regarded as high-risk borrowers. Furthermore the lack of pro-activeness and decisive measures from the financial institutions to solution the challenge of the SMMEs to access credit , delays the growth in the economy. The objective of the study is to explore how do the SMMEs owners understand and experience the adoption of Fintech service to improve financial opportunities. The purpose is to develop new insights that could be recommended to the financial institutions and government agencies to provide solution to access to credit, operational efficiency, that are offered by Fintech services. The research design for the study is explorative in nature. The study makes contributions through the conceptual framework where the additions and refinements to the body of knowledge were presented.

Key words

Access to credit, Fintech services, SMMEs, Medium, and Mirco Enterprises , Operational Efficiencies.

Declaration

I declare that this research is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Corporate Strategy at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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5 December 2025

List of Acronyms and Abbreviations

AJG	Academic Journal Guide
B2C	Business to Customer
GDP	Gross Domestic Product
DSBD	Department of Small Business Development
IFWG	Intergovernmental Fintech Working Group
SEDA	Small Business Development Agency
SEFA	Small Enterprise
SMME	Small Medium, and Mirco Enterprises: (South African context)
SME	Small and Medium-sized Enterprise: (Global context)
P2P	Peer to peer
Fintech	Financial Technology
QR code	Quick response code
KYC	Know Your Client
FCA	Financial Conduct Authority
AFS	Australian Financial Licenses
ERM	Enterprise Risk Management
IMF	International Monetary Fund
WBG	World Bank Group

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CHAPTER 1: INTRODUCTION

1.1 Background to the research problem: Business relevance

According to the SMEs Finance Forum (2025), the report highlights credit constraints in the market, referencing that the banks and formal financial institutions prefer to lend to SMMEs with professional financial statements and established credit histories that demonstrate lower risk. Many Small Medium, and Mirco Enterprises (SMMEs) owners do not have a rich credit history to build credibility, and they do not have sufficient collateral for security to be considered by the financial institutions and therefore leads to these businesses to be regarded as high-risk borrowers. Stringent collateral requirements and know your customer (KYC) procedures create significant barriers for SMMEs to access formal credit from the banks. In developing economies, the underdevelopment of credit infrastructure—such as credit reporting systems, collateral, and national credit bureaus—further limits access to financing. Additionally, rising costs, including interest rates, fees, and administrative costs, reduce the availability of financing options for SMMEs.

Projections suggest that by 2030, there will be at least 600 million jobs that will have to be created in order to increase the labour force to position the SMME development as a strategic priority for governments worldwide. Notably, in these markets, SMMEs are responsible for generating approximately 70% of formal employment. Despite their economic significance, financial opportunities are limited to SMMEs growth, ranking as the second most frequently cited challenge among SMMEs in developing and emerging economies (World Bank, 2019).

Notwithstanding the significant presence and economic importance of SMMEs, they still face significant hurdles in maintaining and expanding their businesses. These SMMEs often do not have capital and have no access to financial services, primarily because of the gap between financial institutions and small business owners. This ultimately hampers their ability to manage these challenges effectively. Additionally, inadequate screening processes by lenders further limit their access to financing.

Small Business Growth Index – Sacci (2025) The economy of South Africa depends strongly on the strength of the SMMEs. The sector is estimated 98% of the SME are responsible for over 30% of the GDP of the country, however there's a finance shortfall towards the SMMEs estimated to be \$10 billion trade. There are probably 2,67 million small businesses enterprise in South Africa, and only 1/3 of the number is registered as formal

business and 2/3 is the informal business in South Africa. SMMEs sector is estimated to be 54% of the informal economy, indicating that many SMMEs are not registered for tax purposes. The sector creates jobs that are estimated to be 11,4 million, and 91% of the jobs created from the formal sector, therefore 30% contribution towards GDP is generated from this sector.

Blueweave Consulting (2019) There are alternative funding models for small businesses enterprises in the market, such as peer to peer also known as (P2P) which has been recommended to be the solution to the financial challenge of the SMMEs. The size of the P2P lending market in South Africa has been estimated to be \$1.61 billion in 2024 projected to grow by 19.62% for the period of 2025- 2033. The P2P competitive edge is acquisitions and investing in innovation technologies for the SMMEs. The key player in the peer to peer (P2P) are : RainFin, Funding Hub, Ozow, Fincheck, Lulalend, Naledi3d Factory, Fedgroup, Edge Growth, People Fund and Inclusivity Solutions.

Africa (2024) has published Bridgement Lending company as one of the top lenders of working capital to the SMMEs owners. The lending platform has been applauded for the quick and the efficient process of approving loan applications. Their competitive edge in the market is set to be integration of their system to the most leading accounting systems in the country such as Sage, Xero, and QuickBooks. These systems are essential for output of the financial documents of the SMMEs.

The government of South Africa have also made initiatives available to the SMMs owners, these initiatives led by the agencies that are designed to provide funding to the small businesses owners they include Small Enterprise and Finance Agency (SEDA), and the Department of Trade, Industry and Competition (DTIC).

1.2 Academic Research problems: Theoretical relevance

The African perspective, according to Amadasun and Mutezo (2022), small and medium-sized enterprises (SMMEs) in Southern Africa encounter challenges in securing financing to support their businesses. A major obstacle is the strict collateral requirements imposed by financial institutions to grant loans. Furthermore, SMMEs owners often lack the necessary financial data for loan applications, which affects credit evaluations. The further challenge is the lack of pro-activeness and prompt measures from banks to solution the challenge of financial opportunities for SMMEs owners delays the growth in the economy. The structure of banks has a negative bias toward funding SMMEs; they consider businesses high risk. This

bias results in SMMEs being granted loans at high interest rates, which cripples the business. Lastly, the SMMEs environment is predominantly dominated by informal companies, which affects their access to bank funding. from banks.

The lack of financial access for SMMEs has been mainly discussed in the literature, Surmanidze et al. (2023), as a significant factor in the socio-economic development of any country. Small businesses are vital for job creation, economic diversification, and improving lives. However, SMMEs continually face challenges such as insufficient funding, lack of knowledge, poor financial management, and inadequate collateral, which hinder growth and sustainability (Surmanidze et al., 2023).

This restricted access to funding exacerbates existing challenges and increases the financial vulnerability of small businesses, as noted by (Mandviwalla and Flanagan, 2021). Small and medium enterprises are vital engines in the economic frameworks of most nations, especially in developing economies. Worldwide, SMMEs make up about 90% of all businesses and provide over 50% of total employment. In emerging markets, formal SMMEs account for up to 40% of national GDP, with this number increasing significantly when informal businesses are included (Sharma et al., 2023).

Rehman et al. (2023) in Pakistan confirm this challenge, where low bank lending to SMMEs hinders economic growth, despite the adoption of Fintech in commercial banks in the region. Only 17% of the banks' lending targets SMMEs. The businesses encounter significant barriers to accessing bank credit due to a lack of collateral, severe information asymmetries, poor creditworthiness, and the risk of manipulated lending contracts.

These obstacles restrict growth, employment, and overall development. Benedict et al. (2021) provide insight that SMMEs in developing countries are characterized by inefficiency, underperformance, and limited research.

Surmanidze et al. (2023) literature emphasizes the role of SMMEs as engines of the economy and employment. Their financial opportunities have a positive correlation with business growth and national economic performance. The opportunity is also demonstrated by Rehman et al. (2023), who showed how Fintech innovations like big data and mobile banking have assisted in improving credit supply to SMMEs by mitigating information disparity and improving credit assessment.

Benedict et al. (2021) state that financial opportunities are a principal barrier constraining SMMEs growth and productivity in developing economies; moreover, previous studies have often focused on advanced economies. This study addresses the research gap concerning SMMEs in developing economies, particularly in Sub-Saharan Africa. Sanga and Aziakpono

(2023a) also confirm this research gap, where China dominates in the analysis of the Fintech and SMMEs access to finance, and Africa is the least researched region.

In China, the economy is primarily driven by the financial services sector, like South Africa, which accounts for 90% of firms and provides employment. Fintech has played a crucial role in easing the challenges faced by SMMEs; the use of "big data, cloud computing, and artificial intelligence" has proven to improve credit scoring, thereby increasing competition among banks (Li et al., 2024).

Rehman et al. (2023) emphasize that SMMEs are pivotal drivers of the economy by providing employment and contributing to the GDP. However, their growth is limited by restricted access to finance. Improving SMMEs access to financing through technology can close funding gaps, empower businesses, promote economic growth, and lower unemployment. From the broader perspective, facilitating Fintech adoption in SMMEs can transform credit markets, especially in emerging markets. Sanga and Aziakpono (2023a) echo SMMEs that they are "engines for social and economic development".

Scholars agree with Choudhary and Thenmozhi (2024) that fintech growth has a positive contribution to financial inclusion, SMMEs financing, investment strategies, and financial system stability, with broad economic and social effects. However, financial institutions, governments, and co-operatives need evidence-based insights to balance innovation, financial stability, and growth. Li et al. (2024) also concurs that effective Fintech solutions can promote inclusive finance, improve resource allocation, and support broader economic stability and growth.

The study advances the experience understanding of the SMME owners showing how Fintech adoption reduces information asymmetries, opening access to credit, a key issue in SMMEs financing (Rehman et al., 2023). It also clarifies how fintech innovation, and financial services can address traditional financing challenges. It fills a gap in existing research by exploring how Fintech services can improve financial opportunities for the SMMEs, especially within bank-dominated financial systems (Li et al., 2024). The importance of financial access for SMMEs highlights capital market flaws and information asymmetries, guiding the development of programs by financial institutions and governments to lower lending barriers (Surmanidze et al., 2023).

1.3 The research questions

The research question is based on various studies, where Fintech and the financial sector have a limited call for a comprehensive evaluation of Fintech's impact on SMMES finance in emerging markets. This creates a research gap concerning the exact measurement and assessment of fintech's effects on SMMES financing and operations (Choudhary & M. Thenmozhi, 2024).

Other scholars have examined factors affecting the performance of SMMES, such as intellectual capacity (Xu & Li, 2019) and trust-based performance dynamics (Gorondutse & Hilman, 2018). However, there is a lack of sufficient publications demonstrating how Fintech specifically improves SMMES financial opportunities and overall performance. Therefore, Sheng (2020) observes that there is a scarcity of discussion regarding the direct relationship between Fintech innovation and SMMES performance, thereby indicating an under-researched area.

Further gaps were identified regarding access to SMMES finances in the South African context, especially concerning the adoption of Fintech services and the current challenges SMMES owners face. The study has one main research question with three sub-questions designed to gather insights from SMMES owners.

Research Question: How do SMMEs owners understand and experience the adoption of Fintech services to improve opportunities?

Research sub-question 1: How have Fintech services increased SMMEs' opportunities to enter new markets? This issue arises from the analysis of family-owned SMMEs' business dynamics, which indicate that digital transformation consistently affects SMMEs' performance (Li et al.'s 2024).

Research sub-question 2: How are Fintech services improving access to credit for SMME owners? This question is discussed in Thakor's (2020) examination of the role of Fintech in the ecosystem, and Thakor then concludes that this is an area of literature that is in its early stages, therefore presenting an opportunity for further research.

Research sub-question 3: How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses? While there's research around Fintech adoption and financial inclusion, Lagna and Ravishankar (2021) argue that financial inclusion is not the key focus in this literature, and therefore, the opportunities for further research include how Fintech can offer operational efficiencies within SMMEs.

1.4 Research objectives

The objective of the study is to explore how do the SMMEs owners understand and experience the adoption of Fintech service to improve financial opportunities. The purpose is to develop new insights that could be recommended to the financial institutions and government agencies to provide solution to access to credit, operational efficiency, that are offered by Fintech services. Then lastly to develop the conceptual framework that depicts the similarities and differences of the research outcomes of study.

1.5 Theoretical contributions

The research objectives is to explore how do SMMEs owners understand and experience the adoption of Fintech services to improve financial opportunities. The study also aims to explore the operational efficiencies provided to the SMMEs by fintech services, and to further explore how Fintech services are improving access to credit for SMME owners. The research contributions have been divided in two sections: addition to the existing body and body of knowledge and refinements to the existing body of knowledge. The following subthemes have emerged as the potential refinements to the body of knowledge from the study are the following:

- The use government as a guarantor.
- Lack of infrastructure in neighbouring countries impact trade.
- SMMEs in SA are less exposed to peer-to-peer lending (P2P).
- Financial exclusion by religion is prevalent.
- Some sectors did not require collateral.
- Increased costs digital infrastructure,
- Bank officials should visit SMMEs premises to better understand the SMMEs owners.

Fintech adoption can be useful in business because it can help reduce adverse selection and information asymmetries during the lending process. Blockchain technology's ability to increase transparency, improve credit assessment, and reduce transaction costs provides theoretical backing for its positive role in increasing credit supply to the SMMEs (Rehman et al., 2023).

1.6 Research setting

The research is conducted in South Africa. The research question aims to understand the experiences and perceptions of small and medium-sized enterprises in South Africa regarding the adoption of Fintech. The current topic has been extensively studied in China, as reflected in the literature review. This is why South Africa is well-suited for Fintech and SMMEs study.

This study addresses the research gap concerning SMMEs in developing economies, particularly in Sub-Saharan Africa. This research gap is also confirmed by Sanga and Aziakpono (2023a), who note that China dominates the analysis of Fintech and SMMEs' access to finance, and Africa is the least researched region.

South Africa's Minister of Small Business Development has enacted the National Small Enterprise Act of 1996 (Act No. 102 of 1996), which classifies Small, Micro, and Medium Enterprises based on their annual turnover by sector, | *Department of Small Business Development* (2023).

As a result, the study's participants were selected from the following sectors: Financial Consulting Services, Telecommunications, Petroleum, Construction, and Agriculture. The study was conducted in three provinces: Gauteng, where most SMMEs resided, and the Northwest and Mpumalanga. The participants' ages range from 30 to 60 years, with two women and twelve men representing different qualifications and levels of business turnover. All businesses had been in operation for over five years and were well-established.

1.7 Research Report Overview

The research will consist of the seven chapters arranged in the following manner: Chapter 1 will background to the research problem; chapter 2 will be the Literature review and chapter 3 outlines the research question and sub-questions related to these constructs. chapter 4 describes the research methodology used in the study, followed by chapter 5, which presents the findings from the participants. chapter 6 compares the actual findings with the insights from the literature review. The study concludes with chapter 7, where research recommendations for financial services, government agencies, SMMEs owners, regulators, and future research are provided. The final section presents a a final conceptual framework.

CHAPTER 2 : LITERATURE REVIEW

This section provides a literature review of the scholarship that is relevant to the research questions. It draws from the following from the Information Systems Journal, the Entrepreneurship Theory and Practice, and the Journal of Financial Intermediation, all of which are four-star journals. This chapter will discuss the literature addressing the research question: how do SMME owners understand and experience the adoption of Fintech services to improve financial opportunities? The research question includes several key concepts: the first from Lagna and Ravishankar (2021), focusing on financial opportunities through Fintech, combining finance and technology; the second involves SMME owners using Fintech based on Soluk et al. (2021), highlighting entrepreneurship opportunities ; and improving operational efficiencies, as discussed by Thakor regarding Fintech opportunities for SMMEs.

The review examines perspectives on the opportunities of the SMMEs owners that is provided by the Fintech services and the difficulties they encounter when seeking funding from financial institutions, cooperatives, and government agencies. The goal is to understand the ongoing debate about SMMEs' owners' access to finance, often known as financial inclusion. The study also explores each construct to gain insights into the different and similar viewpoints of the authors. The chapter concludes with the conceptual framework.

2.1.1 Search Criteria

The search for articles was checked against the top journals from the Academic Journal Guide. The AJG provides a rating of the journal's level and quality on a 1-4 scale. The following journals rated 3 and 4 were considered: Economic Analysis and Policy, Sustainability Accounting, Management and Policy Journal, Finance Research Letters, Review of Finance, Journal of Financial Intermediation, Electronic Commerce Research and Applications, Journal of Corporate Finance, World Bank Economic Review, Entrepreneur Practice and Theory Journal, Journal of Economic Structures, Cogent Business and Management Journal.

The figure 1: below depicts the flow of the research question based on the literature review:

2.1 Roadmap of the literature

2. 1 Introduction		
Search Criteria		
Main Heading	Main heading	Main heading
2.2 Financial Services provided to SMMEs owners by Fintech	2.3 Access to Credit	2.4 Operational Efficiency for SMMEs owners
2.2.1 E-commerce	2.3.1 Lack of collateral access to credit	2.4.1 Low-Cost efficiency for SMMEs by Fintech adoption drivers
2.2.2 Invoice Trading	2.3.2 Information disparity	2.4.2 Payment Solutions
2.2.3 P2P Lending Platforms	2.3.3 Financial Inclusion of the SMMEs	
2.2.4 Equity Crowdfunding	2.3.4 Skill development and Digital Literacy	
2.2.5 Fintech and Private Collaborations	2.3.5 Digital Infrastructure and Inclusion	
2.2.6 Fintech adopted by Traditional Banks		
2.2.7 Government's Regulatory Role for Fintech		
2.5 Conclusion	2.5.1 Conceptual Framework of how SMME owners experience Fintech Services	2.5.2 The research gap

2.2 Financial services provided to SMMEs owners by Fintech services

Fintech services have emerged as an innovative alternative to traditional models for providing financing opportunities to SMMEs. Sharma et al. (2023) present four options, which will be briefly unpacked: e-commerce, invoice trading, equity crowdfunding, and Lending platforms (P2P).

Sharma et al. (2023) suggest that Fintech is an innovation in financial technology that transforms the financial services industry. The literature categorizes Fintech services into two groups relevant to small businesses.

- Payment services- refer to mobile payments, digital wallets, and other electronic transactions.
- Financial Services – refers to alternative financial models, which are P2P (peer-to-peer lending), Crowdfunding, and Blockchain.

Sanga and Aziakpono (2023b) add the following components that shape the Fintech services:

- Investment management services, including robot-advisors and e-platforms.
- Emerging related areas- Insurance technology and regulatory technology.

Das (2019) further explains that Fintech encompasses a range of technological innovations aimed at automating processes within the financial industry, including both routine manual tasks and complex decision-making. It is transforming numerous areas of finance, such as payment systems, contract verification, trading activities, risk assessments, lending practices, mobile banking, customer engagement, and investment banking.

Fintech is generally defined as any technological innovation that lowers or removes the costs associated with financial intermediation (Das, 2019). Although definitions may vary among sources, their overall description captures the essence of what is commonly viewed as Fintech. For example, the Bank of International Settlements (BIS) defines Fintech credit as including all credit-related activities conducted through electronic platforms that operate independently of traditional commercial banks (BIS Quarterly Review, September 2018, p. 31).

A systematic review of Fintech from 2008 to 2023 highlights differences among Fintech startups, including P2P lending, crowdfunding, and invoice trading. These startup models leverage big data, fintech platforms, and customized services, and are mostly accessible to small businesses.

The Fintech startups often challenge the monopolistic role of banks in financing SMMEs, whereby traditional banks are adopting the improvements brought by Fintech to upgrade their services rather than replacing them. This process involves integrating fintech payment systems, employing analytics, and adopting blockchain or cloud-based solutions to improve efficiency, reduce costs, and serve small businesses better (Sharma et al., 2023).

Li et al. (2024) provide a deeper understanding of how the Fintech mechanism enhances financing activities by detecting how early defaulting systems lower banks' risk perception and decrease the risk premium on loans. Based on their findings, Fintech also increases

bank competition by offering innovative products and services that provide SMMEs with more diverse borrowing options.

2.2.1 E-Commerce

According to Gong et al. (2019), changes in customer needs have required e-commerce platforms like Amazon, Tmall (B2C platform), and JD to play a vital role in the online market; these platforms offer processes that increase trade opportunities for SMMEs. SMMEs are given opportunities to distribute their products and services through Amazon centres worldwide, including in emerging markets. E-commerce platforms have also expanded opportunities for SMMEs to obtain financing through “Amazon Lending.”

One of Amazon's spokespersons addressed a challenge faced by SMMEs in accessing finance: “Feedback from Amazon sellers suggests that as SMEs develop, a lack of funding can be a challenge that hinders growth. Qualifying sellers will be invited to apply for loans spanning from 1000 to hundreds of thousands of dollars.” The second challenge that e-commerce platforms like Amazon, Alibaba, and eBay have tackled is providing SMMEs with solutions to cash flow problems through their financing schemes (Gong et al., 2019).

2.2.2 Invoice Trading

Invoice trading is an alternative financial method used by SMMEs as a financial option, as they struggle to obtain credit from banks due to a lack of collateral or insufficient financial history, which renders them ineligible for traditional loans (Corrales et al., 2024). It is described as a form of crowdfunding that provides working capital to small businesses. Massa Saluzzo and Alegre (2021) describe invoice trading platforms as “asset-based financing” where SMMEs seek funds by selling debts to a group of investors.

Corrales et al. (2024) cite Ziegler et al. (2017), who describe their study as referring to invoice trading as the “financial discount on an invoice via a platform (lender) in exchange for the payment of commissions or fees.” Invoice trading has faced challenges; a study by Corrales et al. found inconsistencies among lenders due to the monopoly of the SMME market, where lenders charge exorbitant borrowing costs.

2.2.3 P2P Lending Platforms

Financing alternatives or lending platforms are described as technologies that facilitate the delivery of new and improved financial services to underserved communities like SMMEs. Innovation in financing options is categorized into four main groups. First, P2P includes credit, deposit, and capital raising services; second, payment services cover both retail and wholesale transactions; third, there are investment management services; and finally, insurance (Thakor, 2020). The analysis suggests that market lending enables direct connections between lenders and borrowers, bypassing the need for intermediary banks.

According to the study conducted by Chen et al. (2020), the largest lending platform in China, P2P Renrendai, uses four metrics: “age, gender, education, and marital status.” The study found that the education metric provided lenders with the most returns from borrowers and revealed discriminatory tendencies where “young women” had fewer chances of being granted loans, which impacted economic growth in China. It is also noted that the “European lending markets” differ and do not show the same level of discrimination as observed in Asia.

Following the analysis, Chen et al. (2020) suggest that the “impact of soft information, loan description texts, spelling errors, positive language” was a key factor in deciding whether to approve or deny loans to borrowers. The key findings of the study provide insight that lenders often make decisions to grant loans not based on the accurate personal information provided by borrowers, which differs from traditional banks, where a credit profile of the SMME would typically have been used.

2.2.3.1 Analysis of P2P Lending platforms

Thakor (2020), focused on the intermediary measures that should be created on managing the competition between the Traditional banks and the Fintech lending platforms that’s have emerged in financial industry. These competitors are competing for the trust relationship between the clients, SME’s and the traditional Banks. The study also focused on whether P2P will shift the lending market of the SMEs from the Banks, and to what extent that shift of the market will be.

2.2.4 Equity Crowdfunding

Massa Saluzzo and Alegre (2021) cited several scholars, such as Cappa et al. (2020), Moysidou and Hausberg (2020), and Presenza et al. (2019), who highlight crowdfunding as a type of financing scheme where a pooled group of individuals from different locations provides capital to business owners in need of funds in exchange for the 'physical, financial, or social reward.’ The process operates through “online platforms” that act as a bridge between SMMEs and investors. In addition to securing funding from the pooled resources, crowdfunding also offers SMMEs a market presence to gauge interest in their products.

However, findings from the study by Massa Saluzzo and Alegre (2021) demonstrate how the success of crowdfunding can impact the success of the online platform. phenomenon called the “wisdom of the crowd.” Other scholars (Polzin et al. 2014 and Steininger and

Gatzemeier, 2019) argue that other key components of a successful crowdfunding platform depend on additional factors such as “trust, and or credibility.”

The study by Djimesah et al. (2021) highlights the ease of use and usefulness of crowdfunding platforms, which encourage both local and international stakeholders to participate, helping SMMEs secure funding from a broader pool. Crowdfunding funds SMMEs by providing a web-based marketplace where entrepreneurs can showcase their business ideas to a broad audience of potential investors. This method enables SMMEs to raise capital directly from many supporters, bypassing traditional financial institutions. The P2P funding models benefit both platforms and sellers by providing capital to constrained SMMEs and generating profits for the platforms through interest rates and service fees (Sharma et al., 2023).

As previously discussed, Fintech services in emerging markets have driven financial inclusion by introducing new products and services (Ding & Kang, 2024). The Ghanaian Fintech ecosystem includes government institutions, banks, financial service providers, telecommunications regulators, Fintech firms, clients, representatives, and “Think Tanks” (Senyo et al., 2021).

2.2.4.1 Analysis of the Financial services provided to the SMME's by Fintech

Thakor (2020), focused on the intermediary measures that should be created on managing the competition between the Traditional banks and the Fintech lending platforms that's have emerged in financial industry. These competitors are competing for the trust relationship between the clients, SME's and the traditional Banks. The study also focused on whether P2P will shift the lending market of the SMEs from the Banks, and to what extent will that the market be shifted.

The threats of P2P lending platforms to replace the bank's ability to lend to the SMMEs was expressed by (Tang 2019). Sharma et al. (2023 brought out a different insight of how Fintech services; e-commerce, crowdfunding, invoicing and P2P can benefit the SMMEs on different levels of the society. The study identifies the crowdfunding, P2P lending platforms on the micros level, where individual SMEs owners could benefit from generating funds by borrowing from the general lenders and from crowdfunding on the communities. Another different insight on the Fintech services on the Meso level is the e-commerce online service, where ecosystem of Fintech; financial organisations, governments, big corporation buyers and sellers transact digitally. This market emerged due to the stringent bank regulation towards the SMEs, these lenders created an alternative from traditional banking. On the Marco level, Fintech services affect the economy at large, from the regulatory perspective, how would government regulate Fintech services, looking at creating a conducive environment for your Startups and Incubators of small business.

While Gong et al. (2019) brought similar platform financing models for SMEs that are on macro level. The large corporations like Alibaba and Amazon have established that the change in behaviour in clients and SME necessitates new dynamics to meet these financing needs for growth. These financing platform models had variations of agreements and negotiations “no platform-based financing model” and or “Online platform-based financing model” and “model preliminaries”. These models are purposed for SMEs, to fulfil the financial cash flow needs in the business.

2.2.5 Fintech and Private Collaborations

Banks play a key role in regulating the community ecosystem and approving policies that facilitate new market entrants, all while staying dedicated to financial inclusion (Senyo et al., 2021). Traditional banks in the subcontinent have often been hesitant or unable to reach large parts of the population, causing certain sectors of the economies to remain non-monetized and less productive (Kauda, 2019). As a result, initiatives that promote financial inclusion—aimed at providing unbanked African nationals with better access to and use of financial services—are crucial for supporting the growth of small businesses.

Sanga and Aziakpono (2023) review of Fintech collaborations with Banks is beneficial to the ongoing challenges that small and medium-sized enterprises (SMEs) in South Africa face when attempting to access credit, The Fintech is an enabler for increasing opportunities for SMMEs to obtain credit from the bank, simplifying the credit history and credit assessment for the Banks. The review highlights that these issues stem from the inconsistent and unorganized information SMEs provide during credit applications. Their study demonstrates that research indicates fintech tools tend to disrupt banks rather than foster collaboration between fintech and bank lending.

According to Sheng (2020), their research addressed these challenges a few years ago and analyzed and explored the issues of irregular information and insufficient security for loans, proposing the collaboration of Fintech technology and traditional banks as a potential solution.

Thakor (2020), examined in their empirical studies of the Fintech lending platform competing with banks for lending to SMEs, whether it would replace the banks’ lending. The study’s discovery was not definitive. However, it indicated that where there were “high regulatory costs and risks,” there was also high migration from banks’ lending to fintech lending. Nevertheless, banks still enjoyed trust in communities where “secured assets and collateral are still required.”

2.2.6 Traditional Banks adopting Fintech services

A recent literature review conducted by Sanga and Aziakpono (2023) emphasizes the persistent challenges faced by small and medium-sized enterprises (SMMEs) in South Africa regarding access to credit. The review highlights that these challenges stem from the

irregular and unstructured nature of the information provided by SMMEs during the application process. Their study analysed and explored the issues of irregular information and insufficient security for loans, proposing the collaboration of Fintech technology and traditional banks as a potential solution, Sachin et al. (2023) emphasize that SMME's and Fintech Review address how Fintech services have provided leverage on financial hurdles, resulting in "increased sales volumes," customer satisfaction, and ultimately improved business performance.

Rehman et al. (2023) explained that over the past decade, technology has undergone a significant transformation in the banking industry. Fintech has greatly influenced how banks collect information from their customers. Fintech startups posed a threat to traditional banks, prompting them to offer online services. As a result, fintech has significantly impacted banking services by changing how clients interact with banks and, consequently, what information is collected—both essential components. In the banking sector, this has led to the disintermediation of financial services due to the growth of internet and mobile banking, as well as innovative financing methods such as peer-to-peer (P2P) lending, crowdfunding, and cryptocurrency.

These assertions are concurred by Sheng (2020), who found that China's banking sector is primarily influenced by the financial sector, specifically the supply of bank credit. However, the SMMEs are essentially contributors to the economy and are not the beneficiaries of the credit supply. As a result, the findings aimed to bridge the gap in credit supply between SMMEs and banks in China.

According to Fasano and Cappa (2022), findings suggest that the effects of major Fintech components, which enable banks to gather hard and standardized information quickly and efficiently on SMMEs, have created a limitation: a lack of soft information, which is critical for the loan application decision-making process. The subsequent effect, based on their study of Fintech's impact on Italian SMMEs sampled from 2013 to 2019, indicated that when SMMEs adopt Fintech tools, their financial statements show reduced levels of bank debt and suggest an "opposite effect" of Fintech on information asymmetries. The study recommends that digitized information cannot replace soft data; therefore, face-to-face interaction with bankers remains a critical factor in the relationship between banks and SMMEs.

2.2.6.1 Analysis of the Traditional Banks

Sheng (2020) highlighted insights on challenges of finances facing the SMEs in producing a collateral during the lending processes, this was caused by the preference the Bank has of the size of the SME. The traditional banks preferred to lend to bigger SME's companies than small SME's due to risk appetite the bank would have. In Sheng analysis, Bank believed that

small SME's have a high default risk than the large SME's and hence they would prefer to lend to the larger SMEs. Subsequently, the Banks believed that large corporation have built a strong credit history over time, and the SME company have built capacity to repay the loans.

2.2.7 Government's Regulatory Role in Fintech

The government's role in the economy is crucial for promoting and supporting growth through Fintech services. Jiang et al.'s (2021) research highlights the importance of government in building the P2P market during China's early development stages, as this region had a large. The P2P lending market is valued at \$140 million, making it four times larger than the US P2P lending market. 2017.

The Chinese government enacted rules and regulations that support "start-up businesses" by providing funding for technological transformation and developing systems that are sensitive, robust, and tailored to the needs of SMMEs to encourage innovation. The government's goal, based on the research analysis, was to promote financial inclusion and create a level playing field for new businesses to develop new products and services (Benedict et al., 2021).

Chen et al. (2020) analysis in China suggests that the P2P lending market was unregulated before 2016, leading to the chaotic growth of lending platforms in the region. After the introduction of P2P regulation requirements in 2016, the Chinese P2P lending market contracted. Fintech companies are less regulated compared to traditional ones, which has fostered a competitive and innovative environment for clients (Choudhary & M. Thenmozhi, 2024).

The scholar Chen et al., (2020) continued in their review that regulation and policies designed to guide the establishment of P2P must be adaptable, innovative, and they must still protect the country's confidentiality, financial sustainability, and fair competition. Zhao and Chen (2021) highlight different perspectives on how government grants negatively impact the government's collaboration with P2P, including concerns about unfair leverage related to the volume of business and the investor pool, which creates an uneven advantage.

According to Giglio's (2021) literature review, the Chinese government's role is to create an environment of supportive infrastructure for FinTech firms to thrive by establishing new e-commerce platforms and monitoring their products and services. The government has also provided fintech companies with preferential tax rebates, lowering rates from 25% to 15%, to encourage innovation and the development of new products and services. Fintech firms are regulated by the "China Banking and Insurance Regulatory Commission and the People's Bank of China.

In 2018, the International Monetary Fund (IMF) and the World Bank Group (WBG) established an international Fintech policy framework called the Bali International Agenda (BFA). Its goal is to promote economic growth through Fintech expertise. In Australia, Fintech companies are required to obtain licenses for their respective sectors; generally, these are Australian Financial Services Licenses (AFS). In Switzerland, the Swiss Financial Market Supervisory Authority regulates Fintech operations. According to Giglio (2021), the Australian government has made progress in establishing a regulatory sandbox. The EU, except for the UK, has fallen behind in Fintech innovation compared to developed countries like the US, Singapore, and China. The United Kingdom (UK) does not have a dedicated niche for Fintech firms; however, these firms are regulated just like other financial services providers by the Financial Conduct Authority (FCA).

Bu et al. (2021) provided insights from the Asian perspective, highlighting that over-reliance on government regulation can hinder the innovative spirit of Fintech because the government often lags in technology. The study indicates that this will impede growth. The subsequent role is to ascertain that the innovation of Fintech should not violate the laws and regulations of the country, and the study further suggests that strong regulation will result in the prevention of financial instability of the economy and protection of human rights.

2.2.7.1 Analysis and conclusion Government role in Fintech

Giglio (2021) provided the global regulation view on how the developed countries are handling the Fintech regulation, with the US the 2nd country after China the emerging country in the lead for Fintech market, showing an atomized regulatory framework of Fintech and sandboxes. While Bu et al. (2021) showed that the emerging market like China, there was also a rise in innovation with non-compliance with threatened the governance of the Fintech industry. The government of China developed the mechanism manage the non-compliance with revising the rules and regulation in the Fintech industry. However, the study emphasised the significance of the creating a balance between risk that has been brought by excess innovation and the protection of the rights of consumers.

Jiang et al.'s (2021) brought a different perspective on regulation of P2P and the funding of the SME where government have close relationship with P2P or Small business, those businesses tend to have better operational efficiencies, improved rates for lending to the SME's, they also obtain access to credit easier than business that are not having close ties. The study cautions on how the SOE businesses relationships can have adverse outcome in the economy when they are not managed professionally.

2.3 Access to credit

2.3.1 Lack of collateral access to credit

The lack of funding for SMMEs mainly results from their limited resources and structural disadvantages, often called the “liability of smallness” (Eggers, 2020). SMMEs usually have fewer employees, limited access to capital, and financial restrictions, which limit their ability to invest in fintech tools. Joensuu-Salo and Matalamäki (2023) confirm in their research that the limited financial resources of SMMEs create constraints on research and development, as well as the adoption of new technologies. This further affects their business competitiveness and presents a major barrier to the fintech capabilities of SMMEs and their access to funding.

According to Ramudingane and Nkondo (2024) in Vhembe District, extensively discuss the causes of limited financial access, primarily focusing on the strict credit access regulations and requirements imposed by banking institutions and the National Credit Bureau, which make it difficult for SMMEs to qualify for loans. The limitation of financial opportunities is also highlighted by Van der Spuy and Antonites (2022), who further explain that banks often require numerous and specific documents, such as financial statements, business plans, and collateral securities, which many SMMEs businesses do not possess, leading to the rejection of loan applications.

The lack of collateral securities has been highlighted by Surmanidze et al. (2023), who noted that SMMEs often lack sufficient collateral to secure loans, a key requirement for credit approval. The issue of collateral for obtaining loans has also been supported by Amadasun and Mutezo (2022), whose research highlights that the challenges faced by SMMEs in Southern African countries are widespread collateral issues that impede access to financing and hinder economic growth. This is also reinforced by the structure and system of banks, which are designed to be risk-averse when funding SMMEs based on the risk assessments banks use for credit applications. South African banks are reluctant to lend to SMMEs. However, when they do, it comes with high interest rates and the cost of external funding, which financial institutions use as a strategy to discourage SMMEs from obtaining finance (Herrington, 2020).

According to the research conducted by Amadasun and Mutezo (2022), from an African perspective, the study highlights three significant challenges that SMMEs across Southern Africa face in accessing finance to fund their businesses. The study sheds light on the dominant and usual requirement by the bank—collateral requirements—that financial institutions impose to secure loans.

2.3.1.1 Analysis and the conclusion of the Collateral

Eggers (2020) provided insights on the characteristics of the small businesses, and why they are prone to risk, the small business are small in nature in terms of size according to the number of employees they employ which is usually limited to 250, small businesses are limited in resources to acquire investment infrastructure and technology. They also struggle to be financed by the banks because the banks regard them as risky, by determining whether the SME business is recently created or if it has been in existence for longer or if the small business is pioneering in the sector or not. Which provides justification why Banks views small businesses risky, and why they would put harsh collateral for the small business. The review also shows the advantage of being a small business during a crisis such as COVID 19, the ability to make decision is quicker because the consultation is small. Another advantage of small businesses is mostly agile when it comes to take risk associated with innovation. Joensuu-Salo and Matalamäki (2023) is similar with Eggers (2020) in relation to the size of the small business and ability of the SME to acquire the Fintech capability for the growth of the SMEs. The study argues that small SME's if they cannot afford Fintech capability they are impeded from growth when compared with the Big SMEs and therefore attribute the growth and performance of the SMEs to the capability to acquire the technology.

Surmanidze et al. (2023) is also similar with scholars on the pivotal role of the SMEs in the building communities, creating jobs in the communities, this is also similar with Ramudingane and Nkondo (2024) on the impact the SME's has in communities on they create jobs in the communities, the focus of their analysis shed light on the importance of the all stakeholder to collaborate for the growth and sustainability of the SME's due to the impact to the communities. The study emphasises that Banks have to create awareness on how SMEs can comply with their requirements to be granted loans, another stakeholder is the government by providing the guarantees to the SMEs when they borrow from the Banks, another critical stakeholder mentioned is Rural and development agencies which are always critical for rural and farming development.

The scholars have similarities that the SMEs are drivers of the economic growth across different geographical area, the US SMEs are subject to the similar conditions, the Asian region, China, are subject to the same conditions, Africa the SMEs are subject to the same conditions and therefore requires all the stakeholders in the society to collaborate more often.

2.3.2 Information disparity

The second major challenge is the proper financial information and operations of SMME business owners. This requirement is often inadequate or lacks the necessary financial data for loan applications, which also impacts credit assessment. Amadasun and Mutezo (2022)

further confirm that traditional banks lack understanding and support for SMMEs' businesses, which delays SMMEs from obtaining funding. The structure of banks has a negative bias when it comes to funding SMMEs; they view small businesses very high risk. This bias results in SMMEs being granted loans at high interest rates, which cripples the businesses.

Surmanidze et al. (2023) the country of Georgia was ranked 7th over 190 by World Bank in 2020 in terms of conducting business with Ease evidence by the high number of new business (Startup). Poland small business was regarded as a showcase where SME has high access to funds from the Banks loans which is different in most countries even Georgia. The study shows the lack of finance from the banks, is cited to lack of income verification, or inconsistency in income result and eventually a decline in credit application.

Therefore, the SMEs borrow from the micro lenders, who charge high interest rates. The challenge of lack of financial opportunities because of inaccurate documentation, unverifiable income, lack of showing profitability and sustainability of the business. The studies conducted in China on "Fintech's increases SMME performance" bridged the gap of accurate information from the SMME to the Bank by applying intelligent corporate searching. China is also leading in big data, cloud computing, and blockchain. The system provides the capability to address information asymmetry, which generates relevant financial information on behalf of SMMEs and reduces the risks of lending from the Bank (Li et al., 2024).

The evidence from the study conducted between 2008 and 2022 Sanga and Aziakpono, (2023a) confirms how commercial banks have leveraged fintech capabilities to increase lending to SMMEs by making information more accessible, collecting accurate data about SMMEs, and reducing information obscurity Choudhary and Thenmozhi (2024) highlighted those big data analytics is a fintech capability used to analyse large volumes of data, identify patterns, and predict risks. Their study confirms the effectiveness of this technology in consolidating information for SMMEs. Tantri (2020) highlighted in their analysis how machine learning has improved the loan application process for SMMEs and individuals more efficiently than traditional banks. While Gomber et al., (2018b) established that their comparative study on big data had improved credit assessments. Their comparative study demonstrated that big data has far exceeded banks' normal credit scores, reducing the time it takes to process SMME applications, which delays the approval of credit loans.

2.3.2.1 Analysis and the conclusion of the information disparity

Scholars such as Li et al., (2024) and Choudhary and Thenmozhi (2024) are similar in their literature analysis that Fintech as an emerging market dominating China, has a capability of reducing the gap of finance of the SME's closer to the Banks that funding this small business.

Both scholars agree that China is a big market for Fintech technology, and SMEs are big drivers of the Chinese economy, big contributors to the economy, contributing to the job creation and innovation but SMEs in China are excluded from financial access by the traditional bank, (Li et al., 2024). The fintech capability reference by scholars is big data analytics, the block chain, and cloud computing to properly analyse the financial information of the SME.

Surmanidze et al. (2023) brings a different insight that Poland small business does not struggle with liquidity and access to credit with the Banks loans which is different in most countries. The view is different from the Amadasun and Mutezo (2022) who has confirmed that traditional banks lack understanding and support for SMMEs' businesses which in turn don't grant SMME credit loan. The study shows the lack of financial access from the banks, is main contributor to growth and development of the SME's because they businesses would not be able to acquire fintech services to compete with competitors, nor will they be able to meet the changing demands of the modern client.

2.3.3 Financial Inclusion of the SMMEs

Literature, according to Ajide (2020), supports that financial inclusion promotes diverse entrepreneurship in Africa, including micro-small businesses, women, farmers, and rural and youth sectors, both formal and informal. Financial inclusion creates opportunities for new financial products accessible to all communities. It enables marginalized communities to participate in the mainstream economy by accessing funding, opening accounts, and obtaining insurance.

Ajide (2020) defines financial inclusion as a strategy that coordinates all sectors of the economy, providing opportunities for equitable access to financial services, especially for marginalized communities and entrepreneurs. The examination by Ajide (2020) expands on the definition of financial inclusion by highlighting further causes of financial exclusion, including "limited access to credit and financial services, the limited exposure to financial products, and limited exposure to technology infrastructure." As a result, SMMEs become vulnerable to informal financial services providers for credit.

According to Arner et al. (2020), Fintech plays a crucial role in financial inclusion and supports the UN Sustainable Development Goals. The study highlights India, providing insights into the implementation of what it calls "Four digital financial transformations," which foster financial inclusion through digital ID, open payment systems, digital government services, and financial markets. Other nations that have adopted the digital financial transformation include Kenya, China, and Russia.

Arner et al. (2020) further suggest that electronic payment systems are essential for financial inclusion, development, and participation in the economy. The contrast between fintech-driven disintermediation by startups and fintech adoption by banks for operational improvement highlights the benefits that Fintech lending platforms have introduced to the market. This shift has eased SMMEs' financing constraints and improved integration with traditional financial systems, thereby addressing the long-standing issue of information asymmetries faced by SMMEs. The process promotes transparency and encourages competition among financial institutions, replacing traditional banking system functions. Consequently, this reduces financial pressure on SMMEs and lowers borrowing costs (Sanga & Aziakpono, 2023).

According to Das (2019) highlights three risks that Fintech has introduced, both as a disruptor and as a force for improvement. These risks include the quality of data output, which must be protected to ensure a positive customer experience, referring to the principle of "garbage in, garbage out." Additionally, Fintech poses unforeseen infrastructural costs (like cloud expenses), software expenses, and cybersecurity risks that were not initially anticipated. These costs require significant investment, which small firms will either need to budget for or seek as financial assistance from investors or financial institutions. The last point the analysis refers to is the distinction between customer centricity and automation. Fintech promotes the automation of services, which can improve efficiency, such as robot-advising. However, excessive automation should not compromise customers who still prefer face-to-face interactions.

While there is overall support for Fintech activities, some scholars, such as Ding and Kang (2024), emphasize the need for robustness and accuracy in assessing Fintech impacts, implying caution in interpreting the performance. Therefore, they urge that greater government oversight is necessary to prevent fraud and financial leakage. The study also highlights that in some regions, like Sub-Saharan Africa, inadequate fintech infrastructure restricts the use of Fintech tools. When infrastructure cannot effectively support fintech services, it hinders growth and financial inclusion.

Ding and Kang (2024) found that increased digitization raises energy consumption, particularly in regions struggling with energy generation, posing a significant challenge. Another factor that might have been overlooked is that the wide range of Fintech services requires users to have financial and fintech knowledge, so regions with low fintech literacy may not benefit equally, which could deepen inequalities and economic disparities.

2.3.3.1 Analysis and the conclusion of Financial Inclusion

Scholars such as Kauda (2021) in their analysis of the SMME's challenges of lack of access to credit, information asymmetry, collateral, which leads to financial exclusion. The fundamental goal, it should be to capacitate business owners to make good financial decisions, and therefore in addressing financial inclusion at the centre of solution is the level of financial literacy of the business owners. Small business owners must have financial literacy and must be trained appropriately.

In the same line that Fintech can increase financial inclusion from the SMMEs perspective, Ding and Kang (2024) in the absence of funding, and lack of access to credit, the business owners are compelled to prioritise profits over investing in long term Fintech investment this in turn does not promote innovation amongst SMMEs and therefore no growth in the economy.

However Ding and Kang (2024) and Das (2019) brought forth nuance of difference on the unintended consequence of Fintech technology, which the scholars cautioned about the quality of the information you receive, proper analysis should be conducted before using information from external sources, the spike security risks such as cybersecurity and the expenses that are related to the software.

2.3.4 Skill development and Digital Literacy

Ferilli et al.'s (2024) research on digital literacy cannot be viewed as a standalone concept because it depends on the country's "digital infrastructure," which significantly influences the adoption of Fintech innovation. The study further shows that in countries across Europe with high digital infrastructure and significant Fintech adoption, digital participation among users increases. It concludes that the government's role is to develop skills within communities to enable full Fintech adoption by "making financial literacy a reality for all."

Lo Prete (2022) defines digital literacy as engaging in online activities and the virtual use of technology, while financial literacy refers to the individual's capability to make financial decisions, and their study argues that digital literacy is associated with a certain level of education and social class, which in turn supports financial literacy and an entrepreneurial spirit. The literature argues that countries need a combination of digital literacy and financial literacy to implement technological innovations successfully.

The survey conducted by the Organization for Economic Co-operation and Development (OECD) demonstrates that, in the Nordic countries sampled, residents proficient in technology accounted for 31%, and those financially educated accounted for 55%. This implies that when assessing technology implementation, digital literacy cannot be evaluated without also considering the countries of financial literacy level, (Lo Prete, 2022).

2.3.5 Digital Infrastructure and Inclusion

According to Arner et al. (2020), the true impact and full potential of Fintech can be achieved when the proper infrastructure is established to support innovation. The analysis conducted by Douglas W. Arner highlights four main “pillars” necessary for creating a supportive infrastructure. These pillars include: the first is the development of the “digital identity,” the second is the seamless process of “opening accounts” and client verification via “e-KYC,” the third is “electronic provision for government services and payments,” and the fourth is the “design of digital financial markets and systems.”

The adoption of digital technology can increase access to financial products and services, improve the quality of life for marginalized communities, particularly in Africa (Ding & Kang, 2024). Digital infrastructure plays a crucial role in developing products and innovative solutions within a country (Ajide, 2020). The SMMEs owners more often face financial challenges such as capital constraints, high operating costs, and management issues. Therefore, Ding and Kang (2024) suggest that when SMMEs owners run their businesses, they are juggling limited working capital and small profits. As a result, there are no resources allocated by SMMEs for research and innovation, which in turn confines and constrains the ability of their innovation and the growth in the economy. Where the government prioritizes digital infrastructure and inclusion, SMMEs owners will benefit financially, increase research and innovation, and promote economic growth.

According to Nan (2019), the emerging economies in Sub-Saharan Africa still face deteriorating institutions and infrastructure, such as the power grid and healthcare. These institutional weaknesses can be addressed through innovations inherent in digital infrastructure. Digital infrastructure offers growth opportunities for existing businesses and new entrepreneurs, allowing them to bypass traditional economic systems.

The studies by Nambisan et al. (2017) also highlight the vital role of digital technology in the economy by driving three types of innovation. First, it creates entrepreneurial opportunities by connecting technology with societal challenges. Then, digital structures act as agents within the country, promoting innovation and development. Finally, they foster an environment of growth and long-term sustainability for innovations.

2.4 Operational Efficiencies for SMMEs owners

2.4.1 Payment Solutions

Khatri et al. (2020) suggest that Fintech technologies, such as finance and digital finance, are recognized as services that disintermediate and re-intermediate in the financial sector; however, they originate from Information and Communication Technology (ICT), not necessarily from the financial sector, but they are leveraging their innovation to solve the

financial challenges of the SMMEs. Hence, the introduction of digital payments, lending platforms, and automated services. Several key elements contribute to the accelerated adoption of Fintech in emerging markets. First, there is a rising demand for innovative financial solutions due to the underdeveloped nature of financial systems. Next, limited financial inclusion presents opportunities for Fintech innovators. Additionally, widespread access to the internet and mobile technologies facilitates broader Fintech outreach (Sharma et al., 2023).

Consequently, scholarly attention in emerging markets often focuses on mobile payment systems, peer-to-peer lending platforms, and fintech remittance services, all of which play a pivotal role in fostering inclusive economic development. A notable example of this is M-Pesa, the mobile money service developed by Safaricom in Kenya in 2007, which significantly improved financial access in East Africa (Arner et al., 2020).

Ahn and Lee (2019) highlight that emotional connection, economic benefits, and user convenience are key factors influencing consumer engagement with fintech banking platforms in these economies. More generally, Frost (2020) outlines other global drivers for Fintech adoption, such as unmet financial service needs, shifting demographic profiles, increased market competition, the cost of capital, and overall macroeconomic conditions. The study offers insights into new factors like trust in financial services, digital payments, and mobile payments, which greatly increase adoption among SMMEs and clients. Trust relates to the assurance of the technology's stability and security, influencing how users experience fintech services (Hasan et al., 2021).

2.4.1.1 Analysis of payment solution

The increase of digital payments study is dominant in the emerging countries when compared to the developed economies, precisely because it facilitates the introduction of financial inclusion through Fintech services such as digital payments. The introduction of Fintech services is eradicating the cash payment to digital payments for small business, (Sharma et al., 2023).

The scholars, Arner et al. (2020) have similar views that Fintech is a serving tool that that fosters financial inclusion, and the emphasis for their analysis was the significance of government building digital infrastructure for the new entrance businesses that are innovative. China as a pioneer in Fintech has built the digital infrastructure, with its established companies Alibaba in 2004 introduced the Alipay digital payments system, and Tencent which created WeChat wallet in 2013.

Finally, Frost (2020) makes the interesting observation that the need for financial inclusion drives the rise of Fintech in emerging markets, reflecting the need to participate in the economy and to access new products and services for all, including payments, credits, investments, deposits, and insurance.

2.4.2 Low-Cost efficiency for SMMEs by Fintech adoption drivers

The Fintech technology that has revolutionized the financial challenges faced by SMMEs utilizes advanced tools, including big data, cloud computing, blockchain, and artificial intelligence, to improve the efficiency of financial services. Specifically, these Fintech solutions have improved two key aspects: creating more funding opportunities for SMMEs and lowering financial costs (Li et al., 2024).

Sharma et al. (2023) state that the adoption of fintech services by SMMEs owners depends on several factors, including the ease of use of the technology, the cost of the technology, the company's size, age, personal characteristics of SMMEs owners, and regulatory requirements.

Frost (2020) suggest that there are perceived risks that are related to the adoption of Fintech are as mentioned "privacy risks" related to personal information. "Security risks" involve technical and system vulnerabilities, "monetary risk" concerns potential financial loss, and other threats as well. Socioeconomic factors such as market size, demographics, and government support act as broader macroeconomic drivers of fintech adoption worldwide. Previous global studies have demonstrated how economic conditions and infrastructure impact fintech adoption rates. Frost (2020) further alludes that this perceived risk hinders the adoption and use of fintech services, and they can negatively affect SMMEs by shaping customer attitudes and trust, which in turn influences their behaviour and goals related to fintech.

AlSharji et al. (2018) explain that social media platforms have enabled SMMEs to reach a larger customer base, which has a positive impact on their revenue. Additionally, they can use lower marketing costs on social media their brands and revenue (AlSharji et al., 2018).

2.4.2.1 Analysis of Low costs and Time efficiencies

Li et al. (2024) had a focus on the effectiveness of Fintech system in reducing costs on the small companies of the SME's that larger SME's, the study focused on the size of the amount of debt that the SME has obtained against the interest charged on the debt. The conclusion of that analysis was the lower the amount debt, resulted to lower the costs of acquiring debt, this measure gave an advantage to smaller SME's of acquiring debt.

Scholar's view from Thakor, (2020) agrees that Fintech capabilities which includes payment solutions, gateways, QR codes, mobile payment, improves the efficiency of SMMEs and

drastically reduced the costs of payments and transactions. Fabian et al. (2023) suggests that innovative business that needs no building structure scales their business up quicker due to low costs of productions, which is an advantage of small businesses. The SMMEs have an advantage of being agile in decision making, that innovation promoters play a crucial role in advocating for digitization because it reduces production costs.

The scholars, Frost (2020) are cautioning on the risk that is associated with the embracing of the new technology such as the cyber security, the privacy risk which impedes the adoption of the Fintech services.

Conceptual framework design

Access to credit:

- Collateral
- Information Asymmetry
- Financial inclusion

Operational Efficiencies:

- Low costs and Time efficiencies
- Digital Payments

Fintech Services for Small and Medium Enterprises

E-commerce

P2P Lending Market

Fig:2 Own Conceptual framework design

2.5 Conclusion

The conceptual framework in the first pillar illustrates the diverse and flexible financial opportunities that Fintech services offer to SMME owners, including e-commerce, invoice trading, equity crowdfunding, and P2P lending platforms (Sharma et al., 2023). The second pillar demonstrates the operational efficiencies that are provided to the SMMEs owners by the Fintech services, which are not limited to low costs (Li et al., 2024) and payment services (Khatri et al., 2020). The last pillar is addressing the wide common challenges that are facing the SMMEs owners to obtain credit, the lack of collateral from the SMMEs owners, the information asymmetries provided by the SMMEs owners when applying for credit, the lack of adequate information when the credit providers are evaluating the credit score, which ultimately leads to huge part of communities being financial excluded in participating in the economy, (Arner et al., 2020) All Fintech services for SMME owners could be more accessible and easier to use, especially in communities where collaboration between institutions, the government, the private sector, and P2P occurs (Jiang et al., 2021).

CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction

The study aims to understand how SMME owners experience the adoption of Fintech services to improve financial opportunities, Choudhary and Thenmozhi (2024) by addressing the three research sub-questions. As the study has alluded in Chapter 2, previous scholars did not address the issue of Fintech services as an enabler to financing opportunities, as a

provider of operational efficiencies; to the SMMEs owners, however, a few studies have mentioned Fintech as a financial enabler to access credit from the financial institutions.

Sachin et al. (2023) emphasize that SMMEs and Fintech Review highlight how Fintech services have provided leverage on financial hurdles, resulting in “increased sales volumes,” customer satisfaction, and ultimately improved business performance.

According to Carbó-Valverde et al. (2022), who conducted an empirical study on the profitability of Fintech SMMEs in Spain, the “large and solvent” Fintech SMMEs are more profitable than smaller Fintech companies. The studies suggest that a key factor in profitability is when one “entrepreneur” acts as a “driver” rather than a group of entrepreneurs. The same studies also found that another factor contributing to the success and profitability of Fintech start-ups is whether the SMMEs have been “incubated” by Fintech firms.

An empirical analysis in China, Sheng (2020) identified various other factors regarding how Fintech services contribute to SMMEs owners credit access through banks, leading to their profitability. However, the study highlighted multiple factors, including urbanized SMMEs, which are likely to receive bank credit. Another contributing factor is that established banks are receptive to Fintech innovations, which has increased the credit supply for SMMEs.

According to Jourdan et al. (2023) confirm that most studies conducted in Fintech have focused on secondary data (48.15%), followed by formal literature (28.70%), and surveys at 10.65%. However, very few studies have been based on interviews. Their systematic literature review, conducted over a 10-year period, demonstrates a gap in the depth of knowledge in Fintech research (2023).

Depiction of the Research strategy over Fintech studies over the period of 10 years

Research strategy	#	%
Formal theory/lit review	62	28.70%
Sample survey	23	10.65%
Lab experiment	2	0.93%
Experimental simulation	3	1.39%
Field—primary	20	9.26%
Field—secondary	104	48.15%
Field experiment	0	0.00%
Judgment task	0	0.00%
Computer simulation	2	0.93%
	216	100.00%

Fig 3: Jourdan et al. (2023)

3.2 Research Gap

The existing literature highlights a significant gap in understanding how SMME owners experience the adoption of Fintech services. While various studies have examined factors affecting SMMEs' performance—such as intellectual capacity (Xu & Li, 2019) and trust-based performance dynamics (Gorondutse & Hilman, 2018)—there has been limited focus on how Fintech specifically improves SMMEs opportunities and overall performance. Sheng (2020) observes that there is a scarcity of discussion regarding the direct relationship between Fintech innovation and SMMEs' performance, thereby indicating an under-researched area.

Although Sheng (2020a) finds that fintech growth improves SMMEs efficiency and promotes bank credit supply, the analysis suggests that Fintech development is limited and has material gaps for further research. Therefore, a comprehensive evaluation of fintech's impact on SMMEs' finance in emerging markets is limited, creating a research gap regarding the precise measurement and assessment of fintech's effects on SMMEs' financing and operations (Choudhary & Thenmozhi, 2024).

Furthermore, Sanga and Aziakpono (2023) highlight the challenges faced by SMMEs, including collateral requirements imposed by banks and increased transaction costs, which hinder growth. Research on how Fintech services have improved the lending process for SMMEs remains limited. In comparison, Li et al. (2024) identify this gap within the context of

China, a major emerging market with a well-developed financial sector. The present study aims to address this gap by exploring how Fintech enhances SMMEs' financial opportunities in emerging markets, with a particular focus on funding from financial institutions and government support.

3.3 Research Question

How do SMMEs owners understand and experience the adoption of Fintech services to improve opportunities?

The research question is based on various studies, where Fintech and the financial sector have a limited call for a comprehensive evaluation of Fintech's impact on SMMEs owners' lack of finance in emerging markets. This creates a research gap concerning the exact measurement and assessment of fintech's effects on SMMEs financing and operations (Choudhary & Thenmozhi, 2024).

Research Sub question 1

How have Fintech services increased SMMEs' opportunities to enter new markets?

This issue arises from the analysis of family-owned SMMEs' business dynamics, which indicate that digital transformation consistently affects SMMEs' performance (Li et al., 2024).

Research Sub question 2

How are Fintech services improving access to credit for SMME owners?

This question is discussed in Thakor's (2020) examination of the role of Fintech in the ecosystem, and Thakor then concludes that this is an area of literature that is in its early stages, therefore presenting an opportunity for further research.

Research Sub question 3

How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses?

Although research on Fintech adoption and financial inclusion exists, Lagna and Ravishankar (2021) argue that financial inclusion is not the primary focus in this literature. Therefore, opportunities for further research include how Fintech can improve operational efficiencies within the SMMEs environment and landscape.

Li et al. (2024) provided evidence that Fintech's digital capabilities have established a bridge for SMME owners to access credit funding from traditional banks by increasing finance for SMMEs owners and reducing financing costs. The literature has highlighted the struggle of SMMEs owners to be financed by these institutions; this was not different for the Chinese economy.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

As mentioned in the previous chapter, the research question is: how do SMME owners understand and experience the adoption of Fintech services to improve opportunities? This exploratory question aims to understand the different experiences of SMME owners. It will also explore the financial services opportunities offered by Fintech, provide a better understanding of the operational efficiencies available, and identify the challenges SMMEs face in expanding their access to credit and improving overall business performance. Braun and Clarke (2006) define exploratory questions as comprehensive research questions that aim to answer broad research questions by using tapered questions, such as "how," "what," and "why."

4.2 Research paradigm

The research adopts an interpretivist paradigm because it aligns well with the exploratory nature of the question. Saunders et al. (2019) provide insights into interpretivism as a paradigm that is subjective and views human beings as entities seeking meaningful experiences, distinct from objects that have the motive to find different views. This philosophy assumes that social reality is not objective but is shaped by individual experiences. The interpretivism of qualitative analysis focuses on how participants construct society and the environment in which participants (SMME owners) operate, rather than on predefined phenomena (Bell et al., 2022). The study uses a phenomenological approach that allows insights to be derived from the SMMEs' owners.

4.3 Research design

The research design, which employs semi-structured interviews, uses a phenomenological approach aimed at understanding the experiences and knowledge of SMME owners, specifically how they interpret their world (Braun & Clarke, 2021). This is accomplished through their experiences with financial technology services.

Exploratory research designs are beneficial because they are flexible and easily adaptable. The study employs an inductive approach, as circumstances vary significantly and require careful examination. This inductive approach is also recommended for this study because a suitable method for analyzing primary interview data is used, namely, thematic analysis. This will be used for the data analysis as described below. The phenomenological approach fits with the interpretivism paradigm as both are interested in the experience of knowledgeable individuals and both value multiple perspectives.

4.4 Research Setting

The research is conducted in South Africa. The research question aims to understand the experiences and perceptions of small and medium-sized enterprises in South Africa regarding the adoption of Fintech. The current topic has been extensively studied in China, as reflected in the literature review. This is why South Africa is well-suited for Fintech and SMMEs study.

This study addresses the research gap concerning SMMEs in developing economies, particularly in Sub-Saharan Africa. This research gap is also confirmed by Sanga and Aziakpono (2023a), who note that China dominates the analysis of Fintech and SMMEs' access to finance, and Africa is the least researched region.

The South African Fintech Market Analysis (2023) has identified the country's fintech industry as a global fintech market, accounting for 40% of all African fintech proceeds. The proceeds of Fintech South Africa are evaluated to be R77.7 billion, with digital payments and Insurance Technology representing 61% of the total proceeds. The diagram below illustrates the South African fintech Ecosystem, where the firms are developing products that are transforming the country through digital payments and lending platforms for the marginalized communities.

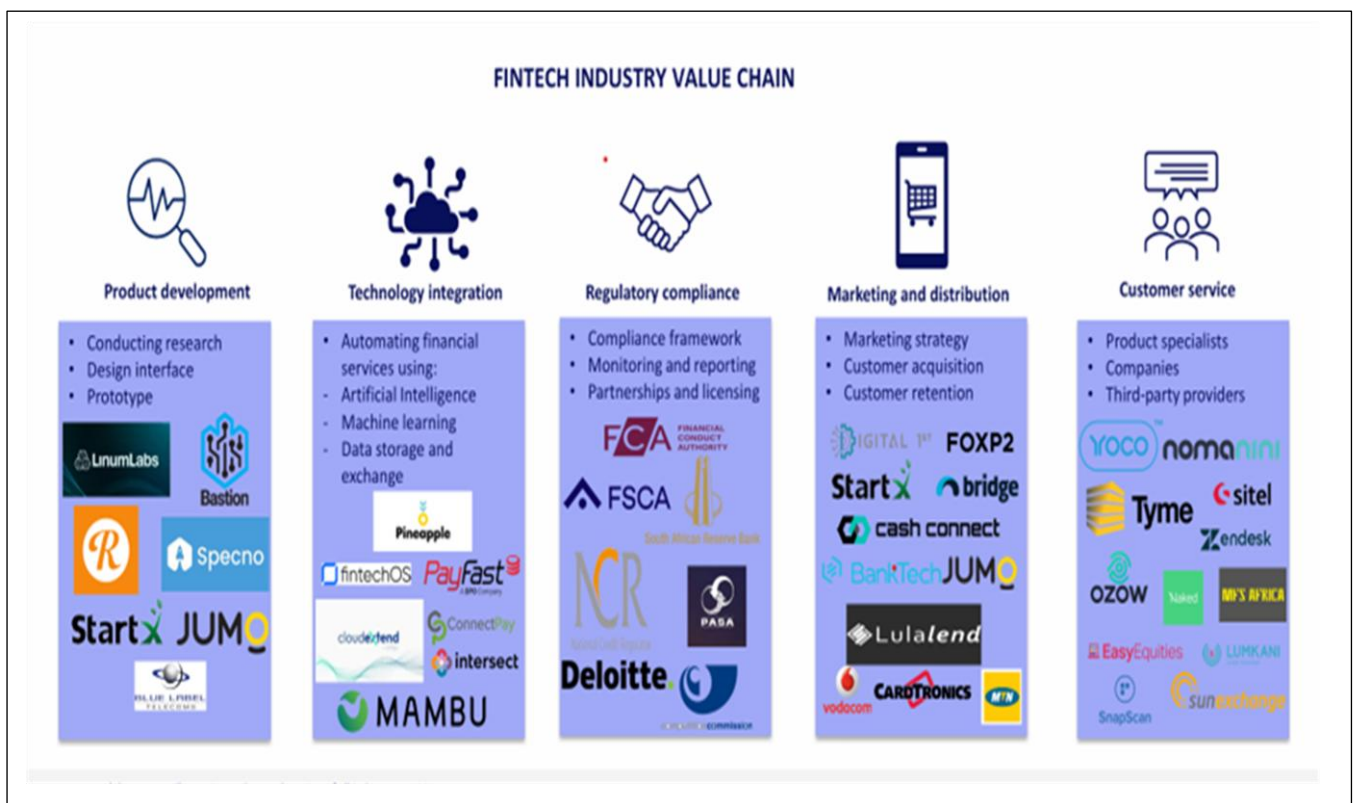


Fig.4: South Africa Fintech Ecosystem (2023)

According to Sanga and Aziakpono (2023a) have conducted an analysis on access to finance, which demonstrated that studies on Fintech and SMMEs have been focused on geographical areas such as the Asian region, with 22 publications, followed by the US and some European countries, which have fewer studies. Africa and other developing regions have limited research, emphasizing the need for more studies. The review covered the period from 2016 to 2022.

Table 1: Regions of Empirical Studies of Fintech and SMMEs Finance and Counts per Region:

Region/Country	Number of Publications
China (Asia)	22
United State	9
UK (Europe)	5
Indonesia (Asia)	5
Germany (Europe)	4
Italy (Europe)	3
Malaysia (Asia)	3
South Africa	1
Kenya	1
Nigeria	1

Source: Sanga and Aziakpono (2023a)

The South African government context has an entity called the Small Enterprise Development Agency, which is a unit of the South African government that provides funding for SMMEs. It operates in nine provinces of the country. The Department of Small Business Government Notices (2023) classifies small businesses with fewer than 50 employees and a turnover ranging from R15 million to R80 million, depending on the industry. The micro-business is the smallest within the SMME sector and is an informal enterprise, employing fewer than ten full-time staff members and generating a turnover of between R5 million and R20 million. Medium-sized businesses are classified as formal businesses. They are the largest employers within

the SMME sector, with at least 250 full-time employees and a turnover ranging from R35 million to R220 million, depending on the industry.

4.5 Level of Analysis

Our level of analysis consists of small and medium-sized enterprise owners who have or have not adopted financial technology tools. The study has focused on SMMEs that have been operating for at least five years. The analysis has been based on individuals, regardless of the gender of the SMMEs (Harrell & Bradley, 2009). The study comprises SMME owners of various sizes, based on their turnover. It encompassed SMMEs in Telecommunications, Petroleum, Farming and Farming Stay, Restaurant services, financial consulting services, Construction and manufacturing.

4.6 Unit of analysis

The unit of analysis refers to what is (subject) that is being studied, while the level of analysis pertains to who is being studied. However, these two are not the same, even though the unit of analysis and the level of analysis are closely related. In this study, the unit of analysis is the experience and understanding of SMME owners regarding the adoption of fintech services. The data will be collected through our research design by the researcher, which involved semi-structured interviews where SMME owners shared their experiences.

4.7 Sampling method, sampling criteria, sample size

The research analysis used purposive sampling in this study, which is a non-probability sampling method. Purposive sampling aligns well with the interpretivism paradigm because it values multiple perspectives.

The researcher conducted semi-structured interviews, enabling probing questions and encouraging participants to elaborate on their responses. This was important for our study, which is based on an interpretivist epistemology and aims to understand participants' interpretations of different experiences (Saunders et al., 2019). Asking participants to define concepts highlighted the significance and complexity of the information gathered. Two pilot interviews were carried out to ensure that the questions did not lead participants; these pilots were excluded from the main study's sample. The pilot interviewees provided insights that a proper background of the study would clarify the context of the questions, which was a valuable contribution.

- The participants for the study were purposively sampled in South Africa, in the Gauteng province and the Northwest province. The researcher invited owners from financial institutions who were willing to participate in the study and who were owners of their small businesses, who also understood the funding models of the businesses.

According to Bell et al. (2022), sampling ensures representation across different sectors, sizes, and geographical locations for SMMEs.

- The sampling focused on different sectors of SMMEs owners across various provinces to ensure that diverse data is obtained for proper comparison (Bell et al., 2022a). The selected SMMEs included Telecommunications, Petroleum, Farming and Farming stay, Restaurant services, Financial Services, and Construction and manufacturing companies, as well as family-owned businesses. According to Bell et al. (2019), purposive sampling guarantees a diverse selection of SMMEs.
- Further criteria set by the researcher were that the business must have been operational for at least five years and possess existing financial statements. The researcher sent the interview invitation to 20 SMME owners; however, based on the purposive sampling criteria, only 14 participants were selected and ultimately interviewed. All participants were provided with the same set of open-ended research questions to answer, thereby limiting flexibility to adjust the interview based on the participant's responses.

4.7.1 Demographics of the participant

The study included 14 SMME participants: three women and eleven men this is relevant to mention the diversity of the participants for the study, they were all owners/ co-owners of the businesses. Most participants were based in Gauteng, one was based in Limpopo, and another participant was based in the Northwest Province. South Africa. They had extensive experience in their fields of industry. Our demographics indicate that all SMMEs had a qualification minimum level of NQF 5 and above. This demonstrated that they were literate SMMEs, with the highest qualification being MBAs; another notable factor is that men dominated the sample. It is worth noting that there were no businesses below R5 million per annum, referring to the Macro business. All businesses were small businesses according to the definition of the South African SMMEs legislation, which ranges from R5 million to R20 million, a definition that does not accurately reflect the demographics of South African SMMEs. This is material information when measuring who contributes to the economy.

The maturity in years of SMMEs is influenced by the business's turnover and the number of employees, which contribute significantly to the economy. Matured owners of the businesses employed up to 80 employees, more than younger SMME owners which could suggest whether the experience and tenure in industry have an impact on longevity to business.

Industries of the participants

Participant	Industry
PSB	Telecommunications
PSI	Telecommunications
PHJ	Telecommunications
PAK	Petroleum Industry
PNG	Petroleum Industry
PPH	Construction and Manufacturing
PNG	Construction and Manufacturing
PGL	Farming /Cabin Stay
PTS	Farming
PSA	Restaurant
POD	Financial Services and Consultancy
PMA	Financial Services and Consultancy
PJM	Financial Services and Consultancy
PNJ	Financial Services and Consultancy

Fig:5 Authors own

According to Gioia et al. (2013), the interview protocol must prioritize ensuring that the research questions remain at the core of the conversation and avoid leading questions. The interviewer's guide is attached as Annexure A.

When the researcher reached the 14th participant, no new insights were generated. At this point, the researcher's saturation was reached, as a level was reached at which no further insight was derived from the participants (Saunders et al., 2019).

4.8 Research Instrument

The researcher conducted semi-structured interviews, allowing for probing questions and encouraging participants to elaborate on their responses. This was significant for the study because the study employed an interpretivist epistemology and aimed to understand participants' interpretations of distinct experiences (Saunders et al., 2019). Probing participants views of concepts elevated the importance and complexity of the information collected. Two pilot interviews were conducted to validate whether the questions were not leading the participants; the selected pilots were excluded from the main study's sample size. The interviews were conducted from June 2024 to December 2024, with all 14 participants given the same set of open-ended research questions to answer, allowing flexibility to adjust the interview based on the participant's responses, (Gioia et al., 2013).

The interview for each participant lasted 60 minutes. In some interview sessions, the participant corroborated the views of the researcher, and in other sessions, the participant provided new insights and views. The initial interview protocol was prioritized to ensure that the research questions remain at the core of the conversation and avoid leading questions; the interviewer's guide is attached in Annexure A. The diagram following depicts the research instrument design.

4.8.1 Instrument Design: Interview Protocol

<p>Introduction</p> <p>5 minutes</p>	<p>Thank you for participating in this interview. Please provide your insights on your hands-on experience and understanding as small and medium-sized enterprise business owners in South Africa regarding the adoption of Fintech tools (digital payments, online sales, automated financial statements). How have these experiences influenced your business with access to credit and overall business performance?</p> <p>Your responses will be handled strictly with confidence, and they will be part of a group of other SMME owners who will be interviewed. The identity of your business and you will be anonymized entirely in all the research reports I write. The data will be stored electronically in the cloud to prevent easy access and protect the client's information.</p> <p>In order to keep the connection, would you be so kind as to keep your video camera on?</p> <p>Are there any questions from your side before we can proceed?</p>
<p>The Main Research Question</p> <p>How do SMMEs owners understand and experience the adoption of Fintech services to improve financial opportunities?</p>	
<p>Question One</p> <p>8 minutes</p>	<p>How have Fintech services increased SMMEs' opportunities to enter new markets?</p> <p>This issue arises from the analysis of family-owned SMMEs' business dynamics, which indicate that digital transformation consistently affects SMMEs' performance (Li et al., 2024)</p>
<p>Question Two</p> <p>8 minutes</p>	<p>How are Fintech services improving access to credit for SMME owners?</p>

	This question is discussed in Thakor's (2020) examination of the role of Fintech in the ecosystem, and Thakor then concludes that this is an area of literature that is in its early stages, therefore presenting an opportunity for further research.
Question Three 5 minutes	How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses? Although research on Fintech adoption and financial inclusion exists, Lagna and Ravishankar (2021) argue that financial inclusion is not the primary focus in this literature. Therefore, opportunities for further research include how Fintech can improve operational efficiencies within the SMMEs environment and landscape.
Question Four 8 minutes	How have digital capabilities or fintech tools increased SMMEs' opportunities to enter new markets? The findings from Chen et al. (2016) confirm that SMMEs that adopt new digital technologies create a competitive advantage in the market. Astuti et al. (2020) echo this, stating that digital transformation always impacts SMMEs' performance.
Closing 5 minutes	Those were all the questions that I wanted to ask. Is there any final thought you would like to share?

4.9 Data gathering process

Belina (2022) recommends that semi-structured interviews offer insights into the ordinary level of societal opportunities and challenges. This is particularly relevant for the SMMEs owners' experiences, as they cannot be fully expressed in a channelled mode, as the quantitative questionnaire would suggest. The research process of thematic analysis has provided the study with a comprehensive and in-depth picture (Berbekova et al., 2021).

Ahlin (2019) also asserts that semi-structured interviews create a pathway for more robust conversations, citing research studies of criminal justice practitioners that provided insights into how different areas of community corrections operate, including problem-solving skills in cases by the courts, which utilized semi-structured interviews.

The researcher sent invitations to the selected SMME owners to participate in the research, with a consent form signed by the participant before the interview began. The invitation

indicated that 60 minutes was allocated for each interview; the researcher remained unbiased, avoided altering responses, shared personal views, and refrained from using expressions that supported or rejected the participant's comments (Bell et al., 2022).

The researcher conducted the interviews via Microsoft Teams and were scheduled for all participants. This approach provided an inexpensive and straightforward way to connect with SMME owners through virtual platforms. The web platform had audio transcription enabled, and an audio recorder was used to capture the interviews. The researcher took notes as needed and transcribed the data for analysis to ensure quality control. However, the audio recordings are stored on an encrypted computer protected by a password to prevent unauthorized access.

The data information of the SMMEs was anonymized by removing all direct identifiers to the individuals, and fictitious names were used. The data was stored electronically in cloud storage for prevention, easy access, and protection of client information. Data collection was resumed after receiving ethical clearance from GIBS, beginning with pilot interviews. No organizational consent was required from the SMME owners as participants; individual consent will be signed before the semi-structured interview commences.

Table 2: Number of participants

Sector	Planned Interviewees	Final Interviewees
Telecommunication	3	3
Petroleum	3	2
Farming and Hospitality	2	2
Financial Services	3	3
Restaurant Services	2	1
Construction and Manufacturing	3	2
Total	16	14

4.10 Data analysis approach

The data analysis process followed the inductive approach outlined by Braun and Clarke (2021), during which the transcripts of participants were read to understand their experiences while their identifying information was anonymized. The researcher applied the inductive approach, using the exact quotes from participants to create codes. Then the researcher used a second coding step to identify categories; a deductive approach from an academic perspective was used to determine the themes derived from these categories.

According to Braun and Clarke’s study (2006), thematic analysis is a method used to identify patterns in data and present them comprehensively. It provides flexibility within discussions and seeks out repeated patterns in semi-structured interviews to understand the context. The data analysis focused on semi-structured interviews to identify recurring themes, patterns, and insights related to the experiences and perceptions of SMMEs owners. These methods involved coding the data and organizing it into recurring themes that reflect the distinctive views of the study participants (Saunders et al., 2019).

Braun and Clarke (2006) provide a systematic approach to thematic analysis, simplified into the following six steps:

- “Capture the information in its original concepts.
- Identify relevant elements of the “data” methodically.
- Look for “themes” and group codes into possible “themes.”
- Analyse themes to see if they function in recurrence with coding.
- Continuous analysis to hone the details of each theme.”
- Lastly, evaluate the vibrant, engaging excerpt scenarios and conclude by relating them to the research question in the literature review”.

The deductive approach is the academic perspective that uses the categorization of the codes into themes that will be consistent with the conceptual framework design in Chapter 2 to create the golden thread of the research, however the researcher used the conceptual lens in analysing the categories into themes. The presentation of data from the 1st codes to the 2nd code themes, in an inductive perspective, is a crucial stage in the entire research project because it demonstrates the transformation of the raw material of quotes from the participants into the themes, which reflects is the rigor of the qualitative research, (Gioia et al., 2013). Fourteen transcripts were loaded in Atlas. Ti, and the first coding was completed and loaded to Excel for further coding, as attached in Appendix C.

Based on the analysis conducted using qualitative data, translating raw data to the material, the following depicts the steps that were followed to determine the number of 1st code and the 2nd codes, and the 20 themes.

Table 3: Summary of the 4 Steps of Data Analysis

Step 1	1 st Code	199
Step 2	2 nd Code Categories	48
Step 3	Themes	20

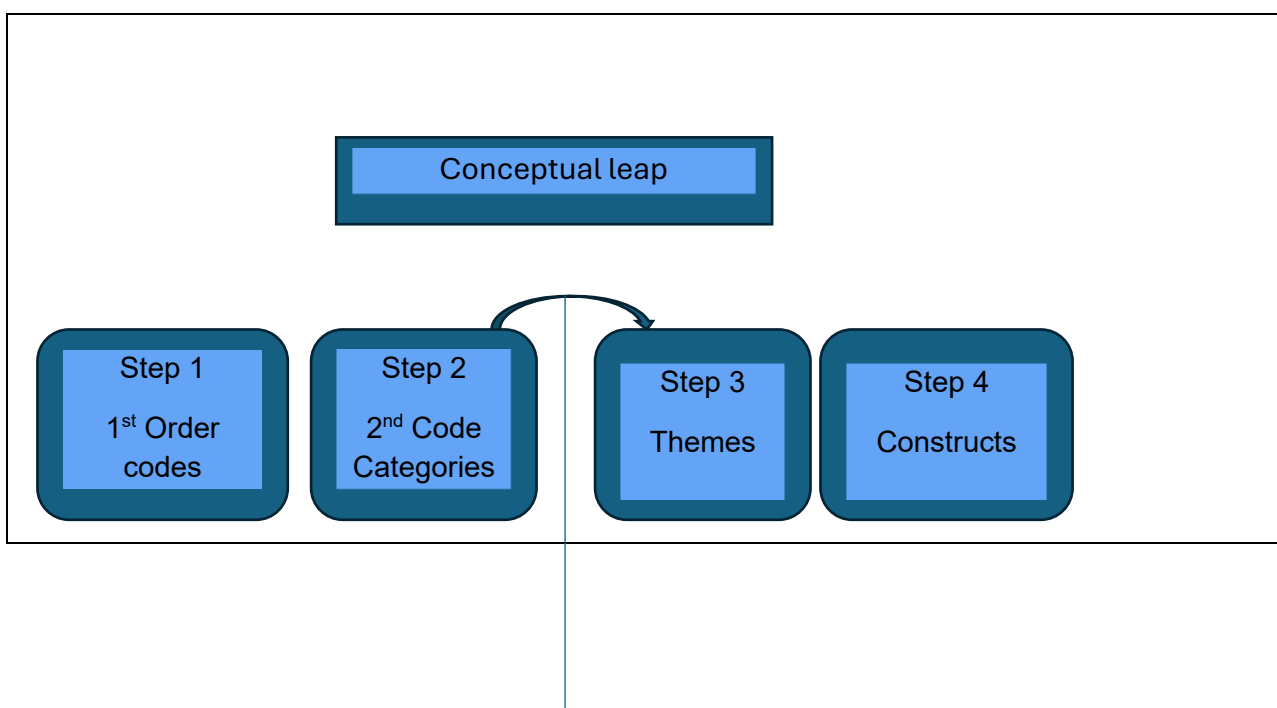
Step 4	Constructs	4
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4.10.1 The Conceptual Leap

The transformation of 2nd code, the categories to the themes, a conceptual lens must be applied to the categories Gioia et al. (2013), through a process called Conceptual Leap. Klag and Langley (2013) providing a meaning to a conceptual leap, alludes that it was a challenge to convince the academic community to understand the themes can emerge from qualitative research into “theoretical contribution”, which is why it was imperative that their study should succeed in defining what it meant “the conceptual leap”; the study defines the conceptual leap as “bringing the gap between empirical data and theory: moving from the mass of words and other data (the world of the field) through and beyond the mechanics of analysis to an abstract and explicit set of concepts, relations, and explanation that have meaning and relevance beyond the specific context of the development (the world of ideas)”.

4.10.2 The conceptual Lens

Merriam (2009) defines new ideas, and themes that have become evident from the qualitative analysis, through the instrument design, are developed and constructed into a conceptual framework through a process of conceptual lens. The mapping of concepts always is always linked to the Chapter 2 of the literature review, as analysed by Merriam (2009).



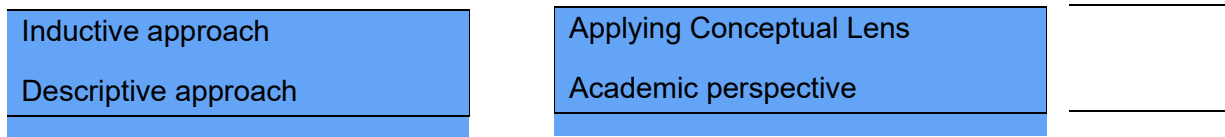


Figure 6: The 4 Steps of Data Analysis

4.11 Research rigor and quality

Reliability is a crucial aspect of research quality; however, it does not fully gauge the overall quality of research. Various forms of validity have been recognized, one of which is construct validity, which pertains to the extent to which the research accurately measures what it intends to assess, as outlined by Saunders et al. (2019). Ensuring quality and rigor based on Trustworthiness, the framework from Schwandt et al. (2007), the below framework was customised this research analysis.

Rigour according to Lincoln and Guba

CRITERIA	Definition of Lincoln and Guba 1985	Research Analysis Evidence
1. Credibility	“Confidence that the findings are a true reflection of the participants' experience”	“Triangulation was achieved when different perspectives across participants were received”.
2. Transferability	“The extent to which the findings can be transferred to other groups with the researcher's responsibility, provide enough clarity”	“The findings were presented with a rich, detailed description of the participants, including their verbatim quotes”.
3. Dependability	“The stability over time is such that if the study were to be repeated, the same result would not be different”.	“The audit trailer has been established, which includes a research proposal, an interview protocol, and audio scripts”.
4. Confirmability	“The degree to which the findings are a product of a participant's experience and not the researcher's own biases”.	“The researcher has explicitly stated their commitment to reflexivity by acknowledging any potential biases”.

Fig 9: Schwandt et al. (2007)

4.12 Research Ethics

According to Bell et al. (2022), the essential ethical considerations in business research are protecting participants from harm, obtaining their informed consent in advance, and ensuring that no invasion of privacy occurs. Lastly, the participant was not coerced or deceived. The Gordon Institute of Business Science (GIBS) also highly upholds and observes these values, as the institution ascertains that the ethics committee approves every application to conduct the study.

“An informed consent letter serves as a legal instrument to shield the university and its researchers from potential legal repercussions when sharing research findings. It is crucial to safeguard the rights of participants and respondents involved in the study. (Gordon Institute of Business Sciences, University of Pretoria, 2024). The consent letter details what information participants will be asked to provide and how. It highlights that taking part is optional and that the participant can leave at any point without facing any consequences.

It also explains that all information will be kept and shared without including any personal details. The researcher will ensure that a signed consent letter is obtained from participants prior to data collection. Participation will not be induced or forced through any incentive or coercion. (Gordon Institute of Business Sciences, University of Pretoria, 2024). Participants will be English-speaking. They will not have dependency relationships with the researcher scholar”.

For individual SMME owners' data information that will be collected, it will be anonymized by removing all the direct lead indicators to the individuals; fictitious names will be used. The data will be stored electronically on cloud storage for prevention, easy access, and client information protection. Data collection will resume after receiving ethical clearance from GIBS, beginning with pilot interviews. No organizational consent is required for the SMME's owners as participants; individual consent will be signed before the semi-structured interview commences.

4.13 Limitations and delimitations of the Study

The study was limited to purposive sampling of the SMMEs who were willing to participate and fulfilled the government's definition of SMMEs. However, the limitation of the study is that the researcher is the novice researcher, and second limitations is the constraint of tight deadline.

CHAPTER 5: FINDINGS

5.1 Participants findings

This chapter present the findings from the participants ideas and concepts that have been identified from the semi structured interviews in relation to our research question.

The analysis consists of 20 Themes that were discovered from data from participants; there are 11 new themes that came from the analysis to answer the research question three of them are new, they were not present in the original conceptual framework which are, **social media impact on SMME's** and **financial literacy** and these are the highlighted in green. Also under Fintech solutions for small macro medium enterprise construct, only 2 themes will be discussed, P2P Lending and Traditional banks will be discussed as one theme and Government role will also be discussed as another because **E-commerce, Invoice trading and Equity funding** there was no evidence in the findings , therefore these themes will remain in the conceptual framework and will not be discussed under chapter 5,however in Chapter 6. That means only 9 themes that will be discussed according to the constructs and the research sub questions.

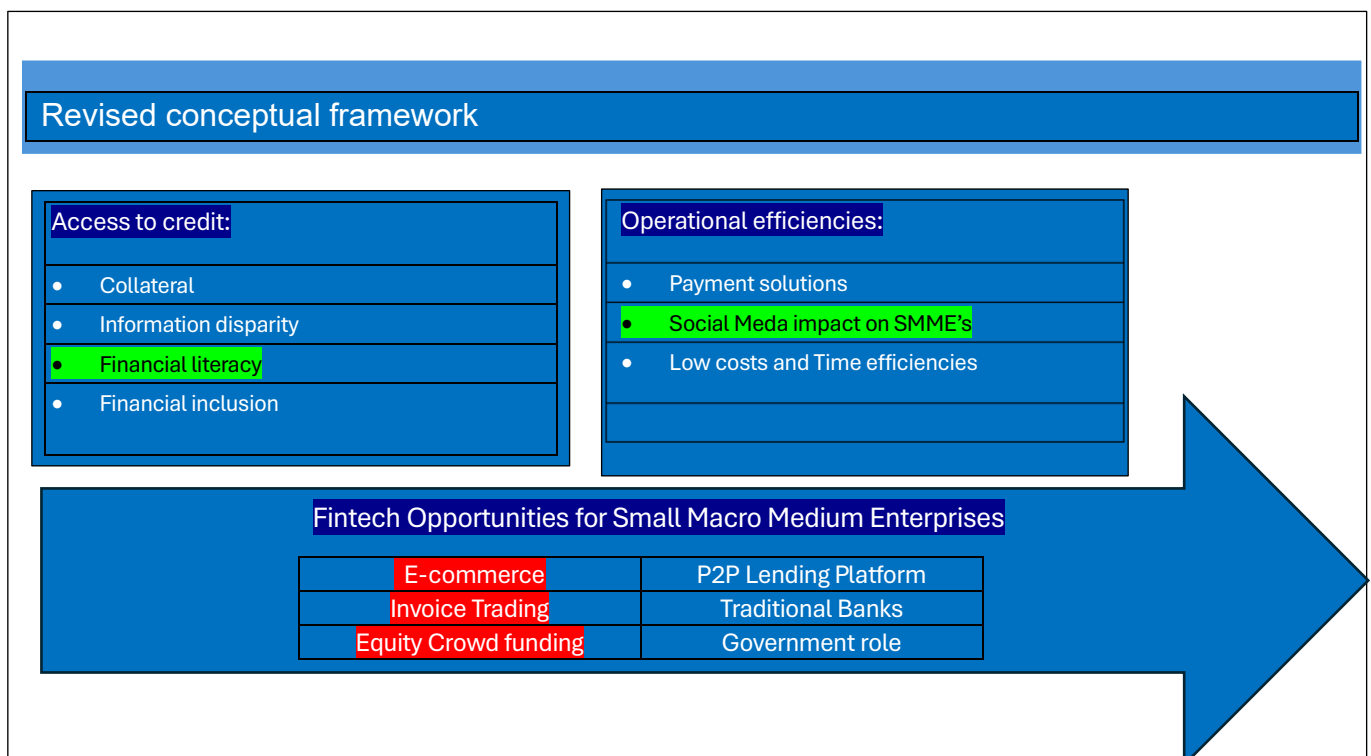


Fig7: Author's own

The follow of presentation will consist of each of the research sub questions that together answer the main RQ. This is evidenced by the themes that are related to it, according to the groups of participants. The findings may not be related on each group except where relevant

findings emerge based on the theme. The 14 participants are grouped according to their sectors that they will be colour coded into for the simple reference across the entire research study as follows:

Telecommunications group	Petroleum group	Restaurant Services	Construction and Manufacturing group	Farming and Farming Stay group	Financial Services and Consultants group
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5.2 Research Sub-question 1:

How have Fintech services increased SMMEs' opportunities to enter new markets?

This section focuses on the Fintech services that are offered to SMME's owners to enter into new markets, there are 6 themes that are related to the construct Fintech solutions for the SMME's only 2 themes will be discussed, P2P Lending and Traditional banks will be discussed as one theme and Government role will also be discussed as another because E-commerce, Invoice trading and Equity funding there was no evidence in the findings that were related to themes and therefore they will remain in the conceptual framework.

List 4 Concepts that has emerged in research sub question 1

Themes	Telecommunications	Petroleum group	Restaurant Services	Construction and Manufacturing group	Farming and Farming Stay group	Financial Services and Consultants group
P2P lending vs Traditional Banks	CIPC Bank accounts First thing	Linkages		Training		Loan sharks, Poorer
Government Roles	Lack of visibility	Collaboration		Training, Coaching the SMMEs	Poor administration	Regulate Fintech Sandboxes

5.2.1 Research sub question 1: Theme 1- P2P vs Traditional banks

5.2.1.1 Evidence of P2P Lending platform vs Traditional banks

POD	<i>These Fintech financial institution (Luna), they will give you that ridiculous request to say. Are you having ten invoiceable clients? I'm like, no. Why do I need that nonsense? What? When are you caring about is cash flow #1? Secondly, is revenue gross revenue monthly? And lastly is? Capability and probability to be paid back.</i>
PNG	<i>Financial Institution are the ones who should make it easy, but because it requires a lot of training. So they should be assisting the stakeholders rather than just focusing on lending finances, but we must also make sure that you encourage your stakeholders to use these types of platform so that it assists even with a person so that they were it's easy for them to manage those financial institution and also in terms of credit it will be aligned with their requirements</i>
PHJ	<i>The bank can send an advertisement or fly to certain emails to all the SME's businesses that are under certain threshold and say if you guys are interested in learning to how to develop or grow your business, we are offering a 2-day online course with this company or whatever the case may be. Now as a Bank you've given this company a more of a foundation that he would not have had. You are also increasing the probability of him succeeding, and if he succeeds, the bank succeeds.</i>
PHJ	<i>Remember, the first thing you do once you've registered your business at CIPC, the first thing you do after that you need to go and open a bank account.</i>
PMA	<i>The same model that that the Apple has Apple you buy a phone, it comes with fixed memory. If you want more memory, you must buy cloud and they own that cloud; If when one day you want to move from Apple somewhere else, you lose that information. It traps you in so they could capture them while they're starting as SME's and give them these services and products that will not just benefit them as clients but will also make sure that when the millions do start coming, they will stay with the bank.</i>
PNG	<i>There are some lots of linkages that you can do, but most of those linkages are from the bank the bank know. They know that OK to assist this customer to improve his profitability. If I can link him with this one and this one and this one, this business will be sustainable.</i>
PSB	<i>These P2P institutions, if they could partner with banks for, for instance, to say look we have a relationship with banks, so and so FNB and these are the minimum requirements that they need from you as a business for you perhaps to get funding or if they are the ones who are giving funding, they should just be out there more</i>
POD	<i>At this point in time, you can't hey, especially outside the metropolitan areas, could lack surviving without these fintech services cause the banks are often full right availabilities of advisors and all those kinds of things.</i>
PMA	<i>They struggle. I mean it's like loan sharks, really. They benefit from the poor, not the rich. Unfortunate those people because those kinds of financial institutions, they will benefit from someone who won't be able to qualify at a bank matter because they consider them a high risk. They're going to charge a premium.</i>
PMA	<i>You become poorer because when they take 30% of your income of whatever that you make, then your 30% poor you know, whereas I advocate for people building a credible credit profile so that they can get in funding and again. Financial institutions and they even have the negotiating power to go to the person that gives them the best rate.</i>
POD	<i>At this point in time, you can't hey, especially outside the metropolitan areas, could lack surviving without these fintech services cause the banks are often full right availabilities of advisors and all those kinds of things, right?</i>
POD	<i>They said they don't have business banking. I'm like, so you are telling me I am going to queue with this granny that are going just to request a statement. Yeah. Well, 10 hours. Like, I feel sick. I'm leaving. Right. So, knowing what I know now, I can't survive without those applications or those services.</i>

5.2.1.2 Cross group analysis of the P2P vs Traditional banking evidence

The Financial service group provides testament to the power of Fintech services where its services has been integrated to the Banking services, the long queue in the Bank has been drastically reduced because services like Banks statements are automated into the phones. The benefit of Fintech further includes the loan application online, opening investment account, drafting of Wills, the supporting documents can also be uploaded online without going to the bank, except when its necessary or when the application has been declined. There is an adverse negative that the financial services group that they have raised that the Lending companies for an example Luna (P2P) are lending loans to SMMEs at a very high interest rate up to 30%. The impact of this lending at the high rate, makes the SMME's poorer, it is disempowering to the SMMEs, referring to the P2P as "loan sharks".

The Telecommunication group points that the Bank has an advantage than the P2P lending platforms because every company must register with Companies and Intellectual Property Commission (CIPC) a government department, Trade and which is legitimate way of recognising a company in South Africa, the bank account details is a requirement. Therefore, Banks have an opportunity to incubate new companies, the bank can link small businesses with advanced businesses where there's synergies. According to them the Banks has significant chance of partnering with government, partner with P2P because of the overview of SMME accounts data that is at its disposal.

According to the Construction and Manufacturing group, the Banks should be offering training the SMMEs, partnering with stakeholders that will align the SMMEs to meet the Bank's compliance, this process will be beneficial for both the SMME owner and Bank, because the growth of these companies will be locked with the Banks.

The Petroleum group has alluded the capability that seats with Banks, is significant that the P2P because of the trust the Banks have built over years cannot be compared with these lending platforms. The P2P lending platform reputation was not popular with group participants; they still preferred that SMME's should build their credit profiles with the Banks to maximise the buying power rather than buying credit expensive from Lending companies.

5.2.1.3 Conclusion of cross group analysis of P2P vs Traditional banking

The Telecommunications group assertions are similar with the financial service group in that the Banks have an ability of offering the training the SMME's to be aligned with its compliance. By virtue of their exposure to Fintech services, these group are similar towards their views towards the P2P lending platforms, that they are providing least services to the SMMEs, more than growing than empowering themselves.

All the participants, the Construction and Manufacturing, the Petroleum and Telecommunications are similar that Banks should take leading role in collaborating with other stakeholders to incubate the SMME's in the country due to the advantage of information that the Banks has in its possession.

5.2.2 Research sub-question 1: Theme 2: Government role

5.2.2.1 Evidence of the Government role

POD	<i>The role of government would be to regulate, especially in cyberspace. To ensure that all of these things are controlled, so that the banks can take the necessary initiatives.</i>
POD	<i>There are people that I know as well here that were helped by government. They bought the farms, but those farms now there's nothing because they were given a start up by government, no education, nothing. Now when the chickens have finished laying the eggs 12 months later, they ate the stock, they ate everything.</i>
PNG	<i>When it comes to redeem those funds I understand, the role of government is to make sure that there is no money laundering and so they put it proper contingencies like, for instance, when you receive the money now it just sits it into your bank and they will ask you some questions before it is released.</i>
PHJ	<i>In the rural areas, people have lands that they can't plough and all that, but they cannot hire people because they don't have the facilities, they don't have equipment's, they don't so that they can be able to whatever they produce they produce, they can be able to give out. So, the more prominent farmers.</i>
POD	<i>But the difficulty for it, you know, for 1/100 to be able to access those opportunities are huge. You still must go to a manual process. You still must go, and you know you cannot send E- documents; you must download print them in the world of today for you to make submission</i>
POD	<i>But there should be a way for government to intervene using financial. Technological systems to be able to get us out of hot messes.</i>
PHJ	<i>Have you seen a SEDA office in your area; but that is fine. I do not want to go to see them can I access SEDA services, through an App in the Eastern Cape I pitched. That service provider intervention right where you can apply online. The system is not managed online.</i>
PTS	<i>I think government has a major role in this thing and what we have identified especially in the Department of Agriculture, Land Reform and rural development, it really has got a beautiful programme. Yeah, you know of empowering, you know, this upcoming traditional farmer, you know, converting them to commercial farmers. However, the way that we that we dealt here a very wrong way if he has a knows where you have got your 200 hectares there by your village at least you know two people at you know your municipal Office of Agriculture they can give you a package.</i>
PNG	<i>The government want to increase the participation of small medium enterprises and one of the keys is finance. It is not only financial but the number one it says it is finance. One of the things that they must do. It is not make applying for finances sophisticated.</i>
PPh	<i>The government should provide a law in place where suretyship is provided to SMEs. For example, if an SME wants to start up, it typically lacks security. The government should come in and give that type of surety and make sure there is a guarantee to make sure the person can start because no one can borrow money without a guarantee.</i>

PSB	<i>Your business must in place, it must be tangible. That that is the thing, with the government system, they would not be able to give you funds if your business is not tangible</i>
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5.2.2.2 Cross group analysis of Government role

The South African government has different agencies that handles the training and funding of the SMME's owners, such as such Small Enterprise Development Agency SEDA and Small Enterprise Finance Agency (SEFA) relevant to the SMMEs. The two agencies were merged 1 December 2024 to better service through various programmes and trainings as required by the needs of the SMMEs. According to Telecommunications group the government agencies have not clearly communicated the funding process and funding requirements of the government to the SMMEs owners. The poor administration and lack of clarity about these processes to the SMMEs was cited as a contributor of lack growth, lack of knowledge to the SMMEs. The Department of Small Business Development (DSBD) has been tasked to create at database of the of the South African SMME's where all the information related to the sector of the SMMEs, performance is collated, the absence of this valuable information is referencing the opportunity that government needs to maximise for the growth of the SMME. The Finance group also mention the lack of footprint of government agencies across the country, there were other concerns such as the automation of the application forms in government agencies which is leading to the deemed inefficiencies of the government department and lack of funding towards the SMMEs.

There are good farming initiatives from the agriculture department, which is echoed by Farming group, the department has given farmlands back to the communities, as part of government redistribution of land reform Section 25(5) of the constitution. However, people who receives these farms does not have farming experience, which leads to them lying wasted and idle. Therefore, what seems to be lacking is proper training and coaching of the new farmers. Some farm-lands in rural areas lay waste unutilised due to lack of funding to rural areas, then urban areas.

The Construction of manufacturing group's perspective is funding to the SMME's owners must be regulated by the government, more that surety as a guarantee for loan, according to the group the using surety as an access, is a limiting factor especially to the innovation and creativity of the SMME's. Other regulation that should be put in place, is for cyber solution, South African government launched its first regulatory sandbox, the Intergovernmental Fintech Working Group (IFWG) in 2020.

5.2.2.3 Conclusion of analysis of the Government role

There is similar view between Farming and farming stay and the Construction and manufacturing groups, based on government funding process, it appears that funding from the government is more accessible to the two groups than the access to credit from the Banks. These two groups are acknowledging the initiatives of the government however lack of proper administration of the funds is a barrier to the SMMEs.

The Telecommunication group alluded to the lack of automation of processes of the government application forms, this is no different from the Construction and manufacturing that the process in these institutions is complex for ordinary citizen like SMME's owners.

5.3 Research Sub-questions 2

How are Fintech services improving access to credit for SMME owners?

This section focuses on the challenges that are faced with SMME with access to credit, there are four themes that will be discussed, three themes were in the original conceptual design, which are collateral, information asymmetry, financial inclusion and the new theme that has emerged in the findings is financial products.

List 5: Concepts that emerged in this research sub-question 2

Themes	Telecommunications group	Restaurant services	Petroleum group	Construction and Manufacturing group	Farming and Farming Stay group	Financial Services and Consultants group
Collateral	Eliminate debt		Loan, compliance requirements	Security, regulating access to credit	No security, legacy, lack of understanding	
Information asymmetry	Available data, quick and efficient	Sage	Supported Franchisor Inherent Model	Banks harsh, no access	Struggles funding, no access, lack of reporting	SAGE software
Financial inclusion	Credit bureau, size of the SMME, Exclusion by religion	Cash Business	New accounts	Cash flow, Run Cash Business	Tyme Bank	Limited services in Branches
Financial literacy	Private sector, public sector initiatives	Challenging	Business skills, financial literacy	Hand to mouth, finance intimidating	Government intervention	Failed businesses, Rise in tenders

5.3.1 Research question 2: Theme 1: Collateral

5.3.1.1. Evidence of collateral

PPh	<i>The government should provide a law in place where suretyship is provided to SMEs. For example, if an SME wants to start up, it typically lacks security. The government should come in and give that type of surety and make sure there is a guarantee to make sure the person can start because no one can borrow money without a guarantee.</i>
PAK	<i>Yeah, I think it helped me with security for the loan that I got from the bank.</i>
PAK	<i>Facility was sitting at 100,000 as we speak right now. The facility it is 3 million with the exact amount of collateral.</i>
PTS	<i>And other people that we spoke in the same space, especially White Caucasians, they can access this financial instrument with the bank. They have got good, you know, overdrafts are it a legacy issue? Possibly it is easier with them because maybe they have been in the banking system for a very long time from their grandfathers and whatever and they know their business through and through. I am a darkie bra, and you know, they think maybe we are there to take money and we run away.</i>
PGL	<i>As a farmer, it is a struggle to get finance from the bank; and especially with the fintech services. So hence I said there is the first leg of the farming side of the business and the farm stay. So, with the farming side, it's been a struggle because yeah, it's a struggle to get finances from anyone because they want. You to be up and running. You need to have collateral and all the other things.</i>
PNG	<i>But for you to use that data you will need to visit those businesses because in your engagement with the business you start to understand it better and how to assist that business.</i>
PAK	<i>Fortunately, the bank did not give me a low score; as I said, it was a new business. We relied on projections rather than actual figures. So, once we have proven in the first say 12 months, this is where we are with the figures and how you handle the management account and so on, then the bank will give you another rating according to how you manage your account.</i>
PNG	<i>Remember, for you to get credit you, you must make sure that you are compliant with the needs of that financial institution. So, Fintech, fintech make it easy for that type of request.</i>
PSB	<i>If you can eliminate this debt on the side, we'll be able to give you a credit on this side. So, there are checks and balances as well at the same time.</i>
PNG	<i>And so mostly you will be assisted by your Franchisor companies, so it should be the companies that operate in that space. So, you because obviously if you operate in that space, you will solely be dependent on the Franchisor whether it's a Sasol or whether it's Total whether it's BP, so these companies are empowered in terms of Fintech. So, but what they do then they will cascade it down to who to the operator, whether you're operating in the commercial space, whether you're operating in the retail space. So, they, make sure that you've got the proper support when it comes to fintech.</i>

PNG	<i>Remember, for you to get credit you, you must make sure that you are compliant with the needs of that financial institution. So, Fintech, fintech make it easy for that type of request.</i>
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5.3.1.2 Cross-group analysis of collateral evidence

The collateral need for SMMEs that were sampled brings out insight that are diverse, the constructions and manufacturing group struggles with providing the security that is required by the Bank. The assessments from the group is that there should be regulation and laws that regulate how SMME should be funded, and the government should play an active role in regulating. Largely the funding of the construction and manufacturing was self-funded.

The petroleum group, these SMMEs process is managed from the Franchising model, where financial ability and funding is predetermined by the Franchisor before the agreement is concluded and therefore, collateral requirements will not be required. The need for collateral requirements for them was based on increasing their credit facility, which will be subject to bank rules.

The group farming and the construction group have similar challenges when it comes to providing the collateral for funding, some of the challenges the participants alluded that they are predominantly legacy of discrimination of race, where funding is granted based on the history. These assertions the participants felt that the financial institution shows preference and confidence especially when it comes to funding where farming is concerned.

5.3.1.3 Conclusion of cross-group analysis of collateral

The findings of the collateral brought out the interesting observation from the sampled SMMEs owners that the financial services group, and Telecommunication groups were similar in that they did not need collateral for them receive funds from the Bank. The Financial service group indicated that their services did not require a startup capital due to servicing nature of the business, and therefore no collateral would be necessary for them. The Telecommunication group also did not need a collateral however shared that the use of Fintech services made it easier for them to get funding from the Banks. The need for collateral seemed to be sector related challenge, where the findings from the farming and farming stay, construction and manufacturing were indifferent because they were greatly impacted by need to provide a collateral as the requirement security to be funded by the Banks.

The challenge of not having collateral for the Bank as requirement for security compelled the SMME to self-fund their businesses and therefore brought numerous financial strains to them as businesses owners and to their families, and some the participants alluded that the

SMME's owners had to live from "hand to mouth" without sustainability and hope to receive funding from the bank. Some other challenges alluded by the SMMEs owners, the lack of proper documentation of the business, lack of succession plan, no distinction of owner expense and the business expenses increase their challenges of not receiving funds from the financial institutions.

5.3.2 Research question 2: Theme 2: Information disparity

5.3.2.1 Evidence of information disparity

PNJ	<i>You've got clients who would be saying they want to have financial statements, they want to buy properties, they want to buy cars. And so, the bank would say prepare financial statements and management accounts and you can't, you can't be using software's like your Excel, you need system that are presentable, proper. It's professional and its value for money for the company.</i>
PHJ	<i>But with us, I mean we are able to draw from our SAGE for an example, we can draw all the information, all the invoicing, we can do our management statements, we can do our Just day-to-day projections, you know, we are able to get all that information from other platforms that we're using and we can provide it to whomever we are applying for. Hence, for an example, our success rate in the last, let's say six months or we've just purchased the first property was last year, December, we got it over the line or the second, sorry. And then also we are currently doing the same process with the other banks. We are looking at the apartments in in Cape Town, but it it's been done with ease because every the all the information is there.</i>
PNG	<i>Remember, for you to get credit you, you must make sure that you are compliant with the needs of that financial institution. So, Fintech, make it easy for that type of request.</i>
PAK	<i>Yeah, I think what the banks are doing, I'll say I was very, very thankful for, the management account that was done every three months cause. That showed me how do I need to manage my account. So, the bank in that on that side of the issue when they ask you for the management account, it's more like asking you how you run your account.</i>
PHJ	<i>And all the records are there. You see don't have to be running around trying to get the information to be collected. It's available on demand and that's what this technology does. It gives you information as and when you need it because you've been, you're populating the information, it's coming in as it comes in, it updates and then the day you decide you want to pull that report</i>
PTS	<i>Unfortunately, our farming, you know, has not succeeded in raising any financial loan with the banks, and there is something that we ultimately, you know, I felt something that we should not pursue in the future and just target other stakeholders.</i>
PPH	<i>Treat a person differently according to where you're coming from, what you need and be able to be flexible in the requirements that they need; I'm not sure whether for them they use the same thing to everyone. Hence, they end up only giving loans to bigger companies who have all their systems in place.</i>

PGL	<i>As a farmer, it's a struggle to get finance from the bank; and especially with the fintech services. So hence I said there's the first leg of the farming side of the business and the farm stay. So, with the farming side, it's been a struggle because yeah, it's a struggle to get finances from anyone because they want you to be up and running. You need to have collateral and all the other things.</i>
PSB	<i>So, you don't have to put numbers together, wasting time collecting data. The data is there. It's a measure of you looking at the data and see. OK look, I've got that. Let me work on reducing the debt. That's all you do.</i>
PNG	<i>So, it's really made it easier for you to supply the information that is required by the financial institution. Whereas if you if you are if you are without the Fintech, it's going to be difficult for you to supply the information and it doesn't help them to measure whether your business is justifiable to receive that financial assistance.</i>
PHJ	<i>I think the biggest problem that any small to a medium business has is when you go to the banks or when you do any application outside of the banks, be IT facilities, be it buying new equipment, there's data that they need and a lot of the times because a lot of small businesses don't have the finances to include platforms where you can bring your data and have it in populated in one platform. They then fail with the applications.</i>
PGL	<i>How much revenue have you generated so they're able to then check with what you're giving them, you know on the on the system, but if you're not doing that through this Tech, you're not going to be able to report correctly, you know, and that you instead of reflecting the correct picture.</i>
PPH	<i>And the rules of the banks, the rules of the banks are to be lenient. The banks are too harsh</i>

5.3.2.2 Cross-group analysis of information disparity

The lack of information disparity for SMMEs refers to the lack of proper information and documentation gathering and reporting of the business. The requirement for financial institution is a coherent, organised generation of financial statements and management accounts to obtain funds from them. This requirement will demonstrate the sustainability of the business and its ability to repay the future financial obligations.

In some instances, the financial statements that Banks require them to be audited by the external financial auditors for verification. In the absence the financial statements, the financial institution are not allowed to enter a financial relationship with clients they are prohibited according to the National Credit Act (NCA), Act 34 OF 2005 of South Africa. The Act requires that due diligence must be conducted before a transaction can be concluded to avoid reckless lending to customers. This is where most SMMEs encounter challenges of acquiring software systems that help them with the professional generation of these compliance documents.

The analysis from the findings shares different experiences from the participants, the Telecommunication group of SMME owners enjoys the Fintech capabilities where financial statements are required. This is evidence by the systems that they have acquired like Sage software system. The Sage software is a business management tools, that simplifies accounting documents of the SMMEs and produce compliant financial reporting. Therefore, the Telecommunication group does not struggle with providing financial statements to the Banks, which leads to easy access to credit and funding for them.

The experience for the Farming group has been positive, they have not received funding from the Bank, the reasoned they have shared that the Bank required collateral, they are required to provide proper reporting of the business. Another challenge for the farming group, is the lack of systems of running the business. This unpleasant experience and sentiments are also shared by the Construction and Manufacturing group, where they feel that Banks “are harsh” towards the SMMEs. The most contributor is the inability to utilize fintech systems to generate the required documents. Due to the unique requirements of the industry, the farming group struggles to obtain credit from banks and government institutions.

The Financial services group, and Restaurant services have not struggled with financial statements and compliance requirements of the Banks. This is due to the nature of the type of the services that they offer to their clients. Their primary services as a business are to provide clients a service of producing the financial statements.

The Petroleum group distinct difference and an advantage is the franchise model, the group has share insight that Fintech systems are inherent in the business model. The franchisors provide all the Fintech systems that enables the franchisee to run the business, the financial access is approved prior to the franchise agreement, therefore all the financial statement requirements will be conduct outside the Banks process of lending.

5.3.2.3 Conclusion of cross-group analysis of Information disparity

There was diverse experience from the group of participants, which provided contrasting views that the groups’ SMME’S owners in Telecommunication, Petroleum, Financial Services, and Restaurant services have enjoyed the benefit of Fintech tools where they use the SAGE system extensively with their clients and generating financial reports for credit application with the Banks. It has also benefited them in managing their cash flow and increasing their credit score.

The three groups, Construction and Manufacturing and Farming, are different and have been negatively impacted by not having fintech services, the impact has been exacerbated lack of access to credit from the Banks, which impedes their growth, the job creation opportunities, expansion to mention the few. What is evident and necessary these sectors need a similar

solution to the Telecommunication group, in that no business should operate without this fintech technology. The fintech advantage is significant and necessary and it goes beyond financial systems. The benefits include a range of tools from Human resources facilities, operational tools, and management accounts.

5.3.4 Research question 3: Theme 3: Financial Inclusion

5.3.4.1 Evidence of financial inclusion

PNG	<i>What we were told they just looked at what was coming in and the consistency thereof. To say sometimes it's 15,000 or sometimes it's 10,000, sometimes it's lower. So that's what we were told at the bank to see. If you keep it at a minimum, perhaps of a certain amount. Then you'll be able to qualify for maybe 20,000 out of a credit card.</i>
PHJ	<i>Yeah, but the ITC is bad. Yeah, you need to wait for at least minimum 30 days, but even there, your credit risk profile is still going to be high. So, you need to wait for a longer duration which is 3 months until you are good.</i>
PNG	<i>So, you are working using cash from your business and making sure there's funds and take back what is left to the business? Definitely so, what would happen is would sell the certain number of units per month. So, for instance we like this morning somebody just called me to say, look, I'm looking for two loads of Sand it's about R3000 give them the account number put it in the account and then other customers would come daily. And then by the end of the month, we, we are just hoping for that. At least it would meet their salary, the salary packages or salary wages, and then we pay whatever is left is put back into the business, yeah.</i>
PMA	<i>I always say to someone that works with me today and they are like, oh, you are not making that much money yet then. Therefore, they want to treat me poorly. I am like, you're losing out because this business is going somewhere. So, you capture them as soon as they start, and you give them these products that will keep them. And when they make a lot of money, they won't leave because they're like, you must go and get my financial management system from Sage.</i>
PAK	<i>Fortunately, the bank did not give me a low score; as I said, it was a new business. We relied on projections rather than actual figures. So, once we have proven in the first say 12 months, this is where we are with the figures and how you handle the management account and so on, then the bank will give you another rating according to how you manage your account.</i>
PTS	<i>I think again with what small banks that are coming through, I love it. I love their, their easy business. You know I remember the other day open an account, wanted to test It took me about less than 10 minutes for me to open a bank account and I could transfer money, and I will see it on the other side.</i>
POD	<i>How as banks, can you assist us at least to be present there? Whether you know you can set up, you know, a mobile facility that you know at least ensure that people can bank. Kyc, you know, build credit, they can loan this and the other when you've got a small tender to supply books. Or, you know, stationary and the likes, these people, you know, they can go to the bank, have an overdraft and then buy this and supply. At this stage, these people are unable to take part in, this space. So unfortunately, the banks, as</i>

	<i>you know, you are choosing the better the branches and the likes. They said no, no that we cannot do. I spoke to the HOD, or finance and I said no you need a fintech you know solution for some of these things identify and use why.</i>
<i>PPH</i>	<i>Yeah, that's what is done within the Indians, the Muslim, the Jewish communities. They form families within their own. But the challenge with them is that they don't want any outsiders. As for us, for the automotive, it is acceptable.</i>
<i>PTS</i>	<i>There is a challenge that they still use even cash to a greater extent. They people who are selling mangwinya (vetkoeks) and not because they don't want to, but they do not have those you know facilities and Apps.</i>

5.3.4.2 Cross-group analysis of Financial Inclusion

The financial inclusion is widely expressed as challenge in the South Africa amongst all the groups of the SMME, where a responsibility of solving this challenge, the groups pointed to the Banks having a pivotal role in eliminating financial exclusion. The Telecommunication group though not directly affected by this challenge, they view that Banks have a material role in that every business that is registered, it begins with the bank account. This data intelligence can be used matched or mapped or incubate the small business to matured business using a kind of incentive towards the matured businesses.

They further make accessions that established business in South Africa some of them are run by “cartels”, in other words you must belong to the group, other businesses are run religion, you must be a Muslim to get to the circle of business or Jew, these are exclusion that are limiting to opportunities for SMMEs.

The Construction and manufacturing group run their business with cash, where a credit application facility from the Banks has been declined due to the reasons like “lack of consistency in income” in the SMME’s bank account contributes therefore, the SMME becomes dependent on cash to sustain the business, pay employees. The cash way of running the business is disadvantageous to the SMME owner because there will be no credit history profile for future credit and therefore the cycle of lack credit facility will continue.

The credit score requirement is central to lending, and financial institutions draw a credit report on your behalf to verify that you can manage your obligations. All financial institutions will first verify the financial conduct of the client from credit bureaus, to decide your credit profile. Therefore, a credit report of the SMME owner or the any client will be generated by the Bureaus with the with a specific score that shows your risk level, ranging from low-risk clients—showing that you manage your credit very well—to medium and high-risk clients, which refer to those unable to handle debt correctly. As a result of this credit rating, the Bank

denies the credit application. All the SMMEs' group have attested to this challenge that a duration of 30 days must lapse before client's name or SMME can be cleared from the credit Bureau, therefore in this period owners of business cannot obtain credit from the Banks or obtain the credit at a very high cost.

The Financial services group provides the services of creating financial statements and management accounts for the other businesses, and therefore this group experiences the financial exclusion first hand with clients. They experience clients who struggle to obtain a credit facility, clients who cannot obtain overdraft facilities for their business, due to the lack of financial statements and the compliance of the Banks. Therefore, the absence of fintech solutions of the SMME magnifies the challenge of growth and financial inclusion of the SMMEs in the economy. The Farming group dilemma is the financial exclusion of the rural communities, according to this group, the residents in rural areas are still using cash as means of payment and transactions. The reluctance of financial institutions like Banks to bring ATMs in the rural communities further keeps those communities underdeveloped.

5.3.4.3 Conclusion of the group analysis of financial inclusion

Therefore, the financial inclusion for the Telecommunications group is different due to the level of exposure the SMMEs is operating on, this group of SMME owners are not struggling with Fintech capability, information asymmetry, they are struggling with financial exclusion in business opportunities which appears to be limited to either religion, or family ties as alluded earlier. The Construction and Manufacturing financial inclusion is related to access to credit facility, bank accounts within the financial institutions. This group of SMMEs owners are struggling to the entry level of financial inclusion, which will be similar with Farming business owners where they businesses is funded from cash basis, which is not sustainable. The Financial services group financial inclusion is quite different since they are solutioning their business clients with financial statements to participate in the economy. If their business clients are able to be funded by Banks, there will be a flow in the economy, there will be job opportunities created by these businesses.

5.3.4 Research question 3: Theme 4: Financial literacy

5.3.4.1 Evidence of Financial literacy

PNG	<i>But if we don't have that knowledge or understanding, then most of the small businesses it's hand to mouth. So, it doesn't have any impact that the country or the government wants that as small businesses we contribute to the economy.</i>
PNG	<i>Look I don't know. Maybe people as well. We are easily intimidated by some spaces. walk into and remember this financial education as well. I see is not all of us who are really u know it. A friend of mine says engineers are not good financial managers. There's that space as well. You know, we want to operate businesses, but financially we find ourselves very lacking, you know.</i>
PAK	<i>Somebody must just take this initiative to say if you if you want to apply for finance, what are the key critical elements? Because most of the people, they don't know they end up blaming government, they end up blaming financial institution. Somebody just wants to sell some sweets and then he wants to be financed with the million rent he doesn't understand.</i>
PNE	<i>That's why you get a lot of tenders failing, because when somebody gets the tender, instead of looking at what is in the budget for this project, they start spending the money before they buy the relevant materials and tools for the trade. By the time you realise that You are supposed to be starting the project, you've already spent a lot of money that you were not supposed to spend.</i>
POD	<i>There's a capacity of skills. And I mean, the skills gap in terms of the people that are doing the development programmes. I think there's also lack of understanding, you know, but it's a progressive thing.</i>
PSA	<i>They should be a bigger incubation now approach. By either banks or government they must make it easy for new business entrance, even if you are not new.</i>
PGL	<i>We need that financial literacy to say when that R100 comes in, it's not yours. Maybe out of those hundred rand, 80% goes back business and you can use only R10 because you still have to pay the people you still have to buy paper.</i>
PSI	<i>Well, you know SME's, it's quite a very challenging space. Many businesses fail because they lack the right tools. And the right advice. You know, because in all of this you would have a lot of them. Lacking understanding of how like something like Value Added Tax works.</i>
PJO	<i>Whether from the private sector or the public sector, what is important is to close the gap in terms of education and awareness.</i>
PNG	<i>You will know what the risk are involved. You will know whether the business is sustainable. Is it going to pay itself because you will not get just getting money for free at the end of the day, you must pay back the money.</i>

5.3.4.2 Cross-group analysis of Literacy evidence

The Construction and manufacturing group made assertions that there is a skills and knowledge gap amongst the SMMEs where including the other expertise that is lacking amongst the SMMEs owners. The group are engineers by profession and running a business requires business acumen, which they shared the frustration of lack of necessary skills.

The need of training the SMMEs owners to “run the businesses as business” as shared by the Petroleum group, they are sharing the same sentiment of the skills gap. However, someone must take the responsibility of training the SMMEs, either the private sector and or public sector. The Petroleum group has not been affected directly however they group is not oblivious of the general needs of the SMME’s.

The financial literacy and job creation in any society are anchors of growth and sustainability of the economy, as mentioned by the financial services group. This group offers financial services to other small businesses from financial accounts to management accounting. They are experiencing first hand challenge of other SMME’s that are struggling with understanding of their business financial records; therefore, the challenge needs a collaboration between private sector and the government.

5.3.4.3 Conclusion of analysis of Literacy evidence

The Financial services group has a similar view that financial literacy is a societal challenge in South Africa, agreeing with the Telecommunication group that private sector or public sector to take a lead in putting the plans to upskill the SMME’s in understanding the basics concepts of running the business. This view is also similar with Petroleum group in that SMME’s understanding should be elevated to business literacy that the borrowed funds are not for free, when the government or the banks who lends funds to them, they expect a return on investment, they expect accountability. There were no differences amongst the group participant in relation to the need that SMME’s owners needs upskilling in the way they run their businesses. The big question remained the Who will take the Lead?

5.4 Research Sub question 3

How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses?

The section will for focus on the themes that are related to research Sub-question 1, the original conceptual framework had only two themes, the data findings has emerged two new themes that will be discussed according to the evidence on each group of the participants.

List of concepts from research sub-question 3

Themes	Telecommunications group	Restaurant	Petroleum group	Construction and Manufacturing group	Farming and Farming Stay group	Financial Services and Consultants group
Payment solutions	Detect fraud easily, Online services Ease ERM solutions	Digital gateway	Payment gateways, speeds point, online services	Transactional banking	Collaboration with Airbnb, banking basis, Quick services	Making payment easy, speed points, online services
Business communications	Bandwidth SADC	WhatsApp, TikTok, Social media			WhatsApp, Products Catalogue, bank details	Mobile phones SADC
New markets	Artificial intelligence ideas, global trading		Exposure of global markets, Network opportunities		Booking.com Airbnb	
Low cost	Saving costs, Real time data		No middle management	Good quality		Saves time, quick reporting

5.4.1 Research question 3: Theme 1: Payment solutions

5.4.1.1 Evidence of Payment solutions

PHJ	<i>I think from what we have seen, our expansion and growth has been to try and get into other African countries. And we are using payment tools and payment methods that FNB have on their platform, like your Forex, payments and so on. So, we are finding it seamless also to turn monies around that are coming from foreign countries, which is also helping us within the markets and areas that we are playing. I mean we have received payments from Malawi; we've received payments from Namibia, we've received payments from a lot of these African countries. But that's also because of the fintech.</i>
POD	<i>I think the fact that you can access your statement at your fingerprint that will be OK. I don't need to go and sit on the computer for me to do either payments or any other things.</i>
PNG	<i>Remember, there's an invoicing system in place, which generates invoices and handles payments. This system allows me to create a receipt when someone pays.</i>
PNG	<i>I use it a zero platform. So in in a, in a zero in a zero platform you can manage your debtors manage your creditors you can manage your suppliers, you can invoice you in one platform you press a button I can get my financial statement because its cloud based.</i>
PHJ	<i>I think the start of payment for Sage is about R15,000 to R18,000. They, that lady suggested SAGE she said please link it to your banking</i>
PSI	<i>I'm sorry I have got an experience for every single bank because with ticket host what we do initially we would brainstorm and do studies to say what is the easy cause my thing was let's rather avail only the easiest method to make payment because we've got all of them. We've got Nkuru, we've got Apple Pay, Samsung pay, Mobicred you name them RCS. We've got all of them. But I'm saying it doesn't help to have of them, if they are complicated</i>

PSI	<p>Yes, yes and how I do it is whatever advice we give or that we provide in, some of the clients I said to them, look, you've been our client for a very long time. We've got an SLA with you, but since you you're taking additional time out of what we've agreed upon. Here's a link. Just enter out whatever amount you want to enter there and pay us. That's it, you know, and the link is..... you to enter a figure and then pay us a consulting fee. And that link was built using Chat GPT. But just to be just to be practical, you know, so. So, I'm I think the Pay Fast services we've really enjoyed them.^[56]With because they allow us to have access to cash advances, which the repayment method is what we would really enjoy.</p>
PGL	<p>But on the farm stay, which is why I'm focusing on, we're using a lot of that because I'm piggybacking on the service providers that I'm using. I have an assigned to Airbnb and ebookings.com. So, they handle all the financials for me, which is excellent, and it which is what is helping my business to grow. Now what happens is when a customer makes their booking. On the platform they book, they confirm the dates they pay. Then once they've paid, that's when bookings.com will send me an e-mail to Alert me of the booking and if I'm happy with the booking.</p>

5.4.1.2 Cross -group analysis of Evidence of payment solutions

There is a significant difference between the SMMEs' groups that were sampled in terms of exposure in the use of Fintech payments solutions. The similarities of all groups is the basic use of bank related services to transact, however the Telecommunications group, the Petroleum group and Financial Services group appeared to be advance in knowledge and experience in using digital payment solutions. The Petroleum group difference that has an advantage is based on the basis that these businesses are franchises; therefore, the Franchisor incubate the franchisee and provide systems that enables the franchisee to succeed. The Telecommunications group, they are also product providers of some of the payment systems like Samsung Pay, PayPal, Nkuru, to their customers who are smaller SMEs to them. The services like Forex are received funds from abroad has been made possible by the digital payment services, the ability to trade and pay and receive goods and services came very strong from the Telecommunications group. The Financial Services group they are using digital payments for receiving payments from their customers. These digital payment solutions have become a necessity in their business operation efficiencies.

The Construction and Manufacturing Services appear to be using the digital payment solution for basic banking solutions of receiving and payment to their daily transactional, also they suggest the prevention of fraud. While the Farming and Farm Stay has leveraged on payment platforms through the collaboration with Airbnb where clients can book online and pay online the booking, and the funds are transferred to SMMEs. The participants groups cited the convenience that is brought by digital payments solutions is immerse that you are able to make digital payments abroad or local at anytime and anywhere.

5.4.1.3 Conclusion of the analysis evidence of payments solutions

The participants groups are all similar in the use of the digital payment however the difference is the degree of usage that is dependent on the exposure of Fintech services. The degree of usage is demonstrated by Telecommunications groups and Financial Services groups in the services that they offer to other businesses. The benefit of payments solution, it keeps the record of every transaction that took place, receipts and payments. If the payments systems are linked to the software in use by the small business, all the payments and receipts will be collated, and it will be easy to compile the financial statements books that are required by the Bank when the credit application is made. The Petroleum group difference that has an advantage is based on fact that these businesses are franchisees, therefore the Franchisor incubate the franchisee, and provide the necessary support systems of Fintech. SMMEs owners in a franchise model have an added advantage in Fintech business support by virtue of the built-in business model. Franchises like Engen, Total, and Sasol petroleum businesses have designed structured packages with ongoing support. That support has developed to encompass the digital Fintech capacity in all aspects of the business. The disadvantage of Construction group and manufacturing groups, Farming and Stay cabin, is the cost of acquiring the financial accounting software services, the above groups use the digital payment systems is limited to the transactional activities.

5.4.2 RQ3 Theme 2: Low Costs

5.4.2.1 Evidence of Low cost and Time efficiencies

PSB	<i>Aspect of our operations; we upload data, information, we do site visits where we do audits of the sites, we take pictures and we are able to do these things on platforms and applications online, yeah, which also helps us again once again took save costs.</i>
PAK	<i>So, we have these tools that we have used to try and improve the business and to make our lives easier. It has also helped us to actually not that we don't want middle management, but you save costs because now you don't have as many middle managements people.</i>
PHJ	<i>Real time data is very important because when you want to interact with other stakeholders, it could be service providers and all that they would want to see your business viability and how can you demonstrate that you will use the data that is at your hand.</i>
PPH	<i>It is not only volumes but quality also, because if we do it manually, people that will be doing the bricks in the morning, they have energy right towards lunchtime, they're tired. So how are they going to compress it so that your quality is the same throughout?</i>
PSB	<i>Is efficient because I can see my credit scores; I can manage my credit scores so that it allows me to apply for a property that I like. Right now, I have applied the programme</i>

	<i>through the banking app, and everything was approved through the banking app, so it is definitely efficient and effective.</i>
<i>PMA</i>	<i>I mean they need management accounts they need you know information to make a quick decision and that those have been very useful. They're very key and also, they make it easier. Because, I mean, if you are keeping a manual system information gets lost, invoices get lost in a whole lot of things. But if you have a system that's online when it's time to produce a report, it's literally a click away.</i>
<i>PNE</i>	<i>Technology now to convert that saves time, it saves us money because we were going to have somebody to do that.</i>

5.4.2.3 Cross group analysis of the Low costs and Time efficiencies

The Fintech services has been a saving cost component in telecommunications group by enabling time efficiencies of uploading content while on visiting sites. This is also similar with petroleum group; every business seeks to reduce costs. The Fintech services of communication has reduced the cost of hiring extra management layers in petroleum group.

The reduction of running costs in the SMMEs environment is a main objective to improve profitability. The efficiency of Fintech in providing in time real data, is not a time saving mechanism only, but it is saving costs, because it saves costs of travelling to different stakeholders.

The groups are similar where Fintech service is used to save costs, the construction and manufacturing has implemented the automation of making bricks which has reduce the time it takes to produce volume and to provide efficient. The participants in construction group alluded that their workers especially after midday, they become tired, and sleep during the working hours. The automation of bricks it is the saving costs analysis. The financial service group has the same similarity with other business groups about reducing time and costs by also automating the reporting of financial management report for their industry.

5.4.2.3 Conclusion of the analysis of the low costs and time efficiency.

The Fintech services of telecommunications group, petroleum group, financial services, the restaurant services, constructions and manufacturing group have demonstrated the saving costs provided by Fintech. The benefits that came from Fintech from different sectors are as follows; the real time data, saving time, increased productivity, reduced middle management, quick reporting, were and lastly the must have customised services of saving costs time efficiencies' that is relevant for each group. Therefore, there were no difference in these participants groups except the fintech services that is employed by each group sector.

5.4.3.RQ3 Theme 3: Social media impact on SMME's

5.4.3.1. Evidence of social media

PSA	<i>If you want to go global for now, the Sky's the limit for us. We have TikTok. I mean, we had a function 2 weeks ago at 21st. We on TikTok only we had over 20,000 views. People that viewed and liked the thing, you know I know it can be quiet. Effective, in fact, for us without WhatsApp, I don't know how. How would we survive?</i>
PSA	<i>Hey once the invoice has been received it should be posted on the admin and finance, and they'll be indication that this is the new stock that must be processed. So, they are not all over because if you receive them by e-mail. Tracking them becomes your sole responsibility, while if it's on a WhatsApp everyone can see and action them.</i>
PGL	<i>That's way for me during COVID that's when because now we started using Apple, WhatsApp where people could make the bookings online. I need 30 trays of eggs I need. A sheep. I need chillies, you know, they would use the WhatsApp platform, but now with WhatsApp business it's actually good because now we have those automated</i>
PSA	<i>We use WhatsApp a lot for the for the for the restaurant business I also use WhatsApp even for Consulting in the work that we do in the consulting we work in different projects.</i>
PSA	<i>WhatsApp is really been instrumental. Honestly, it's not a joke. You know WhatsApp is good.</i>
PGL	<i>You have your catalogue; you list all the products that you are selling. So, with me mostly when people want to book. Then they want to order food so or they want to order massages because we have a mobile spa lady that comes if they there's a need for that. There's a menu they on our WhatsApp catalogue. They will check and say I want this, then they get the banking details, I send them the banking details then they pay before coming.</i>
PAK	<i>Boarding data centre infrastructure but we are able to use all these platforms for communication and just to speak to our clients with the customer and our engineers, everybody is, you know, transparently everybody gets the information timelessly on one platform.</i>
PNG	<i>And then you start to see some other space of how you can opportunities of how you can network in your networking. You can participate in spaces that we have never thought of. Yes you engage with global people.</i>
PNG	<i>Because it's all about Sell gold. Gold. You sell the same as petroleum. You can sell. as petroleum. You can sell chickens is the same as petroleum. But the good thing about Fintech is that it just exposes you to different markets and then you can sell anything.</i>
PNG	<i>Remember, once you use that thing(Fintech) it exposes your business to because you will be in a particular platform so in in that platform you see networking and then in your networks and then you start to understand that your business can grow to other countries, maybe in the neighbouring countries, where, if not, it can go globally.</i>
PGL	<i>So, you see, there is excellent, especially in, I won't say much about the Farm Stay because the Farm Stay is sorted, by Booking.com and Airbnb platforms. The marketing for me is sorted and I mean I had guests from Netherlands. So, we global there, I don't have a problem so.</i>
PGL	<i>The technology that is being developed now, it would be nice, and it puts us to play with the big players in the accommodation industry because now you Google Caleb's farm cabins, you'll see all the accommodation across Potchefstroom. You know where you have your big hotels, you then they classify as the ratings we get.</i>
PNG	<i>You know you can sell anything. You can sell anything, and the good thing is that it expands your thinking, so you are not in an in a comfort zone.</i>

PGL	<i>I have planted 300 trees of Pomegranate, so I want to do pomegranate oil. I also plant garlic, so I want to do garlic oil as well, you know? So those are things that I want to be exploring and for me that's where the global aspect now comes in. Because oils, you can transport the lifespan of it is not like when you're transporting a meat or the actual.</i>
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5.4.3.2 Cross group analysis of the evidence of social media impact on SMME's

The Restaurant Services is heavily reliant on WhatsApp use of communication between managers, front line staff, and supervisors. What is demonstrated is that it can communicate even to communities where the business is resident. In the entertainment business, which includes Chisanyama, which consists of booking DJs, ordering meat and drinks, and changing staff shifts, WhatsApp is used extensively to communicate operations and attract new clients. The Farming Stay business, which is hospitality industry, the participant shares insight that the WhatsApp tool allows businesses to post their catalogues and the bank accounts for clients to pay. The Farming Business was propelled forward during COVID-19 using WhatsApp user-friendly to customers when there was restricted in movement. However, the tool has since been upgraded to include more features, such as a catalogue, placing orders, and informing customers about prices. The Restaurant Business and Farming Stay business are quite similar on how they attract the clients and communicate with their entire operation.

The petroleum group has been shared insights how Fintech created a platform of growing to neighbouring countries, they attest that if you can distribute petroleum, you can distribute gold or rather anything as mentioned by one participant. The group also attested that Fintech creates opportunities on network to grow one's business, you can engage and exchange products within your networks. Opportunities of growth and expansion in global networks are limitless, furthermore the group suggest that Fintech expand your thinking, endless opportunities.

Fintech has removed geographical barriers according to farming and farm Stay group, access to the markets like Booking.com and Airbnb has been opened through Fintech, that clients globally can still find accommodation offered by SMME in South African through the platform created by platform, a testament of clients from Netherlands stayed in Farm-stay business of the SMME. The Financial services group share light of banking everywhere locally without going to branches, this has been made possible by Fintech opportunities brought to Banks.

5.4.3.3 Conclusion of analysis o social media impact on SMME's

It is interesting how SMMEs have evolved in proactive communication with existing clients and attracting new ones using WhatsApp, TikTok, most social medium platforms This is

prevalent in the hospitality industries, where advertising, marketing, also distribution of products and services. However, the Telecommunication groups and Financial Services group have similarities in communicating with cross-borders clients due to the industry that they operate in, and their international customers. The Petroleum industry's perspective on business communication has been improved through the secured data infrastructure that the seamless communication on all levels of management be achieved and reduces the layers of chains of management. This is effective as the message does not lose meaning and reached the intended users on all levels.

The analysis of the cross group has proven that Fintech has opened access to new markets to the SMME, through the artificial intelligence, through exposure to global trading, and the network opportunities, however on different degrees of exposure relevant to the product that the SMMEs is offering, and secondly to the degree of the technical exposure to technology. This evidence from the quotations that came through from the Telecommunication group, these SMMEs are already trading in these markets, and this is like the Petroleum group.

The farming group has seen opportunities of growth in farming and exporting the pomegranate oil, however in progress. The new market is found through the Booking.com on the Farm Stay that the SMME is running along farming. The group of construction and manufacturing and the group of restaurants have not demonstrated opportunities in new markets, the construction group in fact suggest that you must be in person when you are in construction.

Chapter 5 Conclusion

THEMES	Similarities between Groups	Differences between Groups
P2P Lending Platform	<ul style="list-style-type: none"> Lending platform expensive for SMME's 	<ul style="list-style-type: none"> No Trust from SMME's
Traditional Banks	<ul style="list-style-type: none"> Banks leading role in training SMME's 	<ul style="list-style-type: none"> Harsh requirement to new businesses
Government role	<ul style="list-style-type: none"> Good initiatives by government-agricultural dept Inefficient processes Manual processes Lack of visibility 	
Collateral	<ul style="list-style-type: none"> Finance group and Telecommunication did not require collateral. 	<ul style="list-style-type: none"> Construction, Farming denied access to funding due collateral

	<ul style="list-style-type: none"> • Franchisee models funded by agreement • Eliminate Debts 	<ul style="list-style-type: none"> • Funded based on history of legacy • Bank Compliance requirement
Information disparity	<ul style="list-style-type: none"> • Exposure to Fintech service • Access to credit facility • Quick and efficient • Real time data 	<ul style="list-style-type: none"> • Lack of exposure • No financials statement • No access to loans
Financial literacy (new)	<ul style="list-style-type: none"> • General societal challenge for SMME's 	<ul style="list-style-type: none"> • Rise in tenders' systems • High number of failed businesses • Hand to mouth -
Financial inclusion	<ul style="list-style-type: none"> • Financial inclusion should be pivotal in the agenda of Banks. • Banks rich in data of all SMME's new and established 	<ul style="list-style-type: none"> • Credit bureau length of time • Exclusion by Religion • Size of the SMME's matters for lending
Payment solutions	<ul style="list-style-type: none"> • Online services • Ease of use • Speed points machine 	<ul style="list-style-type: none"> • The degree of usage demonstrates technical expertise • Built in systems in the franchisee model
Business communication (new)	<ul style="list-style-type: none"> • Geographical barriers broken • Communication seamless on all levels 	<ul style="list-style-type: none"> • WhatsApp communication tool • Entertainment • WhatsApp catalogue
Low costs and time efficiency	<ul style="list-style-type: none"> • Quick reporting • High volume of production • Saves time 	
Operational efficiencies	<ul style="list-style-type: none"> • Social media impact on the SMMEs 	<ul style="list-style-type: none"> • Geographical barriers removed • Best practices • Increased visibility • Competitive advantage

CHAPTER 6: DISCUSSION

Paragraph 6.1

The chapter will present findings with the existing literature. That is a comparison of the finding in Chapter 5 with the literature as discussed in chapter 2, ensuring a coherent and organized approach. This process is simply the discussion compares comparing the similarities and differences of the themes from the findings and literature.

The process will start with recap of the findings of each theme and then a recap of the literature for each theme. Thereafter a discussion of findings will be contrasted to the literature review. The process will use the 10 themes as discussed in Chapter 5 from findings to the literature review. Another layer of process will be overlayed where there are new themes that have come from the findings. The process will follow an organized, congruous and duplicate way, as discussed as follows:

In Chapter 5, the findings there were emergence of new themes that were not captured in chapter 2 of the literature review, and thereafter the comparison of similarities and differences will be discussed. Where there was emerging themes from the findings that were not found in Chapter 2, the researcher will conduct a new search of the new emergence theme in a Three-Way Process to look for more literature. The process will not be fully comprehensive however will show what the systems used by the researcher to search in the literature if the theme is existing already, and or if the differences are not existing, it will be on considered as a possible refinement to the existing knowledge.

The process will follow these three steps:

Level 1:

Choose three top scholar articles from the literature in Chapter 2, conduct a search the word of the theme that have identified in the findings, but which was not found in the literature review.

Level 2:

When the theme cannot be found in level 1, the process will further select the from the existing literature the three top scholars. Where the researcher will undertake to search the theme in the literature published by scholars in the last five years. If the researcher finds the literature on the new theme that was searched, an analysis of literature and findings will be conducted to determine if there are differences and or similarities in the new theme. Where the literature is not existent in this step, the process will continue with level 3.

Level 3:

The researcher will search for a key word using the construct of the theme from the top journal that are currently being used. If there is literature relevant that is found, there researcher will conduct the analysis of literature and findings for similarities and any differences.

If there was no result found, this will be considered as a potential contribution or a potential difference in the body of knowledge. The study will state the words that were used on for each of the above steps.

If there is an introduction of a new literature on any of the above steps, the literature will only be discussed in current Chapter, and the reference list will be updated.

6.2 Research sub-question 1

6.2.1 Theme 1: P2P Lending vs Traditional Banks

6.2.1.1 Recap of the findings of the P2P Lending vs Traditional Banks

The findings from the P2P Lending vs Traditional Banks, have brought out insights from the Telecommunications group that were asserting similar views with the financial service group in that the Banks have an ability of offering the training the SMME's to be aligned with the Bank's compliance. By virtue of their exposure to Fintech services, these groups are similar towards their views towards the P2P lending platforms, that they are providing least services to the SMMEs, more than growing than empowering themselves.

All the participants, the Construction and Manufacturing, the Petroleum and Telecommunications are similar that Banks should take leading role in collaborating with other stakeholders to incubate the SMME's in the country due to the advantage of information that the Banks has in its possession. The Telecommunication group did not struggle with obtaining credit from the Bank due to its size and exposure to Fintech, this experience was different from the Construction and Manufacturing groups, and the Farming and farming stay.

6.2.1.2 Recap of Literature on P2P Lending vs Traditional Banks

Li et al. (2024) analysis focused on the effectiveness of Fintech system in reducing costs for the smaller SMEs other than the larger SMEs. The analysis found that the size of the amount

of debt that the SME has been granted by the Banks against the interest charged on the debt was lower to the costs of acquiring debt, this measure gave an advantage to smaller SME's of acquiring debt and preference with the Banks.

However, Thakor (2020), analysis had a different angle on the Fintech services where the intermediaries' measures were created in managing the competition between the Traditional banks and the Fintech lending platforms that have emerged in financial industry. Thakor (2020), argues that the emergence of P2P lending platforms created competition in the financial industry, the strong trust relationship of the clients, SMEs with traditional Banks, was instrumental in winning the market. The study further focused on whether P2P will take away the lending market of the SMEs from the Banks, and to what extent that shift of the market will be. The conclusion was inconclusive in whether P2P will take the market from the Banks.

Sheng (2020) also shares the operational challenges facing the SMEs in producing a collateral during the lending processes. The study further shares some insights on challenges of finances this was caused by the preference the Bank has of the size of the SME. The traditional banks preferred to lend to bigger SME's companies than small SME's due to risk appetite the bank would have. In Sheng analysis, Bank believed that small SME's have a high default risk than the large SME's and hence they would prefer to lend to the larger SMEs. Subsequently, the Banks believed that large corporation have built a strong credit history over time, and the SME company have built capacity to repay the loans.

6.2.1.3 Discussion of literature and findings of the P2P Lending vs Traditional Banks

The findings insights from the study are very clear that SMME's owners are constantly challenged with information asymmetry, where the small business does not keep a proper recording of the financial statements. As the result of lack of financial statements, the Banks become reluctant to lend funds to the SMMEs owners, without track of the financial statements. The first concern from the Banks will be lack of proof of the affordability of the SMMEs owner, the second concerns for lenders will be small business will not have a credit record and therefore does not provide confidence that the business has a capability of repaying the loans.

The two above insights from the scholars such as Sanga and Aziakpono (2023) are similar with the SMME's owners in that this is a traditional challenge of the SMME's of not keeping the proper management documents as required by financial institutions. Sheng (2020) in their review had analyzed the information disparity as challenge that the SMMEs has been struggling with, especially the SMME's who have not collaborated with Fintech services. Over the decade, the analysis from Rehman et al. (2023) has claimed how Fintech services have impacted the Banking services to solve these challenges.

The introduction of Fintech services in the banking industry was first confronted with resistance and later collaboration from the Banks, according to Rehman et al. (2023), this collaboration has led to the innovations such as mobile banking, as well a financing method such as peer-to-peer (P2P) lending, crowdfunding, and cryptocurrency.

In the research findings, participants had been exposed to the Fintech services such as payment services, mobile payment, digital wallets, and other electronic transactions, except the P2P lending market. Therefore, the telecommunication group participants evidenced that Fintech services had been a seamless process of producing financial statements, proper documentation of compliance as required by the traditional banks, and therefore they had received loan from the traditional banks. However, the other part of findings of the participants who had not been exposed to the Fintech services, did not have a proper financial statement, the challenges of incoherent document continued, and they did not receive benefit of seamless flow of comprehensive documents as the result a continued struggle with the bank document requirements continues.

The Chinese market is the leading market on Fintech services, Jiang et al. (2021) with the P2P lending market valued at \$140 million. Sheng (2020) reiterated how fintech has improved the credit application process over 217 observations, specifically regarding the accurate information of SMEs, thereby reducing the tension between banks and business owners. Fintech has increased the number of channels for alleviating bottlenecks and creating speed in “credit evaluation.” Finally, they studied how “risk assessment” was simplified due to the use of Fintech capability.

However, the South African P2P size of lending market was \$1.61 billion in 2024 projected to grow by 19.62% for the period of 2025- 2033, which is lower than the Chinese market, and the findings from the participants had an opinion of difference and they have not been exposed to the P2P lending market. In the research findings the participants did not have exposure to the P2P Lending markets, therefore they did not find value in borrowing in them, in fact they have suggested that lending markets are lending to the SMMEs at a very high costs, one the participants referred to the P2P lending markets as “loan sharks” alluding to them as disempowering to the SMMEs owners.

6.2.1.4 Conclusion of the literature and findings of the P2P Lending vs Traditional Banks

Based on the literature and findings of P2P Lending and Traditional Banks, there are similarities that the Fintech services provide seamless process of creating financial documents and compliance required by the financial institutions such as Bank. According to Fasano and Cappa (2022) literature suggest that the components of Fintech when employed

by SMME's owners enables to standardized information quickly and efficiently on SMMEs, reducing time it takes to produce financial statements and the limitation which is critical for the loan application decision-making process.

However there are difference in findings and the literature that P2P lending from the experience of the participants has not found to be benefiting the SMMEs, which the literature according Sanga and Aziakpono (2023), Fintech P2P as an alternative lending platform to traditional banking, which has opened a wide gap in knowledge of how banks can use Fintech as a fintech capability to financing of the SMMEs owners.

6.2.2 Theme 2: Government role

6.2.2.1 Recap of the findings of the Government role

These findings that was derived from the government role is that there is an agency that handles the training and funding of the SMME's owners in South Africa which is called Small Enterprise Development Agency SEDA and Small Enterprise Finance Agency (SEFA) which were merged on 1 December 2024 to develop SMMEs. According to Telecommunications group these agencies have not clearly articulated the funding process and funding requirements to the SMMEs owners. The poor administration and lack of accountability of the entire funding process to understand how many SMMEs funded by the government was cited by the group as concerning, the lack of database of the SMMEs is another major concern, where the national database of the South African SMME's is non-existent. The Finance group also mention the lack of footprint of government agencies across the country, the automation of the application forms in government agencies leads to the inefficiencies and lack of funding.

There are good farming initiatives from the agriculture department, which is echoed by Farming group, the department has given farmlands back to the communities, as part of government redistribution of land reform Section 25(5) of the constitution. However, people who has received these farms, the findings suggest that they did not have farming experience, which led to them laying wasted and idle. Therefore, what seems to be lacking is proper training and coaching of the new farmers. Some farm-lands in rural areas lay waste unutilised due to lack of funding to rural areas, then urban areas.

The Construction and manufacturing group's perspective related to funding to the SMME's owners, the group recommended that security that is required financial institution must regulated by the government. The surety as a guarantee for loan is a limiting factor to the innovation and creativity of the SMME's. Another recommendation is cybersecurity should is a risk that must regulated. The South African government has launched its first regulatory

sandbox, the Intergovernmental Fintech Working Group (IFWG) in 2020 which is responsible for regulating the Fintech innovation in South Africa.

6.2.2.2 Recap on Literature of the Government role

Giglio (2021) provided the global regulation view on how the developed countries are handling the Fintech regulation, the US showing as 1st world country demonstrated an atomized regulatory framework of Fintech and sandboxes. While China has a thriving in the Fintech market, Bu et al. (2021) had a rise in non-compliance of innovation with threatened the governance and regulation of the Fintech industry market. The government of China had developed the mechanism to manage the non-compliance by revising the rules and regulation in the Fintech industry. While study emphasised the significance of compliance, China was careful to create a balance between risk that was brought by excess innovation and the protection of the rights of consumers.

Jiang et al.'s (2021) brought a different perspective on regulation of P2P and the funding of the SME where government have close relationship with P2P or Small business, those businesses tend to have better operational efficiencies, improved rates for lending to the SME's, they also obtain access to credit easier than business that are not having close ties. The study cautions on how the SOE businesses can have adverse outcome in the economy when the relations are not professionally managed.

6.2.2.3 Discussion of literature and findings of the Government role

The research findings are similar with literature where the government should be playing pivotal role in supporting the development the SMMEs, training them and putting the infrastructure. The South African government has put together a policy to improve the efficiencies for the SMMEs, though it's in a planning stage as stipulated below in this document:

SMMEs and Co-Operatives Funding Policy for South Africa (2023), and they are summarised as follows:

- “Improve coordination on the SMME financial opportunities ecosystem by establishing a National Coordination Forum, which will be led by the Department of Small Business Development (DSBD).
- The Department of Small Business Development (DSBD) will measure the Database of Small Businesses.
- Targeted funding instrument for SMMEs and Co-operatives, partnering with credible institutions

- Improve Business Development Support by implementing the SEFA-led Incubation and Business Development Service Policy. The point of measure will be the South African Financial Inclusion Policy.
- SEFA is leading the effort to de-risk SMMEs' finance through credit guarantees by implementing the Incubation and Business Development Services Policy”.

The above research finding is similar in literature where Chinese government has facilitated the knowledge of sharing, provided digital infrastructure to support regulatory compliance to create an environment for the SMMEs to thrive for business where the local government has subsidized SMMEs' stock market listing. It demonstrates financial infrastructure in which the government shows a political will to support SMMEs (Thakor, 2020). The similar views are shared by Sanga and Aziakpono's (2023) where their analysis provided insight about the Chinese government sought to promote collaboration among emerging markets through the recommendation of “Introduction of regulatory sandboxes” for compliance and sustainability.

The difference in literature for Fintech framework, the Chinese government is well advance in developing its framework and regulation for innovation and databases, SMMEs financial markets while the South African government is in planning stages in creating database for an example for the SMME's.

The research findings also found that the lack of connectivity infrastructure in the neighbouring countries hinders the productivity intercontinentally, another the finding in relation to connectivity in the SADC, that the legislation of the countries fundamentally differs on the even though the countries could be using the same Telcos, which is an inhibitor to the collaboration and trading across the continent. If South Africa has strong connectivity infrastructure, while the neighbouring countries struggle with fibre, bandwidth, and Internet connectivity, it will hinder productivity.

The literature again is similar with the findings that infrastructure of the neighbouring countries is significant for trading and for collaboration, this is testament in literature where Sanga and Aziakpono's (2023) the government put together tax incentives to attract large corporations to collaborate with SMMEs to participate in the digital lending market in China”.

The enforcement of regulation is similar in literature with the research findings from Giglio (2021) who provided the global regulation view on how the developed countries are handling the Fintech regulation, with the US the 2nd country after China, showing an atomized

regulatory framework of Fintech and sandboxes, however countries are reviewing how strong their policies in relation to Fintech.

The scholar agrees on involvement and government in in Fintech regulation Chen et al., (2020) Chinese government reinforcing regulation in the Fintech P2P booming market to the protect the country's confidentiality, financial sustainability, and fair competition. The government of China developed the mechanism manage the non-compliance with revising the rules and regulation in the Fintech industry.

industry, the study concluded on the significance of the creating a balance between risk that The further findings in the research has noted that the South African government launched its first regulatory sandbox, the Intergovernmental Fintech Working Group (IFWG) in 2020, this is similar with the framework for Fintech and sandbox discussed by Scholar Bu et al. (2021) analysis of the emerging market China which showed rise in innovation with non-compliance in 2016 which threatened the governance of the Fintech has been brought by excess innovation and the protection of the rights of consumers.

6.2.2.4 Conclusion of the Literature and findings of the Government role

The research findings and literature revealed that there are similarities that government's role globally is immense when it comes to Fintech regulation. The researcher has highlighted the similarities that governments have be involved creating a thriving environment business, enabling environment for creativity, job creation and for attracting investors, and promoting collaboration between sectors. The regulation and policy are necessary measures that are used to promote compliance from the innovation, while enabling the innovators to be creative without invasion of the law. The regulation and policies also promote sustainability of the businesses created and protect the consumers from non-compliant innovation.

The differences were also mentioned that the Chinese government is well advanced in infrastructure for Fintech and the SMMEs, while the South African government has to make big strides to enable SMMEs owners to create jobs, and to enable Fintech services to reach the businesses on the ground.

6.3 Research Sub-question 2

6.3.1 Theme 1: Collateral

6.3.1.1 Recap of finding of the Collateral

The findings of the collateral brought out the interesting observation from the sampled SMMEs owners in that the financial services group, and Telecommunication groups, they did not need collateral for them receive funds from the Bank. The Financial service group indicated that their services did not require a startup capital due to servicing nature of the business, and

therefore no collateral would be necessary for them. The Telecommunication group also did not need a collateral however shared that the use of Fintech services made it easier for them to get funding from the Banks.

The need for collateral seemed to be sector related challenge, where the findings from the farming and farming stay, construction and manufacturing were indifferent because they were greatly impacted by need to provide a collateral as the requirement security to be funded by the Banks.

The challenge of not having collateral for the Bank as requirement for security compelled the SMME to self-fund their businesses and therefore brought numerous financial strains to them as businesses owners and to their families, and some the participants alluded that the SMME's owners had to live from "*hand to mouth*" without sustainability and hope to receive funding from the bank. Some other challenges alluded by the SMMEs owners, the lack of proper documentation of the business, lack of succession plan, no distinction of owner expense and the business expenses increase their challenges of not receiving funds from the financial institutions.

6.3.1.2 Recap of the literature of the Collateral

Eggers (2020) provided insights on the characteristics of the small businesses, and why they are prone to risk, the small business are small in nature in terms of size according to the number of employees they employ which is usually limited to 250, small businesses are limited in resources to acquire investment infrastructure and technology. They also struggle to be financed by the banks because the banks regard them as risky, by determining whether the SME business is recently created or if it has been in existence for longer or if the small business is pioneering in the sector or not. Which provides justification why Banks views small businesses risky, and why they would put harsh collateral for the small business. The review also shows the advantage of being a small business during a crisis such as COVID, the ability to make decision is quicker because the consultation is small. Another advantage of small businesses are mostly agile when it comes to take risk associated with innovation. Joensuu-Salo and Matalamäki (2023) is similar with Eggers (2020) in relation to the size of the small business and ability of the SME to acquire the Fintech capability for the growth of the SME's. The study argues that small SME's if they cannot afford Fintech capability they are impeded from growth when compared with the Big SMEs and therefore attribute the growth and performance of the SMEs to the capability to acquire the technology.

Surmanidze et al. (2023) is also similar with scholars on the pivotal role of the SMEs in the building communities, creating jobs in the communities, this is also similar with Ramudingane and Nkondo (2024) on the impact the SME's has in communities on they create jobs in the

communities, the focus of their analysis shed light on the importance of the all stakeholder to collaborate for the growth and sustainability of the SME's due to the impact to the communities. In the study, Surmanidze et al. (2023) makes reference that Banks have to create awareness on how SMEs can comply with their requirements to be granted loans, another stakeholder is the government by providing the guarantees to the SMEs when they borrow from the Banks, another critical stakeholder mentioned is Rural and development agencies which are always critical for rural and farming development.

There are similarities, Joensuu-Salo and Matalamäki (2023) that the SMEs are drivers of the economic growth across different geographical area, the US SMEs are subject to the similar conditions, the Asian region, China, are subject to the same conditions, Africa the SMEs are subject to the same conditions and therefore requires all the stakeholders in the society to collaborate more often.

6.3.1.3 Discussion of the literature and findings of the Collateral

The research findings shows that lack of funds for small business to acquire the Fintech technology services, impedes the growth, the expansion of their business, and the SMME cannot employ more people. The research findings also found that no small business should operate without the Fintech services related to that sector. A collateral is the means to obtain credit from the financial services; it serves as security to the Banks to guarantee them that the SMME. The research findings have brought out a different view that some sectors of the SMMEs did not need the collateral for their businesses, because they are franchisees, they further indicated that Banks borrowed them the funds they have required after they presented their financial statements. The challenge of the SMME for obtaining credit from the financial institution and Banks, is similar in literature as expressed by Eggers (2020) that the size of the small business and ability of the SME to acquire the Fintech capability inhibits the growth of the SMMEs. The literature further suggest that the Banks uses collateral as measure to protect their capital from loss as they regard SMME or small business as risky especially the small businesses that are innovative.

Other findings from the research were the collaboration of the stakeholder such as government agencies, rural development agencies and financial institutions must prioritise the development of the SMMEs. Governments should create infrastructure that would be innovative business to thrive, by implementing policies that removes the collateral and instead have government create a guarantee for SMMEs for the Banks to grant the credit. The findings also raise that the government through the agricultural development agencies developed of the rural farmers, that laid waste. This insight was similar to the scholars Ramudingane and Nkondo (2024), who said the SMME's contribute to the communities on

creating jobs, and the importance of the stakeholder to collaborate for the growth and sustainability of the SMEs due to the role of the SMME.

The research findings brought forth concerns that the Banks compliance process is "harsh" and stringent when it comes to the SMMEs and it is not always clear what are the requirements, the literature makes a similar point to the scholar Surmanidze et al. (2023) insights where the study makes reference that Banks must create awareness on how SMEs should comply with their requirements to be granted loans.

6.3.1.4 Conclusion of the Collateral

The literature review and the research findings have similarities that SMME require assistances when it comes to access to credit, because the collateral is a barrier to the growth of the SMMEs across global economies, as Joensuu-Salo and Matalamäki (2023) has discussed that the SMEs are drivers of the economies globally and the challenge is universal from the US SMMEs, the Asian region, China, Africa the SMEs are all subject to the same conditions of lack access to loans, and the Bank using collateral as a barrier and therefore requires all the stakeholders to be involved in solving this challenge.

This is the ongoing challenge faced by SMMEs in emerging markets to obtain funding from financial institutions and government agencies (Lagna & Ravishankar, 2021). These challenges primarily come from stringent banking security requirements, high transaction costs, inadequate financial documentation, and limited collateral, Sanga and Aziakpono (2023) also confirm that SMEs face challenges related to collateral requirements imposed by banks and increased transaction costs, which hinder growth.

There were no differences in literature and the findings of the research except that Fintech is able to solve the collateral challenge from both sides, the SMMEs by employing systems that generate compliant documents, and from the Bank's perspective, Fintech solve the challenge by employing big data analytics to assess the credit history of the SMMEs.

6.3.2 Research sub question 2: Theme 2: Information disparity

6.3.2.1 Recap on findings of the Information disparity

There was diverse experience from the group of participants, which provided contrasting views that the groups' SMME'S owners in Telecommunication, Petroleum, Financial Services, and Restaurant services have enjoyed the benefit of Fintech tools where they use the SAGE system extensively with their clients and generating financial reports for credit application with the Banks. It has also benefited them in managing their cash flow and increasing their credit score.

The three groups, Construction and Manufacturing and Farming, are different and have been negatively impacted by not having fintech services, the impact has been exacerbated lack of access to credit from the Banks, which impedes their growth, the job creation opportunities, expansion to mention the few. What is evident and necessary these sectors need a similar solution to the Telecommunication group, in that no business should operate without this fintech technology. The fintech advantage is significant and necessary and it goes beyond financial systems. The benefits include a range of tools from Human resources facilities, operational tools, and management accounts.

6.3.2.2 Recap on literature of the Information disparity

Scholars such as Li et al., (2024) and Choudhary and Thenmozhi (2024) are similar in their literature analysis that Fintech as an emerging market dominating China, has a capability of reducing the gap of finance of the SME's closer to the Banks that funding this small business. Both scholars agree that China is a big market for Fintech technology, and SMEs are big drivers of the Chinese economy, big contributors to the economy, contributing to the job creation and innovation but SMEs in China are excluded from financial access by the traditional bank, (Li et al., 2024).The Fintech capability reference by scholars is big data analytics, the block chain, and cloud computing to properly analyse the financial information of the SMME.

Surmanidze et al. (2023) brings a different insight that Poland small business does not a challenge such as the liquidity and access to credit with the Banks loans which is different in most countries. The view is different from the Amadasun and Mutezo (2022) who has confirmed that traditional banks lack understanding and support for SMMEs' businesses which in turn do not grant SMME credit loan. The study shows the lack of financial access from the banks, is main contributor to growth and development of the SME's because they businesses would not be able to acquire fintech services to compete with competitors, nor will they be able to meet the changing demands of the modern client.

6.3.2.3 Discussion of literature and findings of the Information disparity

The findings from the research found that majority of SMMEs are often unable to produce proper documentation of the operations of their businesses, except that the business is using a financial systems software (Fintech) that accurately populate documents that will be required by the financial institutions such as Banks. The lack of accurate documentation leads to financial exclusions of the SMMEs from obtaining credit from the Banks. There are similarities with literature that the SMMEs according to Sheng (2020) the study analyzed and explored the issues of irregular information and insufficient security for loans, proposing the collaboration of Fintech technology and traditional banks as a potential solution. Sanga and Aziakpono (2023) echo the similarities that fintech collaborations with banks is beneficial to

remedying the challenges that small and medium-sized enterprises (SMEs) in South Africa face when attempting to access credit, the Fintech improves the opportunities for SMMEs to obtain credit from the bank, simplifying the credit history and credit assessment for the Banks.

Another research finding insight that Banks officials it is recommended that they must visit small business enterprises in their business sites, in order to fully understand the operations emphasizing that Banks do not know the nature of the businesses their funding, this is quite similar to the assertions that are raised by Fasano and Cappa (2022), that though the purpose of Fintech is to enable banks to gather hard and standardized information quickly and efficiently on SMMEs, it has also have adverse negative outcome of limiting the face to face interactions of the business owner and the bank official. As result of this limitation, some of the important aspects such as a lack of soft information are omitted, which is critical aspects for the loan application decision-making process. The different insight from the Fasano and Cappa (2022), the Fintech impact on Italian small business sampled from 2013 to 2019, indicated that when they adopted Fintech services, their financial statements show reduced levels of bank debt and suggest an “opposite effect” of Fintech on information asymmetries, where the soft information about the SMME owners is omitted which has direct impact in credit application process.

6.3.2.4 Conclusion of the Information disparity

The literature has similarities to the research findings, that The Banks should take advantage of the Fintech capability, Tantri (2020) discusses how machine learning has improved the loan application process for SMMEs and individuals more efficiently than traditional banks and this improves the opportunity of lending to the SMMEs through narrowing the information gathered from the SMMEs owners. This similarity is also found in literature from scholar Gomber et al., (2018b) who conducted a comparative study on big data and improved credit assessments. Their study showed how big data exceeded banks' normal credit scores, and being efficient in reducing the time to process SMME credit applications which improves the operational efficiencies.

There were differences in literature from Fasano and Cappa (2022) that Fintech can have unintended consequences, though it provides quick and efficient information to the lenders as hard copy, the soft information of the business owner is missed and cannot be collated through Fintech and therefore a limited information available for decision making for credit lending.

6.3.3 Theme 3: Financial Inclusion

6.3.3.1 *Recap of findings of Financial Inclusion*

Therefore, the financial inclusion for the Telecommunications group is different due to the level of exposure the SMMEs is operating on, this group of SMME owners are not struggling with Fintech capability, information asymmetry, their challenge of financial exclusion in business opportunities which appears to be exclusion by religion, or family ties as alluded in the evidence. This exclusion is not associated to the level of knowledge or technical skills to the relevant sector, the gates are closed purely because you do not pledged allegiance to the certain religion and therefore you will be excluded in business.

The Construction and Manufacturing financial inclusion is related to access to credit facility, bank accounts within the financial institutions. This group of SMMEs owners are struggling to the entry level of financial inclusion, which will be similar with Farming business owners where they businesses is funded from cash basis, which is not sustainable. The Financial services group financial inclusion is quite different since they are solutioning their business clients with financial statements to participate in the economy. If their business clients can be funded by Banks, there will be a flow in the economy, there will be job opportunities created by these businesses.

6.3.3.2 *Recap of Literature review of Financial Inclusion*

Scholars such as Kauda (2021) in their analysis of the SMME's challenges of lack of access to credit, information asymmetry, collateral, which leads to financial exclusion. The fundamental goal, it should be to capacitate business owners to make good financial decisions, and therefore in addressing financial inclusion at the centre of solution is the level of financial literacy of the business owners. Small business owners must have financial literacy and must be trained appropriately.

In the same line that Fintech can increase financial inclusion from the SMMEs perspective, Ding and Kang (2024) in the absence of funding, and lack of access to credit, the business owners are compelled to prioritise profits over investing in long term Fintech investment this in turn does not promote innovation amongst SMMEs and therefore no growth in the economy. However Ding and Kang (2024) and Das (2019) brought forth nuance of difference on the unintended consequence of Fintech technology, which the scholars cautioned about the quality of the information you receive, proper analysis should conducted before using

information from external sources, the spike in security risks such as cybersecurity and the expenses that are related to the software.

6.3.3.3 Discussion of the Literature and findings of the financial inclusion

The research findings have different types of financial exclusions, which was interesting to observe from the contribution of experience, the entry level of financial inclusion is in reference to having transactional accounts. The SMME's financial exclusion is related to the lack of access to credit, lack of access to overdraft, lack of access to working capital. This layer of financial inclusion can be easily solved by Fintech services that the SMMEs should use, such as financial software's systems, which some of the contributors have attested to the benefits using these Fintech services. In line with the financial inclusion on the entry level, this insight was similar to the views by Kuanda (2021) that most of the SMMEs are financial excluded from economic participation due to the information asymmetry, lack of collateral as discussed. The are similar views Arner et al. (2020) where adoption of "four digital financial transformation, which are digital ID, open payment systems, digital government services, and financial markets" has transformed the lives of individuals and SMMEs who could not open accounts. The countries such as Kenya, Russia, China and India have implemented the digital transformation.

Another research finding indicated that the world of finance is intimidating, there a need from the SMMEs owners to take financial responsibility over what they know, and there was consensus that there is a need to upskill from the side of SMMEs in terms financial literacy and in technological literacy. The literature view is no different from the view that SMMEs owners must acquire financial literacy according to Ding and Kang (2024), because they must be able to take informed financial decisions. The optimum use Fintech and the benefits will only be derived when the business owners understand fully how to use the gadgets.

The second layer of financial inclusion surfaces when the business owners are well equipped from Fintech technology, they are financial literate, and they are well experienced in their sector from the research findings that opportunities from these sector are often exclusive to a certain religion, if the business owner does not pledge allegiance to religion, the door will be closed and you will be excluded from business opportunities. The literature review was silent in this view that there is financial exclusion by religion.

6.3.3.4 Conclusion of the financial inclusion

The research findings and literature review are similar in that financial exclusion is the cause of the slow economy growth due to number of individuals clients, small business owners, and rural communities who cannot fully participate in the economy. Therefore, the deliberate

financial inclusion through innovation of “four digital financial transformation” which are “digital ID, open payment systems, digital government services, and financial markets” could change lives especially in the emerging markets, (Arner et al., 2020). The literature review and research findings are also similar in that the SMMEs owners must foster to a culture of being deliberate in acquiring financial skills and technological skills. However, there was difference and no view from literature where the research findings have suggested that there are “cartels” in the economy where small businesses do not have access to certain market by virtue of religion.

6.3.4 Theme 4: Financial Literacy

6.3.4.1 Recap of the findings of financial literacy

The finding indicated that there is a skill gap in knowledge of the how to run the business amongst the SMME’s, they further reiterated that financial literacy is a societal challenge in South Africa. Another finding is the participants agreeing with the that private sector or public sector should collaborate to take the country forward through the development and upskilling of the SMME’s in understanding the entrepreneurial skills, and how to make a good credit application. There were no differences amongst the group participant in relation to the need that SMME’s owners needs upskilling in the way they run their businesses. The big question remained the Who will take the Lead?

6.3.4.2 Recap of the literature of the financial literacy

The researcher could not find the theme evidence from the literature review in Chapter 2, and therefore the three-step analysis will be implemented as it was previously discussed under paragraph 6.1.

Three steps

Step 1

These scholars were selected because they are already in the Chapter 2; were the following: Ding and Kang (2024); Sanga and Aziakpono (2023a); and Arner (2020); Kuada (2021).

The following words were used, “financial literacy” “SME + financial literacy”; “literacy”.

There was hit on Arner (2020) on financial literacy, under the heading called “Balancing inclusion” where the analysis was discussing on how countries should protect its citizen on products that are riskier, the emphasis was if the country is committed to decrease financial inclusion, more consciousness should be around clients and SMME owners who are less literate. The article did not have a lot of result around financial literacy, the researcher proceeded to the Step 2:

Step 2

Scholar	Title of the Article
Guoxuan Ding & Nier Kang	The impact of digital financial inclusion on China's regional disparities in quality of economic development
John Kuanda	Financial Inclusion and small enterprise growth in Africa: emerging perspective and research Agenda
Bahati Sanga & Aziakpono	FinTech and SMEs financing: A systematic literature review and bibliometric analysis

All the above articles only two articles were relevant to the financial literacy; however, the most relevant article was the from Kuanda (2021), where the emphasis was about the financial inclusion. The study was unpacking the significance of financial inclusion to the SMME's, the analysis recommends that the literature review in the quest to solve the long standing issue of the lack of access to credit of SMME, should not only be solved on information disparity however financial literacy should be at the centre of the solution, by also opening “ “information centre” easy accessible to the SMMEs. There were similarities that were found in literature analysis of Kuanda (2021) and the research findings will be discussed below.

6.3.4.3 Discussion of the Literature and findings of the financial literacy

The research findings have pointed out the need of training the business owners with financial literacy as an overlay to the existing qualification because other SMMEs are Engineers and therefore does not have a background of financial literacy which they will be challenged in interpreting their financial statements. The literature insights has the similar views which Kuanda (2021) has raised that business owners, needs to be capacitated with financial literacy to make informed decisions. Literature has also suggested that financial inclusion and financial literacy are extremely closely related and should be handled in that level of priority, (Kuanda, 2021).

Another finding that was advocated by the research that private sector should lead the plan of collaboration to take the country forward through the development and upskill through the innovation hubs. The finding has similar view to literature research concurred by Arner et al. (2020), the true impact and full potential of Fintech capability can be achieved when the proper establishment of support innovation for SMMEs.

6.3.4.4 Conclusion of the financial literacy

The research findings made mention that there is such lack of training of financial skills that is required to assist the SMMEs in building profitable business. The same views have been shared in literature that financial literacy is part of the solutions that should be prioritised in solving financial literacy. The findings also referred that government agencies are required to implement the mandate of developing the SMMEs as stipulated in *SMMEs and Co-Operatives Funding Policy for South Africa (2023)*.

The literature views agree that with research findings that adoption of digital technology can increase access to financial products and services, improve the quality of life for marginalized communities, particularly in Africa (Ding & Kang, 2024). There were no differences that were found between the research findings, and literature review.

6.4 Research sub question 3

6.4.1 Theme 1: Payment solutions

6.4.1.1 Recap of the research findings of the payment solutions

The participants' groups are all similar in the use of the digital payment; however, the difference is the degree of usage that is dependent on the exposure to Fintech services. The degree of usage is demonstrated by Telecommunications groups and Financial Services groups in the services that they offer to other businesses. The benefit of the payments solution, it keeps the record of every transaction that took place, receipts and payments. If the payments systems are linked to the software in use by the small business, all the payments and receipts will be collated, and it will be easy to compile the financial statements books that are required by the Bank when the credit application is made.

The Petroleum group difference that has an advantage is based on the fact that these businesses are franchisees, therefore the Franchisor incubates the franchisee, and provides the necessary support systems of Fintech. SMME owners in a franchise model have an added advantage in Fintech business support by virtue of the built-in business model. Franchises like Engen, Total, and Sasol petroleum businesses have designed structured packages with ongoing support. That support has developed to encompass the digital Fintech capacity in all aspects of the business. The other group participants such as Construction group and manufacturing groups, Farming and Stay cabin, they do not have financial software systems linked to their business, and they have raised a cost-related concern of acquiring the financial accounting software services, and therefore they are limited to digital payment systems for transactional purposes only.

6.4.1.2 Recap of Literature review of payment solution

Sharma et al., (2023) the increase of digital payments study is dominant in the emerging countries when compared to the developed economies, precisely because it facilitates the introduction of financial inclusion through the Fintech services such as digital payments. The introduction of Fintech services is eradicating the cash payment to digital payments for small business. Arner et al. (2020) suggest that Fintech is a serving tool that that foster financial inclusion, and the emphasis for their analysis was the significance of government building digital infrastructure for the new entrance businesses that are innovative. China as a pioneer in Fintech has built the digital infrastructure, with its established companies Alibaba in 2004 introduced the Alipay digital payments system, and Tencent which created WeChat wallet in 2013.

6.4.1.3 Discussion of the literature review and findings of the payment solutions

The research findings and literature are similar and agree that Fintech services such as mobile payments, digital payments the fosters financial inclusion to the emerging markets. The scholar Frost (2020) makes the interesting observation that is similar in that the need for financial inclusion drives the rise of Fintech in emerging markets, reflecting the need to participate in the economy and to access new products and services for all, including payments, credits, investments, deposits, and insurance.

The digital payment services are necessary for operation efficiencies for small businesses; however, this is only a part of a solution, the small businesses need more solutions to be successful. If the digital payments systems are linked to the software such as Zero platform and or Sage system or any accounting system in use by the small business, all the payments and receipts will be collated, and it will be easy to compile the financial statements books that are required by the banks when the need for credit application.

There were no differences in literature and research findings that digital payments are necessary for seamless operations for electronic payments. The scholars, Arner et al. (2020) has similar views that Fintech is a serving tool that that foster financial inclusion, and the emphasis for their analysis was the significance of government building digital infrastructure for the new entrance businesses that are innovative. The similar view from the research findings where the small business has been able to collaborate with corporations such Airbnb for accommodation, and Booking.com. and become seamless towards all parties involved.

6.4.1.4 Conclusion of the payment solutions

The research findings demonstrate that all SMMEs use the digital payment however the difference is the degree of usage that is dependent on the exposure of their business.

Additionally, the benefit of payments solution keeps the record of every transaction that took place, receipts and payments. Other findings suggest that not all SMMEs owners are benefiting fully to the Fintech services due to the cost of acquiring the financial accounting software services which limits the use digital payment to the transactional activities.

These findings are similar with scholar Sharma et al. (2023) as the scholar analysis discusses that the increase of digital payments is dominant in the emerging countries when compared to the developed economies, precisely because it facilitates the introduction of financial inclusion through the Fintech services such as digital payments. The introduction of Fintech services is eradicating the cash payment to digital payments for small business.

Another finding from the research pointed out the benefits that the payments solutions have brought to the SMMEs owners, the flow of funds across globe using Forex payments system, easy access financial statement, integration and easy detection of fraudulent transactions.

6.4.2 Theme 2: Low-Cost efficiency

6.4.2.1 Recap of the findings of the low-cost efficiency

The Fintech services of telecommunications group, petroleum group, financial services, the restaurant services, constructions and manufacturing group have demonstrated the saving costs provided by Fintech. The benefits that came from Fintech from different sectors are as follows; the real time data, saving time, increased productivity, reduced middle management, quick reporting, every participant group according to the sector must have customised services that is relevant for each group. Therefore, there were no difference in these participants groups except the fintech services that is employed by each group sector.

6.4.2.2 Recap of the findings of the low-cost efficiency

Li et al. (2024) had a focus on the effectiveness of Fintech system in reducing costs on the small companies of the SME's than larger SME's, the study focused on the size of the amount of debt that the SME has obtained against the interest charged on the debt. The conclusion of that analysis was the lower the amount debt, resulted to lower the costs of acquiring debt, this measure gave an advantage to smaller SME's of acquiring debt.

Scholar's view from Thakor, (2020) agrees that Fintech capabilities which includes payment solutions, payment gateways, QR codes, mobile payment, improves the efficiency of SMMEs and drastically reduced the costs of payments and transactions. Fabian et al. (2023) suggests that innovative business that needs no building structure scales their business up quicker due to low costs of productions, which is an advantage of small businesses. The SMMEs have an advantage of being agile in decision making, that innovation promoters play

a crucial role in advocating for digitization because it reduces production costs. The scholars, Frost (2020) are cautioning on the risk that is associated with the embracing of the new technology such as the cyber security, the privacy risk which impedes the adoption of the Fintech services.

6.4.2.3 Discussion of the literature and the findings of the Low costs' efficiency

The research findings and the literature has found similarities that were brought by Fintech services, benefits that were mentioned such as time saving on projects, other benefits were on time production of data for stakeholders, professional reporting. According to Li et al. (2024) shares an emphasis that Fintech effective solutions can promote inclusive finance, improve resource allocation, and support broader economic stability and growth. Another research finding and literature is the type of the SMMEs whether it is an innovative business and or a traditional business because the Lenders and financial institutions, they regard innovative businesses as risky and will charge the small businesses high interest rate, (Fabian et al. 2023). Another consideration is whether the small business is a small or big SMME. Eggers (2020) the size of SMME is the advantage to them because they are agile in decision making, though the overall the SMMEs encounter challenges in general of acquiring investment technology infrastructure which is supposed to increase its performance and production. There were not differences between the literature and research finding in relation to Fintech whether if it saves costs of production, rather it is the cost of acquiring the technology assets that the SMME that they have to solution.

6.3.3.4 Conclusion of the Low-cost inefficiencies

The research findings are similar with literature in Fintech saves costs for the SMMEs for operational efficiency which therefore improves the profitability, and the small businesses can increase and expand. The literature from Soluk et al. (2021) on family influence and digital innovation have demonstrated capabilities of enabling technology to reduce production costs and creates "new entrepreneurial opportunities" by attracting new customers.

6.4.3 Theme 3: social media impact on SMME's

6.4.3.1 Recap of social media impact on SMME's

It is interesting how SMMEs have evolved in proactive communication with existing clients and attracting new customers using WhatsApp, TikTok, most social medium platforms This is prevalent in the hospitality industries, where advertising, marketing, also distribution of products and services.

However, the Telecommunication groups and Financial Services group have similarities in communicating with cross-border clients due to the industry that they operate in, and the customers their international customers.

The Petroleum industry's perspective on business communication has been improved through the secured data infrastructure that the seamless communication on all levels of management be achieved and reduces the layers of chains of management. This is effective as the message does not lose meaning and reached the intended users on all levels.

The analysis of the cross group has proven that Fintech has opened access to new markets to the SMME, through the artificial intelligence, through exposure to global trading, and the network opportunities, however on different degrees of exposure relevant to the product that the SMMEs is offering, and secondly to the degree of the technical exposure to technology. This evidence from the participants indicated these SMMEs are already trading in these markets, and this is like the Petroleum group.

The farming group has seen opportunities of growth in farming and exporting the pomegranate oil, however this is still in progress. The new market is found through the Booking.com on the Farm Stay that the SMME is running along farming. The group of construction and manufacturing and the group of restaurants have not demonstrated opportunities in new markets, the construction group have not found an opportunity to digital markets now they business is in person in manufacturing and construction.

6.4.3.2 Recap of the social media impact on SMMEs

The researcher could not find the theme evidence from the literature review in Chapter 2, and therefore the three-step analysis will be implemented as it was previously discussed under paragraph 6.1.

Three level

level 1

These scholars were selected because they are already in the Chapter 2; were the following: (Lo Prete, 2022), Silvano, G, & Mbogo, C. (2022), Adel AlSharji, Syed Zamberi Ahmad, Abdul Rahim, (2018)

The following words were used, “SME + WhatsApp”; “SME and Socia media”, Facebook, Twitter.

There were numerous take ups, on Solvano & Mbongo, (2022) on social media and the performance of the SMEs, the scholar focused on how normal advertising has been outpaced by social for SME’s, the emphasises was that social media platforms are motivated by the need to meet social industry expectation which encourages the SMEs to use the opportunity for the benefit of visibility to their customer and to compete in a wider audience. This further leads to successful and coherent social media campaigns for SMEs when they conform to digital marketing practices. However, this article was unfortunately not rated on the Academic Journal Guide (AJG) and therefore the researcher proceeded to Step2:

level 2

Scholar	Title of the Article	
Anna Lo Prete, (2022)	Digital and financial literacy as determinants of digital payments and personal.	Not relevant
Silvano, G, & Mbogo, C. (2022)	Impact of social Media Marketing on Small Business’s Sales Performance: A case of Women Clothing Stores in Nyamagana District, Tanzania	No Listed on AJG, useful for discussion
Adel AlSharji Syed Zamberi Ahmad Abdul Rahim, (2018)	Understanding social media adoption in SME’s	(AlSharji et al., 2018) AlSharji et al. (2018)

All the above articles only two articles were relevant to the social media impact to SMMEs however, the most relevant article was the from AlSharji et al. (2018) where the emphasis on the “adoption of social media” by the small businesses in the Middle East. The advantage that literature and scholars were recommending social media for SME’s it was the relatively low competitive costs for visibility of the products online. It was interesting to note the type of sector that were sampled for the analysis that they were similarities to the researcher sampled SMME’s in South Africa. The participants small businesses sampled from the

literature were “ICT, professional services, constructions, restaurant and catering, and also logistics”. There were similarities from AlSharji et al. (2018) and differences from literature and research findings.

6.4.3.3 Discussion of the Literature and findings social impact on the SMME’s

The research finding has great benefits from social media platforms because the geographical barriers has been removed, there hospitality industry has now access to the new markets through Booking.com and Airbnb. The small business can now collaborate by advertising their business on WhatsApp, Twitter, TikTok on all social platforms. Another finding from the research is ability of social media to attract clients globally for accommodation offered by SMME in South African through the platform. The findings further confirms that there are growth opportunities that SMMEs can enjoy through the distribution of their products and services on social media, on or network platforms, other benefits are growth opportunities, expansion of network to the small businesses engage and exchange products within your networks expand your thinking, endless opportunities.

The literature from the scholar AlSharji et al. (2018) regarded social media as an “innovative product” that is useful for quick decision making to small businesses owners, if the decision makers perceive it as useful. The difference though from literature in the analysis from the Middle east small businesses sampled, they suggested that they have not explored social media for their businesses, this claim could be related to the 7 years difference of time horizon. It would be interesting to explore recent literature studies on social media in the Middle east. They advertised on LinkedIn, as a professional base. Another difference from the literature on this article they found that the use of social media was a “pressure” from the society and the use not necessarily be aligned to the “strategy” of the business as the result they have not explored the opportunity.

6.4.3.4 Conclusion on the social impact on SMMEs

The findings social impact on the SMMEs was highlight positive impact, pointing to the different modes of influence of using social media by SMME’s; by peers and competitors who successfully utilize social media, and influencing them on adopting similar strategies to stay competitive in the market, while social networks help to disseminate valuable knowledge about technological benefits and best practices. The social media highlighted growth opportunities, opens new markets for the small medium entrepreneurs; global markets; collaborations such as Booking.com with the SMMEs. It has improved their operations efficiencies of cost through various means, such as Twitter, Facebook, and Instagram WhatsApp catalogue and other media platforms.

The literature review by AlSharji et al. (2018) had differences, that they have not explored the

“innovation product”, therefore generalising the experience of impact of social media on developed countries and emerging market could be an opportunity to explore these assertions.

Conclusion chapter 6

This chapter concludes with the summary of the outcomes of the findings and literature discussions. The table will consist of constructs, themes, and similarities and or differences of the comparison.

Table of summary of outcomes of the discussion of the research findings and literature

Construct	Themes	Similarities	Differences
Fintech Opportunities for SMME	P2P Lending	Traditional challenge of SMME, of not keeping proper document	Groups had no exposure to P2P Lending market
Fintech Opportunities for SMME	Platform Traditional Banks	Information disparity Improved credit application	
Fintech Opportunities for SMME	Government role	Fintech playing pivotal role. South Africa has a new funding policy. China provided digital infrastructure	Lack of infrastructure in the neighbouring countries. China well advance in Fintech infrastructure than South Africa.
Access to credit	Collateral	No business should operate without a Fintech services. Governments to become the guarantor for Innovative SMMEs. Insufficient security	Some sectors did not need a collateral. Franchisee businesses.
Access to credit	Information disparity	Lack of soft information omitted. Reduced bank debt “opposite effect” of Fintech	
Access to credit	Financial inclusion	Different levels of financial exclusion. Capacitate SMMEs Lack access Digital transformation	Financial exclusion by religion Increase digital costs
Access to credit	Financial literacy	Skills gap Societal challenge Informed decision	

		Adoption of digital technology	
Operational efficiencies	Payment solutions	Degree of usage Fosters financial inclusion Emerging market product	
Operational efficiencies	Low costs	Time saving Costs of Fintech Increased production Professional reporting Attracting new customer	
Operational efficiencies	Social media impact on the SMMEs	Best practices Increased visibility Competitive advantage Pressure from society	Access to new markets Expansion to networks Geographical barriers removed

6.5.1 Revised conceptual framework

The revised conceptual framework depicts the summary of the discussion outcomes of the research findings and literature. There were two themes that were identified in Chapter 5, such as financial literacy and social media impact on the SMMEs remains in the revised conceptual framework. From the outcomes of the Chapter 6 presented the sub-themes that will be added in the revised conceptual framework. The sub-themes differences in the research findings and literature will be presented as potential refinements to the body of knowledge, and they will be highlighted with yellow.

Revised conceptual framework

Access to Credit

- Collateral
- Fintech services essential
- Franchisee business model
- Fosters financial inclusion
- Information asymmetry
- Traditional challenge
- Financial literacy
- Financial inclusion
- Train SMME's owners
- Skills gap
- Exclusion by religion
- Increased Fintech costs

Operational Efficiencies'

- Payment solutions
- Degree of usage
- Emerging market product
- Social media impact on SMMEs
- Geographical barriers removed
- Best practice
- Increase visibility, Expansion to Network
- Competitive Edge, Society pressure
- Low costs and Time efficiencies
- Time saving
- Increase productivity

Fintech Opportunities for Small Marco Medium Enterprises

E-commerce	P2P Lending Market	Government guarantor
Invoice Trading	Traditional Banks	Traditional Challenge Improved credit scoring
Equity Crowd funding	Government role	New funding policy Neighbouring Infrastructure

CHAPTER 7: CONCLUSION

7.1 Introduction

The chapter will conclude with the research outcomes from the research and the literature as it was discussed in Chapter 6. Li et al.'s (2024) the study was focused on how do SMMEs owners understand and experience the adoption of Fintech services to improve opportunities?

The research setting was based in South Africa with different sectors of the SMME's from Telecommunication, Petroleum services, Construction and manufacturing, Restaurants, Farming and Financial Services industries. Other scholars have examined factors affecting the performance of SMMES, such as intellectual capacity and trust-based performance dynamics.

The study was intended to answer the research questions as below: Research main question: How do SMMEs owners understand and experience the adoption of Fintech services to improve opportunities?

Research sub- question1. How have Fintech services increased SMMEs' opportunities to enter new markets? This issue arises from the analysis of family-owned SMMEs' business dynamics, which indicate that digital transformation consistently affects SMMEs' performance, (Li et al., 2024).

Research sub-question 2. How are Fintech services improving access to credit for SMME owners? This question is discussed in Thakor's (2020) examination of the role of Fintech in the ecosystem, and Thakor then concludes that this is an area of literature that is in its early stages, therefore presenting an opportunity for further research.

Research sub-question 3. How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses? While there's research around Fintech adoption and financial inclusion, Lagna and Ravishankar (2021) argue that financial inclusion is not the key focus in this literature, and therefore, the opportunities for further research include how Fintech can offer operational efficiencies within SMMEs.

This chapter will present the research outcomes of the each of the research question sub questions, as outlined. The theoretical conclusions were determined from the comparative analysis of research findings and literature under each research question. It will be based on the where the findings that were similar to the existing literature which is our potential to

addition of knowledge and where there were differences found on the research findings; it will be discussed as the potential refinements to the existing body of knowledge.

The theoretical conclusion will be concluded by the similarities and differences based on the research sub questions. The final conceptual framework will be presented with the outcomes of the research. Thereafter the chapter will follow up with research contributions, and then recommendations for the management and other stakeholders. Finally, the chapter will conclude with limitations and the future research suggestions of the study as whole.

7.2 Principal Theoretical conclusions

7.2.1 Research sub-question 1: How have Fintech services increased SMMEs' opportunities to enter new markets?

The research outcome from the Fintech services opportunities had three main themes which were P2P Lending market and Traditional Banks, and the third one was Government roles.

7.2.1.1 Similarities with the literature for research sub-question1

The research outcome for Fintech services agreed or aligned with literature that SMMEs are often challenged with accessing funding from the financial services institutions such as Banks and or government agencies due to the old traditional issues, information asymmetry, collateral, lack of proper recording of financial statements. The emergence of the P2P Lending market platforms to the financial services industry, according to Thakor, (2020) came to rescue to the challenges of SMMEs by providing the alternative financing to the SMMEs. The research outcome also concurs with scholars on how P2Ps intrinsically share the credit market as competitors to financial services and the growth of P2P lending market has encroached in the market share of commercial banks, it was viewed as genuine threat (Donaldson et al., 2018).

However the research outcomes were aligned on lack of trust and expensive lending rate of P2P in South Africa, Thakor (2020) expressed the P2P challenges based on lack of trust and integrity from the communities, because the platform relies on pre-lending screening to classify loan risks, which is where incentive issue concerning the adequacy of screening efforts is dependent on, which is different from traditional banks.

Sanga and Aziakpono (2023) views were consistent with the research outcome that SMME's traditional challenge referencing the lack of proper management documents as required by financial institutions remains if the fintech services are not integrated in the small business enterprises. Sheng (2020) also consistent with research outcome that SMME's who have not collaborated with Fintech services are still struggling with the issues of lack of funding from the financial institutions.

Over the decade, the analysis from Rehman et al. (2023) has claimed how Fintech services have impacted the Banking services to solve these challenges.

In relation to the Government role theme, the research outcome has expressed consensus that governments are instrumental on creating a safe and a conducive environment for businesses to be regulated for Fintech innovation. These views are aligned with scholars, Sanga and Aziakpono's (2023) where their analysis provided insight about the Chinese government has promoted the collaboration among emerging markets through the recommendation of "Introduction of regulatory sandboxes" for compliance and sustainability. This is the same with China, which is a leading country in Fintech market, Bu et al. (2021) had shed a concern on non-compliance of innovative P2P companies which threatened the governance and regulation of the Fintech industry market. The South African Fintech market has also created milestones by establishing its first regulatory sandbox, the Intergovernmental Fintech Working Group (IFWG) in 2020 which is an environment to test new innovative products against the laws and rules of the country.

7.2.1.2 Differences with Literature for Research Sub-question1

On the theme on P2P lending market vs Traditional banks, the research outcome has borrowed from P2P lending market though it is growing market in South Africa. Contrary to the literature the research outcomes made reference to these markets as "matshonisas" which means (Loan sharks) because of the interest that P2P charged, which is much higher than the rates in the traditional banks. The South African P2P size of lending market was \$1.61 billion in 2024 projected to grow by 19.62% for the period of 205- 2033, which is lower than the Chinese lending market, Jiang et al. (2021) estimated that Chinese P2P lending market valued at \$140 million.

The government role theme, the research outcome has indicated that lack of the infrastructure in the neighbouring countries impedes the trading in the Southern African Development Community. The lack Fintech infrastructure which is related to Fintech capability is not fully developed across first the SADC which is different to the developed countries alluded by Arner et al. (2020) that digital infrastructure can promote the financial inclusion, and the real impact of Fintech potential can be achieved.

7.2.2 Research Sub-question 2: How are Fintech services improving access to credit for SMME owners?

7.2.2.1 Similarities with the literature for how are Fintech services improving access to credit for SMME owners?

The research outcomes have brought out insights that the SMMEs are pillars of the economies, in the emerging market and as well as the developed market. However, the SMME's owners across global economies are subject to the similar conditions of lacking collateral as a requirement for financial access, (Joensuu-Salo and Matalamäki, 2023). The outcomes further refer that the size of the small business matters to the financial institutions such as Banks, the maturity in tenure of the small business also matters because it gives credence that the small business has an ability to repay back its financial obligations and it has created a credibility in the market, (Eggers, 2020).

Another research outcome on collateral refers to the financial institutions, they have a responsibility to create awareness on compliance requirements of the financial institutions, banks, government agencies. The SMMEs are regarded as anchors in the economy because they create jobs and contributes to the economy. Therefore, the government should be a standing in collateral especially to the innovative businesses, (Ramudingane & Nkondo, 2024).

Regarding Information disparity the research outcomes are consistent that Fintech has unintended consequences where the assessment of the affordability of credit of the SMMEs owners is only conducted through the financial statements and through other credit scoring methods, the huge element of face to face interactions is omitted, where the personal circumstances of the business owners can be missed, and therefore lead to an adverse outcome of the application, (Chen et al. 2020).

With regard to the financial inclusion, the research outcome has indicated that irregular information, insufficient security for loans, financial literacy are some of the primary reasons for financial exclusion. However, there are different types of financial exclusion, the opening of bank accounts, access to credit, affordable financial products and services, are the entry level of financial inclusions which allows all individuals to participate in the economy. The solution were recommended in literature by Arner et al. (2020) "four digital financial transformation, which are digital ID, open payment systems, digital government services, and financial markets". There is another layer of financial exclusion when the all the financial services has been employed but the markets are closed to SMME owners, and they lack access to those markets.

Regarding the financial literacy the research outcome revealed that there is a skills gap that is required to capacitate the SMMEs owners to make financial decisions, scholars such as Kuanda (2021) has suggested that financial inclusion and financial literacy must be treated with the same urgency when the development of the SMME's owners.

Another research outcome concurs with literature that there should be a collaboration between private banking and public sector to take the country forward through the development and upskilling of SMMEs owners through the innovation hubs. This view is concurred by Arner et al. (2020), the true impact and full potential of financial literacy can be achieved when the proper establishment of support innovation for SMMEs.

7.2.2.2 Differences with literature for Fintech services improving access to credit for SMME owners?

Under the theme of collateral, the research outcomes has identified that some sectors did not need a collateral for them to access credit from the financial institutions, because they had been using Fintech services, and these sectors have the required financial compliance documents for related to information asymmetry. The franchisees business model also did not a collateral from the financial institutions because their financial assessment would have conducted prior to the agreement of a franchisee and a franchisor.

Regarding the theme financial inclusion, the research outcome, has emphasized different layers of financial exclusion, the entry layer referring to the opening accounts, access to credit, and access to financial products and services, however financial exclusion to specific markets has been experienced by certain sectors, exclusively ringfenced by association to a specific religion. This literature review did not refer to this exclusion to markets by religion.

On access to credit, the research outcome has mentioned the acquiring the Fintech services has increased the unintended costs, such as infrastructural storage related costs, security costs, and other fintech related costs. The increased Fintech services does have an adverse impact on costs on emerging economies that are challenged with the electricity because the gadgets consume a lot of energy and therefore without the large consumption, the fintech services will not be effective.

7.2.3 Research sub-question 3. How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses?

The operational efficiency of the SMMEs owners have three themes that expressed the efficiencies, they are digital payments solutions, low costs efficiencies, social media impact on the SMMEs.

7.2.3.1 Similarities with the literature for operational efficiency of SMMEs owners in managing their businesses

The research outcomes were consistent that the fintech services such as digital payments solution, mobile payments, new products and services in the markets are all tools that have facilitated the financial inclusion in the emerging market. These products have increased entrance of participation of the small business to the new markets, attracting new clients, and breaking geographical barriers for the SMMEs owners. Frost (2020) has made the observation that digital payments solutions operational efficiency necessary to the small business owners. The degree of usage of Fintech services is not limited to digital payments, however there are more complex of products and services available in the market which depends to the exposure of technical knowledge of the SMMEs owners.

Regarding the theme of low costs efficiencies, the research outcomes has demonstrated that the use of fintech services has provided increased productivity, saving time meeting the compliance requirements, and professional reporting to the stakeholders, this is in alignment with Fabian et al. (2023) that innovative small business are advantageous in that they do not require building infrastructure and hence the running of these businesses have low costs.

Regarding the theme social media impact on the small business the research outcome was not consistent with scholars from the Academic Journal Guide (AJG) top journals however scholars such as Solvano & Mbongo, (2022) have made contributions that are valuable and relevant in that social media have amplified the exposure of the small business into new markets, such as Booking.com, and or Airbnb. The exposure of new communication medium of attracting new customers such as TikTok, WhatsApp, Twitter as means of advertising. The exposure to international trading markets, which has extended the global markets of the small businesses. The scholar AlSharji et al. (2018) makes reference that social media was an “innovative product” for decision making for small businesses however cited that small businesses in the Middle East had used social media sparingly for business use, this could be the article was published 7 years ago, it would be interesting to analyse the recent studies of social media impact in the same region.

7.2.2.3 Differences with literature for operational efficiency of SMMEs owners in managing their businesses

On the social media impact on SMMEs the literature outcome has expressed the new markets and access to new markets such as Booking.com and Airbnb where the SMMEs owners have an opportunity to collaborate with the institutions. The social media has also enlarged the opportunities of attracting new clients, enabling the small businesses market

their products on wider audience. Regarding global markets the SMMEs have an opportunity to trade internationally and expand their business networks.

7.2.4 Final Conceptual Framework

The below depicts the final conceptual framework which consists of the sub- themes highlighted in yellow as potential additions to body of knowledge, the themes in red were the themes identified from chapter 2 from original conceptual framework where research outcomes did not have findings, and the green themes emerged in the research findings.

Final Conceptual framework

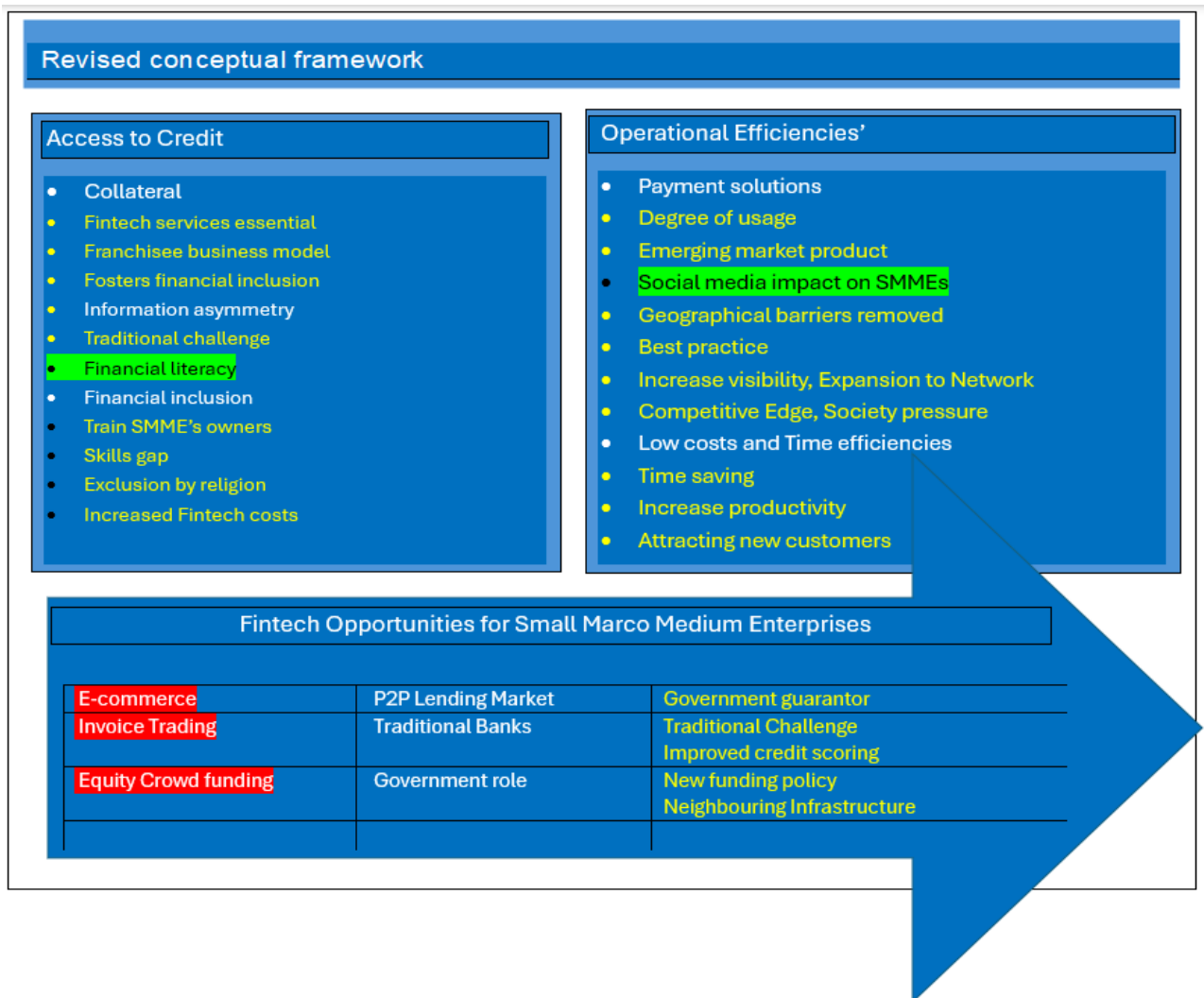


Fig 9: Authors own

7.3 Research Contribution

The research aimed to explore how do SMMEs owners understand and experience the adoption of Fintech services to improve financial opportunities. The study aims to explore the operational efficiencies provided to the SMMEs by fintech services, and to further explore how Fintech services are improving access to credit for SMME owners. The research contributions have been divided in two sections: addition to the existing body and body of knowledge and refinements to the existing body of knowledge.

7.3.1 Additions to the existing of the body of knowledge

The additions are based conditionally on the work that has been conducted, the following areas of similarities are summarised below; and they are regarded as potentially additions to the existing body of knowledge.

List of potential additions

Constructs	Themes	Subthemes
Fintech Opportunities for Small Macro Medium Enterprises	<ul style="list-style-type: none"> • E-commerce • Invoice trading • Equity crowd funding • P2P Lending market • Traditional Banks • Government 	<ul style="list-style-type: none"> • Traditional challenge • Improved credit scoring • Fintech pivotal role • Digital infrastructure
Access to credit	<ul style="list-style-type: none"> • Collateral • Information asymmetry • Financial inclusion • Financial literacy 	<ul style="list-style-type: none"> • Fintech essential • Insufficient security • Lack of proper documentation • Banks official visits SMMEs sites • Bank collaboration • Different levels of financial exclusion • Digital transformation

		<ul style="list-style-type: none"> • Train SMMEs owners • Skills gap • Informed decision • Adopt technology
Operational efficiencies	<ul style="list-style-type: none"> • Payment solutions • Social media impact • Low costs 	<ul style="list-style-type: none"> • Degree of usage • Emerging market product • Fosters financial inclusion • Professional reporting • Attracting new customers • Increased production • Time saving • Increased visibility • Competitive advantage • Pressure from society

7.3.2 Refinements to the existing body of knowledge

The study has found areas that are different based conditionally on the work that has been conducted, these areas are contributions based on the theory of refinements which is an “adaptation” of existing theory in a different setting by (Crane et al., 2015 p. 5). The following areas of differences are summarised below; and they are regarded as potentially refinements to the existing body of knowledge.

List of refinements

Constructs	Themes	Subthemes
Fintech Opportunities for Small Macro Medium Enterprises	<ul style="list-style-type: none"> • E-commerce • Invoice trading • Equity crowd funding • P2P Lending market 	<ul style="list-style-type: none"> • Government as a guarantor

	<ul style="list-style-type: none"> • Traditional Banks • Government 	<ul style="list-style-type: none"> • Lack of infrastructure in neighbouring countries • No exposure to Lending market • New funding policy
Access to credit	<ul style="list-style-type: none"> • Collateral • Information asymmetry • Financial inclusion • Financial literacy 	<ul style="list-style-type: none"> • Financial exclusion by religion • No collateral • Increased costs digital infrastructure • Visits SMMEs premises
Operational efficiencies	<ul style="list-style-type: none"> • Payment solutions • Social media impact • Low costs 	<ul style="list-style-type: none"> • Access to new markets • Expansion to Networks • Geographical barriers removed

7.4 Recommendations for management and other stakeholders

There are contribution that has emerged from the analysis of the research to the management of businesses and stakeholders, the Fintech services opportunities the following recommendation are:

- The innovative small businesses most often does not have collateral for the loans to secure for the loans. These small businesses owners in some instances would not have property to use as a security. Therefore, management of the financial institutions and government should evaluate the concept and business plans to ascertain the profitability of the business and stagger the required loan amount to business owner based on the Milestones that are being achieved.
- Government role is immense in the country in providing digital infrastructure for the SMMEs to create jobs, to produce new products and services. The small businesses consume high energy, innovative business will also consume high volumes of energy. The government has the capacity to establish a sustainable energy supply in the

country, perhaps exempt the small business from load shedding schedule in the country.

- The second recommendation on the collateral, the government could create innovation Hubs for small businesses, which could ascertain the Banks that any small businesses that came from the Innovation Hub can be guaranteed a loan. In this way, as it has been discussed Banks view to innovative small business is risk averse.
- The P2P Lending markets is not visible to most small business environment in South Africa, Banks decline the credit application on regular basis, this could be direct referral to the P2P lending platforms, this could create a platform for a collaboration between the Banks and 2P2 in South Africa.
- In relation to access to credit, financial inclusion is still a huge challenge, access to overdraft, access to credit especially to the small business's owners. The recommendation to the Bank officials would that they should be interested in understanding the small businesses holistically. There must be commitment from the Banks to grant credit to the small businesses. This commitment will be demonstrated when the requirement of Knowing your Business is established. The financial institutions miss the soft information of the business and when the credit application of the loans presented to the credit management, it would not be easily declined.
- The recommendation to the Bank officials would that they should be interested in understanding the small businesses holistically. A specific level should be set for threshold loan application where officials should visit the SMMEs premises. There is a great lack of understanding of the businesses that are funded, the exercise should not be at the desktop.

7.5 Limitations

The limitation of the design and methods were already discussed in Chapter 4. Therefore, the limitation outlined below will be based on the entire research study.

- The setting of the study was in South Africa.
- The SMMEs sampled were already businesses with Bank accounts
- The SMMEs sampled did not represent all sectors in the economy, and did not explore each sector extensively.
- The profile of businesses was above R5 million, indicating that these businesses belong to the formal sector, are registered with SARS, and contribute to the economy.
- The study did not explore the nuances of the P2P that emerged in the findings on SMMEs.

- However, they do not encompass the informal sector of the SMME, which denotes a limitation in providing a holistic view of the country's SMME landscape.

7.6 Suggestions for future research

- There were number outcomes that were sectors specific, studies could be conducted in depth.
- The study was conducted in South Africa and further research could be conducted in emerging countries.
- The differences that were found in P2P lending market in the SMMEs in the emerging market could be an area of interest.
- Further research could look at how other emerging markets have invested in the digital infrastructure of their countries.

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Annexure 1: Interview Protocol

<p>Introduction</p> <p>5 minutes</p>	<p>Thank you for participating in this interview. Please provide your insights on your hands-on experience and understanding as small and medium-sized enterprise business owners in South Africa regarding the adoption of Fintech tools (digital payments, online sales, automated financial statements). How have these experiences influenced your business with access to credit and overall business performance?</p> <p>Your responses will be handled strictly with confidence, and they will be part of a group of other SMME owners who will be interviewed. The identity of your business and you will be anonymized entirely in all the research reports I write. The data will be stored electronically in the cloud to prevent easy access and protect the client's information.</p> <p>In order to keep the connection, would you be so kind as to keep your video camera on?</p> <p>Are there any questions from your side before we can proceed?</p>
<p>The Main Research Question</p> <p>How do SMMEs owners understand and experience the adoption of Fintech services to improve financial opportunities?</p>	
<p>Question One</p> <p>8 minutes</p>	<p>How have Fintech services increased SMMEs' opportunities to enter new markets?</p> <p>This issue arises from the analysis of family-owned SMMEs' business dynamics, which indicate that digital transformation consistently affects SMMEs' performance (Li et al., 2024)</p>
<p>Question Two</p> <p>8 minutes</p>	<p>How are Fintech services improving access to credit for SMME owners?</p> <p>This question is discussed in Thakor's (2020) examination of the role of Fintech in the ecosystem, and Thakor then concludes that this is an area of literature that is in its early stages, therefore presenting an opportunity for further research.</p>
<p>Question Three</p> <p>5 minutes</p>	<p>How can Fintech services improve the operational efficiency of SMMEs owners in managing their businesses?</p> <p>Although research on Fintech adoption and financial inclusion exists, Lagna and Ravishankar (2021) argue that financial</p>

	inclusion is not the primary focus in this literature. Therefore, opportunities for further research include how Fintech can improve operational efficiencies within the SMMEs environment and landscape.
Question Four 8 minutes	How have digital capabilities or fintech tools increased SMMEs' opportunities to enter new markets? The findings from Chen et al. (2016) confirm that SMMEs that adopt new digital technologies create a competitive advantage in the market. Astuti et al. (2020) echo this, stating that digital transformation always impacts SMMEs' performance.
Closing 5 minutes	Those were all the questions that I wanted to ask. Is there any final thought you would like to share?

Annexure 2 : Consent form

Informed Consent Letter

Dear Participant

I am a master's student studying MPhil-Corporate Strategy at the Gordon Institute of Business Science. I am conducting research on how do SMMEs owners understand and experience the adoption of Fintech services to improve opportunities? Our interview is expected to last 60 minutes and will help us understand some of the insights on how Fintech is improving access to credit. Your participation is voluntary, and you can withdraw at any time without penalty. By signing this letter, you are indicating that you have given permission for:

- The interview is to be recorded.
- The recording will be transcribed by a third-party transcriber, subject to a standard non-disclosure agreement.
- Verbatim quotations from the interview are to be used in the report, provided they are not identified with your name or that of your organization.
- the data to be used as part of a report that will be publicly available once the examination process has been completed; and
- All data to be reported and stored without identifiers.

If you have any concerns, please contact my supervisor or me.

Our details are provided below:

Researcher name:

Email: 26536831@gmail.com

Research supervisor name

Email:

Phone:

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

Annexure 3: Ethical Clearance Approval

Ethical Clearance Approved

Masters Research <MastersResearch@gibs.co.za>
To: You
Cc: Masters Research <MastersResearch@gibs.co.za>

Ethical Clearance Report.pdf
420 KB

Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear Nozuko Makhunga,

Please be advised that your application for **Ethical Clearance** has been approved. You are therefore allowed to continue collecting your data. We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards,

Annexure 4: Codes

Go-Getter Character of the SME owner
Measuring Financial Inclusiveness by Urban over Rural
Active role of Dep of Agriculture in rural areas
Types of Fintech Services/Tools
Government driving education program for SME
Minimum wage requirement impact on SME
WhatsApp uses a Most efficient Tool of communication
Zero platform makes easy to manage your Debtors /creditors, generate invoices
Using payment gateways across Africa makes business seamless
Examples of performance indicators that the Government could us on its Agencies
Fintech creates a platform of growing to neighbouring countries
New Ideas/New opportunities that AI related
Financial records of your company are easily accessible makes easy to manage your Debtors /creditors, generate invoices
Franchisors corporations Bp; Sasol always support the operators in terms Fintech
Bank reluctance to fund farming business, is it a race issue ?
The Banks strict rules towards SME's
Fintech creates opportunities on network to grow your business
Systems that provides professionalism
Trust as contributor to adoption to Fintech
Difficult to get funding as a farmer
Impact of automation on job creation
It saves costs of operations in telecommunication industry
The Fintech Services are an essential because the Banks are often Full
Expansion, creating more opportunities
Efficient communication across all levels timeously
Banks do not understand SME's Operations, and therefore, they cannot use the data intelligently to grow these businesses
Financial literacy requirement on SME
Importance of understanding Ecosystem
Owner of a Farm collaborating with Airbnb and Booking.com
Fintech products
Government process are manual
Government department unable to track the performance of SME's , they don't have a digital tool
Challenges of SME's having more than One business to Run
Making buying properties online, all compliance documents with Ease
The challenges of Agencies of the Government, are measured on numbers not on the growth of SME's
Government driving education program for SME
Fintech products
Collateral for the Loan
Financial Institutions vs Government should lead the Fintech Revolution among SME's

Gathering experience in your specific industry
Types of financial products
No Credit granted from the Bank, because the business was new
SEDA or SEFA services are not available online, why paper based?
Innovation improves profitability in manufacturing
Closure of branches in small dorpiess have contributed in financial exclusion in rural areas
Accurate reporting of your financial status
Types of financial products
Banks are interested in the size of the SME's
Banks do not understand SME's Operations, and therefore they cannot use the data intelligently to grow businesses.
Fintech creates a platform of growing to neighbouring countries
African countries struggle with infrastructure and bandwidth which impedes productivity
Government process is manual
Innovation by new Banks
Banks should be in the forefront of increasing capability of SME's
Department of Agriculture have funding for upcoming farmers however its conducted irresponsibly.
Fintech adaptation depends on age group
The biggest challenge of SME is lack of required documentation to obtain financial assistance, which Fintech provides
Making payments Easy
The government should provide training to support SME
Fintech products
South Africa leading in Africa in terms of technology
Fintech financial products benefits tailored for SME's
Government is punitive on SME's on compliance
Importance of understanding Ecosystem
Banks can collaborate with other existing companies for training other SME's at a preferential rates given by the Banks.
How to improve your chances of of obtaining Credit from the Bank
Social Media also gives SME's publicity
Examples of payments systems complicated
Aumotation vs Manual manufacturing improves quality and increases volume
Types of Fintech Services/Tools
Risk embedded in using WIFI in public places
Digital systems allows me seamless management of the credit score,making it easy to obtain credit.
Types of Fintech Services/Tools
Aumotation vs Manual manufacturing improves quality and increases volume
Reaching and communicating with wider audience
Government lack of securing proficiencies in ts parastals or government department, example NSFAS
Lack of Interconnection in SADC

Government does not exercise due diligence in awarding BEE tenders
Government department unable to track the performance of SME's , they don't have a digital tool
Payment platform designed to detect fraud on your account
Challenge financial literacy among SME's
Willing to learn character of the SME owner
Tendering business has become a form of employment due to Unemployment
Fintech technology in farming where supplier and buyers Meet
Reaching and communicating with wider audience
Financial products sold on platform by Banks
Fintech system showing Cash Flow Management
Fintech financial products benefits tailored for SME's
Types of Fintech Services/Tools
Education system does not produce what the market needs
Lack of urgency from the Government
Saving time
Technology is generational relevant, and age sensitive
Types of Fintech Services/Tools
Fintech makes it easy to obtain credit from the bank, all your financial documents are easily populated by your digital system
Fintech creates opportunities on network to grow your business
Banks should be in the forefront of increasing capability of SME's
Tracking Task, Invoices, Delivery is everyone responsibility on the WhatsApp group
Fintech system showing Cash Flow Management
Banks are interested in the size of the SMEs to build relationships
South Africa Fintech not user friendly by 90-year-old
Minimum wage requirement impact on SME
Fintech makes easy to generate financial statement
Department of Education can increase skills shortage by sponsoring bursary on the fields that the country needs
Saving time
Importance of understanding Ecosystem
Self-driven attitude of the SME
Technology can be customised to the size of the SME
Fintech for banking App provides investment options online
It reduces the layers of middle management in SME
Fintech system showing Cash Flow Management
Collecting data to understand your cash, debts
Fintech removed geographical barriers
SME's uses cash to sustain their business
Theres a Gap in the market of Couching and Training of what the Business Is?
Saving time
Fintech creates a platform of growing to neighbouring countries
WhatsApp Business efficient in SME's environment
African neighbouring countries have simplified Fintech than South Africa

Gathering experience in your specific industry
Lack of understanding the principles of business
African countries struggle with connectivity which impedes productivity
Types of Fintech Services/Tools
Requirements to be funded by Government
Government has provided connectivity in public places
Government is plucked by corruption and lack of political willingness
Government have Active role to support SME by providing surety .
Government has initiatives however they are not administered properly.
Government is plucked by corruption and lack of political willingness
Government is plucked by corruption and lack of political willingness
Legislation of Gateway platforms in Zambia vs South Africa
Government role is a regulating the SME's
Illustrations of how Apple captures clients, Banks can adopt
Fintech technology has level play field in hospitality industry accommodating SME's
Making payments Easy
At what point to you require Fintech systems?
Funding from the government must include proper accountability and follow up to maintain support for the SMEs for the specific periods of time.
Banks have financial data to link SMEs for growth and sustainability
Technology is generational relevant, and age sensitive
Illustrative of performance indicator using BEE vs BBEE
The South African job market cannot absorb everyone, due to mismatch of skills
There is a skills gap in business development programmes for the SME.
The government should collaborate with Banks to help SME's
Fintech Financial Institutions vs Banks benefits from the poor
Government driving education program for SME
Certain branches have limited functionality which necessitates the Fintech services
Government should create a big incubation and make it Easy for SMEs to comply
Fintech Financial Institutions vs Banks benefits from the poor
Fintech systems useful as an HR function for employees
Bank funds larger corporation over SME's
Banks declines credit application due
Government driving education program for SME
Expanding to other provinces is industry related
WhatsApp uses a Most efficient Tool of communication
Lack of support to the SME's impacts the economy adversely
Types of Fintech Services/Tools
Expansion, creating more opportunities
Continuous Learning of SME
Types of Fintech Services/Tools
Discipline Character of the SME owner
Requirements to be funded by Government
Banks declines credit application due to Inconsistency of Income
WhatsApp uses a Most efficient Tool of communication

Role of the Government is prevent money laundering through legislation like Source of funds
Government driving awareness program for SME
Another challenge SME; the Cost of acquiring Wi-Fi
If listed on credit bureau as an SME's , no credit will be granted by financial Institution
Active role of the Bank on SME funding
Collateral for the Loan
Types of financial products
Religious and Culture impact success of SME
Invest in Systems against Losses
Types of financial products
Automation vs Manual manufacturing improves quality and increases volume
Northwest Corporation for farmers have created exclusivity for few
Types of Fintech Services/Tools
Financial products provided dignity and continuation for families
Technology has increased productivity and Speed
Types of Fintech Services/Tools
Mentoring the SME Owners
Continuous Learning of SME
Credible Credit profile provides with a negotiating power with Banks
Fintech removed geographical barriers
Another challenge fear of being robbed in public place
Saving time
WhatsApp Business efficient in SME's environment
Trust as contributor to adoption to Fintech
Types of financial products
Rural community still uses Cash not Apps which needs to an intervention of Fintech
The SME is required to put in the work
Fintech Expand your thinking
Rural communities still have Trust issues with Apps
Challenges of SME's is pride of using public services
Business development programs of SMEs to assess sustainability or viability of the business.
Clear requirements to be funded by Government
Self-driven character of the SME owner
Vision Character of the SME owner
Financial statements are required to obtain credit from the bank.
Compliance requirements