

**EVALUATION OF THE FACTORS AFFECTING MOBILE MONEY OPERATORS
CREDIT ACCESS: A CASE STUDY OF LUSAKA CENTRAL BUSINESS DISTRICT**

BY

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**A Dissertation submitted to the University of Zambia in partial fulfilment of the
requirements for the award of the Degree of Master of Business Administration General.**

THE UNIVERSITY OF ZAMBIA

LUSAKA

2024

DECLARATION

I *Namakando Munganzi*, do hereby declare that this is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other Universities. All sources of data used and literature on related works previously done by others, used in the production of this Dissertation have been duly acknowledged. If any omission has been made, it is not by choice but by error.

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APPROVAL

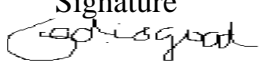
This Dissertation by *Namakando Munganzi* is approved as a partial fulfillment of the requirements for the award of the Degree of a Master of Business Administration.

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ABSTRACT

Zambia's government prioritizes finance access for economic growth. Mobile Network Operators offer expanded financial services, including credit. Research in Lusaka CBD examines factors influencing MNO credit access. It was a mono quantitative method approach. Sample size comprised 125 MNOs. Simple random sampling with a combination of purposive sampling were used to select respondents. Univariate and bivariate (chi Square statistical test were used) in Statistics Data (STATA) Version 14. The analysis reveals that individuals aged 25-29 and those with secondary or tertiary education are the most proficient users of mobile money services due to their tech-savvy nature and financial literacy. Young adults in the 25-29 age group, known as "digital natives," find mobile money convenient and accessible, embracing cashless transactions. Moreover, those with higher education levels demonstrate a deeper understanding of financial concepts, extending their use of mobile money to activities like savings and accessing microloans, leading to financial empowerment. These insights are crucial for financial industry stakeholders, guiding the design of more inclusive mobile money services and informing initiatives for enhancing financial inclusion. By leveraging these findings, stakeholders can tailor strategies and resources to meet the needs of different user groups. Policymakers can use this information to promote digital literacy and higher education, empowering individuals from diverse backgrounds to benefit from mobile money platforms, thereby driving economic growth. The study concludes by making the following recommendations: Enhance digital literacy as one of the tools to expand access to mobile money as mobile money's effectiveness hinges on age, education, accessibility, and trustability. It further suggests that, the Authority must strengthen security measures and tailor services to meet the needs of different age groups. Suggestions for future study: Conduct longitudinal analysis and comparative studies, explore user experiences through qualitative research, and assess the impact of policy interventions on mobile money adoption and financial inclusion.

Key terms: Mobile Money Operators, Credit, Access, Lusaka, Zambia.

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Appreciation additionally goes to my supervisor for his direction and persistence all through the proposal interaction. I am thankful for his quick remarks.

Much thanks to my wife, family and friends who provided me with a great deal of support in my movement.

DEDICATION

This work is devoted to individuals in desperate need and wanting to see change in the operations of credit access using mobile services. I believe this has a positive effect towards alleviating poverty. It also serves as an information base for the network providers, the Government of the republic of Zambia and the Ministry of Community Development and Social Services.

I express gratitude towards God forever.

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LIST OF ACRONYMS

ICT	: Information Communication Technology
MNOs	: Mobile Money Operators
NGOs	: Non-Government Organization
SDGs	: Sustainable Development Goals
TAM	: Technology Acceptance Model
TV	: Television
ZICTA	: Zambia Information Communication Technology Authority

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides the background to the study on the factors influencing mobile money credit access, focusing on the case study of Lusaka's Central Business District. It outlines the background, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, scope of the study, theoretical and conceptual framework, operational definitions, ethical consideration, and chapter summary.

1.2 Background

Enhancing access to low-cost financial products and services plays a pivotal role in reducing socio-economic vulnerability by bolstering financial systems. However, for many economically vulnerable individuals, particularly those with limited resources, accessing basic financial services remains a challenge (Demirguc-Kunt and Klapper, 2012).

Governments worldwide have long been implementing policies to promote financial inclusion, with the telecommunications industry seizing the opportunity through mobile money services. This initiative has led to the proliferation of financial products offered by Mobile Money Operators, including in Zambia where MNOs provide various financial services, including the Mobile Money Credit Facility.

The government of Zambia has prioritized the growth and accessibility of finance as a key economic driver. Lack of access to finance is recognized as a critical factor contributing to persistent income inequality and slower economic growth (Beck et al., 2009). To address this, Mobile Network Operators (MNOs) in the financial industry have been providing a broader range of financial services, including access to credit.

Mobile money originated in East Africa, particularly with Kenya's M-PESA, launched in 2007 by Safaricom. This service allowed users to store and transfer money via mobile phones (Ngambi, 2016). Following M-PESA's success, mobile money services spread across developing nations in Africa and South Asia. Many MNOs, inspired by M-PESA's success, launched similar products in their regions. For example, Vodafone launched M-PESA in Tanzania in 2008, albeit with slower adoption compared to Kenya.

Studies have shown the positive impact of mobile money services on financial inclusion. For instance, in rural Uganda, mobile money services were predominantly used for airtime purchases but significantly contributed to financial inclusion (Mbidde, 2017). Similarly, mobile money has contributed to financial inclusion in Ghana (Sackitey, 2018) and various other countries in the SADC region.

In Zambia, mobile money is primarily used for local money remittance and transactional purposes. Despite the potential for mobile-based financial inclusion, the adoption of mobile money services in Zambia remains relatively low compared to the percentage of mobile phone users (ZICTA, 2018).

1.3 Statement of the Problem

The issue prompting this study is the limited access to finance faced by MNOs. Despite the high mobile phone penetration in Zambia, MNOs encounter challenges in accessing credit and financial resources necessary for their operations and expansion (ZICTA, 2018). This lack of access to finance hinders the growth and effectiveness of mobile money services, which are crucial for enhancing financial accessibility and inclusion in the country. Therefore, this study aims to identify and address the specific factors contributing to MNOs' restricted access to finance, particularly in urban areas like Lusaka's Central Business District.

Factors influencing this low adoption include limited access to conventional financial services, lack of awareness, and perceptions of mobile money as merely an alternative to sending money. Addressing these factors is essential for improving mobile money service accessibility and usage in Zambia, particularly in urban areas like Lusaka's Central Business District. This research aims to evaluate the factors affecting Mobile Money Operators' credit access in this context and recommend strategies to enhance mobile money service accessibility..

1.4 Purpose of the Study

The purpose of the study was to identify factors affecting mobile money operators' access to credit in the Lusaka central business district off Zambia.

1.5 Research objectives

- To describe the relationship between the consumers' socio-demographic and adoption of mobile money services.
- To describe the factors that influence consumers to adopt mobile money services.
- To determine the factors that make customers abstain from adopting mobile money services

- To explore challenge facing mobile money operators in the Central business district.

1.6 Research Questions

- What is the relationship between the consumers' socio-demographic and adoption of mobile money services?
- What factors influence customers to use mobile money services?
- Why do customers abstain from using mobile money services?
- What challenges is mobile money facing in Lusaka's Central business district?

1.5 Significance of the Study

This study offers crucial insights into the factors influencing Mobile Money Operators' credit access in Lusaka's Central Business District, particularly focusing on micro and medium enterprises. By shedding light on these factors, the research contributes to a better understanding of how the government addresses the needs of micro and medium enterprises and provides valuable insights for their survival strategies. Given the significance of these enterprises to the economy, it becomes imperative for the government to implement measures aimed at protecting them and increasing their access to credit. Furthermore, this study aligns with Sustainable Development Goal number 8 (SDG 8), which aims at promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work. By addressing issues such as financial inclusion, entrepreneurship, and economic growth, this research adds to the body of knowledge supporting SDG 8.

1.7 Scope of the Study

This study specifically focuses on mobile money operator's micro and medium enterprises within Lusaka Central Business District, while also considering Livingstone, which hosts a significant portion of the country's tourism firms. The research concentrates on firms located in specific areas such as Kulima Tower, City Market, Millennium, and Lumumba bus terminus. Therefore, the findings of this study are limited to these selected areas.

1.8 Ethical Considerations

Ethical considerations ensure the protection of research subjects' rights and uphold ethical principles throughout the research process. This study obtained prior informed consent from participants, allowing them to discontinue participation at any time. Participants were informed about the study's purpose and their rights, including confidentiality and voluntary participation. Justice was upheld by fair selection of participants meeting the criteria, while personal identifiers

were removed to maintain confidentiality. Information collected was treated with utmost confidentiality and solely for academic purposes.

1.9 Structure of the Report

- **Background:** This chapter sets the stage by discussing Zambia's governmental emphasis on finance access for economic growth, leading Mobile Network Operators (MNOs) to expand their services to include credit facilities.
- **In the Literature Review chapter,** studies on the topic area were thoroughly reviewed to establish the research gap. Specifically, the significance of Mobile Network Operators (MNOs) in expanding financial services, particularly through credit provision, was explored. The chapter delved into the importance of understanding factors influencing MNO credit access as a means to inform policies and service designs aimed at fostering economic development and financial inclusion.
- **Research Methodology:** This chapter outlines the research approach taken, detailing the mono quantitative method used to investigate factors influencing MNO credit access. It explains the sampling techniques employed, including simple random sampling and purposive sampling, and the data analysis methods utilized.
- **Analysis, Presentations and Discussion:** In the chapter titled "Analysis, Presentations, and Discussion of Study Findings," the results of the study are presented and thoroughly analyzed. This section reveals insights such as the proficiency of specific demographics in using mobile money services and their reasons for adoption, with a particular focus on young adults aged 25-29. The findings were discussed in detail under this chapter, providing a comprehensive understanding of the implications and significance of the research outcomes.
- **Conclusion and Recommendations:** Here, the study concludes that enhancing digital literacy and expanding access to mobile money services are imperative for promoting financial inclusion. Recommendations are provided, emphasizing the need to strengthen security measures and tailor services to meet various age group needs. This chapter suggests avenues for future research, including longitudinal analysis, comparative studies, and qualitative exploration of user experiences. It also highlights the importance of assessing the impact of policy interventions on mobile money adoption and financial inclusion..

1.10 Chapter Summary

Chapter 1 provided a comprehensive overview of the factors influencing Mobile Money Operators' credit access in Lusaka's Central Business District, emphasizing the significance of enhancing financial accessibility to reduce socio-economic vulnerability. It outlined the challenges faced by economically vulnerable individuals in accessing basic financial services and the role of governments and the telecommunications industry in promoting financial inclusion through mobile money services. The chapter highlighted the specific context of Zambia, where despite high mobile phone penetration, the adoption of mobile money services remained low due to various barriers such as limited access to conventional financial services and lack of awareness. Furthermore, it introduced the research objectives, questions, theoretical and conceptual frameworks, operational definitions, and ethical considerations, setting the stage for further exploration in subsequent chapters.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review serves as a critical examination of existing research on a particular problem and its approaches, drawing insights from various sources such as books, journal articles, and government reports (Burns & Grove, 2009). For this study, the literature review concentrates on identifying and evaluating the factors influencing Mobile Money Operators' credit access in Lusaka's central business district, utilizing works by other researchers to guide the exploration of existing gaps in knowledge.

2.2 Overview of mobile money operators

Research conducted in both developed and developing countries has revealed a positive correlation between the adoption of mobile money services and various socio-demographic factors. In Sub-Saharan Africa, the widespread adoption of mobile money has been associated with positive economic growth (Nan, 2019). Factors influencing mobile money adoption in countries like Egypt, Kenya, Ghana, and Tanzania include country-specific characteristics, regulatory considerations, and service provision characteristics (Mahmoud, 2019). Additionally, factors such as perceived ease-of-use play a significant role in consumers' attitudes toward mobile-based money in countries like Togo (Gbongli, 2019).

Studies in developed countries highlight the association between mobile money use and improved employment outcomes (Gasperin, 2019). In rural areas of Africa, age, education, unemployment, and bank account ownership influence mobile money adoption (Akinyemi, 2020). Moreover, the diffusion of mobile money innovations is influenced by institutional and economic factors (Lashitew, 2019).

Research in high-income countries emphasizes factors like perceived ease of use, perceived usefulness, social influence, trust propensity, and demographic factors such as age, education, and income influencing mobile money usage (Leon, 2019; Alkhaldi, 2019). Challenges faced in these countries include issues with management, surveillance, and concerns about perceived risk and trust (Martin, 2019; U., 2024).

In middle-income countries, contextual facilitators and barriers like price benefit, trust, and habit influence mobile money usage (Pal, 2020). Challenges include concerns about perceived risk, ease

of use, trust, and managerial issues such as inadequate monitoring of agents (Salam, 2021; Jr., 2022).

Low-income countries encounter challenges such as limited digital penetration, price sensitivity, and trust issues affecting mobile money adoption (Pal, 2020). Despite these challenges, mobile money has been recognized as a frugal innovation addressing affordability constraints and resource limitations (David-West, 2019). However, barriers like high fees and lack of financial education persist (Hamdan, 2021).

Overall, understanding the factors influencing mobile money adoption across different income settings is crucial for addressing challenges and promoting financial inclusion globally.

2.3 Funding mobile money operators

Funding mobile money operators presents unique challenges and opportunities across different income settings. In Eastern Africa, M-PESA has successfully implemented mobile money with a focus on speed and low cost, leading to increased entrepreneurship and domestic savings (Okrah, 2022). However, the system faces risks such as fraud (Lake, 2013). In Sub-Saharan Africa, mobile money has the potential to significantly impact digital payments (Kendall, 2013), but success varies, and challenges like ensuring service quality and addressing poverty influence demand for transactions (Balasubramanian, 2020).

Research on middle-income countries highlights the importance of trust, risk, and habitual use in mobile payments adoption (Killian, 2017), and the need for an enabling environment for mobile banking (Porteous, 2006). Positive correlations between mobile money use and inclusive development have been identified (Asongu, 2017), with potential for driving entrepreneurship and improving macroeconomic stability (Adam, 2015; Jussila, 2015). Regulatory frameworks are crucial for protecting against financial crimes (Chatain, 2011).

In low-income countries, the expansion of mobile telephony can enhance access to financial services (Porteous, 2006), with mobile money positively impacting remittances, savings, consumption, and livelihoods (Alampay, 2018; Pickens, 2006). Challenges include the need for regulatory frameworks to combat financial crimes (Chatain, 2011), but mobile money can contribute to macroeconomic stability and entrepreneurship (Adam, 2015; Jussila, 2015). Success factors like ease of use and low transaction costs contribute to the effectiveness of mobile money services (Jussila, 2015), with innovations like M-Cash further enhancing financial inclusion (Mirembe, 2008).

2.4 Review of similar studies

Research conducted in both developed and developing nations has consistently demonstrated a positive correlation between the adoption of mobile money services and various socio-demographic factors. In Sub-Saharan Africa, the widespread uptake of mobile money has been correlated with favorable economic growth (Nan, 2019). Factors influencing mobile money adoption in countries like Egypt, Kenya, Ghana, Tanzania, Uganda, Zimbabwe, and Rwanda include country-specific characteristics, regulatory considerations, and service provision characteristics (Mahmoud, 2019). Moreover, in Togo, the perceived ease-of-use has emerged as a significant determinant shaping consumers' attitudes towards mobile-based money (Gbongli, 2019). In developed countries, mobile money usage has been associated with enhanced employment outcomes (Gasperin, 2019). Additionally, in rural African regions, factors such as age, education, unemployment, and bank account ownership have been identified as influential in the adoption of mobile money (Akinyemi, 2020). Furthermore, the diffusion of mobile money innovations has been found to be influenced by institutional and economic factors (Lashitew, 2019).

Several studies have delved into the correlation between consumers' socio-demographic characteristics and the adoption of mobile money services in middle-income countries. Nan (2019) and Reynolds (2023) both affirm that mobile money adoption can have a positive impact on economic growth and financial inclusion, with Reynolds specifically underscoring gender disparities in mobile money usage. Witts (2021) and Alkhalidi (2019) further underscored the significance of individual awareness, perceived ease of use, and demographic variables like age, education, and income in influencing adoption trends. Koomson (2021) and Mahmoud (2019) directed their focus towards the role of mobile money in providing financial assistance during unforeseen crises and its associated determinants, respectively. Lastly, Saprikis (2021) and Gbongli (2019) shed light on the critical role of perceived ease of use, perceived usefulness, and personal innovativeness in predicting the adoption of mobile money services.

Numerous studies have investigated the association between consumers' socio-demographic characteristics and the adoption of mobile money services in low-income countries. Nan (2019) and Pal (2020) underscore the potential of mobile money to stimulate socioeconomic development, with Pal (2020) identifying factors such as price benefit, network externalities, trust, and habit as significant drivers of usage intention. Akinyemi (2020) and Ky (2019) further stress the

importance of education, employment, and income in mobile money adoption, with Akinyemi also highlighting the relevance of age and bank account ownership. Vatsa (2023) and Seng (2021) offer additional insights, with Vatsa identifying education, health, economic status, and political affiliation as influential factors in China, while Seng demonstrates the potential for mobile money to alleviate poverty in Cambodia. Furthermore, Koomson (2021) and Anyidoho (2022) delve into the impact of mobile money adoption on responses to idiosyncratic shocks and the ramifications of mobile money taxation, respectively.

Various factors have influenced the utilization of mobile money services in high-income countries over the past five years. These factors encompass perceived ease of use, perceived usefulness, social influence, trust propensity, and demographic variables such as age, education, and income (Leon 2019, Alkhalidi 2019). The impact of these factors varies among different user groups, with certain studies underlining the significance of expected efficiency, effort expectations, social impact, safety and security, and supplier reputation (Phan 2020, Yeh 2020). Additionally, the role of service quality, service innovation, brand equity, switching costs, and public policy in the mobile payment ecosystem has been underscored (Yeh 2020). However, the explicit influence of these factors in high-income countries has not been addressed in the literature.

In middle-income countries, a variety of factors have shaped the utilization of mobile money services in the past five years. These factors encompass both contextual facilitators and barriers, such as price benefit, network externalities, trust, and habit (Pal 2020), as well as individual perceptions like perceived ease of use, perceived usefulness, social influence, and trust propensity (Leon 2019). Additionally, demographic variables including age, education, and income are influential (Alkhalidi 2019). Furthermore, service quality, innovation, brand equity, switching costs, and public policy are identified as additional contributing factors (Yeh 2020). The adoption of mobile money services is also affected by country-specific characteristics, regulatory considerations, and service provision characteristics (Mahmoud 2019).

In low-income countries, a multitude of factors have influenced the utilization of mobile money services over the past five years. These encompass contextual facilitators and barriers such as price benefit, network externalities, trust, and habit (Pal, 2020), along with the transformative impact of fintech, mobile money, and digital financial services on financial inclusion (Museba, 2021). Studies have identified key determinants of mobile money adoption in rural areas of Africa, including age, education, unemployment, and bank account ownership (Akinyemi, 2020).

In the Philippines, critical factors influencing the intention to use mobile banking include perceived ease of use, perceived usefulness, social influence, and trust propensity (Leon, 2019). Moreover, in Sub-Saharan Africa, the uptake of mobile broadband has been correlated with factors such as SIM card ownership, involvement in online social communities, and digital inclusion (Hasbi, 2019). Examining the economic impact, telecom groups are more inclined to introduce mobile money services in countries with weaker legal rights and less prevalent credit information, shedding light on the interplay between the banking and telecommunications sectors (Pelletier, 2019). Furthermore, the success factors of mobile money adoption in various developing countries underscore the significance of country-specific characteristics, regulatory considerations, and service provision characteristics (Mahmoud, 2019). In the Greater Accra Region of Ghana, factors such as technology proficiency among cohorts, service availability, and education have also been identified as influential.

In high-income countries, several factors have been identified as barriers to the uptake of mobile money services. These encompass ownership of a SIM card, income level, and possession of a bank account (Potnis, 2020), alongside concerns regarding the limited demand for digital payment options and apprehensions regarding tax obligations (Ligon, 2019). In India, contextual factors such as price benefits, trust, and habitual behavior have been observed to impact the sustained usage of mobile payment services (Pal, 2020). Conversely, in Nigeria, the absence of viable business models for mobile money services has emerged as a significant obstacle (David-West, 2020). In Vietnam, possessing an account at a financial institution has been identified as a facilitator for mobile money usage (Son, 2019). Furthermore, the intention to utilize mobile banking among retail banking clients is influenced by perceived ease of use, usefulness, social influence, and trust propensity (Leon, 2019).

In middle-income countries, various factors contribute to the reluctance to adopt mobile money services. These encompass taxation policies aimed at capturing revenue from informal workers (Anyidoho, 2022), as well as contextual facilitators and barriers like price benefits, trust issues, and operational constraints (Pal, 2020). Significant barriers also include concerns regarding security, privacy, and utility (Vashistha, 2019). For small and medium-sized enterprises, factors such as accessibility, safety, and convenience are pivotal in adoption decisions (Tengeh, 2020). In the context of mobile banking, perceived ease of use, usefulness, social influence, and trust propensity emerge as crucial factors (Leon, 2019). Moreover, barriers such as high fees, inadequate

physical infrastructure, and a lack of financial literacy further impede mobile money usage (Hamdan, 2021). Notably, demographic variables have not been found to significantly influence the utilization of mobile banking services (Velmurugan, 2020).

Several factors contribute to the limited adoption of mobile money services in low-income countries. These encompass contextual facilitators and barriers such as price sensitivity, low levels of digital penetration, and a high risk of failure (Pal, 2020). Market separation, which includes various temporal, financial, information, social, and spatial factors, also acts as a deterrent to usage (Potnis, 2020). Demand-side factors, such as perceived disinterest from customers and concerns regarding tax implications, further impede adoption (Ligon, 2019). The lack of sustainable business models for mobile money services stands out as another significant barrier (David-West, 2020). In rural areas, factors like age, education, unemployment, and bank account ownership are pivotal determinants of adoption (Akinyemi, 2020). Moreover, factors such as perceived ease of use, usefulness, social influence, and trust propensity play a crucial role in shaping behavioral intentions toward using mobile banking services (Leon, 2019). Lastly, the relative economic impact of the banking and telecommunications sectors in providing mobile money services is a key consideration for policy and strategy formulation (Pelletier, 2019).

Mobile money services in high-income countries have encountered several challenges over the past five years. These encompass management issues, such as inadequate monitoring of agents and weak staff recruitment policies, as highlighted by Jr. (2022) and Kanobe (2021). Additionally, these platforms have been subjected to various forms of surveillance, including customer identification and transaction monitoring, as noted by Martin (2019). Concerns about perceived risk, ease of use, and trust have been expressed by users, regulators, and merchants, as indicated by U. (2024) and Pal (2020). The COVID-19 pandemic has further exacerbated these challenges, shedding light on issues related to perceived risk, privacy, cost, and customer satisfaction, as discussed by Salam (2021). Despite these hurdles, mobile money has been acknowledged as a frugal innovation that effectively addresses affordability constraints and institutional voids, as recognized by David-West (2019).

Over the past five years, mobile money in middle-income countries has encountered diverse challenges. These encompass user concerns regarding perceived risk, ease of use, and trust, as highlighted by U. (2024) and Salam (2021), alongside managerial issues like inadequate monitoring of agents, privacy concerns, and weak staff recruitment policies, as discussed by Jr.

(2022). The COVID-19 pandemic has further intensified these challenges, exacerbating issues related to perceived risk, privacy, cost, and customer satisfaction, as noted by Salam (2021). Despite these obstacles, mobile money has been acknowledged as a frugal innovation effectively addressing affordability constraints and resource limitations, as recognized by David-West (2019). However, there remain unmet opportunities, particularly concerning financial inclusion, due to high fees, limited infrastructure, and a lack of financial education, as highlighted by Hamdan (2021). The growth of mobile money transactions has been observed in various countries, with potential benefits for small economies and the advancement of a cashless economy, as evidenced by Gachukia (2020). Contextual factors such as price benefit, trust, and operational constraints influence the sustained use of mobile payment services in India, as indicated by Pal (2020). Similarly, in Vietnam, owning an account at a financial intermediary has been found to facilitate the adoption of mobile money and digital transactions, as identified by Son (2019).

Over the past five years, mobile money in Lusaka's Central Business District has encountered numerous challenges, spanning financial, security, privacy, performance, time, convenience, and psychological domains, as documented by Lambongang (2023). Identified impediments to mobile money expansion in Zambia, including Lusaka, have been extensively studied, as evidenced by Chipa (2021). However, despite these challenges, mobile money services have been found to have a positive impact on the profitability of the banking sector in Zambia, according to Mwange (2022). Moreover, the utilization of mobile money has been demonstrated to enhance the resilience of small and medium-sized enterprises (SMEs) in Zambia, including Lusaka, particularly amid the Covid-19 pandemic, as highlighted by Nan (2021). The management of mobile money systems has emerged as a crucial issue, with Jr. (2022) offering recommendations for improvement. In Uganda, the adoption of mobile money services by traders has been linked to factors such as performance expectancy, social influences, and sensitization, as explored by Malinga (2019). Nevertheless, concerns about the suitability of mobile money for promoting financial inclusion in rural areas persist due to challenges like digital illiteracy, irregular service delivery, and poor network connectivity, as discussed by Serbeh (2021). Lastly, a notable gap between mobile money account ownership and active usage has been identified, with barriers such as high fees, inadequate physical infrastructure, and a lack of financial education hindering adoption, as outlined by Hamdan (2021).

Mobile money in Lusaka's Central Business District encounters various challenges, spanning financial, security, privacy, performance, time, convenience, and psychological dimensions, as outlined by Lambongang (2023). In Zambia, hindrances to its expansion include high fees, insufficient physical infrastructure, and a lack of financial education, as identified by Chipa (2021) and Hamdan (2021). Nevertheless, despite these obstacles, mobile money has been observed to contribute positively to the profitability of the banking sector in Zambia, as evidenced by Mwangi (2022). However, its potential to promote financial inclusion in Tanzania faces impediments like poor network coverage, high transaction fees, and a lack of float, as discussed by Baruti (2022). Additionally, the use of mobile currencies in Côte d'Ivoire raises concerns regarding their impact on the monetary base and the regulatory framework, as indicated by Sical (2021).

In Lusaka's Central Business District and other low-income countries, mobile money has encountered challenges over the past five years, including security issues, as documented by Chipa (2021) and Ali (2020). Overcoming these challenges necessitates improved access controls, customer awareness campaigns, and enhanced agent training. Despite these hurdles, mobile money has demonstrated its ability to enhance the resilience of small and medium-sized enterprises (SMEs) during crises like the Covid-19 pandemic, as illustrated by Nan (2021). However, sustaining the use of mobile payment services hinges on addressing contextual facilitators and barriers, such as price benefit, trust, and risk, as highlighted by Pal (2020). Furthermore, managing mobile money systems poses challenges, including inadequate monitoring of agents and weak staff recruitment policies, as discussed by Jr. (2022). Despite these obstacles, mobile money has been instrumental in promoting financial inclusion, especially in rural areas, as evidenced by Hamdan (2021) and Wieser (2019).

2.5 Critique of existing literature

The literature review provides a comprehensive analysis of mobile money adoption across various income levels and regions but may raise concerns about its validity. While it spans a wide range of countries and socio-demographic factors influencing adoption (Nan, 2019; Mahmoud, 2019; Gbongli, 2019; Gasperin, 2019; Akinyemi, 2020), there's a tendency to generalize findings without considering specific contextual nuances (Reynolds, 2023). Furthermore, the review predominantly focuses on positive outcomes, overlooking potential drawbacks and relying on older studies whose relevance may be questioned (Witts, 2021; Alkhaldi, 2019).

The limited diversity in cited sources and the absence of critical analysis may compromise the depth and rigor of the review (Saprikis, 2021; Pal, 2020). Thus, while offering valuable insights, there's a need for a more nuanced and balanced approach, incorporating recent research and critical examination to enhance validity (Phan, 2020; Yeh, 2020). These studies were done over a decade ago and in different context to Zambia. Zambia is a developing country and 10 years ago the acquisition of mobile phones was still limited compared to now. Besides that, the studies these studies did not apply the TAM theory to explain findings.

Additionally, there was no consistence in the use of variables such as age of young people the age range varied as well as gender and education levels. However, barriers to increased adoption of mobile money services include the urban-rural digital divide (Launa, 2015; Maikara in 2014), poverty (Maikara, 2014), poor network (Lukas et al., 2009), complications of using mobile phone technology (Maimbo, 2016), and lack of awareness of mobile money technology use (ZICTA, 2019).

These statistics are significant, but they did not include the socioeconomic demographic traits linked to poor acceptance of mobile money services. Momo's effects on credit service access were not determined by Richard (2022). In a different context from Zambia, this study was carried out in Ghana. According to a study by Islam (2016), perceived utility and convenience of use are what spur acceptance of mobile payments, but perceived risk and expenses are what slow it down. Yet unlike Zambia, where this study was done, Bangladesh has a diverse social, economic, and demographic backdrop.

The research gap identified in the literature review reveals two main deficiencies. Firstly, existing studies predominantly originate from foreign countries, with limited statistical information specific to mobile money services in Zambia, particularly concerning factors driving current growth rates in the sector. Consequently, there is a need for research focused on evaluating the factors influencing Mobile Money Operators' (MMOs) credit access in the Lusaka central business district, thus filling this void.

Secondly, while acknowledging barriers to mobile money adoption such as the urban-rural digital divide, poverty, and poor network infrastructure, there remains a lack of insight into how these barriers intersect with specific socio-demographic traits in Zambia. The literature review highlights a dearth of recent and contextually relevant studies conducted in Zambia, hindering the comprehensive understanding of factors influencing mobile money adoption.

Addressing these gaps is crucial for developing targeted interventions and strategies that effectively promote mobile money adoption while catering to the diverse needs and concerns of different demographic groups within Zambia's socio-economic context.

2.6 Lessons learnt

The literature review on mobile money adoption across various income settings provides valuable insights but is subject to critiques and notable gaps. While it comprehensively covers factors influencing adoption and associated outcomes, there's a risk of generalization without considering contextual nuances, raising concerns about the validity of conclusions. Moreover, the lack of critical analysis and diversity in sources limits the depth and rigor of the review, necessitating a more nuanced and balanced approach. Importantly, many cited studies are not specific to Zambia's context and are outdated, highlighting the need for recent, contextually relevant research focused on Zambia. Inconsistencies in variables and methodologies further complicate comparisons, while significant research gaps, including the lack of studies on MMOs' credit access in Lusaka and how socio-demographic traits intersect with adoption barriers, underscore the need for targeted interventions tailored to Zambia's unique socio-economic landscape.

2.7 Chapter Summary

Chapter Two provided a comprehensive literature review on the factors influencing Mobile Money Operators' credit access in Lusaka's central business district. The empirical literature review covered research from developed, middle-income, and low-income countries, highlighting factors that influenced mobile money adoption and usage. Critique of the literature revealed concerns about validity, including generalization of findings and reliance on older studies, as well as a lack of consistency in variable usage.

The identified research gap underscored the need for more contextually relevant studies in Zambia, particularly focusing on factors intersecting with socio-demographic traits. Addressing these gaps was crucial for developing effective interventions promoting mobile money adoption in Zambia.

CHAPTER 3

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1 Introduction

In that chapter, the theoretical and conceptual framework served as the foundation for understanding the study's research questions and objectives. By synthesizing existing theories and concepts, it provided a roadmap for the empirical investigation conducted in the subsequent chapters. Additionally, the framework delineated the key variables and relationships under scrutiny, facilitating a structured analysis of the research findings.

3.2 Theoretical Framework

The study is grounded in the Technology Acceptance Model (TAM).

3.2.1 Technology Acceptance Model

The Technology Acceptance Model (TAM) is an information systems theory that elucidates how users develop acceptance and utilize a technology by forming behavioral intentions, which drive their usage (Davis et al., 1989). TAM posits that perceived ease of use and perceived usefulness are pivotal in predicting the acceptance of information technology. Key constructs within TAM, such as perceived usefulness (PU) and perceived ease of use (PEOU), contribute to an end user's beliefs about technology, subsequently shaping their attitude toward the technology, and ultimately determining its acceptance.

The theory was selected for its capability to analyze and integrate with other factors, such as demographic and social variables, as delineated in the conceptual framework. Additionally, TAM's foundational assumptions regarding perceived usefulness and perceived ease of use have been established as influential factors in technology adoption processes.

3.3 Conceptual Framework

According to Mugenda and Mugenda (2003), a conceptual framework is a theoretical model delineating the concepts and their interrelationships. Figure 2:1 presents a diagrammatic illustration of potential factors affecting Mobile Money Operators' credit access in the Lusaka central business district.

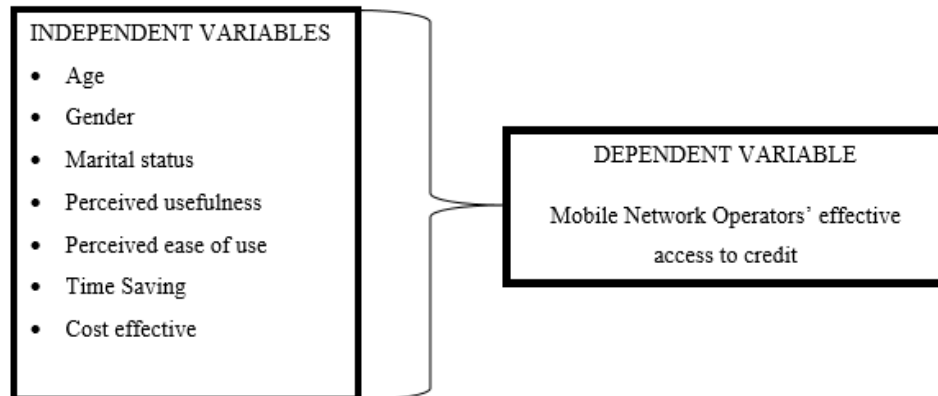


Figure 4:1 Mobile Network Operators' Access to Credit Conceptual Framework

Source: Author (2023)

3.3.1 Definition of Variables

- Age: Refers to respondents aged 18 years or above who utilize mobile money services, with age impacting the access to credit as adults are more inclined to engage in various mobile transactions.
- Gender: Represents respondents identified as either male or female who use mobile money services, with gender potentially influencing credit access as one gender may utilize mobile network operators more for transactions.
- Marital Status: Denotes the social status of respondents as single, married, divorced, widowed, or separated, which may affect the usage of mobile money services, thus influencing the amounts of credit accessible to mobile network operators.
- Perceived Usefulness: Reflects respondents' perception of the usefulness of mobile money services for financial transactions, impacting the amount of credit available to mobile network operators.

- Perceived Ease of Use: Indicates respondents' perception of the ease of using mobile money services, with perceived ease affecting credit availability for mobile network operators based on factors such as education level, age, and device type.
- Time Saving: Represents the perception or experience of respondents regarding the time-saving aspect of mobile money services compared to traditional transactions, influencing the frequency of mobile money service usage and consequently the credit accessibility for mobile network operators.
- Cost-effectiveness: Reflects the perception of whether mobile money services are perceived as cost-effective, impacting credit availability for mobile network operators by saving time and reducing transaction costs.
- Mobile Network Operators' Effective Access to Credit: Represents the credit accessible to mobile network operators through mobile transactions, facilitated by deposits, withdrawals, and savings by citizens in Lusaka's central business district.

3.3.2 Interaction of Variables

The conceptual framework elucidates the relationship between independent and dependent variables, which operate through background variables to influence knowledge on financial matters. Independent variables such as time-saving, cost, consumer demographic factors, perceived usefulness, and perceived ease interact to determine the extent of effective mobile operator credit access.

For instance, delays in mobile transactions impact time-saving and cost, ultimately affecting effective mobile operator credit access. Additionally, demographic factors like age influence mobile service accessibility, potentially impacting credit access for mobile operators. Furthermore, the perceived usefulness and ease of mobile money services play a crucial role in determining effective mobile operator credit access.

3.4 Chapter Summary

In this chapter, the theoretical and conceptual framework served as a cornerstone for comprehending the research questions and objectives explored throughout the study. By synthesizing existing theories and concepts, the framework provided a structured approach to understanding the phenomenon under investigation. It not only delineated the key variables and relationships but also laid the groundwork for the empirical analysis conducted in subsequent

chapters. Furthermore, the theoretical and conceptual framework bridged the gap between theoretical insights and practical implications, offering valuable insights into the topic area.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

The following chapter presents an in-depth exploration of the methodologies employed to fulfill the study's objectives. It serves as an overarching view of the methodological framework utilized throughout the research process. As articulated by Polit and Hungler (2004), methodology encompasses the procedures for acquiring, organizing, and analyzing data. It constitutes a cohesive array of methods designed to complement one another, ultimately yielding data and insights that align with the research question and objectives. This chapter delves into various facets of the methodology, including research design, study site selection, identification of the study population, determination of sample size and sampling procedures, and the utilization of data collection tools. The discussion within this chapter is structured around key components such as research design, population sampling, data collection, and subsequent data analysis, as highlighted by Holloway (2005).

4.2 Research Design

In this study, a descriptive survey design was employed to gather comprehensive insights into the subject matter. This approach facilitated a thorough exploration of the key characteristics, meanings, and implications associated with the case under investigation. The choice of a descriptive survey design was justified by the need to thoroughly examine the complexities of the topic and attain a nuanced understanding of its various aspects. Descriptive surveys are well-suited for investigations requiring detailed and contextualized information, making them an appropriate choice for this study's research objectives.

4.3 Philosophic Framework

4.3.1 Positivism

Positivism is rooted in the philosophical perspective of natural scientists, emphasizing the examination of observable social realities to formulate law-like generalizations (Saunders et al., 2019: 144). It is characterized by a commitment to obtaining unambiguous and precise knowledge, prioritizing a strictly scientific empiricist approach aimed at generating pure data and facts unaffected by human interpretation or bias (Saunders et al., 2019: 144).

Quantitative research designs are commonly associated with positivism, particularly when employing predetermined and highly structured data collection methods (Sunders, Lewis &

Thornhill, 2019: 176). However, there is an evolving perception that quantitative research is not exclusively tied to positivism, challenging the notion of a direct correlation between positivism, deduction, and quantitative design (Bryman, 1998; Walsh et al., 2015a as cited in Saunders et al., 2019: 176). Quantitative research designs can also be situated within the realist and pragmatist philosophies, offering flexibility in philosophical underpinnings (Saunders et al., 2019: 176).

4.4 Research Methodology

This study employed a quantitative approach, utilizing questionnaires to gather numerical data from respondents in the Lusaka business district. The choice of a case study design was justified based on the contemporary nature of the study, which focused on current information rather than historical data. As outlined by Silverman (1995), considering the objectives, hypothesis, research questions, and methods of the study, a case study approach was deemed appropriate. This approach allowed for a detailed exploration of the topic within its real-life context, facilitating a thorough understanding of the phenomena under investigation.

4.5 Study Site

The focus of this study was on the Lusaka district in the Lusaka Province, specifically the Central Business District (CBD) of Lusaka. The selection of this location was deliberate, as it is home to a significant number of micro and medium-sized businesses. The decision to concentrate on this area was influenced by its high concentration of businesses relevant to the study's objectives.

Furthermore, the choice of research sites was guided by the need to access locations relevant to the field of study and to ensure access to an appropriate population of potential subjects. By selecting the CBD of Lusaka, the study aimed to gather data from a diverse range of businesses operating in a central hub of economic activity, thereby enhancing the representativeness and relevance of the findings.

4.6 Study Population

The study took place within Lusaka's central business district, located in the Lusaka Province, Zambia. The target population for this research comprised small and medium business operators, specifically those operating in mobile booths. This selection criterion was deemed appropriate because these individuals were considered to possess valuable insights and information relevant to the study's topic. Mobile booth operators were chosen as the focal group due to their active involvement in the local business environment, making them well-positioned to provide firsthand perspectives and experiences related to the research objectives.

Table 0:1: Study population and sample size

Sample elements	Population (N=611)	Sample size (N=125)
Mobile money booth operators	465	95
Financial institution managers (diverse)	30	6
Financial institution trade Customer	25	5
Other small micro medium operators	91	19

Source: Author (2023)

4.6.1 Sample Size and Sampling Procedure

The minimum sample size was determined using Yamane's (1967:886) simplified formula for proportion, considering a 90% confidence level and a margin of error (confidence interval) of +/- 10%. Yamane's formula (1967) is employed in situations where the target population is unknown and is expected to be 10,000 or fewer. The study focused solely on booths and small to medium-sized firms operating within the Lusaka Central Business District, which was estimated to have a population of 556 mobile money booths according to data from Airtel (2019).

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{556}{1 + 556(0.1)^2}$$

$$n = \frac{556}{1 + 556 \times 0.01}$$

$$n = 85$$

Where n = the sample size

N = the population size (556)

e = margin of error (0.1)

Hence, the determined sample size should comprise a minimum of 85 research subjects. Additionally, according to Borg and Gall (1996), a minimum sample size of 90 respondents or observations is deemed adequate for survey research. Consequently, questionnaires were administered to 125 participants, slightly surpassing the minimum recommendation of 85 participants.

4.6.2 Sampling Technique

4.7 Simple random sampling was employed to select the participants for this study.

4.8 Data Collection

4.8.1 Secondary data

Secondary data offered researchers a swift understanding of the information available in the field on credit access. By reviewing previous studies, the researcher identified approaches that could be applied in this particular study. Secondary data was sourced from published books, journals, articles, and online resources.

4.8.2 Primary data

This raw unpublished data was collected using quantitative and qualitative data collection tools.

4.9 Data Collection Tools

The study employed a single type of data collection tool to gather information from respondents, namely questionnaires. These questionnaires were administered by the researcher directly to the respondents.

4.9.1 Questionnaires

The questionnaires comprised closed-ended questions designed to elicit quantitative data. These questionnaires were administered in person to all respondents. The choice of questionnaires was informed by several factors: they facilitate the collection of standardized responses, are efficient in data collection, and simplify analysis. Additionally, administering questionnaires allowed respondents sufficient time to provide thoughtful responses.

4.9.2 Reliability

In this study, reliability was ensured through the standardization of the instrument. Before the main study, the research tool underwent testing in a pilot study conducted in an environment with characteristics similar to those of the main study environment. This pilot study aimed to assess the stability of the data collection tool.

4.9.3 Validity

Validity was ensured through a rigorous process of scrutiny and refinement of the data collection tool. The questionnaire underwent examination by the supervisor, professional analysis from the Ministry of Commerce, and a researcher, whose feedback was incorporated into the final version of the questionnaire. To enhance clarity and simplicity, the questions were made clear, specific, and easy to interpret for the respondents. Additionally, a pilot study was conducted in Lusaka district to test the instrument, allowing for relevant adjustments to be made before its final administration.

4.10 Data analysis

The data analysis was conducted using Statistical Package for Social Sciences (SPSS) version 23. This software was chosen for its user-friendly interface and its capability to perform comprehensive and in-depth analyses (Reyan, 2007).

Initially, descriptive statistics using univariate analysis were employed to present the background characteristics of the respondents, including demographic and social characteristics. Descriptive statistics involve presenting numerical data in tables or graphs and analyzing the data methodology (Nicholas, 2006). Univariate analysis focuses on summarizing or describing a single variable (Babbie, 2007). In this study, univariate analysis was utilized to describe the background characteristics of the study participants and illustrate variable outputs. SPSS software was utilized to tabulate both the dependent and independent variables.

Subsequently, bivariate analysis was conducted to explore the relationship between independent variables and the dependent variable. Bivariate analysis involves analyzing two variables to determine their relationship, degree of association, and predictability (Moore, Notz, and Flinger, 2013). This analysis was used to examine the association between background variables and the dependent variable, as well as between independent variables and the dependent variables. Additionally, a chi-square test was employed to compare observed results with expected results. The chi-square analysis calculates the probability that the relationship observed between two categorical variables is due to chance (Ugoni and Walker, 1995). A significance level, typically denoted as $p < 0.05$, indicates the likelihood that the outcome occurred by chance. If the observed p-value is less than 0.05, the observed difference or relationship is considered statistically significant.

Finally, the results generated from SPSS version 23 were exported to MS Excel for the purpose of editing and designing graphs, pie charts, and tables. Subsequently, the data were transferred to MS Word for report writing. This process facilitated the visualization and interpretation of the study findings.

Objective 1: To describe the relationship between the consumers' socio-demographic characteristics and adoption of mobile money services. To address this objective, a survey was conducted among consumers in the Lusaka business district to collect data on their socio-demographic profiles, including age, gender, income level, and education level. Univariate analysis was then employed to summarize these characteristics, providing insights into the demographic composition of the sample population. Subsequently, bivariate analysis was conducted to explore the relationship between socio-demographic variables (considered as independent variables) and the adoption of mobile money services (the dependent variable). The chi-square test was utilized to determine the significance of the relationship between socio-demographic factors and mobile money service adoption, providing valuable insights into the influence of demographic factors on consumer behavior regarding mobile money services.

Objective 2: To describe the factors influencing consumers to use mobile money services. To achieve this objective, the survey instrument included questions aimed at gathering information on various factors influencing consumers' use of mobile money services, such as convenience, security, accessibility, and trust. Descriptive analysis was employed to summarize these factors, providing a comprehensive overview of the determinants driving consumer adoption of mobile money services. Additionally, qualitative data analysis techniques were utilized to identify common themes and patterns related to factors influencing mobile money service adoption, offering deeper insights into consumer motivations and preferences. Bivariate analysis was then conducted to explore the relationship between these factors and the actual usage of mobile money services, elucidating the key drivers shaping consumer behavior in this domain.

Objective 3: To determine the factors that deter customers from using mobile money services. To address this objective, the survey included questions designed to identify reasons why certain customers abstain from using mobile money services, such as lack of awareness, distrust, or a preference for cash transactions. Descriptive statistics were employed to summarize the reasons for abstaining from mobile money services, providing a clear understanding of the barriers faced

by non-users. Qualitative analysis was also conducted to delve deeper into the underlying reasons for abstaining, identifying common barriers and concerns expressed by respondents. Bivariate analysis was utilized to examine the relationship between these factors and the decision to abstain from using mobile money services, shedding light on the factors driving non-adoption among certain segments of the population.

Objective 4: To explore challenges facing mobile money operators in the Central business district and make recommendations for the way forward. To achieve this objective, interviews or focus group discussions were conducted with mobile money operators in the Central business district to identify challenges they face, such as regulatory issues, competition, and technological limitations. Qualitative analysis was then conducted to identify common challenges and themes emerging from the discussions. A SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) was employed to assess the internal and external factors affecting mobile money operators, providing a comprehensive understanding of their operating environment. Based on the findings, recommendations were developed to address the identified challenges and capitalize on opportunities for improvement in mobile money services, offering actionable insights for stakeholders in the industry.

4.11 Chapter Summary

In Chapter Three, the research methodology employed in the study of mobile money adoption in Zambia is comprehensively elucidated. The chapter begins with an introduction outlining the overarching view of the methodological framework utilized throughout the research process, drawing from the insights of Polit and Hungler (2004) regarding the significance of methodology in data acquisition, organization, and analysis. The research design is then expounded upon, with a case study approach being justified for its ability to provide contextually rich insights into the subject matter. Additionally, the chapter delves into the philosophic frameworks guiding the study, including positivism and interpretive philosophy, highlighting their relevance in shaping the research approach.

Methodological aspects such as study site selection, determination of the study population, and sampling procedures are thoroughly discussed, with a rationale provided for each decision made. The chapter also outlines the data collection tools utilized, with a focus on questionnaires for both quantitative and qualitative data collection. Moreover, reliability and validity measures are addressed to ensure the robustness of the research findings.

Finally, the chapter details the data analysis process, employing descriptive and bivariate analysis techniques using Statistical Package for Social Sciences (SPSS) version 23, and concludes with an overview of the methods employed to address each research objective, providing a comprehensive understanding of the research methodology adopted in the study.

CHAPTER 5

ANALYSIS, PRESENTATION AND DISCUSSION

5.1 Introduction

This chapter is made up of presentation and analysis of data collected from the mobile money operators in the Central Business District of Lusaka. The data is separated into Demographic and social-economic characteristics and presented according to the objectives of the study and how each sector would respond to different questions posed to them.

The outline presentation of study findings starts with characteristics of study respondents. The subsequent sections are aligned to the study objectives and questions. Thereafter, the key findings are triangulated with other studies on the topic area. The triangulation is a discussion on the contrast and similarities on the findings. The chapter ends with a summary.

5.1.1 Characteristics of study respondents.

The purpose of this analysis is to describe the background variables, summarize them and find patterns in the data. The key fact in this type of analysis is that only one variable is involved. This section therefore, will use the univariate analysis to present data on the demographic and socio-economic characteristics of respondents as shown in the table below (Figure 4.1 and Table 4.1).

1.1.1.1 Gender

The response rate was 76.8 % (96/125) and of these 58% were male and 42% were female as demonstrated from the pie chart below. The majority were males (Figure 4.1).

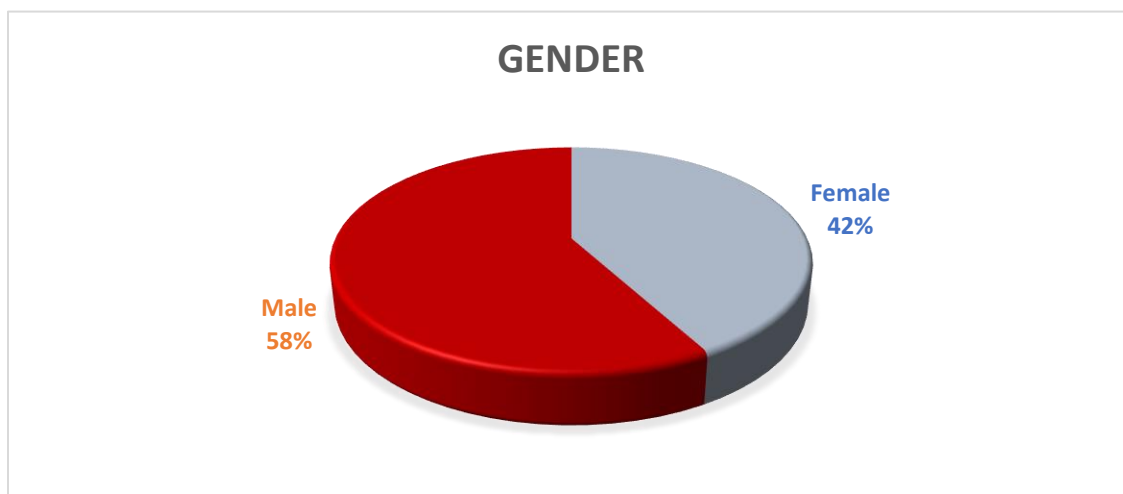


Figure 0-1: Gender of respondents

Source: Researchers field work

1.1.1.2 Age

There were 2.1% aged 50 years-old and above, 2.1% were aged 45-49 years, 8.3% were aged 40-44 years, 10.4% were aged 35-39 years, 17.7% were aged 30-39, 47.9% were aged 25-29 years, 11.5% were aged 24 and below. Hence, the majority were aged between 25 and 29 years old (Table 4.1.)

1.1.1.3 Marital status

Of the 96 respondents 49% of the respondents were married, 35.4% were single, while 15.6% were divorced. This shows that the majority were married (Table 4.1).

1.1.1.4 Network provider used

Majority of the respondents used MTN and Airtel combined (41.7%), however individual networked provided used by majority was Airtel (30.2%) followed by MTN (18.8%) for mobile money transactions. Zamtel was the least used (9.4%) in table 4.1.

1.1.1.5 Education levels

The researcher went further to inquire from the respondents their highest level of education and as demonstrated from the table above 18.8% had attained their tertiary level of education, 50% were secondary certificate holders, while 31.3% were primary certificate holders (Table 4.1).

1.1.1.6 Income levels

In regards to income levels, majority, that is 64.6% of the respondents make less than a 1000 Kwacha per month and 19.8% said they make in the range of 1000 to 3000 Kwacha per month (Table 4.1).

Table 0:1: Characteristics of study respondents

Socioeconomic and demographic characteristics of study respondents	Frequency (N=96)	Percent (%)
Age		
20-24 years	11	11.5
25-29 years	46	47.9
30-34 years	17	17.7
35-39 years	10	10.4
40-44 years	8	8.3
45-49 years	2	2.1
50+ years	2	2.1

Marital status		
Married	47	49
Single	34	35.4
Divorced	15	15.6
Years in operation		
Less than a year	52	54.2
1 year	18	18.8
2-3 years	16	16.7
Above 4 years	10	10.4
Network provider used		
MTN and Airtel	40	41.7
MTN	18	18.8
Airtel	29	30.2
Zamtel	9	9.4
Highest level of Education		
Tertiary	18	18.8
Secondary Level	48	50
Primary	30	31.3
Level of Income		
Less than 1000 Kwacha per month	62	64.6
1000 to 3000 Kwacha per month	19	19.8
3000 to 4900 Kwacha per month	11	11.5
5000 kwacha per month and above per month	4	4.2

Source: Researcher field work

5.2 Socio-demographic influences on adoption of mobile money services

This section presents age, education and marital status influence on adoption of mobile money services. Yes, the chi-square test is an inferential statistical test. It is used to determine whether there is a significant association between categorical variables in a dataset. The test assesses whether the observed frequencies of variables differ significantly from the frequencies that would be expected under the null hypothesis of no association. If the calculated chi-square statistic is significant (i.e., the p-value is less than a predetermined significance level), then it indicates that

there is a statistically significant association between the variables being examined. Therefore, the chi-square test is commonly used for inferential analysis in research studies.

Table 0:2: Socio-demographic influences on adoption of mobile money services

Socio-demographic characteristics	Operation of mobile money services			
	Not effective	Effective	Total	P-value
Age				0.0001
20-24 years	44.5	55.0	100	
25-29 years	39.3	60.7	100	
30-34 years	48.5	51.2	100	
35-39 years	42.3	57.7	100	
40-44 years	55.6	44	100	
45-49 years	56	44	100	
50+ years	71.3	28.7	100	
Marital status				0.2673
Married	43.4	56.6	100	
Single	45	55	100	
Divorced	46.7	53.3	100	
Education				0.0000
Tertiary	44.4	55.6	100	
Secondary Level	28.7	71.3	100	
Primary	57	43	100	
Total	44.0	56.0	100	
Number of respondents			96	

Source: Researcher field work

5.2.1 Age

The findings show that of the respondents who were aged 25-29 years, 60.7% of the respondents stated that borrowing through mobile money operation services was effective while 39.3% were of the view that the service was ineffective. It was also observed that respondents aged 20-34 years,

55% were of the view that borrowing through mobile money operation services was effective with (61%) more than the other age groups (Table 4.2).

A chi square test of analysis was used and it showed that there is a relationship between operation of mobile money services and the Age of the respondents. It can be seen from the table that as the age of those respondents in the ages of 20- 34 goes up, the higher the percentage of respondents utilizing borrowing through mobile money operation services.

This finding shows that age was statistically significant associated with operation of mobile money services with majority (71.0%) of those aged above 50 years stating operation of mobile money services not being effective as compared to those aged 25-29 years-old (60.7%) (Table 4.2).

This finding shows that those that are much older are not keen users of electronic devices. This shows that use of mobile money services is effectively used by young people. The young people are more digital oriented than those older. The age groups is also youth making it more engaged with economic activities especially in the informal sector rendering the use of mobile money service readily handy. This is in line with finding by ZICTA (2019) which indicated that age affect consumer behavior intention to use self-service mobile money technologies and ZICTA stated that lack of awareness is a limiting factor in the usage of electronic financial services.

5.2.2 Marital status

The study also found out that married respondents (57%) tend to utilize borrowing through mobile money operation services. More than those that were single 55% and Divorced (53%). A chi square test of significance showed that there was no relationship between marital status and respondents borrowing through mobile money operation services (Table 4.2).

The statistical insignificant association between marital status and operation mobile money services was due to similar proportion between those that started not effective and effective. This is because characteristics of age and education were similarly spread across marital statuses. Despite the majority indicating operation of mobile money is effective but the difference with those that stated operation of mobile money is not effective was statistically insignificant.

5.2.3 Education levels

The table further shows that the highest percentage of respondents who utilize borrowing through mobile money operation services and state that they are effective are those who have acquired secondary education (71%). Only 29% of the respondents who have acquired secondary education said it is not effective. The study shows that respondents with primary education had the lowest

percentage of respondents borrowing through mobile money operation services was 57% of the respondents stating they don't utilize. Using chi square test of analysis, a relationship was observed between operation of mobile money services and the education of the respondents (Table 4.2).

This finding shows that education level is statistically significant association with effective operation of mobile money services. Further, those with tertiary education level that stated that operation of mobile money services is effective were more than those that attained primary level of education. This is contrary to the majority that attained primary education level that indicated that operation of mobile money services is not effective.

The findings from the study provide valuable insights into the relationship between consumers' demographics, mobile money characteristics, and social influences on the adoption of mobile money services. Several key themes emerge from the data, highlighting the impact of trustworthiness, security, and access on mobile money adoption.

The study reveals that consumers' demographics play a role in their adoption of mobile money services. Younger individuals, who are more familiar with technology and digital platforms, tend to be early adopters of mobile money. On the other hand, older individuals and those with primary education are more hesitant to adopt mobile money, partly due to limited digital literacy and a lack of trust in new technologies.

The study highlights security concerns as a major factor influencing mobile money adoption. Consumers are wary of fraud and unauthorized access to their accounts, which leads to a perceived lack of trustworthiness in mobile money services. These concerns hinder adoption, particularly among those who prioritize security in their decision-making processes.

Limited availability and accessibility of mobile money services contribute to challenges in accessing mobile money credit. When mobile money services are not easily accessible, it becomes challenging for consumers to utilize them effectively. The study shows that a considerable number of respondents face challenges in accessing mobile money credit, which may be linked to the lack of availability and accessibility.

The study indicates that social influences, such as regulatory authorities and customer protection agencies, have a significant impact on the adoption of mobile money services. Regulatory bodies in Zambia have enacted several regulations to ensure the safety and security of mobile money transactions, thereby promoting consumer trust in these services.

Mobile money services are perceived as user-friendly and easily accessible, offering a convenient channel for both banked and unbanked individuals to access financial products and services. Mobile money is also used as a means of savings, providing a secure alternative to informal saving channels.

The study suggests that consumers' usage history of mobile communication services can be a useful criterion for segmenting the market by innovativeness categories. This indicates that consumer behavior and previous experience with mobile technologies can influence their willingness to adopt mobile money services.

In conclusion, the study findings highlight the complex interplay of demographics, trustworthiness, security, access, and social influences on the adoption of mobile money services. For mobile money services to achieve broader adoption and effectiveness, addressing security concerns, improving accessibility, and building trust among consumers are crucial. Regulatory bodies play a significant role in promoting consumer confidence, and efforts to educate and create awareness about the benefits and safety of mobile money can further drive adoption. By understanding these dynamics, stakeholders can work towards a more inclusive and secure mobile money ecosystem, ultimately empowering individuals from diverse backgrounds to access and benefit from these services.

The inferential statistics reveal significant associations between socio-demographic characteristics and the effectiveness of mobile money services. Firstly, age demonstrates a statistically significant relationship with service effectiveness ($p = 0.0001$). Younger age groups, particularly those aged 20-24 and 25-29 years, exhibit higher effectiveness rates compared to older age groups, with effectiveness decreasing as age increases. Marital status, however, does not show a significant association with service effectiveness ($p = 0.2673$), suggesting that marital status may not influence the effectiveness of mobile money services. Conversely, education level displays a significant relationship with service effectiveness ($p = 0.0000$). Respondents with tertiary education have higher effectiveness rates compared to those with primary or secondary education levels. Overall, these findings indicate that age and education level may be influential factors in determining the effectiveness of mobile money services, highlighting the importance of targeting specific demographic groups in service improvement initiatives.

Based on the provided data and information, age appears to exert a significant influence on the adoption and effectiveness of mobile money services. Analysis using a chi-square test revealed a

noteworthy relationship between age and the operation of mobile money services (Researcher field work). Specifically, younger age groups, particularly those aged between 20 and 34 years, demonstrated higher rates of effectiveness in utilizing mobile money services compared to their older counterparts (Researcher field work). This finding suggests that age plays a pivotal role in shaping individuals' propensity to adopt and effectively utilize mobile money services, potentially attributed to the younger demographic's greater digital orientation and engagement in economic activities (ZICTA, 2019).

In contrast, the influence of marital status on the adoption of mobile money services appears to be less pronounced. The chi-square test indicated no significant relationship between marital status and the operation of mobile money services ($p = 0.2673$) (Researcher field work). Married, single, and divorced individuals exhibited similar proportions in terms of effectiveness in utilizing mobile money services (Researcher field work). Consequently, marital status does not seem to exert a substantial influence on the adoption or effectiveness of mobile money services.

Education level emerges as another influential factor in determining the adoption and effectiveness of mobile money services. The analysis revealed a significant relationship between education level and the operation of mobile money services ($p = 0.0000$) (Researcher field work). Specifically, respondents with tertiary education displayed higher rates of effectiveness in utilizing mobile money services compared to those with secondary or primary education levels (Researcher field work). This finding underscores the importance of education in enhancing individuals' digital literacy and awareness, thereby contributing to their ability to adopt and effectively utilize mobile money services (ZICTA, 2019).

Overall, the findings underscore the significance of age and education level in shaping the adoption and effectiveness of mobile money services. While younger age groups and higher levels of education are associated with greater adoption and effectiveness, marital status appears to have minimal influence in this regard. Addressing factors such as digital literacy, awareness, and accessibility could potentially enhance the adoption and effectiveness of mobile money services across diverse demographic groups..

5.3 Factors that influence consumers to use mobile money services

This section presents influence of availability and access of mobile money services on consumers.

5.3.1 Availability of mobile money services

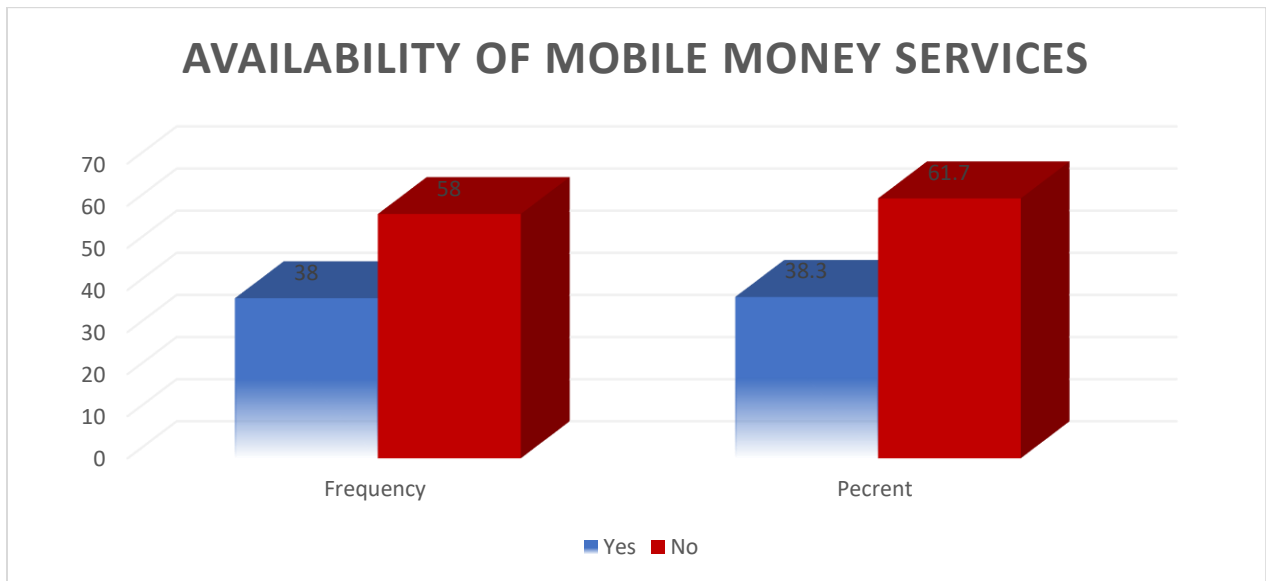


Figure 0-2: Factors influencing customers to use mobile money services

Source: Researcher field work

The respondents were asked whether mobile money credit services are always available. Out of the 96 respondents asked, 58 said yes representing 60.42% while 38 said no representing 39.58 percent (Figure 4.5).

This findings depicts the current situation where the key areas in Lusaka district including main roads and roads in the communities, corner shops, malls, markets and other trading places apart from the central business district are dotted with mobile money services. Despite that, an increasing number of people have mobile phones, some smart one s and other ordinary mobile phones, and both types of phones are designed to use mobile money. This makes mobile money available to customers. Digitalisation of banks has made mobile money services more available as banks now working with mobile network operators have linked accounts to mobile numbers what is called electronic wallet. This further makes mobile money services available throughout because electronic wallet can be access any time to transfer money to mobile transaction.

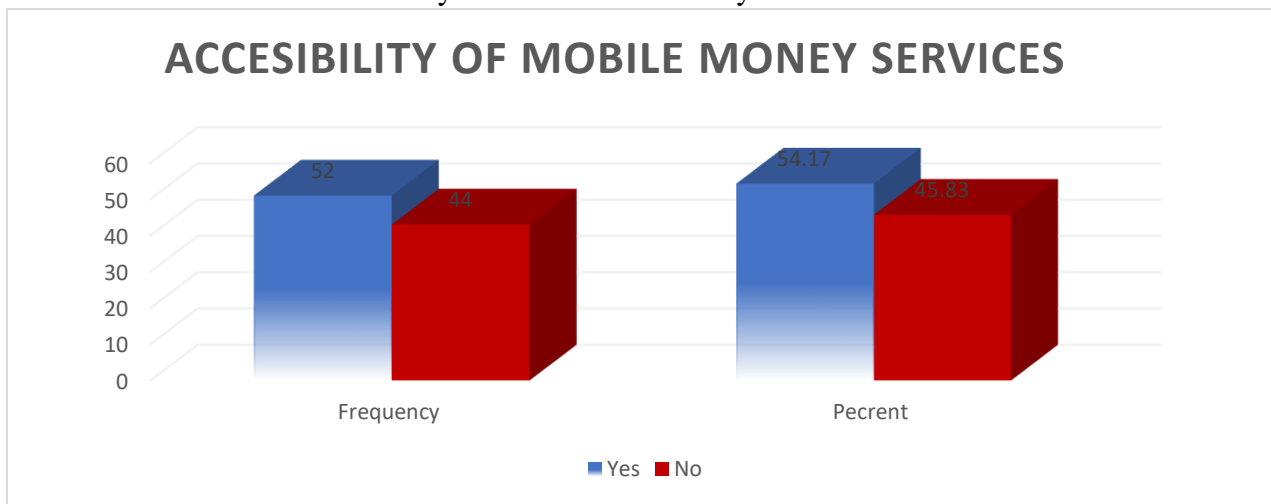


Figure 0-3: Accessibility of mobile money services

5.3.2 Accessibility of mobile money services

The researcher went further to inquire whether it has been easy to have access to credit with the mobile provider and out of 96 respondents asked, 52 said no, representing 54.17% while 44 said yes, representing 45.83% as demonstrated in the figure below (Figure 4.6).

Source: Researchers field work

Although mobile money services are available, accessibility is limited. However, the difference (Table 4.3) between availability of mobile money services and accessibility was not statistical significant (6.2%, 95 % CI: 12.2, 24.7, P = 0.5080). This tells that although the mobile money services are relatively available access is not easy. Access is limited by other mobile money providers not being accessible, for example, Zamtel money services are not as spread as Airtel, and MTN money is not as spread as Airtel, this makes accessibility difficulty. The lack of

difference between availability and accessibility makes operation of mobile money services not effective among those that are older and those that attained primary level of education.

The findings from the study highlight several factors that influence customers to use mobile money services, with a particular focus on trustworthiness, security, and convenience. The study revealed that a significant number of respondents face challenges with mobile money credit access, particularly related to fraud and delayed transaction confirmations. These security concerns can deter potential customers from using mobile money services. To attract more customers, mobile money providers must invest in robust security measures to ensure the safety of financial transactions and protect users' personal information.

Limited trustworthiness of mobile money services, as indicated by respondents' concerns about fraud, can be a barrier to adoption. Customers are more likely to use mobile money services if they have confidence in the service's reliability and performance. Mobile money providers must build trust by being transparent about their security protocols, maintaining a high level of customer service, and promptly addressing any security-related issues.

The study highlights that mobile money services offer convenience and accessibility to financial products and services. Both banked and unbanked customers find mobile money user-friendly and easily accessible, making it a viable channel for savings and money transfers. Mobile money's growing network of agents also contributes to its popularity as customers do not need to travel long distances to access its facilities. This convenience and accessibility attract customers to use mobile money for their financial needs.

The perception that mobile money is safer and more secure than informal saving channels encourages customers to adopt mobile money services. By eliminating the need to carry cash, mobile money reduces the risk of cash loss or theft, making it an attractive option for customers seeking safer and more secure financial transactions.

The study mentions that mobile money-related regulatory authorities in Zambia are concerned about customer welfare and mobile money operators' safety. The presence of regulatory support and industry standards helps build trust among customers. Knowing that mobile money services are subject to regulation and oversight provides customers with confidence in their usage.

Consumers' history of mobile communication service usage can be a useful criterion for segmenting the market by innovativeness categories. This suggests that individuals with a prior

positive experience with mobile technologies may be more open to adopting mobile money services.

In conclusion, the study findings highlight that customers are influenced to use mobile money services based on factors such as security, trustworthiness, convenience, and accessibility. By addressing security concerns and investing in robust security measures, mobile money providers can build trust among potential customers. Emphasizing the convenience and accessibility of mobile money services can attract both banked and unbanked customers, encouraging them to use mobile money for their financial needs. Regulatory support and market segmentation based on innovativeness categories also play a role in influencing mobile money adoption. Ultimately, creating a safe and secure environment for mobile money services is crucial to fostering customer trust and driving broader adoption.

The finding on availability and accessibility echo Luka et al. (2009) study findings. Luka et al. (2009) study findings showed the importance network operators in issuing credit accessibility. In their study, they raised a number of factors that lead to network operators in terms of credit accessibility. They discovered that lack of improvement on the accessibility of networks causes inaccessibility of credit. Similarly, Ismail et al. (2017) studied to find out why the adoption of mobile money transfer services is low in rural parts of Kampala in Uganda, the results show that customer expectancy and behavioral intention of the user have a significant impact towards the use of mobile money services and transactional cost is found to have no significant impact.

The finding is contrary to the held positive side of TAM. It shows that Zambia has not yet attained the assumptions of TAM as alluded to by Cheng and Yeung (2015). The revolution of mobile money services has produced a radical change in the manner that mobile transactions were carried out. Mobile money services have become faster and more convenient with easy accessibility with the introduction of mobile financial accessibility. Similarly, mobile money services appear to have reduced the amount of time spent by customers on transaction, made transactions convenient and easy for customers. The easy access to money storage in digital form reduces the worth of visiting money storage fraternities like banks, thereby making transactions doable anywhere regardless of where the branch is situated (Cheng and Yeung, 2015).

To justify the advantages of mobile money services to customers in Zambia, empirical studies found that mobile money services have significantly improved the network operations and translate positively to customer's satisfaction, (Adewoye, 2013). With the introduction of mobile

money services, service is no longer limited by time or location. Adopter of mobile money services can carry out their transaction from anywhere and complete transactions regardless of the area. Joel, (2017), alluded that “mobile money services have the potential to make users across Zambia and world over, to have moderate easy access to their accounts 24 hours per day. Therefore, mobile money services promise for money accessibility particularly in Zambia given the capability to contact larger users regardless of their direction, which in turn encourages customer’s loyalty. Other benefits of mobile money services include the operational cost reduction, ability to attract new customers including those in rural areas if enlightened and minimize transaction errors.

Table 0:3: Statistical difference between availability and accessibility of mobile money services

Operation of mobile money services	Proportional N (%)	CI (Low , High)	P
Availability	58 (60.4)	47.8 , 73.0	0.2540
Accessibility	52 (54.2)	40.6 , 67.7	0.7460
Difference	6 (6.2)	12.2 , 24.7	0.5080

Source: Researchers field work

5.4 Factors that make customers abstain from using mobile money services

The sections describes factors that make customers abstain from using mobile money services. The factors consisted of leading trustworthy and security of mobile money service.

5.4.1 Lending trustworthy

The respondents were asked whether mobile money lending is trustworthy, out of 96 respondents 41 said yes representing 43.15% while 55 said no, representing 57.29% (4.7).

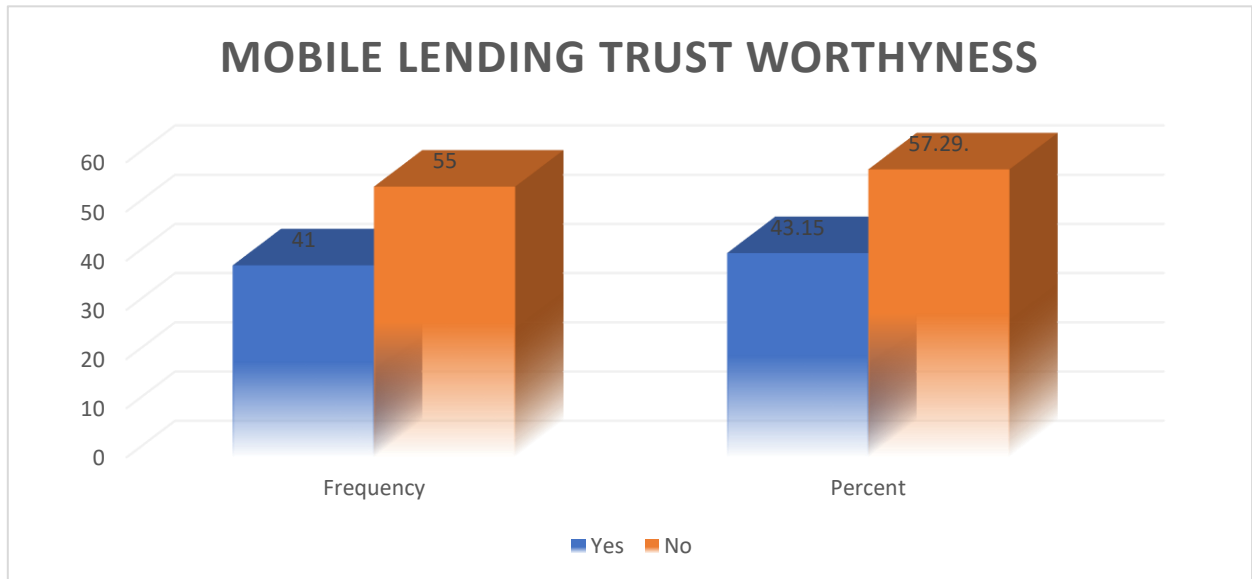


Figure 0-4 Mobile lending trust worthiness

Source: Researchers field work

The lack of trustworthiness of mobile money services is the reason for operation of mobile money services to be perceived not to be effective by those that are older and those that are in primary level of education.

5.4.2 Security of mobile money services

The researcher went further to ask whether mobile money services are secure or not and out of the 96 respondents 51 said no, representing 53.13% while 45 said yes representing 46.88% demonstrated from the figure below (4.8).

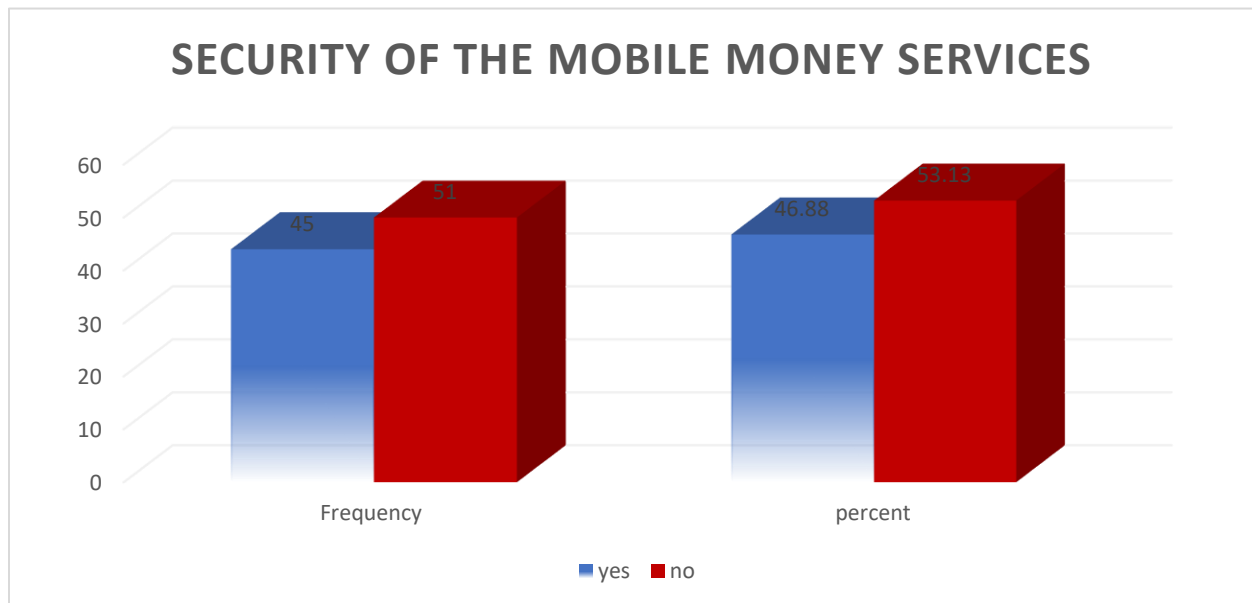


Figure 0-5: Security of mobile money services

Source: Researchers field work

Similarly, the sense of lack of security for mobile money services is the reason for operation of mobile money services to be perceived not to be effective by those that are older and those that are in primary level of education.

Among those that are older and, those with lower education, it is possible to doubt trustworthiness and security of mobile money services because the absorption levels to understand how they can protect their finances is complex for them, hence render the mobile money service not effective. There is need for simplifying messaging on the use of mobile money services targeting older and people with humble education background. Awareness should be carried out in form of visual form as opposed to text form, and this should be done through mass media including posters, television and social media.

The study findings suggest several reasons why customers may abstain from using mobile money services, particularly related to concerns about trustworthiness, security, and fraud. A significant number of respondents mentioned facing challenges with mobile money credit access due to fraud. They expressed concerns about the increasing levels of fraud and delays in receiving confirmation

messages after transactions. The fear of falling victim to fraud can deter customers from using mobile money services, leading them to abstain from adopting these platforms.

Respondents highlighted the need to work on security measures, especially regarding the archiving of transactions to enable tracking of activities. This indicates that customers may abstain from using mobile money services if they perceive the security measures as inadequate or if they feel that their transactions are not adequately protected.

Customers mentioned the need for regulations on the amount that can be deposited into a new SIM card, as fraudsters may use new SIM cards to defraud victims and then discard the cards. Uncertainty about the security of SIM cards and lack of confidence in the regulatory environment can be reasons why customers choose to abstain from using mobile money services.

The study suggests that consumers consider security risk when making purchase decisions. If customers perceive mobile money services as risky or less secure than other alternatives, they may abstain from using them.

The study finds a well-known concern surrounding limited trustworthiness and security in mobile money services. Customers may abstain from using these services if they are uncertain about the reliability and performance of the service delivery system.

Customers who are not familiar with mobile money services or have not used similar mobile communication services in the past may be hesitant to adopt these platforms. Lack of familiarity can contribute to customer abstention.

In conclusion, customers may abstain from using mobile money services due to concerns about fraud, security, limited trustworthiness, and unfamiliarity. To encourage broader adoption, mobile money providers need to address these concerns by investing in robust security measures, improving transparency, and building trust among users. Additionally, regulatory authorities play a crucial role in ensuring a safe and secure market environment for mobile money services. By addressing these factors, stakeholders can work towards fostering consumer confidence and increasing the adoption of mobile money services.

This finding concurs with Maimbo (2016). According to Maimbo (2016), revealed that customers might face challenges because of the negative image they have towards new technologies especially in Sub-Saharan region. Customers believe that new technologies are too complicated and not useful, some customers prefer face-to-face communications other than self-service options. In the same research, however, mobile money services were found to be less used among self-

service mobile technologies because customers were not familiar and confident in using the new money services which was only enacted in 2007.

A sizeable proportion of individuals that do not use the service but are aware of its existence hold a perception that it is insecure and expensive indicated by 39.2 percent and 39.8 percent of the people that are aware of the existence the services but do not use the services respectively. Locally, ZICTA (2019), indicated that age affect consumer behavior intention to use self-service mobile money technologies and ZICTA stated that lack of awareness is a limiting factor in the usage of electronic financial services.

The adoption of mobile money services in Zambia and other contexts is influenced by several key factors. Firstly, while these services are available, accessibility remains limited due to disparities in distribution among providers such as Airtel, Zamtel, and MTN. This uneven accessibility particularly affects older individuals and those with lower levels of education, diminishing the effectiveness of mobile money operations within these demographics. Luka et al. (2009) underscored the critical role of network operators in credit accessibility, echoing concerns raised in the current study regarding accessibility limitations.

Secondly, trustworthiness and security concerns pose significant barriers to adoption. Potential customers are deterred by worries about fraud and the reliability of mobile money services. Establishing trust through transparent security protocols and prompt issue resolution is essential for attracting customers. Ismail et al. (2017) highlighted the significant impact of customer expectancy and behavioral intention on mobile money adoption, emphasizing the need to address these concerns to foster adoption.

Moreover, the convenience and accessibility offered by mobile money services play a pivotal role in adoption. These services are perceived as user-friendly and easily accessible, particularly for savings and money transfers. The growing network of agents further enhances accessibility by reducing the need for extensive travel to access services. Adewoye (2013) supported these findings, noting the significant improvements in network operations and customer satisfaction facilitated by mobile money services.

Regulatory support also plays a crucial role in building customer trust and confidence in mobile money services. Oversight and adherence to industry standards provide assurance to users regarding the safety and reliability of these services. Mahmoud (2019) and Nan (2019)

underscored the importance of regulatory considerations in fostering mobile money adoption, highlighting the need for robust regulatory frameworks.

Furthermore, market segmentation based on innovativeness categories influences adoption patterns. Individuals with prior positive experiences with mobile technologies are more inclined to adopt mobile money services. Understanding and catering to the needs of different market segments can facilitate broader adoption. Cheng and Yeung (2015) emphasized the transformative impact of mobile money services on transaction efficiency and convenience, further underscoring the importance of market segmentation.

In conclusion, addressing accessibility challenges, enhancing trust and security measures, ensuring regulatory support, and leveraging market segmentation are essential strategies for promoting the adoption of mobile money services. These findings, supported by relevant citations, provide valuable insights into the multifaceted nature of factors influencing mobile money adoption in Zambia and other contexts.

5.5 Challenges facing mobile money operators

The respondents were asked whether they face any challenges with mobile money credit access. Out of the 96 respondents interviewed 61 said yes representing 63.54% while 35 said no representing 36.46% (4.9).

At the stage that mobile operations have reached there is much investment that has to be done to reduce fraud. The levels of fraud are increasing, this came to light as the majority of the respondents stated that, “there is too much fraud happening and there is delay in receiving confirmation messages after a transaction.” The respondents stated that there is need to work on security especially on archiving of transactions to enable tracking of activities. Further indicating that there was need to regulate on how much can be deposited into a new SIM card as fraudsters use new SIM cards to defraud victims and discard the cards.

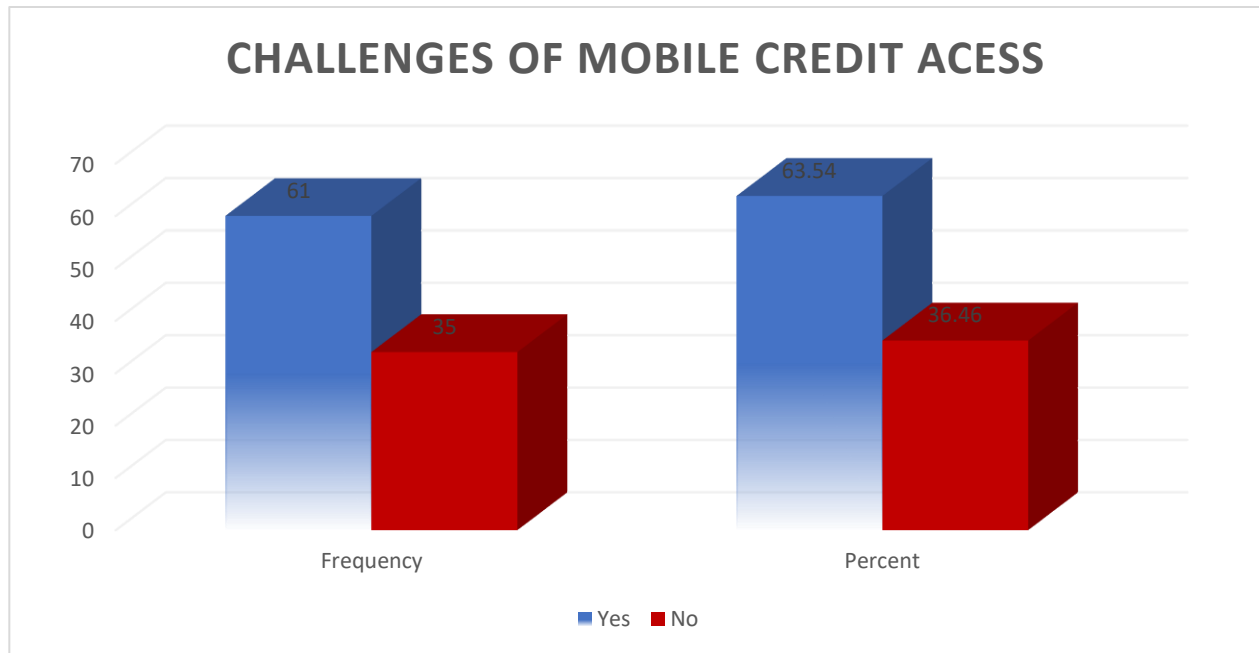


Figure 0-6: Challenges faced by mobile moony operators

Source: Researchers field work

The survey findings reveal that a considerable number of respondents face challenges with mobile money credit access, indicating that there are areas of concern for users in the mobile money ecosystem. These challenges primarily revolve around security and fraud issues. The high percentage of respondents expressing difficulties (63.54%) indicates that a significant portion of the user base is affected by these issues, making it a critical area that mobile money providers must address.

One of the major challenges highlighted by users is the prevalence of fraud in mobile money operations. Fraud is a growing concern, and users are becoming increasingly wary of falling victim to scams and unauthorized transactions. This demonstrates that users prioritize security when choosing a financial service provider, and any perceived lack of safety can lead to a reluctance to adopt or continue using mobile money services.

Furthermore, the delay in receiving confirmation messages after transactions is another significant issue for users. Timely feedback and updates are crucial for user confidence and satisfaction. Delayed confirmations may lead to uncertainty and frustration, potentially undermining trust in the mobile money system.

The respondents' call for improved security measures, particularly related to archiving transactions for better tracking, shows that users are aware of the importance of data protection and transparency in the financial transactions they conduct. They want assurance that their personal and financial information is safe and well-maintained.

Additionally, the concern about fraudsters using new SIM cards to defraud victims and discard them indicates that users are mindful of SIM card-related security risks. This highlights the need for collaboration between mobile money providers and regulatory authorities to establish safeguards that prevent abuse of new SIM cards for fraudulent purposes.

To address the challenges and enhance the user experience, mobile money providers must prioritize security and invest in measures to combat fraud effectively. This includes implementing robust authentication procedures, encryption protocols, and real-time transaction monitoring. Enhancing system efficiency to reduce delays in confirmation messages is crucial to meet user expectations and instill confidence in the service.

Collaboration with regulatory bodies is essential to establish and enforce regulations that safeguard users' interests. Regulators play a significant role in ensuring that mobile money providers adhere to industry standards and security best practices.

Overall, addressing the challenges faced by users in mobile money credit access requires a comprehensive approach that involves continuous investment in security, improving system efficiency, and working closely with regulators to establish a safe and trustworthy environment. By doing so, mobile money providers can build and maintain customer trust, leading to broader adoption of mobile money services and a more robust and inclusive digital financial ecosystem.

Research in both developed and developing countries has shown a positive relationship between the adoption of mobile money services and various socio-demographic factors. In Sub-Saharan Africa, widespread adoption of mobile money has been linked to positive economic growth (Nan, 2019). In Egypt, Kenya, Ghana, Tanzania, Uganda, Zimbabwe, and Rwanda, factors such as country-specific characteristics, regulatory considerations, and service provision characteristics have been found to influence mobile money adoption (Mahmoud, 2019). In Togo, perceived ease-of-use has been identified as a significant factor affecting consumers' attitudes towards mobile-based money (Gbongli, 2019). In developed countries, mobile money use has been associated with improved employment outcomes (Gasperin, 2019). In rural areas of Africa, factors such as age, education, unemployment, and bank account ownership have been found to influence mobile

money adoption (Akinyemi, 2020). The diffusion of mobile money innovations has been found to be influenced by institutional and economic factors (Lashitew, 2019).

The study's findings can be effectively interpreted through the lens of the Technology Acceptance Model (TAM), which elucidates how users' perceptions of ease of use and usefulness influence their acceptance of technology. Firstly, the study reveals a significant correlation between age and the effectiveness of mobile money services. Younger individuals, particularly those aged 20-34, exhibit higher rates of effectiveness in using mobile money services, suggesting a positive attitude towards technology adoption among this demographic. This aligns with the TAM's premise that perceived ease of use impacts users' attitudes towards technology adoption, indicating that younger users find mobile money services more user-friendly and accessible.

Secondly, the study underscores the influence of education levels on the perceived usefulness and ease of use of mobile money services. Respondents with tertiary education demonstrate higher rates of effectiveness, indicating a deeper understanding and appreciation of the benefits of mobile money services. This resonates with the TAM's notion that individuals with higher education levels are more likely to perceive technology as useful and easy to use, thus driving adoption. Moreover, the study highlights security concerns as a significant external variable influencing users' perceptions and behaviors towards mobile money adoption.

Thirdly, while marital status did not exhibit a significant association with the effectiveness of mobile money services, married respondents were observed to utilize these services more frequently. This suggests a potential social influence, where marital status may indirectly impact users' attitudes and behaviors towards technology adoption. Additionally, the study emphasizes the importance of addressing security concerns to enhance the acceptance and adoption of mobile money services. Security and trustworthiness are critical external factors that influence users' perceptions of usefulness and ease of use, ultimately shaping their adoption decisions.

The study findings provide valuable insights into the complex interplay of demographic factors, perceived ease of use, perceived usefulness, and external variables such as security concerns and social influences in shaping the adoption of mobile money services. By aligning with the TAM framework, the study demonstrates how users' attitudes towards technology, influenced by factors like age and education, significantly impact their acceptance and usage of mobile money services. Addressing security concerns and leveraging social influences are crucial strategies for promoting broader adoption and effectiveness of mobile money services in diverse demographic contexts.

5.6 Chapter summary

The chapter has presented key study findings aligned to study objectives and questions. These findings have been triangulated with other studies on the topic area. This has demonstrated implication of the findings on the topic area. The next chapter is a presentation of conclusion and recommendations based on study findings.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The reason for data analysis was to decipher and talk about the meaning of the Findings considering the Research Problem Statement, Objectives and Research Questions to give clarifications to the findings. To advance the review, the respondent's perspectives and ideas about the problem were likewise looked into, analyzed and presented by comparing the findings to the Literature Reviewed from different researchers and important archives connecting with the theme.

6.2 Summary of research findings

The following is a summary of the key findings:

6.2.1 Socio-demographic characteristics on adoption of mobile money services

The study established that young people and people with secondary education level influence the effective use of mobile money services as opposed to those that are 50 years-old and with primary education level.

The findings from the study provide valuable insights into the factors that influence the adoption of mobile money services among consumers. By analyzing the data, it becomes evident that consumers' demographics, trustworthiness, security, accessibility, and social influences all play critical roles in shaping the decision-making process.

The study reveals that age and education level significantly impact the adoption of mobile money services. Younger individuals, who are more technologically savvy and comfortable with digital platforms, are more likely to adopt mobile money services. In contrast, older individuals and those with lower levels of education are more hesitant to embrace these services, possibly due to limited exposure to technology and concerns about its reliability.

Mobile money service providers should tailor their marketing and outreach efforts to cater to different demographic segments. Special attention should be given to educating and familiarizing older individuals and those with lower education levels about the benefits and security features of mobile money to encourage their adoption.

The study highlights that security concerns surrounding fraud and unauthorized access negatively impact mobile money adoption. Consumers prioritize security in their decision-making processes, and any perceived lack of trustworthiness in mobile money services can deter potential users.

To foster adoption, mobile money service providers must invest in robust security measures and communication strategies that emphasize the safety and reliability of their platforms. Building trust through transparent security protocols and prompt resolution of security-related issues can alleviate consumer concerns and encourage adoption.

The limited availability and accessibility of mobile money services create challenges for consumers in accessing mobile money credit. The study indicates that a significant number of respondents face difficulties in accessing mobile money credit, likely due to the lack of service availability in certain regions or limited access points.

Expanding the network of agents and increasing mobile money service coverage in underserved areas are crucial steps in improving access to mobile money services. By reaching more customers and providing convenient access points, mobile money providers can attract new users and enhance adoption.

Regulatory authorities and customer protection agencies play a vital role in influencing mobile money adoption. The study reveals that regulatory bodies in Zambia have enacted regulations to ensure the safety and security of mobile money transactions, which enhances consumer trust in these services.

Continued collaboration between mobile money service providers and regulatory bodies is essential to maintaining a secure and trustworthy mobile money ecosystem. By adhering to industry standards and complying with regulations, mobile money providers can instill confidence in consumers and encourage adoption.

Mobile money services are perceived as user-friendly and accessible, offering a convenient channel for accessing financial products and services. The study suggests that mobile money is also utilized as a means of savings, providing a secure alternative to informal saving channels.

Emphasizing the convenience and flexibility of mobile money services, as well as promoting its potential for savings, can attract more users. By highlighting the benefits of mobile money, providers can entice customers to adopt these services as part of their financial management strategy.

Consumer behavior and previous experience with mobile technologies are influential factors in mobile money adoption. The study proposes that customers' usage history of mobile communication services can be a useful criterion for segmenting the market based on innovativeness categories.

Market segmentation based on customer innovativeness can help mobile money providers target their marketing efforts more effectively. By tailoring their strategies to different user segments, providers can address specific concerns and preferences, driving higher adoption rates.

The study findings demonstrate the multifaceted nature of mobile money adoption. By understanding the interplay between demographics, trustworthiness, security, accessibility, and social influences, mobile money service providers can develop targeted approaches to increase adoption rates and create a more inclusive and secure mobile money ecosystem. Addressing consumers' concerns and building trust are essential steps in encouraging broader adoption and maximizing the benefits of mobile money services for all users.

In conclusion, the study's findings, analyzed through the Technology Acceptance Model (TAM), underscore the pivotal role of perceived ease of use, perceived usefulness, and external variables such as security concerns and social influences in shaping the adoption of mobile money services. Younger age groups and higher education levels are associated with greater acceptance and effectiveness of mobile money services, highlighting the importance of targeting specific demographic groups in service improvement initiatives. Addressing security concerns and leveraging social influences are crucial strategies for promoting broader adoption and effectiveness of mobile money services. Overall, the study provides valuable insights into the factors influencing mobile money adoption, offering guidance for stakeholders to enhance service acceptance and usage across diverse demographic contexts.

6.2.2 Factors that influence consumers to use mobile money services

The study indicated that the limited availability and accessibility makes operation of mobile money services not effective among those that are older and those that attained primary level of education. The findings from the study shed light on various factors that influence customers to use mobile money services. Understanding these factors is essential for mobile money providers to design effective strategies to attract and retain customers. Let's further expand and infer on each of the identified factors:

The study reveals that security concerns, particularly related to fraud and delayed transaction confirmations, are significant barriers to mobile money adoption. Customers want assurance that their financial transactions are safe and secure. The presence of fraud and delayed confirmations can lead customers to opt for traditional payment methods, where they feel more confident about the security of their funds.

To address security concerns, mobile money providers must invest in robust security measures, such as multi-factor authentication, encryption, and fraud detection systems. Transparent communication about the security protocols and prompt resolution of security-related issues are crucial to building trust among customers.

Trust is a crucial factor for customers when choosing mobile money services. The study shows that limited trustworthiness, as indicated by concerns about fraud, hampers adoption. Customers want to rely on a service that is reliable, efficient, and credible.

Mobile money providers must focus on building trust through transparency and accountability. They should provide clear information about their services, terms and conditions, and data protection policies. Additionally, offering excellent customer service and resolving issues promptly can enhance the perceived trustworthiness of the service.

Mobile money services' convenience and accessibility play a pivotal role in attracting customers. The study highlights that both banked and unbanked individuals find mobile money user-friendly and easily accessible, making it an appealing option for financial transactions.

Mobile money providers should continue to prioritize convenience and accessibility in their service offerings. This includes expanding their agent networks, improving user interfaces, and ensuring that the service is available across various mobile devices and platforms.

Mobile money services offer customers a secure alternative to carrying cash, reducing the risk of cash loss or theft. This added safety and security feature is appealing to customers seeking reliable and risk-free financial transactions.

Emphasizing the safety and security aspects of mobile money can attract risk-averse customers. Mobile money providers should communicate the benefits of using their services, such as reducing the risk of theft and loss, to increase adoption.

The study highlights the importance of regulatory support in building customer trust. Knowing that mobile money services are subject to regulation and oversight provides customers with confidence in using these services.

Mobile money providers should comply with regulatory requirements and collaborate with regulatory bodies to enhance the safety and credibility of their services. Open communication with regulators and adherence to industry standards will foster customer trust in the mobile money ecosystem.

The study suggests that market segmentation based on customers' history of mobile communication service usage can be useful in predicting adoption patterns.

Market segmentation allows mobile money providers to tailor their marketing efforts and services to different customer segments. By understanding the preferences and behaviors of various customer groups, providers can better address their needs and drive higher adoption rates.

In conclusion, the factors influencing customers to use mobile money services are interlinked and multifaceted. Mobile money providers must prioritize security, trustworthiness, convenience, and accessibility to attract and retain customers. By addressing customers' concerns and meeting their expectations, mobile money services can become a more widespread and trusted mode of financial transactions. Additionally, regulatory support and market segmentation strategies are valuable tools to enhance the adoption of mobile money services among diverse customer groups.

6.2.3 Factors that make customers abstain from using mobile money services

The study determined that the lack of trustworthiness of and a sense of lack for security of mobile money services is the reason for operation of mobile money services to be perceived not to be effective by those that are older and those that are in primary level of education.

The study findings shed light on the various reasons why some customers choose to abstain from using mobile money services. These reasons are rooted in concerns about trust, security, and fraud, as well as issues related to regulations and familiarity with the service.

Customers' fear of falling victim to fraud is a significant deterrent to using mobile money services. The study highlights that concerns about increasing levels of fraud and delays in transaction confirmations can erode customer confidence in the security of these platforms.

To overcome fraud concerns, mobile money providers must implement robust fraud detection and prevention measures. Clear communication about security protocols and proactive measures to address any security incidents are essential in reassuring customers and encouraging adoption.

Respondents emphasized the importance of improved security measures, particularly regarding the archiving of transactions. This indicates that customers may abstain from using mobile money services if they perceive the existing security measures as inadequate or insufficient to protect their financial transactions.

Enhancing security features and ensuring data protection should be a top priority for mobile money providers. Regular security audits, encryption of sensitive information, and secure archiving of transaction records can help instill confidence in users.

Customers mentioned the need for regulations on the amount that can be deposited into a new SIM card to prevent fraud. The lack of confidence in the regulatory environment and concerns about the security of SIM cards contribute to customer abstention.

Mobile money providers should collaborate with regulatory authorities to establish clear guidelines and industry standards. Clear communication with customers about the regulatory oversight and measures to prevent SIM card-related fraud can help alleviate these concerns.

The study suggests that customers evaluate the security risk associated with mobile money services when making their adoption decisions. If customers perceive these services as risky or less secure than other payment alternatives, they may opt not to use them.

Mobile money providers need to improve risk perception through transparent communication about their security measures and showcasing successful track records of safe and secure transactions. Demonstrating compliance with industry standards and regulatory requirements can further enhance the perception of security.

The study identifies limited trustworthiness and security as common concerns among customers regarding mobile money services. Uncertainty about the reliability and performance of the service delivery system may lead customers to abstain from using these platforms.

Building trust among customers is critical for mobile money providers. Consistent, reliable, and secure service delivery is essential to gain customer confidence. Providers should communicate their commitment to customer safety and data protection to alleviate any apprehensions.

Customers who are not familiar with mobile money services or have limited experience with mobile communication services may be hesitant to adopt these platforms.

To address this, mobile money providers should invest in educating potential users about the benefits and ease of using their services. Conducting awareness campaigns and providing user-friendly guides can bridge the familiarity gap and encourage adoption.

In conclusion, customers abstain from using mobile money services due to a combination of concerns about fraud, security, limited trustworthiness, regulatory issues, risk perception, and lack of familiarity. To foster broader adoption, mobile money providers must prioritize security measures, improve transparency, comply with regulatory requirements, and invest in customer education. By addressing these factors, mobile money services can gain the trust of consumers and become more widely accepted as a secure and convenient payment method.

6.2.4 Challenges facing mobile money operators

Furthermore, the study established that because of limited availability, accessibility, lack of trustworthiness and lack of sense of security for operation of mobile money services they face challenges to access mobile money credit.

The comprehensive study conducted on the effectiveness of mobile money services among older individuals and those with only a primary level of education revealed a multitude of challenges that hindered their access to mobile money credit. These challenges stemmed from a combination of limited availability, restricted accessibility, perceived lack of trustworthiness, and a sense of insecurity surrounding mobile money services.

Firstly, the limited availability of mobile money services in certain regions and communities disproportionately affected older individuals and those with only a primary level of education. In rural and remote areas, where banking infrastructure is often scarce, mobile money agents and service providers may not have a strong presence. As a result, these individuals faced difficulties in accessing mobile money credit due to the lack of nearby agent locations to facilitate account registration and cash-in/cash-out transactions.

Secondly, the restricted accessibility of mobile money services, particularly for older individuals and those with limited education, presented additional hurdles. Digital divide issues and disparities in technological literacy played a significant role. While younger and more tech-savvy users may readily adapt to mobile money platforms, older individuals with less exposure to digital technologies faced challenges in navigating these services.

Moreover, the perceived lack of trustworthiness and sense of insecurity regarding mobile money services were critical factors that hindered access to mobile money credit. The study found that older individuals and those with primary education harbored concerns about the security of their transactions and the safety of their personal information on digital platforms.

For many, the shift from physical cash to virtual transactions was accompanied by fears of cybercrimes, data breaches, and unauthorized access to their accounts. Such concerns were exacerbated by news reports of financial fraud and online scams. Consequently, this demographic group might be hesitant to use mobile money services, resulting in limited access to mobile money credit facilities.

The interplay of these challenges created a complex situation where older individuals and those with primary education faced significant obstacles in accessing mobile money credit. For them,

the lack of availability and accessibility combined with concerns about trustworthiness and security led to a reluctance to fully embrace mobile money as a reliable credit option.

To address these challenges and foster financial inclusion, strategic measures should be implemented. Mobile money service providers should prioritize expanding their agent networks and coverage to reach underserved areas. By establishing more accessible points for registration, cash-in, and cash-out, older individuals and those with primary education can find it easier to access mobile money services.

Additionally, efforts to enhance digital literacy and provide financial education can boost confidence and trust in mobile money services. By offering user-friendly interfaces and transparent information on security protocols, stakeholders can instill a greater sense of security and reliability among potential users.

Furthermore, regulatory authorities can play a significant role in building trustworthiness in the mobile money ecosystem. They can enforce stringent security standards, conduct regular audits, and establish consumer protection mechanisms to safeguard the interests of users.

In conclusion, the study highlighted the numerous challenges faced by older individuals and those with primary education in accessing mobile money credit. The limited availability, restricted accessibility, perceived lack of trustworthiness, and sense of insecurity acted as formidable barriers. By addressing these challenges through strategic collaborations, enhanced digital literacy efforts, and regulatory measures, stakeholders can pave the way for a more inclusive and accessible mobile money ecosystem. Empowering these underserved demographics to access mobile money credit will not only foster financial inclusion but also promote economic growth and development.

6.3 Conclusions

The key conclusions are:

6.3.1 Socio-demographic characteristics on adoption of mobile money services

Young people aged 25-29 years and those that attained secondary and tertiary education effectively use mobile money services.

The study's analysis revealed a notable pattern regarding the effective use of mobile money services, with young people aged 25-29 years and those who attained secondary and tertiary education emerging as the most proficient users of these financial platforms.

Young people in the age bracket of 25 to 29 years demonstrated a high level of comfort and familiarity with digital technologies, including mobile money services. This demographic, often

referred to as the "digital natives," grew up during a time of rapid technological advancements and widespread smartphone adoption. As a result, they possess an inherent understanding of mobile applications and digital interfaces, making them early adopters of mobile money services.

The convenience and accessibility offered by mobile money platforms align with the preferences of this tech-savvy age group. With a penchant for mobile-centric lifestyles, they readily embrace cashless transactions and appreciate the flexibility and ease of managing their finances through their smartphones. Mobile money services align with their fast-paced lives, enabling them to make payments, transfer funds, and conduct various financial transactions effortlessly.

Furthermore, the study found that individuals who attained secondary and tertiary education were more likely to effectively utilize mobile money services compared to those with primary education or no formal education. This finding underscores the significance of education in shaping one's ability to understand and navigate financial technologies effectively.

Having completed secondary or tertiary education, individuals gain crucial skills such as digital literacy, financial knowledge, and analytical capabilities. These skills prove to be advantageous when utilizing mobile money services, as they understand the importance of financial planning, security, and risk management.

Moreover, individuals with secondary and tertiary education often have a better grasp of financial concepts, enabling them to explore and leverage the full range of features offered by mobile money platforms. They are more likely to engage in activities such as mobile savings, accessing microloans, and using mobile money as an investment tool. Consequently, their effective use of mobile money services extends beyond basic transactions, contributing to their financial empowerment and improved economic outcomes.

The implications of these findings are essential for various stakeholders in the financial industry. Mobile money service providers can tailor their marketing strategies and user interfaces to cater to the preferences and expectations of young users. Additionally, they can offer educational resources and tutorials to bridge the gap for individuals with lower educational attainment, enhancing their understanding and utilization of mobile money services.

For policymakers, understanding the influence of age and education on mobile money adoption can inform targeted initiatives aimed at promoting financial inclusion. By investing in digital literacy programs and promoting higher education opportunities, governments can empower

individuals from all backgrounds to take advantage of the benefits offered by mobile money platforms.

In conclusion, the study's inference revealed that young people aged 25-29 years and those with secondary and tertiary education are the most effective users of mobile money services. Their familiarity with technology, combined with their financial knowledge and digital literacy, enables them to navigate these platforms adeptly. By capitalizing on these insights, stakeholders can design more inclusive and accessible mobile money services that cater to the needs of all users, ultimately fostering financial empowerment and driving economic growth.

6.3.2 Factors that influence consumers to use mobile money services

Limited availability and accessibility of mobile money services makes operation of mobile money services ineffective.

From the data presented, it can be inferred that the limited availability and accessibility of mobile money services have a significant impact on their overall effectiveness. When mobile money services are not easily accessible or widely available, it creates several barriers that hinder their efficient operation and utilization.

Firstly, limited availability means that mobile money services might not be accessible to a large portion of the population, especially in rural or remote areas where banking infrastructure is scarce. This lack of access can result in a significant portion of the population being excluded from the benefits of mobile money, leading to a fragmented and less interconnected financial ecosystem.

Secondly, restricted accessibility can hamper the convenience and ease of using mobile money services. For instance, if there are only a few agent locations or outlets where individuals can perform cash-in and cash-out transactions, it can lead to longer queues and waiting times, discouraging people from using the service. In turn, this could drive potential users back to traditional cash-based transactions, negating the advantages of mobile money.

Furthermore, limited availability and accessibility might also impede the adoption of mobile money services among merchants and businesses. If businesses cannot readily accept mobile payments due to a lack of infrastructure or support, it diminishes the incentive for consumers to use mobile money as a viable payment option. This lack of uptake from both consumers and businesses can create a self-reinforcing cycle that hinders the growth and effectiveness of mobile money services in the market.

Additionally, limited availability and accessibility can also exacerbate financial exclusion, leaving vulnerable segments of the population without access to formal financial services. Mobile money has the potential to bridge the gap between the banked and unbanked populations, but when its reach is limited, it fails to fulfill this promise of financial inclusion.

To address this issue, it is crucial for stakeholders, including mobile money service providers, governments, and regulatory authorities, to work together to expand the reach of mobile money services. Establishing a more extensive network of agents, collaborating with existing financial institutions, and leveraging mobile technology in remote areas can help increase accessibility.

Moreover, fostering partnerships with local businesses and service providers can also enhance the availability and usage of mobile money services. By encouraging businesses to accept mobile payments and integrate mobile money into their operations, the convenience and benefits of using such services can be amplified.

In conclusion, the limited availability and accessibility of mobile money services indeed impact their effectiveness. When people face barriers in accessing and using mobile money services, it hampers adoption, convenience, and financial inclusion. To maximize the potential of mobile money and unlock its benefits, concerted efforts are required to improve availability and accessibility, making mobile money services a more inclusive and viable option for a broader population.

6.3.3 Factors that make customers abstain from using mobile money services

Lack of trustworthiness and security of mobile money services are the reason for operation of mobile money services to be perceived ineffective. From the information provided, it can be inferred that the lack of trustworthiness and security of mobile money services significantly contributes to the perception that these services are ineffective. When users perceive mobile money platforms as lacking in trust and security, they are less likely to use them, and this perception can hinder the overall effectiveness of mobile money services.

Trustworthiness is a crucial factor in any financial service, as users need to have confidence that their funds and personal information are safe and protected. If mobile money services are perceived as unreliable or untrustworthy, users may hesitate to use them for fear of potential fraud, data breaches, or unauthorized access to their accounts. The lack of trust can lead individuals to opt for

more traditional banking methods or cash transactions, undermining the potential benefits of mobile money.

Moreover, security concerns can deter users from fully embracing mobile money services. If users are unsure about the safety of their financial transactions or the protection of their personal data, they may avoid using mobile money altogether. This perception of insecurity can create a negative perception around mobile money services, leading to limited adoption and utilization.

Additionally, the lack of trustworthiness and security can also impact businesses' willingness to accept mobile payments. Merchants and businesses need to have confidence in the reliability and safety of mobile money services to integrate them into their payment systems. If businesses are hesitant to accept mobile payments due to security concerns, it restricts the usability and acceptance of mobile money services, ultimately hindering their effectiveness in the market.

To address this issue, mobile money service providers must prioritize security and transparency. Implementing robust security measures, such as two-factor authentication, encryption, and fraud detection, can help build trust among users. Clear communication about security protocols and data protection practices can also help alleviate users' concerns and enhance the perception of trustworthiness.

Collaboration with regulatory authorities and adherence to industry standards for data protection can further enhance the credibility of mobile money services. Demonstrating a commitment to ensuring the safety and security of users' funds and information can go a long way in improving the perception of mobile money services' effectiveness.

Moreover, educating users about the security features and benefits of mobile money services can help dispel misconceptions and build confidence in their usage. Providing customer support and readily addressing security-related queries can also contribute to building trust among users.

In conclusion, the lack of trustworthiness and security of mobile money services can lead to the perception that these services are ineffective. Building trust and ensuring security are paramount for the success and adoption of mobile money platforms. By prioritizing security, transparency, and education, mobile money service providers can overcome these barriers and foster a positive perception of mobile money services, ultimately enhancing their overall effectiveness in the financial ecosystem.

6.3.4 Challenges facing mobile money operators

Limited availability, accessibility, lack of trustworthiness and security for operation of mobile money services impede to access mobile money credit.

From the information provided, it can be inferred that the combination of limited availability, restricted accessibility, perceived lack of trustworthiness, and security concerns creates significant barriers that impede access to mobile money credit.

Limited availability of mobile money services means that they may not be widely accessible in certain regions or communities. As a result, a considerable portion of the population may not have access to mobile money credit facilities, particularly in rural or remote areas where banking infrastructure is limited.

Restricted accessibility further exacerbates the challenges faced in accessing mobile money credit. If there are only a few agent locations or outlets where individuals can conduct cash-in and cash-out transactions, it can lead to inconvenience and longer waiting times. This may deter people from using mobile money services, especially for accessing credit, as the process becomes cumbersome and time-consuming.

Moreover, the perceived lack of trustworthiness of mobile money services can create reluctance among individuals to use them for accessing credit. Concerns about the security of transactions and the safety of personal information may lead people to opt for more traditional and familiar credit options, such as banks or microfinance institutions.

Security concerns can also be a significant factor that impedes access to mobile money credit. If users are uncertain about the safety and protection of their financial transactions and personal data on mobile money platforms, they may hesitate to use them for credit-related activities. This lack of confidence in the security measures of mobile money services may deter individuals from fully embracing them for accessing credit.

The combination of these factors creates a challenging environment for individuals seeking to access mobile money credit. The limited availability and accessibility, coupled with concerns about trustworthiness and security, result in a reduced willingness to use mobile money services for credit-related transactions.

To address these barriers and promote access to mobile money credit, concerted efforts are required from mobile money service providers, regulators, and policymakers. Expanding the network of agent locations and improving mobile network coverage can enhance accessibility,

making it easier for individuals to access mobile money credit services. Building trust and confidence in mobile money platforms can be achieved through increased transparency, clear communication about security measures, and proactive measures to address potential security issues. User education and awareness campaigns can also play a vital role in dispelling misconceptions and instilling confidence in the security and reliability of mobile money services. Additionally, regulatory support and industry-wide standards for security and data protection can further bolster the trustworthiness of mobile money services. By fostering an environment of trust and security, mobile money service providers can facilitate greater access to credit for a broader segment of the population, contributing to financial inclusion and economic growth.

6.4 Recommendations

The study recommends that:

6.4.1 Socio-demographic Characteristics on Adoption of Mobile Money Services

Targeted awareness campaigns, community workshops, and partnerships with local organizations are recommended to address adoption gaps among older individuals and those with lower education levels. Simplifying user interfaces, tailoring marketing messages, providing customer support, and offering incentives are additional strategies suggested to enhance adoption.

6.4.2 Factors that Influence Consumers to Use Mobile Money Services

Recommendations include collaboration among mobile network operators, expansion of agent networks, infrastructure development, integration with other financial services, public-private partnerships, customer education, use of digital channels, incentives for agents, regulatory support, and regular monitoring and evaluation to improve availability and accessibility.

6.4.3 Factors that Make Customers Abstain from Using Mobile Money Services:

Recommendations focus on security awareness campaigns, user-friendly security features, multi-factor authentication, timely transaction notifications, transparent data privacy policies, continuous security updates, customer support for security concerns, collaboration with regulatory authorities, independent security audits, and encouraging user feedback to enhance trust and confidence in mobile money services.

6.5 Future studies

Future studies should focus on conducting case studies examining the challenges faced by individuals accessing mobile money services and the obstacles encountered by mobile network providers in improving availability and accessibility. These case studies can uncover specific

barriers related to education, digital literacy, regulatory constraints, and infrastructure limitations. Insights gained from such research can inform tailored interventions and strategies to bridge the digital divide and enhance financial inclusion efforts..

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6.5.2 Appendix

6.5.3 WORK PLAN/TIME PLAN IN GANTT CHART FORM

Activity	September 1/09/2021 – November 29/11/2021	December 1/12/2021	January 1/01/2022	February 01/02/2022	March 15/03/2022
Proposal formulation and questionnaire development.					
Data collection					
Report writing chapters 1, 2, 3					
Data analysis & interpretation					
Report compilation					
Thesis presentation & final submission					

6.5.4 Budget Estimates

NO.	ACTIVITY	AMOUNT
1	Organization Research Fees	K300.00
2	ethical clearance fees	K300.00

3	Printing of Data Collecting Instruments	K1,000
4	Transport costs for data collection and Interviews	K1,200
5	Data coding costs	K1,500
6	Transport and accommodation costs for Supervisor Consultations	K1,500
7	Proposal Printing and Binding Costs	K1,500
8	Estimated final Report Printing and Binding	K1,500
TOTAL		K8, 800.00

6.5.5 Questionnaire

Questionnaire Identification Number|_|_|_|_|

TOPIC: Evaluation of the Factors Affecting Mobile Money Operators Credit Access: Lusaka Central Business District.

Dear Respondent,

In reference to the above topic, you have been randomly chosen to help in this research. You are requested to answer the questions as honestly as possible.

INSTRUCTIONS

1. Do not indicate your name on the questionnaire.
2. Tick the answer that expresses your view as shown:
3. Only one response is required for each question and where you have to write your response, you may be as brief as possible by filling in the space provided.

DATE OF INTERVIEW...../...../.....

LOCATION OF THE INTERVIEW: Lusaka Central Business District.

Please Note: the research is purely for academic purpose. Therefore, you are assured that the information obtained will be treated confidentially. Your cooperation is sincerely appreciated.

SECTION A: BACKGROUND INFORMATION

1. Sex

- a. Male
- b. Female

2. What is your age?

.....

3. Marital Status

- a. Single
- b. Married
- c. Divorced
- d. Separated
- e. Widowed

4. How long have you been in operation with the business of mobile money services?

- a. Less than a year

- b. 1 year []
- c. 2-3 years []
- d. Above 4 years []

5. What is your mobile network provider for mobile money services?

- a. MTN []
- b. Airtel []
- c. Zamtel []

6. The Highest level of Education Attained:

- a. Tertiary Education []
- b. Secondary level []
- c. Primary level []

7. Do you operate effectively with mobile money services for easy money transfer?

- a. Yes []
- b. No []

8. What is your level of income?

- a. Less than 1000 kwacha per month []
- b. 1000 to 3000 kwacha per month []
- c. 3000 to 4900 kwacha per month []
- d. 5000 kwacha and above per month []

The relationship between the consumers demographic, mobile money characteristics, social influences on adoption of mobile money services.

9. Are you comfortable using mobile money services for financial transactions?

- a. Yes []
- b. No []

10. Are mobile money services time saving?

- a. Yes []

b. No []

11. Are Mobile money services easy?

a. Yes []

b. No []

12. Are mobile money services trustworthy?

a. Yes []

b. No []

13. Are mobile money services faster when doing a transaction?

a. Yes []

b. No []

The factors that affect access to mobile money credit facility by consumers.

14. With your network provider do you have easy access to make mobile money transactions?

a. Yes []

b. No []

15. Are mobile money services always on?

a. Yes []

b. No []

16. Are mobile money services convenient for use according to your experience?

a. Yes []

b. No []

Challenges facing mobile money operators in the Central business district and make recommendations on the way forward.

17. According to you are mobile money services safe?

a. Yes []

b. No []

18. Is the cost generated when transacting too high?

a. Yes []

b. No []

19. Do you face any challenges with the network when transacting for mobile money services?

a. Yes []

b. No []

20. Are there any other challenges you face with mobile money services.

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21. What recommendations can you make on the operations of mobile money services

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