

**FACTORS AFFECTING THE CHOICE OF MOBILE LENDING PLATFORMS
AMONG SMALL AND MEDIUM ENTERPRISES IN THARAKA NITHI COUNTY IN
KENYA**

**BY
FAITH K. MICHENI**

MASTER OF SCIENCE IN COMMERCE (FINANCE AND ECONOMICS)

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**DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made, and author duly acknowledged.

Student Name: **Faith K. Micheni**

Reg. No.: **KCA 19/00033**

Sign: _____ Date: _____

I do hereby confirm that I have examined the master's dissertation of

Faith K. Micheni

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed

Sign: _____ Date: _____

Dr. Ibrahim Tirimba

Dissertation Supervisor

ABSTRACT

Small and medium enterprises (SMEs) have limited access to credit despite their contribution to global economic development and employment creation. The advent of digital lending through mobile lending platforms has improved access to credit for SMEs. However, since mobile lending platforms are unregulated in Kenya, predatory lending is rampant and hence it is vital for SMEs to make informed choices when they are selecting mobile lending platforms. The purpose of this study was to determine the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Specifically, the study sought to determine the effect of transaction cost, risk, and ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. This study applied a descriptive research design on a population of 745 small and medium enterprises in Tharaka Nithi County. A sample of 260 small and medium enterprises were selected and questionnaire were applied to collect data. The collected data was analysed using descriptive statistics (means, percentages, frequencies, and standard deviations) and multiple linear regression. The presentation of the findings was through figures and tables. The study findings determined that transaction costs had a significant and positive effect on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya ($\beta = 0.185$, $p < 0.05$). Additionally, study findings indicate that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta = 0.169$, $p = 0.001$). Further study findings indicated that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta = 0.314$, $p < 0.05$). After considering the research's findings, the study offers important recommendations. First, the study recommends to policy makers and regulators such as Digital Lenders Association of Kenya (DLAK) and Centra Bank of Kenya to design an effective legal and policy framework that will guide the mobile lending institutions to have transaction costs that are fair and within the CBK legal legislation. The study also recommends to mobile lenders to enhance security of their applications through securing the application's code, securing the back end, effective mobile encryption and educating their users on security. Lastly, the providers of mobile lending applications should develop the applications while considering platform compatibility so that the apps can work on several phone models, have simple navigation, have concise and clear content, minimize the number of steps when a user is seeking a mobile loan and reduce the need for scrolling through the application's user interface.

Keywords: Mobile lending platforms, small and medium enterprises, ease of use, risk, transaction cost, firm size.

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DEDICATION

This dissertation is dedicated to my parents Mr and Mrs Franklin Micheni who have always been a constant source of financial support, moral support, and encouragement and who have given me the underlying virtues of discipline and hard work.

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ACRONYMS AND ABBREVIATIONS

ABSA	Amalgamated Banks of South Africa
COVID-19	Corona Virus Disease 2019
FinTech	Financial Technology
GDP	Gross Domestic Product
GNI	Gross National Income
KCB	Kenya Commercial Bank
KNBS	Kenya National Bureau of Statistics
MENA	Middle East and North Africa
MNO	Mobile Network Operator
P2P	Peer to Peer
RBV	Resource-Based View
SME	Small and Medium Enterprise
SPSS	Statistical Package for Social Sciences
TTF	Task-Technology Fit
UAE	United Arab Emirates
US	United States
VIF	Variance Inflation Factor

TERMS AND DEFINITIONS

Ease of use – Capacity of a system to provide an environment in which its users may without much effort, safely, effectively, and efficiently execute activities while also enjoying the experience (Nyaga, 2013).

Mobile lending platforms – an electronic system used by financial institutions or financial technology companies to finance loans (or parts of loans) to individual borrower (Guguyu, 2019).

Risk – Perils inherent in mobile lending such as confidentiality, unauthorized use of personal information and danger of hackers gaining access to the borrower's accounts and information (Disse & Sommer, 2020).

Transaction cost - There are expenses incurred by borrowers as a consequence of borrowing from mobile lending platforms (Guguyu, 2019).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Limited access to credit for small and medium enterprises (SMEs) has been considered the biggest challenge to the performance, sustainability and growth of SMEs globally. World Bank (2020) notes that access to finance is the second most cited hindrance to SMEs' performance, sustainability, and growth. However, Ngureh et al. (2020) observe that the introduction of digital lending has enhanced access to credit for SMEs and it holds promise for increased performance, sustainability and growth of SMEs (Motta, 2018). Digital lending is provision of credit using digital channels such as the mobile phone or the internet. Mobile based lending is one of the most dominant platforms that SMEs use to access credit from financial institutions. However, due to weak or absence of regulatory mechanisms for mobile base blending platforms, predatory lending is rampant (Owuor, 2019). Predatory lending is defined as any lending activity that imposes unreasonable and exploitative loan conditions on borrowers, such as excessive interest rates, exorbitant fees, and terms that deplete the borrower's equity (Disse & Sommer, 2020).

Mobile lending has to a large extent bridged the financing gap that existed amongst SMEs. However, to get the full benefits from mobile lending SMEs must carefully choose the mobile platforms to use to avoid mobile lending platforms that use unethical means to monitor and enforce loan repayment. SMEs should make informed choices when selecting digital lenders that will serve the purpose of providing them with an efficient access to credit. In the United States (US), the US Treasury has approved Kabbage, Square, PayPal and Funding Circle to provide loans to SMEs through the US Small Business Administration's Pay check Protection

Program (World Bank Group, 2020). According to Naruetharadhol et al. (2021), key factors that SMEs considered when choosing mobile lending platforms in US were security of the mobile lending platform, ease of use and lending terms and conditions.

In China, digital lending platforms have collaborated with commercial banks with extensive partnerships to provide loans to SMEs. Alipay has partnered with 100 local Chinese banks to provide street vendors and small merchants with “Zero Contact” loans, which are fully mobile based with no human interaction. This has enabled the banks to disburse loans to over 350,000 SMEs. While choosing mobile lenders, most SMEs in China consider mobile lender’s reputation, interest rates, and transaction costs (Punatar, 2018).

In the United Arab Emirates (UAE), mobile based lending has enhanced access to credit to SMEs for growth and sustainability. One of the leading FinTech firms is Beehive and the first peer to peer (P2P) lending platform in the Middle East and North Africa (MENA) region to be regulated. According to World Bank Group (2020), Beehive has provided credit to 550 SMEs since its inception in 2014. Using the Beehive proprietary credit model, assessment of SMEs can be conducted, and loans provided within days with repayment terms between six months and three years. Ease of use, security, data privacy level, reputation of the lender, transaction costs, interest rates and amount of loans provided are the key considerations by SMEs when choosing mobile lending platforms (Murphy, 2021).

In Cameroon, Tengeh and Talom (2020) considers mobile based lending as sustainable alternative that would enable SMEs to access credit in less developed financial markets. However, most SMEs and stakeholders in Cameroon have not fully maximised the use of mobile lending due to key challenges that include cost, trust and awareness. Key factors that choice of mobile based borrowing channels by SMEs include safety, accessibility and convenience. In Sub

Saharan Africa, Disse and Sommer (2020) note that the partnership between mobile network operators (MNO) and financial institutions have enabled provision of mobile loans to SMEs. One of the notable partnerships between banks and MNOs has been observed in Sub-Saharan Africa is between M-Pesa and MTN Mobile Money with commercial banks in the region. Key factors considered by SMEs in the region when choosing mobile lending platforms include transaction costs, security, interest rates and the reputation of the lender. In Uganda, Baganzi and Lau (2017) indicated factors that influenced choice of mobile lending platforms to include security, reliability, cost and design. In Tanzania, key factors influencing choice of mobile lending platforms were customization, convenience, cost and security features (Abdinoor & Mbamba, 2017).

In Kenya, Nyaga (2013) notes that mobile credit has made a significant contribution to the SME sector in urban centres. Besides, the efficiency and reliability of mobile lending platforms contribute to its utility and growth of SMEs. However, majority of SMEs rarely use their mobile phones to access loans and hence considered this as an opportunity to enhance access to credit for SMEs. Okiro (2016), on the other hand, noted that digital platforms have provided SMEs in major urban centres in Kenya with an opportunity to access credit. Key factor that hinders mobile lending include high interest rates, high transaction costs, and other prohibitive loan conditions. According to Kiogothe (2018), factors influencing choice of mobile based lending platforms included ease of use, costs, reliability and design.

1.1.1 Mobile Based Lending Platforms

Mobile based lending is the process whereby FinTech firms, MNOs and financial institutions disburse loans to borrowers through the mobile phone. According to Disse and

Sommer (2020), the process of loan application, assessment, approval and disbursement is chiefly conducted through the mobile phone without the borrower visiting the FinTech Firm or financial institution providing the loan. Use of the mobile lending channel to process and disburse loans enables speed and efficiency. The lenders utilize digitized data to make their credit decisions and shape relationships with their clients (Kanyare & Mungai, 2017). The use of mobile lending platforms to lend to SMEs provides various benefits to the lenders and borrowers that comprise of convenience, better decision making, efficiency and improved customer experience.

There are various mobile based lending platforms available globally, regionally and locally. Some of the platforms are solely provided by FinTech firms while other are provided by financial institutions in partnership with MNOs. In the US, the most popular mobile based lending platforms are Kabbage, Square, PayPal (World Bank Group, 2020). In China, Alipay has partnered with commercial banks to provide loans to SMEs while in UAE, Beehive which is provided by a FinTech firms is the most popular. In Sub Saharan Africa, the most notable mobile lending platforms include Branch, Tala, Cellulant, Jumo, Paga, Fawry, OneFi, Yoco, Zoono, and MyBucks (Tengeh & Talom, 2020).

Kenya has been on the frontline in adopting mobile lending for SMEs. According to Owuor (2019), there are 49 mobile lending platforms, which are mostly unregulated though some belong to financial players. Banks such as Kenya Commercial Bank through KCB M-Pesa, Commercial Bank of Africa through M-Shwari, Equity Bank through Eazzy Loan, Cooperative Bank through M-Coop Cash, Family Bank through PesaPap, Housing Finance through HF Whizz, and ABSA through Timiza offer quick mobile loans. There are also mobile lending platforms by Fintech firms which SMEs can select from. These include Tala, Branch, Okash,

Berry, Shika, iPesa, Zidisha, Zenka, Jazika, Utunzi, KopaCash, Hara and Saida. This study will focus on the factors affecting the choice of the various mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

1.1.2 Factors Affecting the Choice of Mobile Lending Platforms by SMEs

Mobile lending platforms and loans available to SMEs have different features which may influence the choice between the various available platforms and accessible credit. The various features influence the cost, convenience and user experiences of the users (Owuor, 2019). The most critical features include ease of use, risk and transaction costs. Regarding ease of use, the platform's user interface should be straightforward and easy to use. Many mobile lending platforms provide a fragmented experience with inadequate navigational instructions, forcing clients to abandon them for the easier to use platforms (Okiro, 2016). The platform must make it simpler for users with average digital knowledge to navigate as well as have smart shortcuts to commonly used platform functions.

Risk involved the concerns that SMEs may have regarding the mobile lending platforms in terms of possible data breaches, hacking, security, and cyber theft. With the current increase in the risk of data breaches, cyber theft, and hacking, security is one of the most important aspect when it comes to choosing between the different mobile lending platforms available (Motta, 2018). Customers would undoubtedly want to know that their sensitive data is well-protected from unauthorized access or sharing with third parties. In this respect, multi-factor authentication with safe sign-in choices and contemporary technologies such as biometrics, fingerprint readers, face recognition, codes, and more make it simpler to sign in (Kanyare & Mungai, 2017). Users

should be able to enjoy a secure and risk-free mobile borrowing and repayment experience if mobile lending platforms offer the greatest degree of security.

Transaction costs charged by the mobile lending platforms is a critical feature that could determine why SMEs could select one platform over another. The transaction costs include interest rates, facilitation fees, penalties, and other charges that are payable to the lending platforms to get access to credit. The Kenya Bankers Association indicated that some mobile lending platforms were very expensive to borrowers as the most costly charged an annual interest of 521 percent with the cheapest going for 25.2 percent (Guguyu, 2019). Other charges that mobile lending platforms are facilitation fees; M-Shwari, Kenya's first mobile lending program levies a 7.5 percent facilitation fee on every loan advanced, regardless of term (Ngochi & Kihara, 2019). High interest rates and fees on digital loans can reduce SME profits over time, particularly if the loans are not invested in very productive purposes, and thus returns on investments financed by digital loans may be insufficient to cover loan obligations when they fall due.

1.1.3 Small-Scale Enterprises in Tharaka Nithi County

Tharaka Nithi County is in the former Eastern Province of Kenya. Central region of Kenya. The County occupies an area of 2609 square kilometers with a population of 393,177 (Kenya National Bureau of Statistics, 2019). The county borders Meru County to the North and North East, Embu County to the South and South West, Kitui Country to the East and South East and Nyeri and Kirinyaga Counties to the West. The primary economic activities in Tharaka-Nithi County are subsistence dairy farming, coffee and tea farming, and rearing of other livestock such as sheep and goats and sheep (Tharaka Nithi County Government, 2021). Tharaka Nithi County

has three constituencies which are Tharaka, Chuka/Igambang'ombe and Maara. Major towns in Tharaka Nithi include Kathwana, Chuka, Chiakariga, Chogoria, Gatunga, Itugururu, Kajuki, Kamaende and Gatungu.

Though the County Headquarters are in Kathwana Town, Chuka is the biggest town in the county. Food processing, retail and wholesale commerce, textile, personal services (salons and barber shops), financial services, training and education, and hospitality are among the many small enterprises in Tharaka Nithi County. These small businesses suffer the same problems as other SMEs in Kenya, such as a lack of access to financial services. Consequently, the county's SMEs are stagnating and dying at a significant rate (Akwalu, 2018). Although the majority of SMEs in the county have embraced mobile borrowing, there is little indication that this has had an impact on their performance. This study hence sought to establish the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

1.2 Statement of the Problem

The Financial Sector Deepening (FSD) report (2018) indicates that about 41 percent of Kenyans have taken at least one form of loan from a financial institution. The same report argues that SMEs have been greatly disadvantaged in terms of credit access due to inability to pay, lack of trust among creditors on SMEs based on previous experience in dealing with them as well as the fear of the unknown (FSD, 2018).

Mobile loan services appear to be bridging the gap for Kenyans who do not have formal bank accounts, or whose incomes are not stable enough to borrow from formal financial institutions including the SMEs which lack capacity to deposit collateral to access credit (Owuor,

2019). Mobile loan services have improved access to loans, but the cost of credit has been established to be extremely high making many SMEs to shy away from taking advantage of the opportunities to access credit prompted by the mobile lending platforms.

In Tharaka Nithi County, there has been a high mortality rate of 54% in SMEs within their first 3 years of opening as well as high numbers of stagnation among those that survive after their third year due to inadequate access to capital for expansion (Akwalu, 2018). It is not clear on why the SMEs in Tharaka Nithi County have not resolved to mobile lending platforms despite the availability of this option as an existing method of credit access.

A study by Owuor (2019) notes that mobile loans have been highly un-regulated and therefore their unpredictability in terms of loan terms as well as their un-professionalism in terms of how defaulters are handled thereby making the lenders disadvantaged. Totoro (2017) argues that many SMEs are avoiding mobile lending platforms due to certain factors which are either specific to them or specific to the lenders' side. Akwalu (2018) further notes that there is lack of research agreement on which factors affect SME's choice of lending platforms generally. It is on this grey area of limited research that this study aimed to uncover the factors determining the choice of mobile lending platforms among the small and medium enterprises in Tharaka Nithi County, Kenya.

Gahapa and Tengeh (2019) determined the impact of mobile money on the financial performance of the SMEs in Douala, Cameroon. Kanyare and Mungai (2017) assessed the relationship between access to microcredit determinants and financial performance of small and medium retailing enterprises in Wajir County, Kenya. Masocha and Dzomonda (2018) evaluated the adoption of mobile money services and the performance of small and medium enterprises in Zimbabwe. Mutinda (2014) determined the effect of mobile based money transfers on the

financial performance of SMEs in Nairobi County, Kenya. These studies had not determined the factors affecting the choice of mobile lending platforms among SMEs. This study therefore aimed to fill the gap by determining the factors affecting the choice of mobile lending platforms among SMEs in Tharaka Nithi County, Kenya.

1.3 Objective of the Study

This study's main objective was to determine the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

1.3.2 Specific Objectives

- i) To determine the effect of transaction cost on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya
- ii) To determine the effect of risk on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.
- iii) To determine the effect of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

1.4 Research Questions

- i) What is the effect of transaction cost on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya?
- ii) How does risk affect the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya?

- iii) What is the influence of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya?

1.5 Significance of the Study

Small-scale enterprises in Kenya have long been challenged by access to finance which hampers their capacity to contribute to economic growth and employment creation. Mobile lending platforms have come up to bridge the finance gap for SMEs. However, prevalence of predatory lending by mobile lenders has caused many SMEs to enter a debt trap, and thus SMEs need to make an informed choice on which mobile platform to utilize. This study is expected to determine the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. The findings from this study will hence be significant to policymakers, mobile lending financial institutions, owners of small-scale enterprises, scholars and researchers.

1.5.1 Policy makers

The study findings might assist policymakers such as Central Bank of Kenya to design innovative regulations and establish effective interventions that will ensure that mobile based lending is made more efficient, reliable and convenient. Moreover, the findings may unearth the key aspects that inform SMEs' choice amongst the various mobile lending platforms available. Moreover, the study findings may lead to reforms in the mobile based lending sector which may benefit SMEs.

1.5.2 Mobile Based Lenders

The study findings could also inform mobile based lenders on what SMEs consider important when choosing amongst the various platforms available. This would enable them to

improve their lending processes and products to suit the needs of the SMEs and hence stimulate their profitability, sustainability, and growth. The study findings would also be useful to owners of small-scale enterprises as they would get evidence on the key features of mobile lending platforms that they should consider. This would enable their decision making and adjust their mobile based borrowing practices in line with the study findings.

1.5.3 Researchers and Academicians

Lastly, the study could be important to scholars and researchers. To scholars, the study will provide results which will add to the scant empirical literature about mobile based lending platforms and what factors that SMEs consider when choosing between the various platforms available. Besides, the study will be critical for researchers as it will document limitations which would inform them on essential improvements into their future research endeavours. Moreover, the study will provide suggestions for further research which would be explored by researchers in future.

1.6 Scope of the Study

This study was a questionnaire survey that focused on the SMEs in all sectors in Tharaka Nithi County. The study entailed primary data collection through a questionnaire survey and covered the period between 2020 and 2021. Though there are many aspects that can influence choice of mobile based lending platforms by SMEs, the study focused on risk, transaction costs and ease of use. This study was conducted in the month of September 2021.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of literature on factors determining choice of mobile based lending platforms by small-scale enterprises. The chapter includes theoretical review which discusses the theories that were used to ground the study. The empirical review is also provided in the study which focusses on the various factors considered when choosing a mobile based lending platform by SMEs. The review culminates with identification of research gaps. Besides, the chapter provides the conceptual framework which illustrates the association between the independent and dependent variables. Furthermore, the operationalization of the study variables is provided which indicates how all the variables were measured.

2.2 Theoretical Review

The theoretical framework that anchors the current study is presented in this section. A theoretical framework is crucial in a study as it supports the theories that provides an explanation of the study problem and the association among the variables of study. The theoretical framework of this study was based on the task-technology fit (TTF) theory, transaction cost theory and technology acceptance model. The proponents of these theories, when they were developed and their link to the current study are provided in the section.

2.2.1 Task-Technology Fit Theory

The task-technology fit (TTF) theory, was developed by Goodhue and Thompson (1995), and its key proposition is that embracing technological processes and systems could lead to

improved performance for an organization. The theory proposes that the fit between the tasks of the organization and the adopted technology's characteristics enables the technology to be beneficial to the business. This assertion was supported by Nambisan (2013) who indicated that the technology's characteristics and the characteristics of the task influence the fit of the technology in effectively serving the purpose it was intended to serve in the organization. For the organization's purpose to fit with the adopted technology, the decision makers in the organization must hence select the technology with the features that will fit the organization. However, if the task fails to fit with the adopted technology, the organization does not benefit from the adopted technology and hence has to change the technology.

There are five key constructs in the TTF theory which enable the technology to have a good fit with the organization. These are characteristics of the task, the characteristics of the technology, the fit between the task and the technology, application of the technology in the tasks and outcomes to the organization (Ngochi & Kihara, 2019). When these concepts exist, the organization will select the technology that fits it (El Said, 2015). This theory was applied in the study to link the features of the mobile lending platforms such as risk and ease of use with the needs of the SME and the decision by SMEs to choose one mobile lending platform over another.

An SME considers its financial needs, its risk appetite and technological capacity and then selects the mobile lending platform that will fit its needs. When the SME has low risk appetite, it will select a mobile lending platform with low risk of hacking or data breach and vice versa. Besides, an SME with employees who have low technology knowhow will prefer mobile lending platforms which are easy to use and vice versa. Hence, ease of use and risk will be key

factor that will inform the decision of the SME in choosing a mobile lending platform that fits its tasks, nature and needs.

2.2.2 Transaction Cost Theory

Transaction cost theory by Williamson (1991), focuses on company borders, and seeks to address the issue of when and why activities occur in the market and when they occur inside the business. More precisely, transaction cost theory predicts when hierarchies, markets, or hybrids will be utilized by the firm (Tengeh & Talom, 2020). The theory proposes that transaction costs of activities determine which partner or vendor will provide a good or service in an organization. In the theory, transactions are referred to as transfers of commodities or services across interfaces and where transaction costs are high, the firm internalizes the costs or selects another service provider (Ngureh et al., 2020). Transaction cost theory is predicated on the principles of limited rationality and opportunism, which is defined as self-interest and the need to satisfy one's needs.

According to a study of the empirical literature on transaction cost theory, results involving asset specificity were usually supportive of the theory, whereas findings addressing uncertainty were equivocal (Baganzi & Lau, 2017). Even though just a few research studies focused on transaction frequency, those studies were largely supportive of the hypothesis. Motta (2018) went on to find that although there was substantial empirical support for the transaction cost theory in selecting providers, the study determined that an organization may not have all the transaction cost information it may want in making a certain decision. Therefore, some decisions are made based on perceived or estimated costs which may be different from the actual costs.

The transaction cost theory was applied in this study to inform how transaction costs can inform the choice of mobile lending platforms by SMEs. Mobile lending platforms with high transaction costs are expected to be lesser preferred than mobile lending platforms with lesser transaction costs.

2.2.3 Technology Acceptance Model

The technology acceptance model (TAM) is an information technology theory by Davis (1989) for evaluating users' acceptance and usage of new technologies. Essentially, the theory holds that an individual's intention to use (acceptance of technology) and use behaviour (actual use) of a technology are determined by the individual's views of the technology's utility (benefit from utilizing the technology) and simplicity of use. Simply put, consumers are more likely to embrace a new technology if the user interface is of good quality (that is, credible, usable, desirable and useful) (Rono, 2018). The TAM also indicates that extrinsic factors such as human variations, system features, social influences, and enabling circumstances have an impact on evaluations of usefulness and ease of use.

Various TAM-based academic research on elements of market adoption of Internet-assisted technologies have been conducted in the past (Korir & Ndegwa, 2020; Seçkin, 2016). In this study, TAM will be applied to link ease of use, transaction cost and risk of mobile based lending platforms with their choice. This is supported by a study Seçkin (2016) who used TAM to determine various research constructs that informed adoption of electronic banking services. While using TAM in this study, it is expected that mobile lending platforms which are easy to use, have low risks and have less transaction costs are preferred to alternatives.

2.3 Empirical Review

This section provides a review of literature on the factors affecting the choice of mobile lending platforms. The review concentrates on previous studies associated with transaction cost, risk, firm size, and ease of use and how affect the choice of mobile lending platform.

2.3.1 Transaction cost and choice of mobile lending platforms

Mbugua (2020) conducted a study on the adoption of mobile based microfinance services amongst small enterprises in Kenya. The study revealed that most of the small enterprises borrowed, and they used the money for the purpose for which it was borrowed. Most businesses did not have other sources of financing and relied on mobile based microcredit for loans. The borrowers were able to get funds for capital in the business. The findings agreed with findings by Siabei, (2019) which showed that transaction costs such as insurance fees, facilitation fees, loan processing fees and interest rates charged were a key consideration when selecting a mobile based microcredit platform.

Mutinda (2019) conducted a study on the effects of mobile phone-based loans facilities on SMEs in Nairobi and the factors that SMEs considered vital when choosing between the various mobile lending platforms available in the market. The study revealed that mobile based credit facilities were considered convenient, affordable and reliable. This is because entrepreneurs were able to get the funds that they needed without having to move from one place to another and this saved on costs and time as had been indicated by Owuor (2019). The study by Mutinda (2029) determined that many SMEs did a comparative analysis of the transaction costs inherent in the various platforms before they made their choice.

A study was conducted by Jepkorir et. al (2019) on the use of small mobile based loans on by small and medium enterprises in Kapsabet Town. The study findings showed that many SMEs in the area had at one time accessed mobile based microcredit. The mobile based microcredit was provided in the rural areas at lower interest rates. This was an incentive and people who wanted to start or grow their own ventures were able to get their start up or growth

capital. This led to business growth and sustainability which was similar to findings from a study by Siabei (2019). However, it was also observed that the microcredit loans sometimes negatively affected some businesspeople as they would sometimes be forced to sell their assets to repay their loans. The study determined that transaction costs were a key factor considered when choosing a mobile lending platform.

Iravonga et al. (2018) conducted research on the effects of mobile lending on small scale enterprises in Kakamega County. The study revealed that there was a positive relationship between mobile lending platforms and the performance of small enterprises. The mobile lending platforms enabled the enterprises to access cash for operations, supplies, and growth. This made it possible for the business to expand their product and service offering and thus contributing to financial performance. The study also determines that transaction costs were not a key consideration in choosing mobile lending platforms amongst SMEs in Kakamega.

Morang'a (2018) conducted a study on mobile lending strategy by KCB Limited in Kericho and performance of small businesses in the town that took loans from the bank. The study was conducted through a questionnaire survey. The results showed that mobile credit provided to the small business through KCB M-Pesa platform greatly affected the firm's performance. This was indicated by Punatar (2018) to be because the firms were able to get enough funds at low cost to complete their projects and improve revenues. This also led to an increase in profitability and employment opportunities. The study by Morang'a (2018) determined that larger SMEs preferred mobile lending platform that provided bigger loans which the smaller SMEs opted for those mobile lenders that provided microcredit.

Waliaula (2018) conducted a study on the relationship between mobile based microcredit and the growth of small businesses. The study revealed that accessibility of funds was considered

a major factor and the transaction costs were not considered to be a key factor. The effect as indicated by Nyaga (2018) that business owners who had no other sources of capital would be able to get cash flows and capital for their businesses through the mobile loans, with little consideration of the transaction costs involved. It was noted that mobile credit enabled the businesses to improve their income levels and create employment opportunities.

A study was conducted by Monge (2016) on the role played by digital microcredit on the on performance of small enterprises in Tanzania. The study also assessed the factor that made SMEs to adopt mobile lending. The study population was SMEs in Mwanza, and the study was conducted through a survey. The study revealed that many small businesses shunned mobile lending platforms due to high interest rates and transaction costs. However, the study indicated that SMEs benefited from mobile based microcredit services which enabled most entrepreneurs to start and grow their small businesses. This was similar to a study by Ngaruiya et al. (2016) that some lending platforms required collateral and this negatively affected access to credit and made it costly for SMEs.

Ukiro (2016) did a study of mobile based access to credit for small enterprises in Nairobi, Kenya. The study focussed on the factors that determined which mobile lending platforms that these SMEs adopted. The findings established that transaction costs applicable to the various platforms was not a key factor considered by the SMEs. Another study by Ndunge and Hennink, (2016) that most SMEs adopted the mobile lending platforms that were recommended to them by friends or relatives without much consideration to cost implication. The mobile platforms adopted however, increased how much credit one accessed in future if they paid their credit on time. Firms would get enough funds to improve their business and pay their workers well according to the study findings.

Mutisya (2016) investigated the role of mobile credit on micro and small enterprises in Kitui County. The study was conducted through a questionnaire survey of small business owners in Kitui Town. The findings showed that the mobile loans were more accessible than traditional loans. This meant that the enterprises would have more time to tend to their business rather than being in the bank. Another study by Monge (2016) established that mobile lending services enabled enterprises to receive loans conveniently and efficiently without geographical limitations. The interest rates, and other fees charged by the mobile lending applications were a key factor that made SMEs select some mobile lending applications and not others. The mobile lending services were also affordable and cheap to access which reduced the amount of transaction costs.

2.3.2 Risk and choice of mobile lending platforms

A study conducted by Tengeh and Talom (2020) indicated that mobile lending was a sustainable alternative for small enterprises in less developed financial markets. The study found that the mobile lending platforms were easily accessible, and this enabled the entrepreneurs to get the funds they needed at the right time. The platforms were also indicated by the borrowers to be safe. This made it secure to use anywhere since there were passwords needed before using the mobile platform (Bartik et al., 2020). Convenience also encouraged people to use the platforms. One would use their phone whenever they were, and they would access their funds. This saved on the cost of travelling and time saving. However, the loans from the mobile applications were indicated to be expensive.

Mwiathi and Mwangi (2020) conducted a study on mobile credit access amongst small enterprises in Nakuru county, Kenya. The findings revealed that mobile credit access had a

negative effect on performance of small enterprises. This is because small enterprises that borrowed many times were reported to have high interest rates on loans and many applied the loans in areas, they had not applied the loans for. This made it hard for them to pay back as predicted by Baum et al. (2020). It was also noted that the mobile platforms did not give large amounts of loans as needed. Most businesses required a certain amount of loans in order to start and run, but the credit given was not enough. These loans increased the risk of SMEs into falling into the debt trap (Mwiathi & Mwangi, 2020).

Ngaruiya et al. (2020) conducted a study on the factors influencing the choice of mobile loans from commercial banks by small enterprises in Nakuru. The study determined that convenience, affordability and security were the key factors influencing choice of mobile lending platform, while size of the firm was not a significant factor. The study findings agreed with the findings by Bryan et al. (2020) that mobile based platforms enabled the traders to access funds efficiently and conveniently. This enhanced growth for the small-scale enterprises since they were able to finish projects that had been started. The platforms, according to Ngaruiya et al. (2020), also enhanced liquidity of the firms as they were able to access the money they needed when they needed it.

Gahapa and Tengeh (2019) conducted a study on mobile borrowing amongst small and medium enterprises in Douala, Cameroon. The research showed that most businesses used the mobile money platforms such as TRELOANS Mobile Application and MTN for credit purposes. The research also showed that the use of the services resulted to 73% of the total variance in the turnover of the SMEs. This indicated a positive relationship between the use of the mobile lending platforms and the performance of the small and medium enterprises which is similar to findings from a study by Jepkorir and Gichure (2019). Key features that made mobile lending

platforms to be attractive, according to Gahapa and Tengeh (2019), was the low risk for data breaches and the reputation of the mobile loan providers.

Nyaga et al. (2019) did a study on mobile based credit facilities to small enterprises in Kirinyaga County. The research findings indicated that mobile credit facilities greatly affected the performance of small enterprises. This was due to the platforms being efficient and reliable. The firms were able to get credit when they needed it. The funds would be used to increase their stock or raw materials leading to an increase in sales and profit. Some firms took credit to advertise their goods and services, thus reaching more people which led to higher sales. Another study by Mbugus (2019) indicated that the more credit the firms acquired, the higher the gross profits they got. Mobile lending also saved on time and transaction cost. The size of the firms was not a key factor in influencing the choice of mobile lender as business of all sizes used mobile lending services.

Mutuma and Omagwa (2019) conducted a study on mobile based microloans to small and medium enterprises in Meru Town. Key mobile loan applications utilised included Tala, Branch, KCB Mpesa and Mshwari. The study revealed that these mobile lending applications were chosen due to the low perceived risk that they presented to the SMEs. Credit was easily accessible, and this enabled people to improve their businesses, and this also led to an increase in sales and profit. The duration between application for funds and accessibility of the funds was favourable enough. According to Muendi and Mbugua (2019), this enabled borrowers to be able to cover the need for which the loan was sought for and this led to improved productivity. It was also noted that the mobile lending services had better customer service and the providers had a good reputation.

A study was conducted by Moyi (2019) on access of loans through the various mobile lending platforms for SMEs in Kenya. The findings showed that access to mobile credit was vital for some businesses as they were cash constrained. Business owners were able to access funds to start effectively run and grow their ventures. A similar study by Mutuma and Omwaga (2019) determined that risk of the platform was a key factor considered in making the choice. The mobile platforms were also safe, secure, and convenient since one was able to apply for their funds and acquire them without having to move from one place to another and thus there were reduced transaction costs and time savings. The platforms did not require any form of collateral and did not require long processes to get the funds.

A study was conducted by Mutio (2019) on the factors influencing adoption of mobile lending services by micro businesses in the informal sector. Key factors determining choice of mobile lender included ease of use, transaction costs and size of the firm. The study revealed that the mobile lending services were easy to use and applying and receiving a loan would take little time. The mobile loans charged low interest rates, and this was a positive incentive for the people to take loans to start or grow their businesses. A similar study by Ngochi and Kihara (2019) established that entrepreneurs and small business owners would receive their credit through mobile lending platforms at the right time since they did not undergo long processing time to get their funds and they did not need to give any form of security for the loans taken. This enabled smooth operations, revenue growth and profitability.

Mararo (2018) did a study on mobile borrowing services available to small and medium enterprises in Nakuru Town, Kenya. The findings revealed that design of the mobile platform was a key factor that informed the mobile based lending platform that the firm chose. The small business owners relied on the mobile loans to boost their working capital, buy inventory, and pay

business bills. According to Nyaga (2018), this enables continuity in the businesses and enables the businesses to grow since they could get the right amount of funds at the right time. They were also able to take credit and pay their suppliers in time which improved their relationships with suppliers.

Masocha and Dzomonda (2018) conducted a study on loans from mobile lending applications from FinTech companies on small and medium enterprises in Zimbabwe. The study revealed that the mobile lending platforms, such as Zoono and MyBucks, were secure, user friendly and cost saving. According to Akwalu (2018), this is because one did not have to travel to access their funds and the credit transactions took no longer than a day to complete. Moreover, mobile lending firms in the country ensured privacy and confidentiality of the borrowers and they did not share their data with third parties.

Mabveke (2017) conducted a study on the mobile lending applications for SMEs in Limbe, Cameroon. The study found that most SMEs there had low adoption of mobile borrowing due to the risks involved in the mobile lending platforms including risk of data security. However, businesses that were operational were able to get the credit facilities that they needed to sustain their operations and growth opportunities. According to Abdinoor and Mbamba (2017), this leads to better services, better quality of the products, increased sales, and gross income. The process of accessing the loans was not long so the people were able to tend to their needs in time. Besides, the study by Mabveke (2017) determined that security features provided by the mobile lending applications were adequate.

A study was conducted by Obure (2017) on loans provided by FinTech companies for small businesses in Kisii County. The research revealed that the lending platforms ensured accessibility of funds which were important for the small enterprises. The study determined that,

among other factors, the risk of mobile lending platforms was a key consideration for SMEs when they chose platforms to use. A similar study by Baganzi and Lau (2017), key risk factors considered included security, risk of data misuse, privacy and confidentiality and reputation of the mobile loan providers. Small enterprises also received investment advice from the credit facilities, and this led to better decision making for the SMEs which also reduced their risk of misusing the provided loans.

2.3.3 Ease of Use and Choice of Mobile Lending Platforms

A study was conducted by Muendi and Mbugua (2019) on mobile lending services on to women owned small and medium-sized enterprises in Kenya. The study showed that easy and affordable access to finance and start-up capital made the mobile lending applications to be attractive to women entrepreneurs. Another study by Muema and Wamugo (2020) conducted on mobile based microfinance credit availability by small and medium enterprises in Machakos County had similar findings. The study revealed that ease of credit accessibility through mobile platforms led to the platforms being attractive to SME entrepreneurs.

Siabei (2019) conducted a study on the influence of mobile lending on the performance of micro and small businesses in Nairobi, Kenya. The study found that increased loan access through mobile lending platforms led to increased financial performance of the small enterprises. The mobile lending services also were convenient, and this led to growth of the SMEs. Key banks that provided mobile based loans included KCB, Equity Bank and Cooperative Bank. This enabled small business owners to access funds when they needed them without having to undergo long processes. Another similar study by Gahapa and Tengeh (2019) determined that the

size of the firm, costs, ease of use and reliability determined the choice of the lending platform to adopt.

A study was conducted by Nyaga (2018) to determine the impact of mobile credit services on small enterprises in Muranga Town. The study found that most of the businesspeople relied on mobile based platforms rather than the formal banking system to access loans. Due to the convenience of the mobile lending platforms, most business owners were able to access funds for their businesses faster. According to Iravonga and Miroga (2018), this enabled them to continue doing business without any delays. The mobile lending platforms were also reliable. The traders would then be able to do business with confidence that they would access funds to carry out new investments leading to higher sales. Since the available mobile lenders offered different services and size of loans, the size of the firms was a key factor in determining which mobile lender to choose.

A study was conducted by Muchiri (2018) on the effect of mobile banking adoption on the performance of small and medium enterprises in Nairobi County. The research revealed that firms considered the mobile lending platforms to be user friendly that they did not need any kind of training to use it. The platforms, such as KCB M-Pesa and Mshwari were also convenient since they did not need to travel from one place to another in order to access the funds. It was also revealed that the mobile lending platforms were easily accessible and cost effective. Another study by Kiogothe (2018) determined that through mobile lending platforms, entrepreneurs could access the platforms from anywhere and this enhanced accountability and easy monitoring. There was a low interest on loans, so the business owners found it easy to borrow and payback. The study further indicated that size of the firm was not a key factor informing the choice of the mobile lending platform.

A study was conducted by Njiwakale and Bwisa (2018) on the mobile based microfinance lending on small enterprise performance in Kitale. The study found that the enterprises preferred loans from the mobile lending platforms since they did not require collateral. This enabled them to get the funds they needed without going through long processes hence getting their funds at the right time. A similar study by Mararo (2018) showed that the business owners were able to repay the money after applying the funds in business activities. The study indicated that convenience and possibility of getting funds immediately influenced choice of money lending applications.

Abiola (2017) did a study on mobile based microfinance amongst micro and small enterprises growth in Nigeria. The study findings were that ease of use was one of the most essential factors that clients considered when selecting a mobile based lending platform. The results also found that most of the applications required users to have general technology related skills which made it hard for some users with low education levels. Another study by Obure (2017) revealed that the clients that indicated the mobile lending platforms to be easy to use were more likely to adopt the platforms to access microcredit than those who found the platforms to be hard to use.

Nyamwihula (2017) did an evaluation on the mobile based microfinance loans on small and medium enterprises in Tanzania. The study focussed on the mobile loans that were provided by a partnership of MNOs and commercial banks. The research showed that the design of the platform and ease of navigation through the different links or sections in the platform was a key factor for adoption of the platform by SMEs. These findings concurred with findings by Spahiu and Kapaj (2017) which also showed that customer support, notifications and search functions with the platform were critical for SMEs.

Okumu et al. (2016) did an assessment of the effect of M-Shwari on financial inclusion among Muhoroni factory sugarcane growers. The study revealed that M-Shwari services enabled accessibility of investment and growth capital. People were able to get the funds they needed to provide consistent services in their businesses, therefore improving sales. The credit facility was reported to be safe, easy to use and affordable. The features in M-Shwari included search options, loan statements, good graphical interface and ease of navigation. These findings agreed with findings by Monge (2016) that these were key that SMEs considered when choosing the mobile lending platform.

Ndunge and Hennink (2016) did a study on the use and impact of mobile lending platforms as financial inclusion banking products in Kenya. The research showed that the access to loans enabled people to boost their businesses and take care of their family needs. However, the loan application process and loan repayment terms dissatisfied the businesspeople. They reported being denied loans and hence had to first use the savings service. Though the loan facility charged low interest, the M-Shwari lending platform did not give the best experience to most of the borrowers. The findings also concurred with findings by Ngaruiya et al. (2016) which also determined that some respondents found the M-Shwari application to lack key features that made it hard to use.

A study conducted by Abayo et. al (2015) assessed the features of microcredit on that made them attractive to small businesses in Kibuye. This study was a case of M-Shwari, and it revealed that easy accessibility to investment capital and reduced risks associated with micro credit made the mobile loans by the platform to be attractive to small enterprises. Another similar study by El Said (2015) determined that key factors considered when making the choice decision included the design of the platform, ease of navigation, capacity to utilize the application even

with limited IT knowledge and the use of push notifications in the platform. Besides, the study indicated that customer support and feedback channels were key factors considered by SMEs when choosing the mobile lending platform.

2.4 Research Gaps

The current study is justified due to the methodological, contextual and conceptual gaps that the extant empirical literature leaves. The reviewed studies left some conceptual gaps. For example, Okumu et al. (2016) focussed on factors such as ease of use and convenience and determined that these were critical in the choice of mobile lending platforms by small-scale farmers in Muhoroni. Besides, Abayo et al. (2015) determined that safety, transaction costs and ease of use were the critical factors informing choice of mobile based lending platforms amongst small businesses in Kibuye. These studies did not focus on risk which the current study included. Further, the study by Morang'a (2018) included risk and ease of use of KCB M-Pesa credit facility for small business in Kericho. This study did not include transaction costs which was included in the current study.

The reviewed studies also left some notable methodological gaps. For instance, the study by Gahapa and Tengeh (2019) in Cameroon indicated that ease of use of mobile lending platforms significantly influence the choice of mobile lending platforms by SMEs. However, this study population was mobile lenders whereas the current study focussed on SMEs who are the users of the mobile lending platforms. Moreover, the study by Nyaga (2018) assessed how the different features of mobile lending platforms affected business performance. However, this study left some methodological gaps as it did not establish the effect of the features of the different mobile lending platforms on choice. Besides, the study by Akwalu (2018) was

conducted amongst small-scale businesses in Tharaka Nithi County but only focussed on youth owned enterprises. This study considered all SMEs in the County.

Besides, the reviewed studies left some contextual gaps. For instance, Abiola (2017) did a study on mobile based microcredit amongst micro and small enterprises in Nigeria. Nigeria has different contextual characteristics in Kenya and hence that study would not be readily generalizable to small businesses in Kenya. Moreover, the study by Ngaruiya et al. (2016) on mobile lending to small enterprises was conducted in Nakuru. Nakuru County has economic and regulatory differences with Tharaka Nithi County and hence the findings from that study may not be generalizable to small scale enterprises in the current study location. Other studies with contextual gaps include study by Iravonga et al. (2018) in Kakamega County, Obure (2017) in Kisii County and Siabei (2019) in Nairobi County.

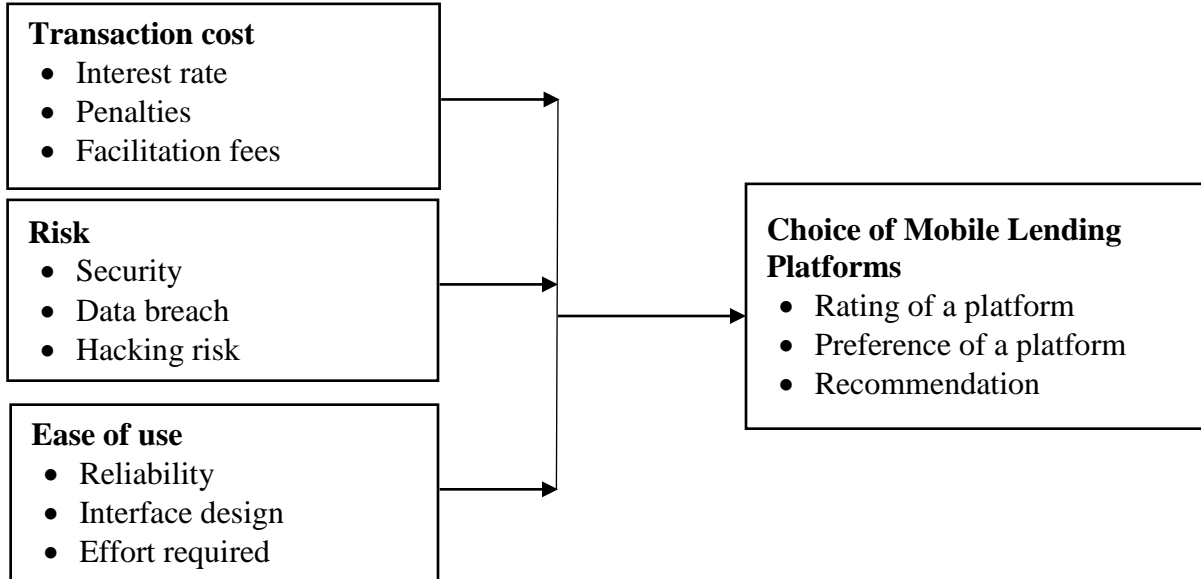
2.5 Conceptual Framework

The conceptual framework that was applied in the current study is presented in Figure 1. This conceptual framework presents the theorized association between transaction cost, ease of use, and risk, which were the independent variables, on choice of mobile lending platform by SMEs, which was the dependent variable.

FIGURE 1
Conceptual Framework

Independent Variables

Dependent Variable



2.6 Operationalization of Variables

The operationalization and measurement of the study variables is provided in this section. All the study variables, their measurement and level of measurement is presented in Table 1. Moreover, the table provides the indicators for the variables.

TABLE 1
Operationalization of the Variables

Variable	Measurement	Level of measurement
Transaction cost	<ul style="list-style-type: none"> • Interest rate • Penalties • Facilitation fees 	<ul style="list-style-type: none"> • Ordinal (Likert scale questions)
Risk	<ul style="list-style-type: none"> • Security • Data breach • Hacking risk 	<ul style="list-style-type: none"> • Ordinal (Likert scale questions)
Ease of use	<ul style="list-style-type: none"> • Reliability • Interface design • Effort required 	<ul style="list-style-type: none"> • Ordinal (Likert scale questions)
Choice of mobile lending platform	<ul style="list-style-type: none"> • Rating of a platform • Preference of a platform • Recommendation 	<ul style="list-style-type: none"> • Ordinal scale (Likert scale questions)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides the research methodology that was applied to conduct the study. The discussion of the methodology comprises of research design, the population of study, size of the sample and the sampling procedures. Besides, the research instrument, procedures of data collection and the data analysis process are presented in this chapter. Additionally, the procedures for pilot testing, validity and reliability, and data analysis are presented herein.

3.2 Research Design

Easterby-Smith et al. (2019) posit that a research design is the whole plan that is applied in integrating the numerous components of the study in a coherent and logical way to enable the study to solve the research problem. This study applied a descriptive research design. This research design was selected for the study as it enables provision of a description of the population characteristics in relation to the study variables and also enables the study to determine the relationship amongst the study variables (Sharp et al., 2017). This, therefore, makes the research design suitable for this study as it enabled the study to establish the extent of use of mobile lending platforms by the small-scale enterprises in Tharaka Nithi County and the factors that the SMEs considered in choosing between the various mobile lending application options available.

3.3 Target Population

Target population of a study is the collection of individuals, entities, organizations, units and items that share a mutual features and which are of interest in a research study (Saunders et al., 2019). This study's target population was 745 (Table 2) small and medium enterprises in Tharaka Nithi County (Tharaka Nithi County Government, 2021). The researcher targeted these firms to understand their usage of mobile lending platforms and what factors determined their choices. The target respondents in these firms were the owners or managers who have a deep understanding of the mobile borrowing aspects of the SMEs. The owner/manager was first asked if the SME used mobile lending platforms and were included only when their answer was affirmative.

TABLE 2
Target Population

Business Type	Target Population
Clothing	92
Leather goods and accessories	53
Financial services	51
Shops	185
Hospitality	62
Food kiosks	71
Handicrafts	17
Beauty shops and salons	101
Groceries	113
Total	745

3.4 Sample Size and Sampling Procedure

Sampling is important in a study when the target population is big and cannot be feasibly covered by a study. The formula by Yamane (1967) will be used in computing the study sample which is indicated hereunder.

$$n = \frac{N}{1+Ne^2}$$

In the formula:

n = Target sample size

N = Target population (745)

e = Level of significance (5%)

Using the formula, the selected sample size is 260.

This study used stratified random sampling to select the small and medium enterprises that participated in the study. Saunders, Lewis and Thornhill (2015) observe that when a population has different groups, stratified sampling is preferred as it enables every group to be represented in the selected sample. Using this sampling technique, the sample was distributed to the various categories proportionately as indicated in Table 3.

TABLE 3
Target Population

Business Type	Target Population	Percentage	Sample
Clothing	92	12.3	32
Leather goods and accessories	53	7.1	18
Financial services	51	6.8	18
Shops	185	24.8	64
Hospitality	62	8.3	22
Food kiosks	71	9.5	25

Handicrafts	17	2.3	6
Beauty shops and salons	101	13.6	35
Groceries	113	15.2	40
Total	745	100	260

3.5 Research Instruments

The current study used a questionnaire to collect data. As indicated by Easterby-Smith, Thorpe, Jackson, and Lowe (2018), a questionnaire is widely favored in collecting data because it is efficient, could be applied in collecting standardized responses and is less time consuming to the researcher and participants. Moreover, a questionnaire is preferred because it could collect data on study variables that cannot be observable.

The questionnaire was developed in such a way that it was simple and clear. The questionnaire was divided into sections to accommodate the various objectives of the research. The questionnaire was divided into five sections. The first section gathered demographic and basic information about the SMEs and respondents. The remaining three sections were devoted to the three study goals. Closed questions on a 1 to 5 Likert scale were included in each of the three sections. According to Zikmund et al. (2016), Likert scales are useful for allowing individuals to answer to complicated questions regarding a company's operations. The last part included questions on choice of mobile lending platforms which was the dependent variable.

3.6 Validity and Reliability of Research Instrument

A pilot test is a small-scale trial of the main study that is conducted using a few participants to evaluate the questionnaire and the study methodology (Fisher, 2017). A pilot test is essential in a study as it can determine challenges and limitations with the methodology or questionnaire that requires to be fixed or managed before the major study. Further, a pilot test

safeguards validity and reliability of the methodology and questionnaire. Twenty six small and medium businesses from Tharaka Nithi County were used in the pilot test. Collis and Hussey (2018) argue that 10% of the study sample is appropriate for a pilot test. The questionnaires filled in the pilot test was analyzed to establish any weaknesses and correct them accordingly.

Validity is defined as the capacity of the research instrument to measure what is was designed to measure (Sharp et al., 2017). This study utilized expert opinions (from panelists and dissertation supervisor) to assess the construct, face and content validity of the research instrument. Additionally, the study used the responses from the pilot test to make amendments to the research instrument. Another aspect that was assessed in the questionnaire is reliability. This is the capacity of the research instruments to provide consistent results after subsequent administration (Easterby-Smith et al., 2018). This was evaluated using the Cronbach's alpha coefficient. According to Zikmund et al. (2013), Cronbach's alpha coefficient is suitable for assessing reliability because it assesses the questionnaire's internal consistency. A Cronbach's alpha coefficient of 0.7 or above is required for the questionnaire to be considered reliable. Any items that have Cronbach's alpha coefficients of below 0.7 should be amended or deleted.

3.7 Data Collection Procedure

The structured questionnaire was drafted to meet the research objectives and was distributed to the owners or managers of the SMEs in all the sampled 260 enterprises. The drop-and-pick method was applied since all the firms were accessible in the study location. The researcher directed the prospective respondents on how to answer to the questionnaire after administering it to them, and a collection date was set. The researcher urged prospective respondents to complete the administered questionnaire and in the agreed time. When the

respondents finished filling out the questionnaire, they informed the researcher, who then went to the SME to collect the completed questionnaire. The questionnaires were gathered and filed in preparation for analysis.

3.8 Data Analysis and Presentation

The questionnaires filled and collected from the field were sorted out, checked for comprehensive and complete filling, and stored in a locked cabinet. Those questionnaires that were adequately filled were considered for inclusion in analysis. The information in those questionnaires was coded and entered into statistical package for social sciences (SPSS) version 24 which was used in analysis.

The study used various techniques in analyzing the data collected. First, all the collected data was analyzed using descriptive measures that included means, frequencies, standard deviations, and percentages. These measures enabled the study to determine the prevalence and distribution of mobile lending platforms used by the small-scale enterprises in Tharaka Nithi County. The descriptive analysis also enabled a portrayal of the choice of the various mobile lending platforms by the studied firms.

The study used multiple regression analysis to establish the effect of the various factors on choice of mobile lending platforms by the small-scale enterprises. Fisher (2017) considers multiple regression analysis to be suitable in enabling research studies to determine the influence of independent variables on dependent variable. In the current study, multiple linear regression model was utilized to determine the influence of transaction cost, risk, and ease of use on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya.

The fitted regression model was.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

In the formula, Y = Choice of mobile lending platform

β_0 = Constant

X_1 = Transaction cost

X_2 = Risk

X_3 = Ease of use

β_i = Regression coefficients

ε = Error term

The results from the descriptive and regression analysis were presented in tables and figures.

3.9 Diagnostic Tests

Several model specification tests were performed before fitting the multiple linear regression model to evaluate the model's fitness and appropriateness. Linearity test, multicollinearity test, test of normality of regression residuals and heteroscedasticity test were among the diagnostic tests performed. These are explained in the sections that follow.

3.9.1 Linearity Test

The first test performed was the linearity test. The purpose of this test is to determine whether the dependent and independent variables have a linear relationship (Suresh & Sharma, 2013). This test was carried out using scatter plots. This necessitated the development of numerous scatterplots for each independent variable against the dependent variable. This determines whether the association was linear.

3.9.2 Multicollinearity Test

The second diagnostic test was the multicollinearity test. This determines if any of the predictor variables have a strong linear relationship (Lincoln & Guba, 2018). The variance inflation factor (VIF) was used to assess multicollinearity in this study. The test's critical value is 5. VIF values less than 5 indicate no multicollinearity, whereas VIF values more than 5 indicate multicollinearity.

3.9.3 Test of Heteroscedasticity

After fitting the model, the study tested the residuals for heteroscedasticity. The heteroscedasticity test evaluates the variance homogeneity of the regression residuals. The scatterplot of the residuals versus the expected values were used to perform this test. Heteroscedasticity is evident when the funnel shape is present, according to Suresh and Sharma (2013). Homoscedasticity, on the other hand, is represented as a random dispersion of projected values shown against residuals.

3.9.4 Test of The Normality of Residuals

The normality of residuals test was the final test performed. When regression residuals are distributed regularly, there is a danger of statistical tests being inaccurate, according to Colomb et al. (2016). Furthermore, the regression coefficients may result in inefficient estimations. Shapiro-Wilk was utilized to assess the normality of the regression residuals in this research. The test's null hypothesis is that the residuals are normally distributed, whereas the alternative hypothesis is that they are not. When the p value is more than 0.05, the null hypothesis is accepted, and when the p value is less than 0.05, it is rejected.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

The data analysis, findings from the study and the discussion of the findings are provided in this chapter. The response rate is provided first, followed by the results relating to the questionnaire reliability, and finally demographic data on the study respondents and the investigated SMEs. The chapter also contains descriptive statistics for the study variables, as well as diagnostic tests conducted prior to the regression model fitting. The chapter ends with a discussion of the major research results and a presentation of the multiple regression model.

4.2 Response Rate

The study received responses from 164 SMEs, based on a sample of 260 SMEs that had been targeted. This amounted to a response rate of 63.1 percent. This was made possible by the effectiveness of reminders and targeting of SMEs in only major towns of the County. According to Fisher (2017), a response rate of 60% or more is considered appropriate, and the results of such research may be utilized to reflect the population if the sampling is effectively conducted.

4.3 Questionnaire Reliability

Cronbach's alpha coefficient was utilized to evaluate the questionnaire's reliability in this research. This alpha coefficient, according to Sharp et al. (2017), measures scale reliability or internal consistency. The items in the questionnaire must have a Cronbach's alpha value of 0.7 or above to be deemed reliable. The Cronbach's alpha coefficient for all of the questionnaire

questions was calculated using the responses from the pilot test. Table 4 summarizes the findings.

TABLE 4
Reliability of Questionnaire

Variable	No. of items	Alpha
Transaction Cost	6	0.788
Risk	8	0.800
Ease of Use	8	0.708
Choice of mobile platform	8	0.816

The results presented in Table 4 indicate that the reliability of the questionnaire was proven, with Cronbach alpha values of greater than 0.7 for all the research variables. Choice of mobile platform had the greatest alpha coefficient (Cronbach's alpha = 0.816), while ease of use had the lowest (Cronbach's alpha = 0.708).

4.4 Demographic Information

The study assessed a range of general and demographic information on the study participants as well as the SMEs they represented in the study. The respondents' role in the business, the length of time in years that the business had been operational, the number of employees in the business and whether the business, in the past one year has borrowed any money from a mobile lender. The following sections summarize the results.

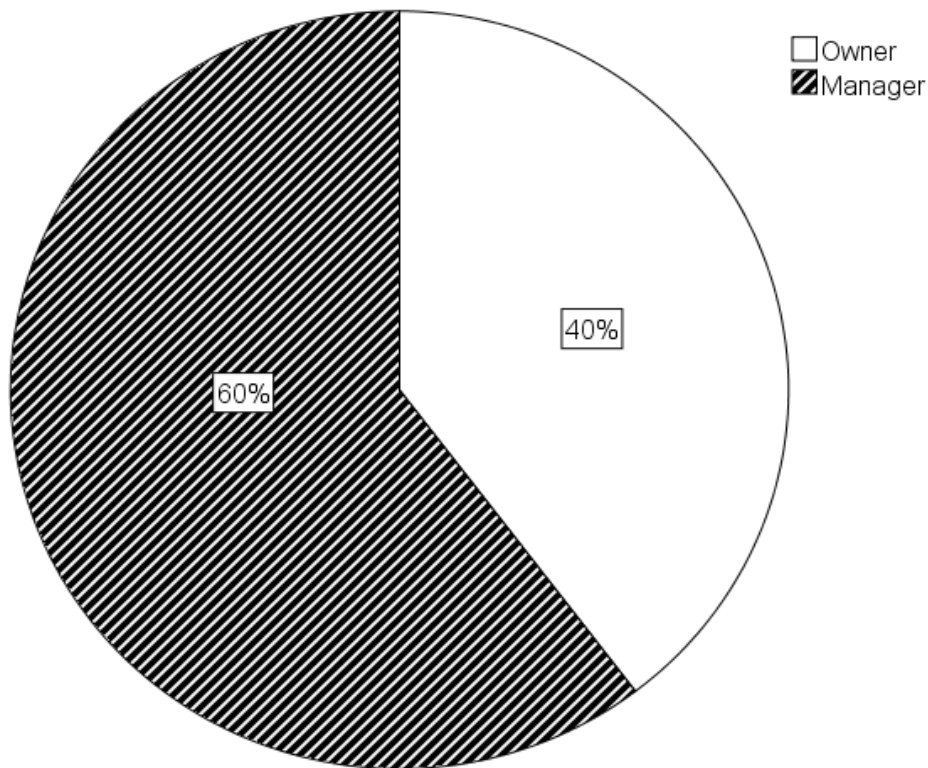
4.4.1 Role of the Respondent in the Business

The study investigated the role of the respondents the surveyed SMEs (whether they were managers or owners). This was done to determine whether they were in a position to respond to

the questions regarding mobile borrowing of their SMEs. The results of the research are shown in Figure 2.

FIGURE 2

Role of the Respondent in the Business



According to the study's results (Figure 2), 60% of the study participants were managers of the surveyed SMEs while 40% were owners. These findings indicate that the respondents were in a position to respond to the questionnaire regarding mobile borrowing practices of the SMEs and why they had selected the mobile platforms that they used.

4.4.2 Years of Operation of the Business

The study investigated the years of operation of the businesses. The goal was to figure out how old the SMEs were. Table 5 summarizes the study's results. According to the results, 52.4 percent of businesses had been in existence for more than 4 years, while 7.9 percent had

been in business for less than 1 year. These results show that though some of the businesses were new, most had been in operation for more than 4 years.

TABLE 5
Years of Operation of the Business

Years of operation	Frequency	Percent
Below 1 year	13	7.9
1 to 2 years	24	14.6
3 to 4 years	41	25.0
Above 4 years	86	52.4
Total	164	100.0

4.4.3 Number of Employees in the Business

To assess the size of the businesses, the research inquired about their number of employees the businesses had. The study's results are provided in Table 6. The study determined that 40.9% of the studied businesses had less than 5 employees. Businesses with 6 – 10 employees were 12.2 percent of the total, while those with above 20 employees were 20.1 percent. These results reveal that most businesses that participated in the study were small.

TABLE 6
Number of Employees in the Business

Number of employees	Frequency	Percent
Less than 5 employees	67	40.9
6 to 10 employees	20	12.2
11 to 15 employees	23	14.0
16 to 20 employees	21	12.8
Above 20 employees	33	20.1
Total	164	100.0

4.4.5 Whether the SME had Borrowed in the Preceding 12 Months

The study also assessed whether the businesses that participated in the study had engaged in any mobile based borrowing in the preceding 12 months. All the SMEs that participated in the study indicated that in the preceding year, they had borrowed some money from mobile lending platforms. These findings imply that most of the SMEs in Tharaka Nithi County rely heavily on mobile lending to satisfy some of their capital and cashflow needs. Besides, the findings show that mobile borrowing is a key source of finance for majority of SMEs in Tharaka Nithi County, thus indicating that mobile based lending has deepened financial access for SMEs.

4.5 Study Variables

The study's goal was to determine the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya the factors considered which formed the three study objectives were transaction costs, risk of the mobile based platform and the ease of use of the platform. The descriptive statistics (standard deviations and means) for the study variables are presented in this section.

4.5.1 Transaction Cost

The study investigated how respondents considered the various transaction costs factors when choosing a mobile based lending platform. A five-point Likert scale ranging from 1 to 5 was used to determine this (strongly disagree - strongly agree). The answers of the respondents were analyzed using standard deviations and means. The study findings are provided in Table 7.

TABLE 7
Transaction Cost Factors

Statements	Mean	Std. Deviation
Interest rates charged by a mobile lender is a key factor for me when choosing a mobile lender	4.20	.750
Penalties charged by a mobile lender is a key factor for me when choosing a mobile lender	4.29	.662
Loan processing fees charged by a mobile lender is a key factor for me when choosing a mobile lender	4.39	.622
Insurance charges charged by a mobile lender is a key factor for me when choosing a mobile lender	2.28	.642
Legal fees charged by a mobile lender is a key factor for me when choosing a mobile lender	2.24	.719
Facilitation fees charged by a mobile lender is a key factor for me when choosing a mobile lender	4.26	.734

The findings from the study presented in Table 7 indicate that respondents considered most of the listed factors as critical when choosing a mobile lending platform. Specifically, study participants agreed that they considered loan processing fees (mean = 4.39, std deviation = 0.622), penalties charged by a lender (mean = 4.29, std deviation = 0.662) and facilitation fees (mean = 4.26, std deviation = 0.734) as key factors when choosing a mobile lender. Besides, study participants agreed that they considered interest rates charged (mean = 4.20, std deviation = 0.750) as a key factor when choosing a mobile lender. However, study participants disagreed that they considered insurance charges (mean = 2.28, std deviation = 0.642) and also disagreed that they considered legal fees charged (mean = 2.24, std deviation = 0.719) as key factors when choosing a mobile lending platform. These findings imply that interest rates, penalties charged, loan processing fees and facilitation fees were the major factors considered by the SMEs when choosing a mobile lender while legal fees and insurance charges were not key factors.

4.4.2 Risk of Mobile lending Platforms

The study examined how respondents considered the various risk factors when choosing a mobile based lending platform. A five-point Likert scale ranging from 1 to 5 was used to determine this (strongly disagree - strongly agree). The answers of the respondents were analyzed using standard deviations and means. The study findings are provided in Table 8.

TABLE 8
Risk of Mobile Lending Platforms

Statements on risk	Mean	Std. Deviation
When choosing a mobile lending app, I consider the security offered in terms of login and authentication	4.38	.629
Risk of being hacked is a key consideration for me when choosing a mobile lending app to use	4.18	.717
Risk of misuse of my personal data is a key consideration for me when choosing a mobile lending app to use	4.20	.798
The level of confidentiality provided by a mobile lending app is a key consideration for me when choosing a mobile lending app to use	4.21	.739
The level of privacy offered by a mobile lending app is a key consideration for me when choosing a mobile lending app to use	4.30	.730
I consider the stability and reputation of the financial institution providing mobile loans when choosing the mobile lending platform to use	4.16	.791

The study findings presented in Table 8 indicate that respondents considered all the listed factors as critical when choosing a mobile lending platform. Specifically, study participants agreed that they considered security offered in terms of login and authentication (mean = 4.38, std deviation = 0.629), level of privacy offered (mean = 4.30, std deviation = 0.730) and level of confidentiality provided (mean = 4.21, std deviation = 0.739) as key factors when choosing a mobile lender. Besides, study participants agreed that they considered risk of misuse of their personal data (mean = 4.20, std deviation = 0.798), risk of being hacked (mean = 4.18, std

deviation = 0.717), and stability and reputation of the financial institution (mean = 4.16, std deviation = 0.791) as key factors when choosing a mobile lending platform. These findings imply that risk factors such as data breach, reputation of the provider, and security were key considerations by the SMEs when choosing a mobile lender.

4.4.3 Ease of Use of Mobile Lending Platforms

The study investigated how respondents considered the various ease of use factors when choosing a mobile based lending platform. A five-point Likert scale ranging from 1 to 5 was used to determine this (strongly disagree - strongly agree). The answers of the respondents were analyzed using standard deviations and means. Table 9 presents a summary of the results.

TABLE 9
Ease of Use of Mobile Lending Platforms

Statements on ease of use	Mean	Std. Deviation
Simplicity of a mobile lending platform in terms of signing in and getting a loan is a key factor for me when choosing the one to adopt	4.20	.725
The user interface design of a mobile lending app is a key factor for me when choosing the one to adopt	4.21	.660
Reliability of mobile lending app is a key factor for me when choosing the one to adopt	4.08	.745
Ease of navigation in a mobile lending app is a key factor for me when choosing the one to adopt	3.89	.705
The level of interaction in a mobile lending app is a key factor for me when choosing the one to adopt	4.43	.675
Use of push notifications or messages in a mobile lending app is a key factor for me when choosing the one to adopt	4.16	.658

The study findings summarized in Table 9 show that respondents considered all the listed ease of use factors as critical when choosing a mobile lending platform. Specifically, study participants agreed that they considered the level of interaction in a mobile lending app (mean =

4.43, std deviation = 0.675), the user interface design of a mobile lending app (mean = 4.21, std deviation = 0.660) and simplicity of a mobile lending platform in terms of signing in and getting a loan (mean = 4.20, std deviation = 0.725) as key factors when choosing a mobile lending platform. Moreover, study participants agreed that they considered use of push notifications or messages in a mobile lending app (mean = 4.16, std deviation = 0.658), reliability of mobile lending app (mean = 4.08, std deviation = 0.745), and ease of navigation in a mobile lending app (mean = 4.16, std deviation = 0.791) as key factors when choosing a mobile lending platform. The implications of these findings are that ease-of-use factors such as ease of navigation, reliability, simplicity, level of interaction and use of notifications were vital for the SMEs when selecting a mobile lending platform.

4.4.5 Choice of Mobile Lending Platforms

The study’s dependent variable was choice of mobile lending platform. This was assessed by providing statements on a five-point Likert scale from 1 to 5 (strongly disagree - strongly agree) to assess choice of the various mobile lending platforms that the SMES used. The study findings are provided in Table 10.

TABLE 10
Choice of Mobile Lending Platforms

Statements on choice	Mean	Std. Deviation
I can recommend the mobile lending platform that I use to others	4.34	.712
I highly rate the mobile lending app that I use	4.38	.640
The mobile lending app that I use is preferred by many business owners that I know in this area	4.31	.622
The mobile lending app that I use is rated highly by other small business owners in this area	4.30	.719
I am very satisfied by the mobile lending app that I use	4.22	.718

The findings from the study presented in Table 10 indicate that respondents had high preference for the mobile lending platforms they had chosen. Specifically, study participants agreed that they highly rated the mobile lending application that they used (mean = 4.38, std deviation = 0.640), they could recommend the mobile lending platform that they used to others (mean = 4.34, std deviation = 0.712) and that the mobile lending application that they used was preferred by many business owners that they knew in the area (mean = 4.31, std deviation = 0.622). Additionally, study participants agreed that the mobile lending application that they used was rated highly by other small business owners in the area (mean = 4.30, std deviation = 0.719) and also agreed that they were very satisfied by the mobile lending application they used (mean = 4.22, std deviation = 0.718).

4.6 Diagnostic Tests

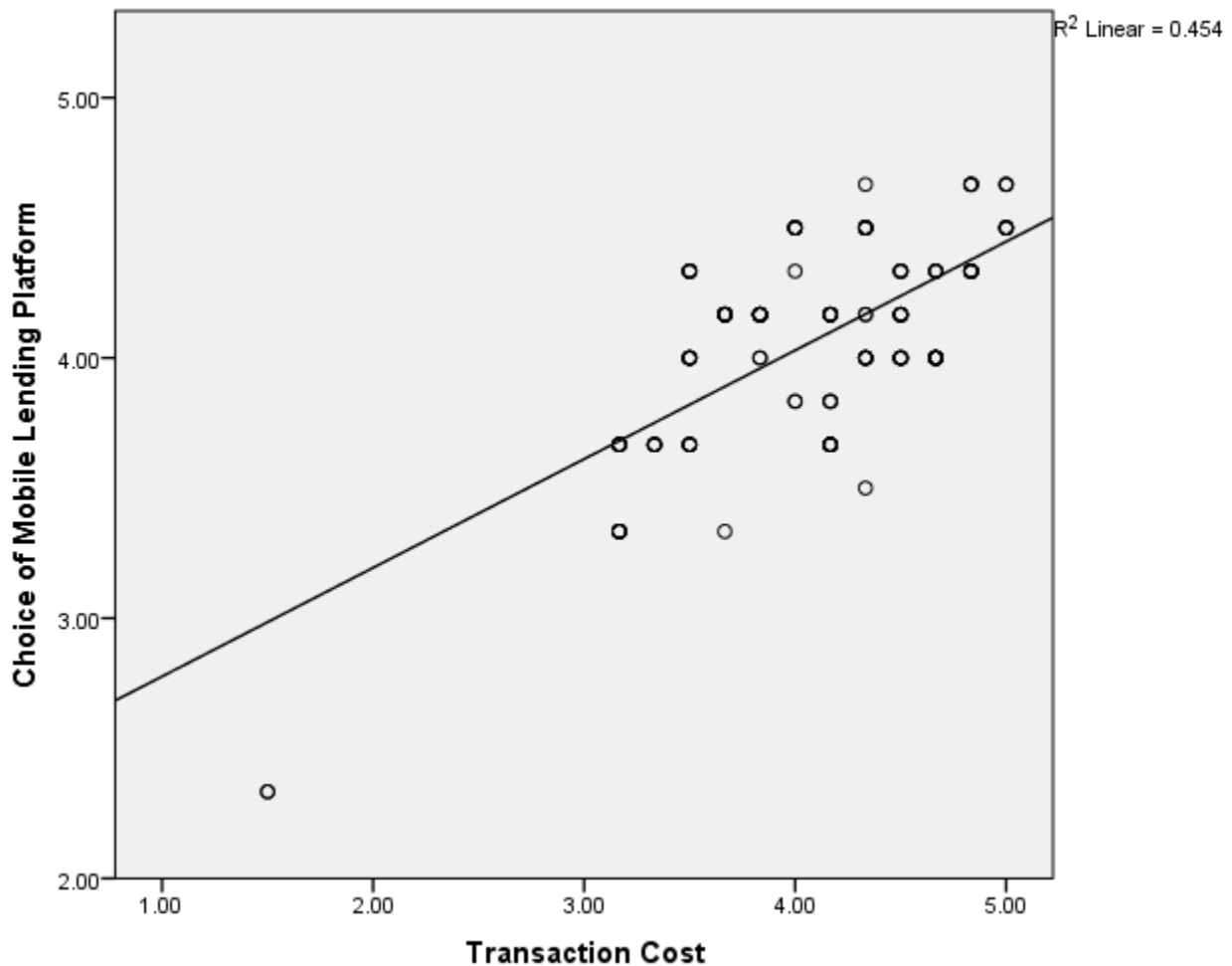
Several model specification tests were performed before fitting the multiple linear regression to evaluate the model's fitness and appropriateness. Linearity test, multicollinearity test, test of normality of regression residuals and heteroscedasticity test were among the diagnostic tests performed. When the linear regression is used to describe the connection between a response and a predictor variable, a few assumptions are made and must be met. These assumptions are basic requirements that must be fulfilled before the linear regression model can be used to draw conclusions or use a model to make a forecast. The four key assumptions were tested, and the findings are summarized in this section.

4.6.1 Test of Linearity

The first test performed was the linearity test. The purpose of this test is to establish whether the response and predictor variables have a linear relationship (Suresh & Sharma, 2013). This test was carried out using scatter plots. This necessitated the development of two-dimensional scatterplots for response variable against each predictor variable. This determines whether the connection is linear. The results of the research regarding the linear association between choice of mobile lending platform and transaction costs is shown in Figure 3.

FIGURE 3

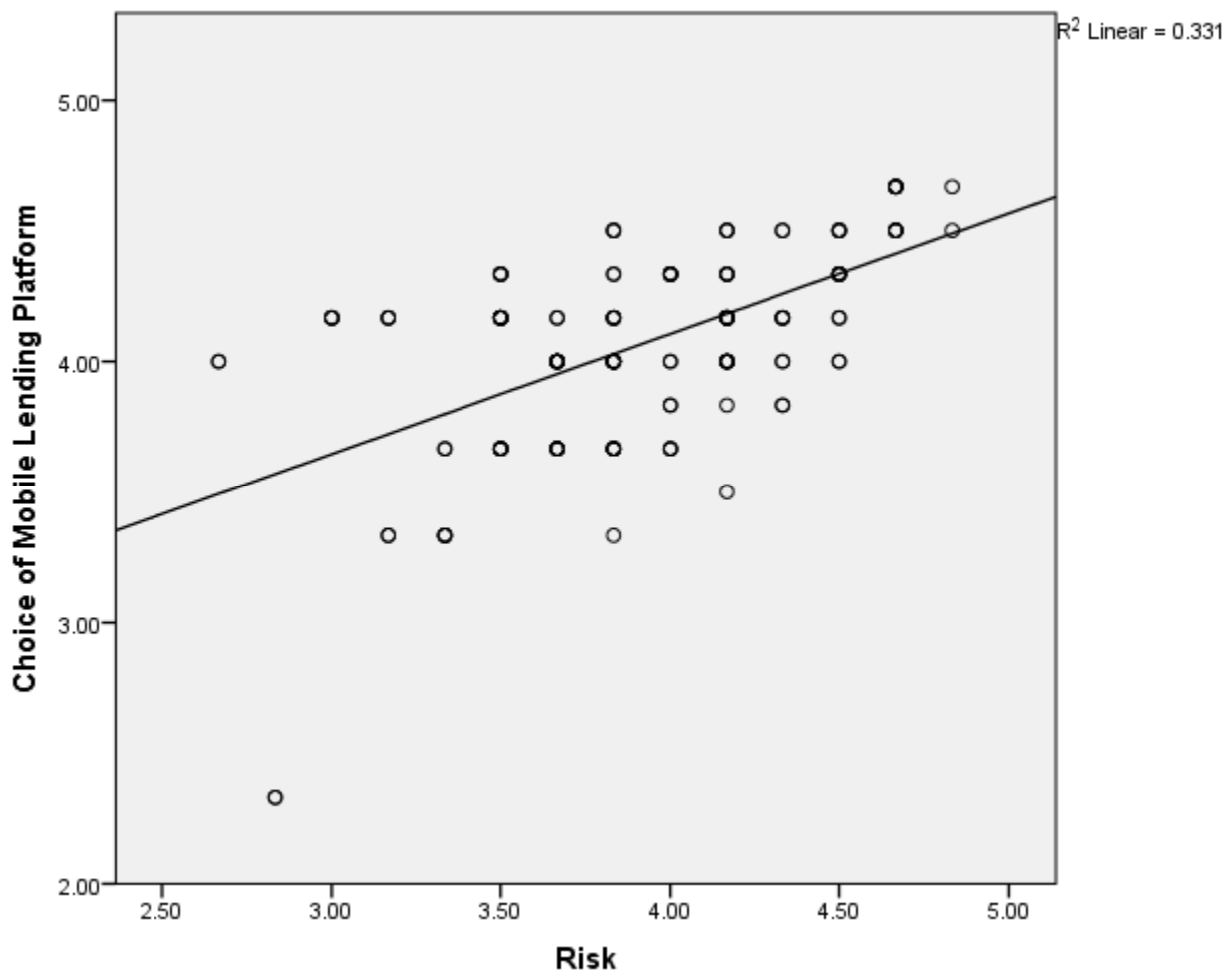
Linear Relationship Between Transaction Cost and Choice of Mobile Platform



The findings displayed in Figure 3 show that there was a linear relationship between choice of mobile lending platform and transaction costs ($R^2 = 0.454$). This implies that fitting a linear regression model between these two variables was appropriate. The results of the research regarding the linear association between choice of mobile lending platform and displayed in Figure 4.

FIGURE 4

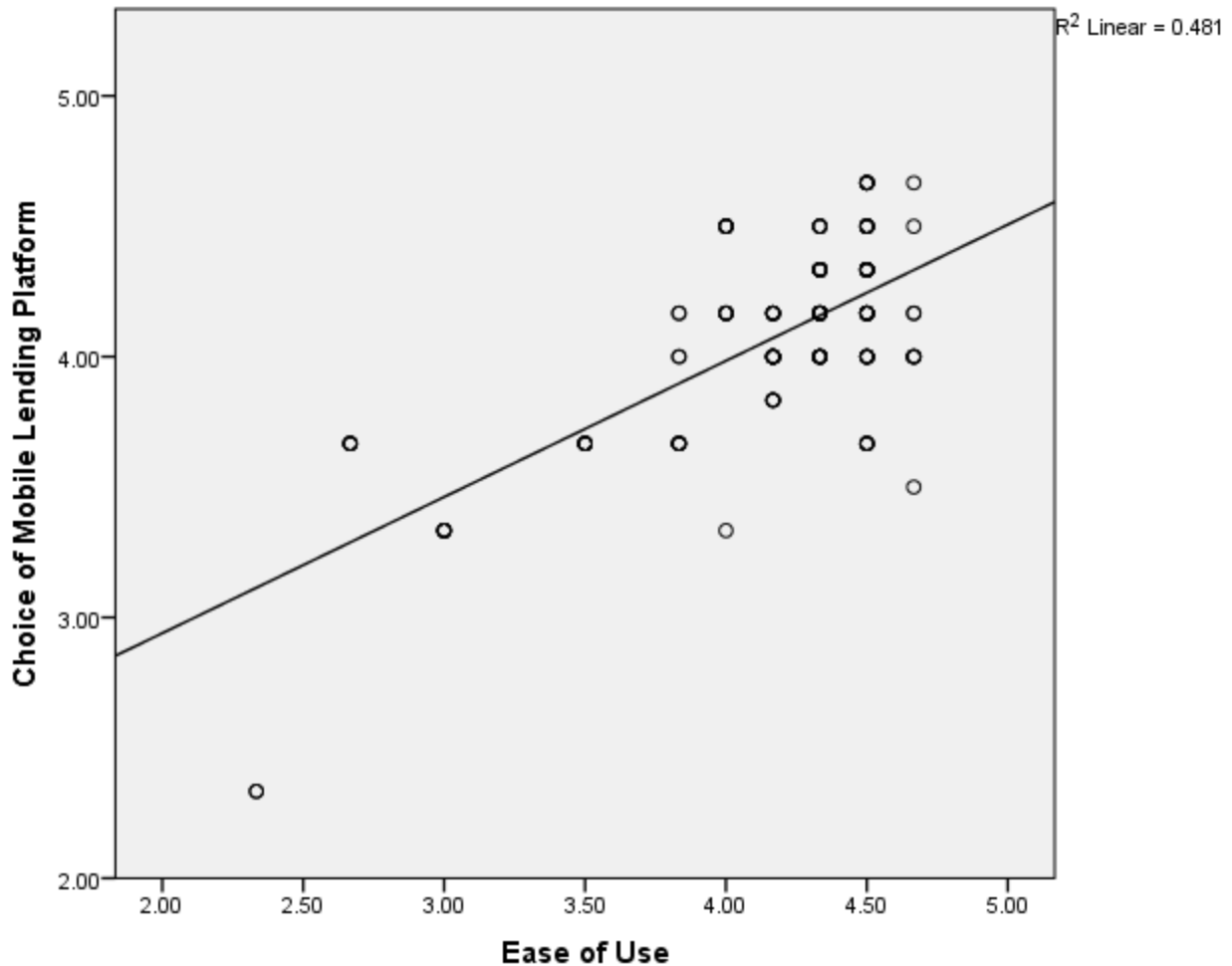
Linear Relationship Between Risk and Choice of Mobile Platform



The findings displayed in Figure 4 show that there was a linear relationship between choice of mobile lending platform and risk of a mobile lending platform ($R^2 = 0.331$). This implies that fitting a linear regression model between these two variables was appropriate.

The results of the research regarding the linear association between choice of mobile lending platform and ease of use of a mobile platform are displayed in Figure 5.

FIGURE 5
Linear Relationship Between Ease of Use and Choice of Mobile Platform



The study findings displayed in Figure 5 indicate that there existed a linear relationship between choice of mobile lending platform and ease of use of a mobile lending platform (R squared = 0.331). This implies that fitting a linear regression model between these two variables was appropriate. The findings indicated that all the predictor variables had a linear association with the response variable. A multiple regression model was hence considered fit for the study.

4.6.2 Test of Multicollinearity

The second diagnostic test conducted was the multicollinearity test. This determines if any two of the predictor variables have a strong linear relationship (Lincoln & Guba, 2018). The variance inflation factor (VIF) was used to assess multicollinearity in this study. The test's critical value is 5. VIF values less than 5 indicate no multicollinearity, whereas VIF values more than 5 indicate multicollinearity. The findings from the VIF multicollinearity test are summarized in Table 11.

TABLE 11
Test of Multicollinearity

Independent variables	Collinearity Statistics	
	Tolerance	VIF
Transaction Cost	.514	1.947
Risk	.643	1.555
Ease of Use	.618	1.619

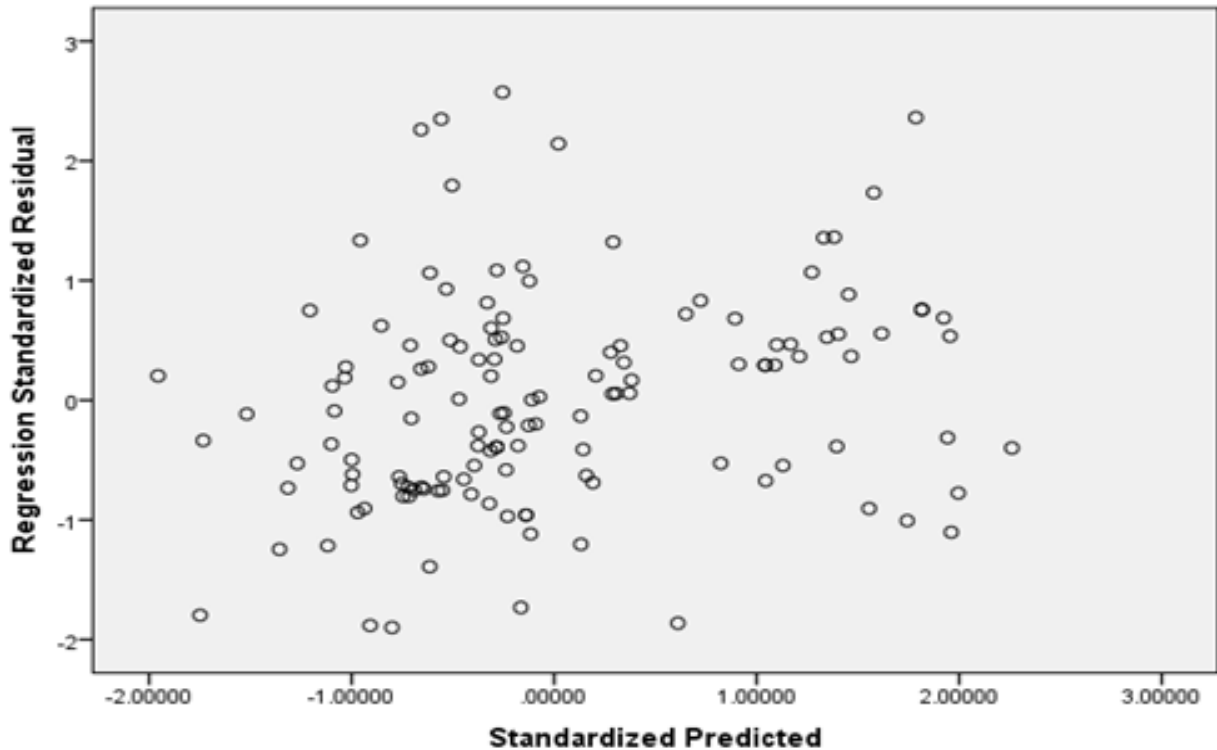
The findings from the study summarized in Table 11 indicated that all of the VIFs were less than two. Transaction costs of the mobile lending platforms had the highest VIF of 1.947, while ease of use of the mobile lending application had the lowest VIF of 1.619. these findings imply that there is no multicollinearity.

4.6.3 Test of Homoscedasticity

After fitting the model, the study tested the residuals for heteroscedasticity. The heteroscedasticity test evaluates the variance homogeneity of the regression residuals. This was conducted by having a scatter plot of the regression residuals against the predicted values. Heteroscedasticity is evident when the funnel shape is present, according to Suresh and Sharma

(2013). Homoscedasticity, on the other hand, is represented as a random dispersion of projected values shown against residuals. The results are shown in Figure 6.

FIGURE 6
Tests of Heteroscedasticity



The findings displayed in Figure 6 indicate that the scatterplot of the regression residuals against the predicted values reveals no trend of a cone or funnel shape. This led to the conclusion that there was no substantial heteroscedasticity, according to these findings. As a consequence of the findings, the linear regression model that was fitted was found to be efficient and reliable.

4.6.4 Test of Normality of Residuals

The normality of residuals test was the final test performed. When regression residuals are not normally distributed, there is a risk of statistical tests being inaccurate, according to

Colomb et al. (2016). Furthermore, the regression coefficients may result in inefficient estimations. Shapiro-Wilk was utilized to assess the normality of the regression residuals in this research. The test's null hypothesis is that the residuals are normally distributed, whereas the alternative hypothesis is that they are not. When the p value is more than 0.05, the null hypothesis is accepted, and when the p value is less than 0.05, it is rejected. Table 12 summarizes the findings.

TABLE 12
Tests of Normality of Regression Residuals

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.091	164	.002	.987	164	.138

The study findings summarized in Table 12 show that the Shapiro-Wilk test of 0.987 was not significant at 5% significance level ($p = 0.138$). As a result, the conclusion was that the residuals were normally distributed, indicating that the fitted model was efficient and reliable. The results of the fitted multiple linear regression model are provided in the following sections.

4.7 Model Fitting

The results of the fitted multiple linear regression model are presented in this section. The section provides findings of the model's ANOVA, summary of the regression model, and the significance of the model coefficients. The regression model's summary findings are summarized in Table 13.

TABLE 13**Summary of the Regression Model**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.782 ^a	.612	.604	.23334

a. Predictors: (Constant), Ease of Use, Risk, Transaction Cost

b. Dependent Variable: Choice of Mobile Lending Platform

Study findings summarized in Table 13 indicates that the correlation coefficient (r) between the study's response variable and the predictor variables was 0.782, suggesting a positive association between the response variable (choice of mobile lending platform) and the three predictor variables (transaction costs, risk and ease of use). The r squared of the regression model was 0.612, indicating that the three predictor variables incorporated in the model explained 61.2 percent of the variation in choice of mobile lending platforms by the SMEs. This means that the error term and variables not included in the model may account for 38.8 percent of the unexplained variation.

The f test was also employed to evaluate the model's relevance and fit in the study (analysis of variance test). This was done to establish whether any of the model's three predictor variables might have an impact on the choice of mobile lending platform by the SMEs. The ANOVA test results are shown in Table 14.

TABLE 14**Analysis of Variance of the Model**

Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.728	3	4.576	84.042	.000 ^b
Residual	8.712	160	.054		
Total	22.439	163			

a. Dependent Variable: Choice of Mobile Lending Platform

b. Predictors: (Constant), Ease of Use, Risk, Transaction Cost

Study findings summarized in Table 14 shows the results of the research, which demonstrate that the model was significant ($f = 84.042$, $p < 0.05$). This indicates that at least one of the predictor variables had a significant effect on choice of mobile lending platform by the SMEs in Tharaka Nithi County. The findings also indicate that the model fits the data well.

The study's purpose was to establish how mobile lending platform's transaction costs, risk and ease of use influenced the choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya. T tests were used to assess the significance of the study's predictor variables. The results are summarized in Table 15.

TABLE 15
Significance of Independent Variables in the Model

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.343	.182		7.385	.000
Transaction Cost	.185	.043	.298	4.330	.000
Risk	.169	.049	.211	3.443	.001
Ease of Use	.314	.047	.417	6.660	.000

a. Dependent Variable: Choice of Mobile Lending Platform

The study findings summarized in Table 15 indicates that the multiple linear regression fitted was;

$$Y = 1.343 + 0.185X_1 + 0.169X_2 + 0.314X_3 + \varepsilon$$

In the formula, Y= Choice of mobile lending platform, X_1 = Transaction costs, X_2 = Risk, X_3 = Ease of use and ε = Error term.

The first objective of the study was to assess how transaction costs affect choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya. Table 15 presents findings that show that transaction costs had a significant effect on choice of mobile lending platforms by

SMEs in Tharaka Nithi County, Kenya ($\beta= 0.185, p < 0.05$). According to these results, a one-unit change in the transaction costs has a direct impact of 0.185 on SMEs choice of mobile lending platforms. These findings enabled the study to answer the first question of the study; What is the effect of transaction cost on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya? The study determined that transaction cost have a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

The second objective of the study was to assess how risk affected the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Study findings provided in Table 15 indicate that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta= 0.169, p = 0.001$). According to these study results, a one-unit change in risk has a direct impact of 0.169 on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. These findings enabled the study to answer the second research question; How does risk affect the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya? The study determined that risk had a positive and significant effect on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

The last objective of the study was to determine the impact of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Study findings summarized in Table 15 indicate that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta= 0.314, p < 0.05$). These study findings enabled the study to

provide an answer to the third research question; What is the influence of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya? The study determined that ease of use has a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya.

4.8 Discussion of the Findings

The study findings determined that transaction costs had a significant positive effect on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya ($\beta= 0.185$, $p < 0.05$). These findings support the transaction cost theory by Williamson (1991) which proposes that transaction costs are the key factors used by firms to determine the vendor to select for a product or a service. The transaction cost theory applied in this study and it is supported by the study findings that show how transaction costs can inform the choice of mobile lending platforms by SMEs. According to the stud findings, mobile lending platforms with high transaction costs are expected to be lesser preferred than mobile lending platforms with lesser transaction costs.

The findings from this study transaction costs had a significant positive effect on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya also concur with previous findings. The study findings concur with findings by Mutisya (2016), Waliaula (2018), and Mutinda (2019) that many SMEs did a comparative analysis of the transaction costs inherent in the various platforms before they made their choice. However, the study findings disagree with findings from Ukiro (2016) which established that most SMEs adopted the mobile lending platforms that were recommended to them by friends or relatives without much consideration to

cost implication. The study findings also contradict the findings by Iravonga et al. (2018) which established that transaction costs were not a key consideration in choosing mobile lending platforms amongst SMEs in Kakamega.

The study findings also indicated that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta = 0.169$, $p = 0.001$). These findings support the task-technology fit theory by Goodhue and Thompson (1995) which proposes that the fit between the tasks of the organization and the adopted technology's risks and characteristics enables the technology to be adopted by the business. These findings support this theory since the findings indicated that an SME considers its risk appetite and then selects the mobile lending platform that will fit its risk appetite and needs. When the SME has low risk appetite, it will select a mobile lending platform with low risk of hacking or data breach and vice versa, according to the study findings.

The study findings that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya relates with findings from previous studies. The findings concur with the findings by Obure (2017) that the risk of mobile lending platforms was a key consideration for SMEs when they chose platforms to use. Other studies with similar findings to this study include Mabveke (2017), Masocha and Dzomonda (2018), Gahapa and Tengeh (2019), Mutuma and Omagwa (2019), and Tengeh and Talom (2020) who all found risk to be a key factor that affected choice of mobile based lending platforms. However, the study by Mwiathi and Mwangi (2020) had findings that contradicted the findings from this study.

Lastly, the study determined that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi

County in Kenya ($\beta = 0.314$, $p < 0.05$). These findings concur with the technology acceptance model (TAM) by Davis (1989) which hypothesizes that ease of use of a technology is one of the key factors affecting adoption and use of that technology. Essentially, the theory holds that an individual's intention to use (acceptance of technology) and use behaviour (actual use) of a technology are determined by the individual's views of the technology's utility (benefit from utilizing the technology) and simplicity of use. Simply put, consumers are more likely to embrace a new technology if the user interface is of good quality (that is, credible, usable, desirable, and useful). While using TAM in this study, it was demonstrated that mobile lending platforms which are easy to use, have low risks and could be less transaction costs are preferred to alternatives.

The findings from this study that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya relate to various previous studies. The findings agree with the findings by Abayo et. al (2015) that key factors considered when making the choice decision included the design of the platform, ease of navigation, capacity to utilize the application even with limited IT knowledge and the use of push notifications in the platform. Other studies with similar findings to this study include Okumu et al. (2016), Abiola (2017), Nyamwihula (2017) and Njiwakale and Bwisa (2018) who all found that ease of use was a key aspect affecting choice of a mobile based lending platform. However, the study findings disagree with the findings from Ndunge and Hennink (2016) and Nyaga (2018) who had determined that ease of use of the platform did not affect the choice of the application.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter includes a summary of the study findings, as well as the study conclusions and recommendations based on the study conclusions. The summary of the findings is presented in line with the study's objectives. Moreover, the study's conclusions are based on the findings from the study, while the research recommendations are based on areas of improvement for policy and practice based on the findings from the study. Lastly, the study provides suggestions for further research which are based on topics that may be investigated in future studies.

5.2 Summary

This section provides a summary of the study's results. This is given in accordance with the study's objectives.

5.2.1 Effect of Transaction Cost on The Choice of Mobile Lending Platforms

The first objective of the study was to assess how transaction costs affect choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya. The study findings determined that transaction costs had a significant and positive effect on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya ($\beta= 0.185, p < 0.05$). These findings enabled the study to answer the first question of the study; What is the effect of transaction cost on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi

County in Kenya? The study determined that transaction cost have a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. The findings from the study further indicated that loan processing fees (mean = 4.39, std deviation = 0.622), penalties charged by a lender (mean = 4.29, std deviation = 0.662) and facilitation fees (mean = 4.26, std deviation = 0.734) were key factors considered by the SMEs when choosing a mobile lender. Besides, interest rates charged (mean = 4.20, std deviation = 0.750) was also a key factor considered by the SMEs when choosing a mobile lender. However, the study determined that insurance charges (mean = 2.28, std deviation = 0.642) and legal fees charged (mean = 2.24, std deviation = 0.719) were not key transaction costs factors considered by the SMEs when choosing a mobile lending platform.

5.2.2 Effect of Risk on The Choice of Mobile Lending Platforms

The second objective of the study was to assess how risk affected the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Study findings indicate that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta = 0.169$, $p = 0.001$). These findings enabled the study to answer the second research question; How does risk affect the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya? The study determined that risk had a positive and significant effect on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. The study findings further indicated that security offered in terms of login and authentication (mean = 4.38, std deviation = 0.629), level of privacy offered (mean = 4.30, std deviation = 0.730) and level of confidentiality provided (mean = 4.21, std

deviation = 0.739) were key factors considered by the SMEs when choosing a mobile lender. Besides, the study determined that risk of misuse of their personal data (mean = 4.20, std deviation = 0.798), risk of being hacked (mean = 4.18, std deviation = 0.717), and stability and reputation of the financial institution (mean = 4.16, std deviation = 0.791) were also key considerations made by the studied SMEs when choosing a mobile lending platform.

5.2.3 Effect of Ease of Use on The Choice of Mobile Lending Platforms

The last objective of the study was to determine the impact of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Study findings indicated that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya ($\beta = 0.314$, $p < 0.05$). These study findings enabled the study to provide an answer to the third research question; What is the influence of ease of use on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya? The study determined that ease of use has a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Further, the study findings showed that the level of interaction in a mobile lending app (mean = 4.43, std deviation = 0.675), the user interface design of a mobile lending app (mean = 4.21, std deviation = 0.660) and simplicity of a mobile lending platform in terms of signing in and getting a loan (mean = 4.20, std deviation = 0.725) were key considerations by SMEs when choosing a mobile lending platform. Moreover, the study determined that use of push notifications or messages in a mobile lending app (mean = 4.16, std deviation = 0.658), reliability of mobile lending app (mean = 4.08, std deviation = 0.745), and ease of navigation in a

mobile lending app (mean = 4.16, std deviation = 0.791) were also key considerations by SMEs when choosing a mobile lending platform.

5.3 Conclusions

Based on the study findings, the research comes to the following conclusions. First, the study concludes that transaction costs are vital factors that SMEs in Tharaka Nithi Consider when making a choice of mobile lending platforms. The study further concludes that the key transaction cost factors considered include loan processing fees, penalties charged by a lender, facilitation fees and interest rate charged.

Regarding risk, the study concludes that risk was an instrumental factor considered by SMEs in Tharaka Nithi County in Kenya, when making the choice of mobile lending platforms to use. The study additionally, concludes that main risk factors considered when choosing a mobile lending platform are security offered in terms of login and authentication, level of privacy offered, level of confidentiality provided, risk of misuse of their personal data, risk of being hacked, and stability and reputation of the financial institution.

Regarding ease of use of mobile lending platforms, the study concludes that ease of use of the platform is pivotal in making the choice of the different mobile based platforms available in the market. They key ease of use factors considered by SMEs in Tharaka Nithi County when making a choice include level of interaction in a mobile lending app, the user interface design of a mobile lending app, simplicity of a mobile lending platform in terms of signing in and getting a loan, use of push notifications or messages in a mobile lending app, reliability of mobile lending app and ease of navigation in a mobile lending app.

5.4 Recommendations

After examining the research's findings, the study offers important recommendations. Based on the finding that transaction costs had a significant effect on choice of mobile lending platforms by SMEs in Tharaka Nithi County, Kenya, the study recommends to policy makers and regulators such as Digital Lenders Association of Kenya (DLAK) and Centra Bank of Kenya to design an effective legal and policy framework that will guide the mobile lending institutions to charge interest rates that are fair and within the CBK legal legislation. Besides, the mobile lending institutions should make their credit assessments and internal operations efficient so that they can push these benefits to their mobile lending customers in terms of reduced transactions costs

Regarding the findings that risk had a positive and significant influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya, the study recommends to mobile lenders to enhance security of their applications. This can be done through securing the application's code, securing the back end, effective mobile encryption and educating their users on security. Besides, the study recommends to users of mobile lending apps to ensure that the devices they use to access mobile lending services are protected and not compromised.

Since the study determined that ease of use had a significant positive influence on the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya, the study recommends to developers of the mobile lending apps to make the apps easy to use for users with average technology knowledge. The providers of mobile lending applications should develop the applications while considering platform compatibility so that the

apps can work on several phone models, have simple navigation, have concise and clear content, minimize the number of steps when a user is seeking a mobile loan and reduce the need for scrolling through the application's user interface.

5.5 Limitations of the Study

This study assessed the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Though the study provides robust findings, it has several limitations. First, the study was focussed on SMEs in Tharaka Nithi County, Kenya, which makes the findings to be not readily generalizable to other counties with differing technological, economic, social and business environment with county. Besides, the study was limited on three factors which were transaction cost, risk and ease of use. This left out other factors that could affect the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. These other factors could be nature of business, credit assessment processes, size of the business, and size of loans provided by the mobile based lender, amongst other factors. The use and application of the findings in this study should therefore be made with these limitations in mind.

5.6 Recommendations for Further Research

The focus of this study was to assess the factors affecting the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. Based on the limitations of the study, the following suggestions for further research are made. First, this study focussed on SMEs in Tharaka Nithi County, Kenya, which makes the findings to be not readily generalizable to other counties with differing technological, economic, social, and business

environment with county. The study therefore recommends a similar study to be conducted in other counties in Kenya to provide a holistic view of what factors SMEs consider when making a choice between the various mobile lending apps available. This would be critical in bridging the contextual gaps in this study.

Besides, this study was limited to three factors which were transaction cost, risk, and ease of use. This left out other factors that could affect the choice of mobile lending platforms among small and medium enterprises in Tharaka Nithi County in Kenya. These other factors could be nature of business, credit assessment processes, size of the business, and size of loans provided by the mobile based lender, amongst other factors. The study hence recommends another study to determine other factors that could affect the choice of mobile lending apps by SMEs.

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APPENDIX: Questionnaire to Owners/Managers of Businesses

This Questionnaire is aimed at seeking views and opinions on the factors affecting choice of mobile lending platforms amongst small and medium enterprises in Tharaka Nithi County of Tharaka Nithi County, Kenya. Your business has been selected to participate in the study.

Please answer the questions by ticking or filling on the space provided.

SECTION A: GENERAL INFORMATION

1. What is your role in this business?

Owner []

Manager []

How long has this business been in operation?

Below 1 year []

1 – 2 years []

3 - 4 years []

Above 4 years []

3. How many employees does this business have? _____ employees

4. Have you in the past one year borrowed any money from a mobile lender?

Yes []

No []

SECTION B: TRANSACTION COST

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent you consider the listed transaction cost factors when choosing a mobile lending platform.

Statements	1	2	3	4	5
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Interest rates charged by a mobile lender is a key factor for me when choosing a mobile lender					
Penalties charged by a mobile lender is a key factor for me when choosing a mobile lender					
Loan processing fees charged by a mobile lender is a key factor for me when choosing a mobile lender					
Insurance charges charged by a mobile lender is a key factor for me when choosing a mobile lender					
Legal fees charged by a mobile lender is a key factor for me when choosing a mobile lender					
Facilitation fees charged by a mobile lender is a key factor for me when choosing a mobile lender					

SECTION C: RISK

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent you consider the listed risk factors when choosing a mobile lending platform.

Statements	1	2	3	4	5
When choosing a mobile lending app, I consider the security offered in terms of login and authentication					
Risk of being hacked is a key consideration for me when choosing a mobile lending app to use					
Risk of misuse of my personal data is a key consideration for me when choosing a mobile lending app to use					
The level of confidentiality provided by a mobile lending app is a key consideration for me when choosing a mobile lending app to use					
The level of privacy offered by a mobile lending app is a key consideration for me when choosing a mobile lending app to use					
I consider the stability and reputation of the financial institution providing mobile loans when choosing the mobile lending platform to					

use					
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SECTION D: EASE OF USE

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent you consider the listed ease of use factors when choosing a mobile lending platform.

Statements	1	2	3	4	5
Simplicity of a mobile lending platform in terms of signing in and getting a loan is a key factor for me when choosing the one to adopt					
The user interface design of a mobile lending app is a key factor for me when choosing the one to adopt					
Reliability of mobile lending app is a key factor for me when choosing the one to adopt					
Ease of navigation in a mobile lending app is a key factor for me when choosing the one to adopt					
The level of interaction in a mobile lending app is a key factor for me when choosing the one to adopt					
Use of push notifications or messages in a mobile lending app is a key factor for me when choosing the one to adopt					

SECTION F: CHOICE OF MOBILE LENDING PLATFORM

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent you agree with the listed statements on choice of mobile lending platforms

Statement	1	2	3	4	5
I can recommend the mobile lending platform that I use to others					
I highly rate the mobile lending app that I use					
The mobile lending app that I use is preferred by many business					

owners that I know in this area					
The mobile lending app that I use is rated highly by other small business owners in this area					
I am very satisfied by the mobile lending app that I use					

Thank You for Your Time and Input