SAFARICOM LIMITED'S MOBILE MONEY SERVICES AND ACCESS TO TRADE CREDIT BY MICROENTERPRISES IN NAIROBI CITY COUNTY KENYA

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS, ECONOMICS AND TOURISM IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION) OF KENYATTA UNIVERSITY

NOVEMBER 2022

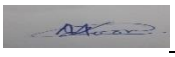
DECLARATION

This research is totally my own work, and it has never before been submitted to another university for any other honor.

Signature**:** EN_____ Date: **10th Nov 2022**

Eva Ngigi- D53/PT/28346/2019

I have given my consent for this research project to be evaluated in my capacity as the Kenyatta University Supervisor,

Signature  **Date 10th Nov 2022**

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DEDICATION

I dedicate this project work to my husband Charles Rubia and my children Sharlyne Rubia, Shanice Rubia and Leschars Rubia who are constant source of love, support and encouragement and will continue to be during the entire period of the proposal. I'm genuinely appreciative to have them in my life. This work will also be dedicated to my mother, Regina Ngigi, who has inspired me to stay strong for the aspirations I have for the present and the future and who loves me without conditions.

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Many thanks.

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ABBREVIATIONS AND ACRONYMS

B2B:	Business to Business
B2C:	Business to customer
C2B:	Customer to Business
FINTECH:	Financial technology
MMS:	Mobile Money Services
MNOs:	Mobile Network Operators
P2P:	Person to person
Mpesa	Mobile money
SMEs:	Small and Medium Enterprises

OPERATIONAL DEFINITION OF TERMS

Access to trade credit: Is a voluntary opportunity for micro-enterprise owners to use interest free short term credit facility provided by suppliers as well to the customers they sell to.

Buy Goods App: Is a mobile money payment system that uses a business till Number designated to the merchants of Safaricom Ltd customers in order to transact goods and services.

Fintech: Fintech refers to financial and technology. It is a technology used to deliver financial solutions specially to business enterprises.

Financial Technology Services: Fintech includes electronic financial services and unconventional sources of funding like digital transactions (mobile point-of-sale payments, digital commerce exchanges), online crowdfunding, robo-advisors, and automated asset management, as well as online lending trading platforms for loans (peer-to-peer loans) for businesses.

Mobile money: Mobile Money is electronic financial services delivered using a mobile phone.

Mobile Money Services: Mobile money services are technology based financial services whereby users can use their phones as bank account to save, deposit, transfer, borrow money and generate financial reports. This study will use the mobile money services as provided by Safaricom Limited mpesa platform that include digital payment platform Buy Goods, saving and loan services- m-shwari, mpesa for business and pochi la biashara

M-pesa- M-pesa is a money transfer system owned and operated by Safaricom Ltd, a money network operator company in Kenya.

M-pesa for Business App: Mpesa for business app is a supplement service provided via mpesa platform. This application allows direct transactions from business till number thereby allowing businesses to send money and make payments as well as make withdrawals from multiple till numbers under the same business**.** Users can also request for

	short term loans which is based on the volume of transactions in their buy goods accounts and is credited to holders' mpesa account at a given interest rate.
Saving and loan service (M-shwari):	A mobile banking program that was developed by Commercial Bank of Africa with mobile phone service provider Safaricom. In addition to the well-known mobile money transfer service M-PESA, M-Shwari offers its users the chance to build savings and credit through quick loans directly from their mobile device.
Mpesa:	Mpesa is a mobile money transfer service provided by Safaricom Ltd, Kenya
Pochi la Biashara app:	Pochi la biashara app is a supplement of mpesa money mobile service that allow users with informal businesses to receive funds directly in their mpesa accounts for goods and services rendered and separate them from personal funds
Digital lending:	Digital lending refers to the process whereby microenterprises are able to credit finance via mobile phones. The process involves application, disbursement and access of the disbursed loan by the applicant.
Micro-enterprises:	Micro-enterprises are companies exempt from the regulatory framework of the government. Pay no taxes and primarily use cash. They just have a minimal amount of contractual requirements or obligations to support employees. They have a turnover of less than Sh 5 million annually and employ one to nine people. Based on the number of employees, the majority of businesses in Nairobi City County are categorized as micro companies and belonging to the informal sector.
Trade Credit:	Trade credit is an arrangement where the micro-enterprise owner buys or sells goods on account from the supplier/to customers without making/receiving immediate cash or digital payment/receipt. It therefore becomes a short-term finance available to the business attracting zero interest to the buyer. It is a business to business (B2B) agreement

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ABSTRACT

Credit rating for informal micro-enterprises for purposes of accessing trade credit by suppliers is challenging since there is a shortage of and complexity in obtaining reliable data. Empirical research indicates that micro-enterprises in Nairobi City County do sell and also receive their goods and services on credit through business to business (B2B) agreement thereby fulfilling a key liquidity need for the micro-enterprises. However, customers who are able to access trade credit are a percentage of less than 2 of the total customers' base since it is based on long term relationship between the buyer and seller. This therefore excludes a huge percentage of customers who may require credit sale as a working capital bridge gap. However, with the upsurge of financial technology products uptake especially Safaricom Ltd's mobile money services, business owners should be able to assess creditworthiness of buyers before giving trade credit and hence this research is intended to ascertain the effect of mobile money services on access to trade credit by the microenterprises in Nairobi City County. The specific objectives of the study were; to assess whether digital payment-buy goods application (till number) has influence on access to trade credit by microenterprises in Kamukunji market, to establish whether saving and loan product (mshwari) has influence on access to trade credit by microenterprises in Kamukunji market, to determine whether mpesa for business application has an effect on access to trade credit by microenterprises in Kamukunji market, to determine whether pochi la biashara application has influence on access to trade credit by microenterprises in Kamukunji market. The following theories served as a guide for the study; Technology Acceptance theory, Unified Theory of Acceptance and use of technology, Diffusion innovation Theory and Technology, organization and Environment theory. To attain its objectives, the study utilised a descriptive research approach. The population targeted under study was 4,080 registered microenterprises in Kamukunji Market, Nairobi City County as per the City County Business Register of 2021. The sample size of 351 microenterprises was determined using the Krejcie & Morgan technique, which was then utilized in stratified random sampling. A self-administered questionnaire was employed for the study's primary data. Statistical Package for Social Sciences (SPSS) version 25 was used to analyze the data that had been collected. The quantitative data was examined through both inferential and descriptive statistics. Diagnostic tests as well as model specification tests were carried out to ascertain whether linear regression analysis best fits the data. The results were displayed through tables and charts. Ethical consideration was also observed. The findings demonstrated that the variables used in this study, savings and loan service, digital payment service, mpesa for business and pochi la biashara jointly explained 82 percent of the variation in access to trade credit among businesses in Kamukunji market. The study also established that savings and loan service and access to trade credit were positively and significant related; digital payment service and access to trade credit were positively and significant related; there is a positive and significant relationship between Mpesa for business application and access to trade credit and that Pochi la Biashara Service and access to trade credit among businesses in Kamukunji market are positively and significant related. The study concludes that Safaricom Ltd mobile money services have significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The study thus recommends that businesses in Kamukunji County and other microenterprises in other counties should strive to embrace Safaricom Ltd mobile money services such as savings and loan service, digital payment, mpesa for business, pochi la biashara since they enhance access to trade credit for the businesses. There is need to do further studies in area related to cost of accessing trade credit under the fintech firms and huge data available for assessing creditworthiness of borrowers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Access to finance is major challenge to expansion of firms in emerging nations, Likewise, most of these firms especially microenterprises do not have access to conventional banking system further compounding challenges faced by these business entities in these countries. (Demirgüç-Kunt *et al.*, 2018). However, payment landscape through provision of mobile money services has been revolutionalised by advent of financial technology (fintech) to the banking and non-banking sectors of the population (Suri, 2017). Advanced business models have evolved since the early 2000 as a result of financial technology whereby the financial institutions are able to provide a range of goods and services via internet banking, mobile wallets, payment applications, and digital credit financing (Cham, 2018).

In contrast to Africa, where the industry has prioritized mobile money, East and South Asia are combining "bottom-of-the-pyramid" retail FinTech with Western-style business-to-business (B2B) innovation (Arner et al., 2016). Western and Central Asia, the Middle East, and Latin America are seen as late adopters of fintech (Bassens, 2020; IMF, 2019;Zalan and Toufaily,2017). As per CCAF (2020), Out of the $305 billion raised by FinTech (encompassing crowdfunding, P2P lending, and corresponding capital raising) in 2018, 70% was raised in China, then the USA ($61 billion), the UK ($10 billion), and five more nations with more than $1 billion raised (the Netherlands, Indonesia, Germany, Australia, and Japan). The top five nations by per capita were the United States, the United Kingdom, Latvia, Estonia, and the Netherlands.

Given their enormous impact on the creation of jobs, the contribution to the GDP, and overall economic growth, access to trade finance for microenterprises continues to be a major barrier in many developing nations. The anticipated annual gap between the anticipated 8.9 trillion USD total demand and the total credit available to micro, small, and medium-sized businesses (MSMEs) is USD 5.2 trillion (IFC, 2020). In contrast to conventional consumer transactions, where buyers might use a credit card to purchase groceries, the business-to-business (B2B) sector is one where sellers

typically have to wait weeks or months for payment when a sale is made on credit. 2019 saw credit used in 56 percent of sales in Sweden and as high as 69 percent in Denmark (Allianz Trade, 2020). According to estimates, credit is used in 80 percent of B2B transactions in the UK. According to estimates, SMEs transact about US$74 trillion worth of business globally using these lending conditions (WorldBank, 2021).

According to research, businesses suffer from delayed payment on trade credit, which also delays or prevents investment and, in certain cases, even leads to insolvencies. At worst, firms run the risk of going bankrupt because of late or nonexistent payments from customers. In Sweden, 64 percent of enterprises reported negative effects from late payments in 2019, an increase of 12 percent from the previous year (Euler Hermes, 2020).

The difficulty of financial market failures can be significantly assisted by expanding financial services beyond "brick and mortar." Even while failures cannot be completely eradicated, unbanked individuals, particularly microbusiness owners, can utilise financial technology to receive trade finance (Burgess & Pande, 2005; Camner & Sjoblom, 2009; Jalilian & Kirkpatrick, 2005; Porteous, 2006). According to the Global Findex study on financial inclusion, savings have been mobilized using mobile phone applications in almost 43% of the developing globe (Demirguc-Kunt,Klapper, Singer, Ansar, & Hess, 2018). The amazing increase in mobile financial services in underdeveloped countries is largely due to the accessibility and affordability of mobile phones (Kshetri & Acharya, 2018).

For illustration, integrated mobile banking allows user to dependably carry out real-time transactions using their cell phone, such as saving money for later use and applying for credit (Demirguc-Kunt, Klapper & Singer, 2017.). On the other hand, by lowering borrowing restrictions, the availability of mobile banking financial services has considerably improved financial inclusion (Blechman, 2016). Through the usage of unofficial sources and social networks, it also gives customers the ability to control risks and lower transaction costs related to saving money or borrowing money, while also enhancing the effectiveness and simplicity of the supply of financial services. Hughes and Lonnie (2007), Mbiti and Weil (2015), Munyegera and Matsumoto (2018).

A total of 487 million formal and unofficial micro and small businesses are expected to exist in emerging economies, with Africa and Asia having the highest proportions. Specifically sub-Saharan Africa share is 2.6 percent. These micro-enterprises require a range of credit products, including working capital, cash advances, overdrafts and credit purchase credit which are generally unsecured (CGAP, 2019). These microenterprises' desire working capital and inventory, which help with operational costs, is what is driving the desire for trade credit. Microbusinesses without a digital footprint that can assist lenders comprehend their cash flows, cyclical payouts, or nonpayment may require invoice finance to better handle working capital (IFC, 2019)

Mobile phone-based financial services have encouraged financial inclusion and the expansion of a thriving financial sector in Kenya over the past ten years (from 2011 to 2021). Kenya is the global leader in mobile payment platforms and services, and it has achieved extraordinarily high levels of financial inclusion thanks mostly to Safaricom Ltd.'s M-PESA services, a mobile network operator (MNO) (Ndung'u, 2019). Mobile money services has significantly reduced the transaction costs associated with money transfers (Jack & Suri, 2014). According to Financial Service Depending 2022 Report, the number of mobile payments increased by 104 percent between 2020 and 2021, a Covid-19 pandemic period indicating an upsurge of digital financial services in Kenya and more so in a big city like Nairobi City County, Kenya.

The empirical literature indicates that informal microenterprises can reduce financial limitations through trade credit in a situation where there are financial difficulties (Lin & Chou, 2015). Trade credit enables business owners to get products and services on credit from merchants and perhaps even offer credit to customers (Wilson & Summers, 2002). Repayment is a key aspect of trade credit arrangement. Most transactions in underdeveloped nations are cash-based, and there are several different payment options, including colleagues, delivery drivers, and relatives. The risk of theft and appropriation is frequently connected with these types of payment arrangements (Beck et al.,2018; Jack & Suri, 2014). Nevertheless, mobile money offers enterprise owners a secure, cost-effective, and a secure substitute for traditional forms of payment ability to lower default risk and increase trade credit ties because it enables suppliers to provide entrepreneurs with goods and services on credit. Additionally, mobile money may help businesses become more liquid, which would

allow business owners to offer credit to clients when selling goods and services (Beck *et al*., 2018).

Credit rating for micro enterprises for purpose of trade credit facility by suppliers is challenging since there is a shortage of and difficulty in obtaining accurate statistics (Pranata, 2019). However, with innovations by fintech firms, data required on sales, purchases, receipts etc can be accessed via money mobile services and thereby enabling suppliers to make risk assessment. Although earlier research contributed to explain how mobile money works in developing nations, the ramifications of this breakthrough have gotten less attention (FSD-Kenya, 2020).

The comparatively low level of external investment for microenterprises suggests that alternative financing mechanisms for these companies need to be strengthened and expanded. The major obstacles to obtaining financing include a lack of collateral, exorbitant borrowing costs, and a lack of transactional history. Additionally, more research has to be done on the connection between mobile money and entrepreneurs' tendency to extend trade credit in the unregulated market. (IFC 2019) So, the focus of this research was to determine if using mobile banking services by entrepreneurs affected their inclination to issue or receive trade credit in the unofficial sector.

1.1.1 Mobile Money Services

Mobile money services entail mobile based money transfer services, payments and microfinance service. In Kenya, Safaricom Limited, a telecom firm, provide these services through M-PESA platform where users deposit, withdrawal, transfer money, pay for goods and services, access credit and savings all in a mobile device (Salfor & Michael, 2020). Mobile money payments have gained popularity with M-pesa dominating with a 98 percent market share (CAK, 2021).

Digital payment (purchase products till number) a mobile money service, eliminates the requirement for customers to use cash or a credit card to make payments. Digital payments, also referred to as cloud or server-based payment systems, can retain data and transaction histories online. The payment system is efficient, practical, instant and secure (Boston Consulting Group and Google 2016). Digital payments positively affect the development of micro-enterprises in that it enables increased transparency and well managed e-bookkeeping (Delloite, 2018). Under mpesa platform, as

provided by Safaricom Ltd, the customers use till number which has greatly helped to improve micro-business operations. The business owners are able to receive payments from multiple customers on one platform irrespective of time and physical distance from all corners of the world. By so doing, the micro-enterprises are able to align finances and books for sale reconciliation (Njenga, Litondo & Mwabu, 2021)

In November of 2012, M-Shwari, a mobile banking service utilized in Kenya for credit and loan services, was created. Its mission was to allow for the un- and under-banked to have easy access to savings and loan services directly from mobile phones, without the need to have minimum deposits or be associated with a large bank or other economic institution (Enriquez & Jackson, 2021). Being a strategic partnership between the Commercial Bank of Africa (CBA) and Safaricom Ltd, this service is able to reach the underserved groups of individuals and business owners where they do convenient saving for investment and can access flexible loans. The service provider operates a credit scoring model upon which the loan advanced is based. Once approved, the amount is instantly credited into their m-pesa accounts for immediate use. (Ndung'u, 2019). Majority of micro-enterprises owners lack collateral for borrowing as well as track record as required by lending institutions and as such this mpesa platform has greatly improved their liquidity in terms of soft loans, a significant source of working capital for these enterprises.

Mpesa for business application is another service provided via mpesa platform. This application allows direct transactions from business till number thereby allowing businesses to send money and make payments as well as make withdrawals from multiple till numbers under the same business (Safaricom, 2020). The lipa na mpesa buy goods till has been improved with the m-pesa for business application, which facilitates business owners to accept payments on the till and utilize the money they have received to conduct additional transactions directly from their till. Previously, businesses could only access funds from their tills after a designated period with some taking up a month before accessing finances (Safaricom Annual Report, 2021). This business application enables users to view the cashflow statements any time of the day. Suppliers of micro-enterprises can therefore ascertain the liquidity status of businesses owned by credit seekers before advancing the credit facility to them. Further, application pay customer feature allows the users to send money to pay

suppliers directly to their mpesa account. (Safaricom Annual Report, 2022). Further, businesses that utilize this application are able to access soft loan whose amount depends on the frequency of transactions done using the till number and hence build their capacity to fulfill commitments as they become due (FinAccess, 2021).

Pochi la biashara (a business pocket) is another money mobile service that allow mpesa platform users with informal businesses to receive funds directly in their mpesa accounts for goods and services rendered and separate them from personal funds (Safaricom Annual Report, 2022). This product was launched in 2020 where the users are required to have a Safaricom phone number and mpesa account. One of the biggest challenges faced by micro-enterprise owners is accounting for business finances and personal cash since the owner and the entity are not distinct (FSD Kenya Report, 2020). With this application, micro-enterprise owner is assured of fund security since customers cannot reverse money paid via mpesa platform without the owner's consent thereby preventing losses. The application can also accommodate huge transactions of up to sh.300,000 per day. The application users can also access pochi la biashara loans to meet obligations such as paying the suppliers (Gachango, 2021) Further, micro-enterprise owners can also keep track of transactions by generating instant mini-statements at no cost among other benefits (Yu Team, 2022).

1.1.2 Trade Credit

Despite the fact that there are lending organizations such as banks, suppliers have continued to sell on credit, which the trade credit theory seeks to unravel. Due to the suppliers' ability to acquire information on creditworthiness of their credit customers, they typically enjoy a competitive advantage over banks in the process of enforcing repayment (Petersen & Rajan, 2021). Such information about the credit customers' ability to pay may be gathered through regular visits to their businesses and reclaim the items in the event that the credit customers default (Mian, Smith, & Jr, 2019). Further, when the buyer takes acts that decrease the likelihood of payback, the supplier has the power to restrict payment by threatening to stop providing future supplies (Petersen & Rajan, 2021). The possibility to price discriminates has also been found to incentivize suppliers to sell on credit (Brennan, Miksimovic, & Zechner, 2018).

According to empirical evidence, business owners who have limited access to bank loans tend to rely so much on trade credit while those who have better financial access tend to extend more trade credit. Accessibility to bank loans and the availability of trade credit are positively correlated. Consequently, there is a considerable inverse relationship between the demand for bank loans and trade credit. This suggests that trade credit and bank loans have complementary and substitutive effects. Trade credit is an essential form of funding for cash-strapped enterprises because it is not dependent on formal securities rather than reputation and confidence (Lin & Chou, 2015).

Effective trading relationships are essential for the business entity's access to trade as well as repayment enforcement (Mcmillan and Woodruff, 2019). Also, depending on the long-standing relationships with clients and the confidence that has been built up, a supplier believes that they will be reimbursed. Building relationship with customers over time cements an enabling reputation which has a positive implication for trade credit access (Fafchamps, 2017; Mcmillan & Woodruff, 2019). Empirical literature implies that interruption in payment can cause trade credit ties to end and that payment is a vital part of those connections (Troya-Martinez, 2017).

Credit rating for informal micro-enterprises for purposes of trade credit by suppliers is difficult due to the paucity of and difficulties in getting dependable data and financial innovations like fintech products may provide a platform on which the suppliers can rely on to make informed credit provision decisions. (Lin & Chou, 2018). In the formal sector, information on accounts receivable and accounts payable is mostly documented, however this may not be the case for microenterprises as they frequently lack registration and infrequently maintain records of their business dealings with clients (Hermes, Kihanga, Lensink, & Lutz, 2019). Due to the informal nature of the study and the lack of accounting records in the dataset, the study depended on survey questions about respondents' access to products and services on credit in the Kamukunji market to calculate the availability of trade credit.

1.1.3 Micro-enterprises in Nairobi City County Market

Microenterprises generate jobs for 17.5 million persons over the age of 18 and contribute 24 percent to Kenya's gross domestic product (KNBS, 2022). According to

business register of the Nairobi City County, Kamukunji market has 4080 registered microenterprises. MSME survey of 2020 indicates that micro-enterprises with between 1 to 9 employees comprise of 96 percent of total number of businesses in Nairobi Central Business District of which Kamukunji market is part of. Further according to KNBS-MSME 2020 survey data, 73 percent of the businesses in central business district operate mostly informally and 27 percent operate mostly formally. Informally suggests that these businesses are not incorporated with the Companies' Registrar, operate out of makeshift shelters or open areas, and typically pay Nairobi City County licenses. Additionally, they primarily rely on unofficial sources of funding like colleagues and investment groups (chamas). Due to their significance for household resiliency and inclusive growth, MSMES are therefore becoming increasingly important to the Kenyan government. MSME, 2020 indicate that 80 percent of the businesses in Kamukunji market are in wholesale and 20 percent on retail with wide range of goods such as apparel trading, hardware traders, motor spare parts, cutlery, shoes, toys, beauty products etc. The market also has a sizeable number of customers from outside of Nairobi City County. MSMES Authority (2021). All the micro-enterprises in Kamukunji market have integrated M-pesa in their businesses as it offers payment services under 'Lipa na M-pesa' services (CAK, 2021).

1.1.4 Access to Trade Credit in Kamukunji Market

Majorly, the micro-enterprises in Kamukunji market are wholesalers and therefore sell most of the goods to other smaller micro-enterprise who engage in retail trade. These smaller micro-enterprises operate within Nairobi City County and a significant number from outside the city. Therefore, this market represents an active market zone with stakeholders from all parts of the country and hence the choice for this study. Like other businesses, these micro-enterprises sell their goods and services on credit through business to business (B2B) agreement thereby fulfilling a key liquidity need for the micro-enterprises (MSMEs Survey, 2021). They also request goods and services on credit from their distributors. As a result, these suppliers offer crucial assistance to these smaller businesses in the form of trade credit, without which many companies would find it difficult to function. Some trade credits are relatively short-term, requiring payment at the end of the day for items supplied after being purchased on credit in the morning (FinAcces, 2019).

According to the MSMES Advisory at the Office of the President (Kenya) 2021 research, Nairobi's microenterprises are incredibly diversified and heavily rely on both official and informal networks to conduct business. The majority of their business transactions with clients and suppliers are informal. These arrangements are based on mutual interests, trust, long term relationships and mutual support. The microenterprises in Kamukunji market through these informal arrangements often access trade credit form suppliers or offer sale credit to customers which is crucial to business operations. The study also revealed that these microenterprises source their customers from face book and other social media platforms where they are able to get orders and goods are delivered to customers as per arrangements put into place. Payment is done via m-pesa platform where all the businesses have m-pesa accounts.

The MSMES Study (2021) also reveals that these microenterprise owners at Kamukunji Market would be willing to sell on credit to customers outside of mutual trust and longterm relationship. However, they are hesitant to offer the facility for fear of defaulting. This study therefore indicates that access to trade credit by customers of Kamukunji market enterprises or credit purchases by the owners themselves from their suppliers is limited to a very low percentage of less than 2 percent of total customer base. Given that most micro enterprises are faced with liquidity challenges, the current study seeks to establish whether mobile money services has effect on the owners willingness to supply goods on credit to their customers. The current study also seeks to ascertain whether the mobile money services has any influence on these microenterprise owners ability to buy goods on credit from their suppliers.

1.2 Problem Statement

Trade credit represents a sizable source of liquidity for microbusinesses. This is usually in terms of short-term basis where payment is done in one day or within two weeks thereby fulfilling a key liquidity need for the microenterprises. Recent survey on Kamukunji market businesses indicate that post corona pandemic (Covid-19) period, customers prefer to place orders using digital platforms as well as digital payment of goods done using the same mode. However, business to business trade credit still remains a key part of trade with the customers. This requires that these microenterprises who majorly supply goods to other microenterprises assess credit worthiness of their customers. The smaller micro-enterprises relationship with

suppliers are typically informal in nature where no legal documentation is done. Similarly, few micro enterprises keep reliable business records. The customers who are able to access trade credit in this market is a low percentage of less than two which puts a limitation on those micro enterprise owners who can access this crucial working capital component. Past studies show that where the uptake of online mobile money services is well routed, microenterprises have been able to assess credit worthiness of their customers. Therefore, this study aimed to ascertain the impact of Safaricom Ltd's mobile money services as provided in the mpesa platform on business-to-business trade credit by microenterprises in Kamukunji market, Nairobi City County.

Studies by EIB, 2017, Lopez *et al* 2019, focus on how to bridge financing gap in terms of demand and supply of credit among SMEs. This study focuses on SMEs in developed countries as well as the credit facilities provided by banking sector. The current study intends to bridge a conceptual gap in that the focus will be on financial technology product (Mpesa) as well as microenterprises in a developing country. A study by (Jack, W., Ray, A., & Suri, T. (2018)) states that using mobile money is related to having access to outside financing. The study, done in Kenya, The study reveals that household credit access and transfers for emergencies are significantly impacted by mobile money. The current study focused on whether mobile money services do have effect on accessability to trade credit by microenterprises in the informal sector. Similarly, a study by Beck *et al* (2018) demonstrates a favorable and strong correlation between trade credit and mobile money. However, while formal businesses made up a substantial portion of this study, there was no actual data on the possible impact of mobile money usage on the chance of obtaining trade credit in the unorganized sector. The current study examined whether mobile money services have effect on how easily small businesses in the informal economy can get trade credit.

1.3 General Objective

The general objective of the study was to ascertain the effect of Safaricom Ltd's mobile money services and access to trade credit by microenterprises in Nairobi City County Kenya.

1.3.1 Specific Objectives

i. To ascertain the effect of savings and loan service on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya.
ii. To assess the influence of digital payment on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya
iii. To assess the impact of mpesa for business on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya
iv. To ascertain the effect of pochi la biashara on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya.

1.4 Research Hypotheses

The study used the following research hypothesis: -

i. Ho_1: Savings and loan service has no significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.
ii. Ho_2: Digital payment has no significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.
iii. Ho_3: Mpesa for business has no significant on effect access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.
iv. Ho_4: Pochi la biashara has no significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

1.5 Significance of the Study

The findings of this study is expected to throw some insight to microenterprise suppliers in Kamukunji market on how they can effectively assess the trade credit risk before giving the trade credit facility to their customers. This would be in tandem with the practice by formal financial lenders under the concept of know your customer (KYC)): The term "KYC" is frequently utilized by the industry to describe the process by which a financial institution identifies a customer and confirms that customer's authenticity during the customer onboarding process. However, It can also be used more broadly to describe other tasks including identifying the beneficial owners of legal person clients, understanding and learning about the nature of the commercial

relationship, continuing to undertake due diligence on that relationship, and monitoring the client's transactions.

The study’s findings should inspire more companies to use internet networks that bring together local businesses or members of the same business association in order to take advantage of bulk discounts. The study's findings will also promote broader adoption and utilization of digital payment systems, such as till numbers, which may be utilized by microbusinesses to produce more accurate data on cash movements and records that can be used to obtain financing.

Microbusinesses should be able to obtain market data on available suppliers through internet platforms, thereby opening up group buying options for microbusinesses to access bulk discounts. The findings will also make the government through MSME authority to improve wifi hot spot networks for ease of access to internet services to all businesses especially when using m-pesa for business app which requires the user to be connected to internet.

1.6 Scope of the Study

This study sought to ascertain determine the effects of mobile money services on access to trade credit by microenterprises owners in Kamukunji market, Nairobi City County Kenya. Kamukunji market is one of the 120 markets in Nairobi City County that has all characteristics of the total markets in the county. These characteristics are in terms of different items of sales and it is centrally located hence ease of access by customers from different parts of the country and beyond, The study was conducted in Nairobi City County Kenya and the study findings related to the period 2020 to 2022. It was during the early years of this period when covid 19 pandemic restrictions affected most businesses and more so the need to pay or receive money digitally was emphasized. Hence, most of these micro-enterprises increasingly got exposure to the mobile money services as provided by Safaricom Ltd. The independent variables include digital payments-Buy goods (till number), saving and loan services (Mshwari), mpesa for business app and pochi la biashara service whereas dependent variable will be access to trade credit.

1.7 Limitations of the Study

Some microenterprise owners were expected not to be willing to provide a succinct picture of trade credit advanced to customers due to fear of disclosing customers' details. The researcher overcome this difficulty by promising the interviewees full secrecy and that the information they gave would only be utilised for research.

1.8 Organization of the Study

The first chapter presents the study introduction, study background, the problem statement, study objectives, research hypotheses, study significance, the study scope, and finally the study limitations. The Second Chapter presented+ a review of literature (both theoretical and empirical) and conceptual framework. Third chapter provided the methodology to be adopted in this study. Specifically, it gives details on design of the research, data collection techniques, operationalization of the variables, data collection tools, analysis of the data and presentation techniques and lastly the ethical considerations of the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides theoretical review capturing related theories that anchor the key variables as well as the relevant empirical literature on mobile money services and access to trade credit by microenterprises that identifies literature gap which this proposal attempts to fill. A summary of the reviewed literature and a conceptual framework are also provided.

2.2 Theoretical Literature Review

Four theories that serve as pillars for both trade credit access factors and mobile money services were used to guide this project study. The theories serve as the basis for better understanding of the proposal.

2.2.1 Financing Theory

This theory, which was authored by Smith & Smith in 1999, contends that the existence of trade credit results from the inefficiencies of financial markets. Because some organizations' perceived risks may be higher than the financial institutions' upper limit on acceptable risk, not all businesses have equal access to institutional financing. In this case, trade credit would be used by small enterprises. According to this hypothesis, trade credit can serve as a replacement for institutional financing, particularly for businesses who lack access to it because of their poor credit standing. As a result, this theory validated the study's use of trade credit.

2.2.2 Technology Acceptance Model

This theory Technology Acceptance Model (TAM) was authored by Davis, Bagozzi and Warshaw (1989). According to the theory, external elements like the user's mindset and the perceived advantage in terms of activity execution have an impact on how apparent convenience and usability of technology are regarded. The model is hypothesized on the premise that individuals acknowledge data framework for creation of new technology or new information system. That a major driver of technology adoption is the perception of utility (Alharbi & Drew, 2014). The model suggested that whether a client will accept or reject the framework depends

significantly on how they feel about usability. The client understands that an easier-to-use framework will be more advantageous for carrying out their activity. This study will employ TAM as its research paradigm and take accessibility, affordability, and safety into account. This theory is crucial to the research because it demonstrates how proprietors of small enterprises have integrated modern technologies into the management of their enterprises. This is necessarily correct when small businesses employ mobile money services for their financial operations, which makes cash transfers faster, safer, and more accessible. The researcher used this theory to establish whether microenterprises in Kamukunji market had embraced and adopted use of mobile money services in processing of trade credit to their customers. Hence, this theory anchored all the independent variables.

2.2.3 Unified theory of acceptance and use of technology

Venkatesh (2003) authored the Theory of Unified, Acceptance and Use of Technology (UTAUT). The theory states that user behavior is a combination of their initial intents to use an information system. The theory consists of four main concepts; performance anticipation, anticipated effort, social dominance and favorable circumstances. These four variables influence behavior and usage. It seeks to clarify user expectations for using an information system and the resultant behavior of usage. Alaa (2020) opines that this theory is a solid and reliable application on various technologies and is still relevant even after modifications have been made. This theory was thought suitable for this study considering it clarified how microbusiness owners intended to use mobile money services and then behaved as they did so based on three major constructs: digital payments, mpesa for business, and pochi la biashara.

2.2.4 Innovation Diffusion Theory

This theory was authored by Rodgers (1962) , declaring that new ideas or practices undergo a process for them to be assimilated over a period of time. It goes on to say that while new technology is important for innovation, other factors such as the idea or practice's compatibility, usefulness, complexity, and the resources available for its proper execution all have an impact. The diffusion of innovation emphasizes on the rate at which new developments spread, how they spread, and why they spread so as

to understand more about the elements that influence individual and small business decision-making on the development of new data innovations. (Oliveira and Martins, 2011). The diffusion theory was crucial to the study because it explained why microbusinesses adopt technical advancements. The most important of these was the advantage they had over brick and mortar businesses. This hypothesis therefore supports the variable of digital payment.

2.3 Empirical Review

2.3.1 Digital Payments-till number and access to trade credit

Wanyonyi & Bwisa (2018) did a study on mobile money transfer and performance of small and medium enterprises. Performance was measured using changes in sale volumes. The study's findings emphasized how small and medium-sized enterprises (SMEs) employ mobile money transfers for business-to-business (B2B) transactions when paying suppliers and customer-to-business (C2B) transactions whenever obtaining payments from credit sale consumers. The study's findings indicated that small and medium-sized businesses' mobile money transfer and sales volumes are significantly impacted favorably. In contrast to the previous study, which concentrated on SMEs, the current study will concentrate on microbusinesses and determine whether the use of a till number as a payment method affects access to trade credit.

Beck *et al* (2018) did a study to ascertain the relationship between theft as market conflict and its propensity to interfere with transaction resolution. The study used firm-level data and concludes that there is a very strong correlation between access to trade credit and mobile money adoption. The study discovered that market friction prevents credit repayment and results in the supply of trade credit ceasing. The study identified three potential connections between mobile money and trade credit and came to the conclusion that it is perceived as a cure-all for theft. First off, trade credit has the ability to affect how much mobile money entrepreneurs utilize to buy inputs from suppliers at a specific rate of output. Second, fraud during trade credit payment harms business owners' potential credit availability. Henceforth, mobile money as a theft-prevention payment method has the capacity to enhance adopters' credit score market valuation and, as a result, the amount of trade credit that an enterprise is able

to obtain. This will increase the demand for mobile money among business owners. Thirdly, the range of goods that can be bought using credit may be restricted due to the greater risk of theft when using cash as opposed to mobile money. This study was done when theft by hackers was rampant and the service providers have greatly improved on security of users' money. Also, the study focused on access to trade by the formal sector whereas the current study will focus on access to trade credit by the microenterprises in the informal sector

Gosavi (2017) investigated the impact of mobile money usase and firms' access to external finance. The results show a strong positive correlation between using mobile money and a company's ability to acquire external financing. These results show that access to external financing can be influenced by mobile money. The findings suggests that another mechanism through which mobile money influences business owners' decisions to accept or extend trade credit is access to outside financing. Trade credit literature supports this notion and illustrates business owners who have access to capital extend greater trade credit to clients (Lin & Chou, 2015). This technique also relates to the possibility of credit being extended to entrepreneurs, given that having access to outside funding may help enterprises improve their cash flow and reduce default risks. The current study seeks to establish whether business payment via till number has an impact on informal sector accessibility to trade finance.

2.3.2 Saving and Loan product-Mshwari and access to trade credit

In a study by FinAccess (2021) to determine the usage of savings and loan services by informal sector households in Kenya, the study found out that the key reasons for savings was to meet day to day expenses and medical expenses. Saving to start a new business and investing in farming related ventures emerged in 2021 while it was absent in the previous years. The study also concluded that reasons for savings through the saving and loan financial service (Mshawari) were security for their money, to increase the chances of obtaining short term loans, convenience and ease of access in case of emergencies. Further, it was found out that putting money aside for saving or loan requests in order to invest in productive assets for 2016,2017 and 2021 was 39.6 percent, 17.4 percent and 32.4 percent respectively. The current study intends to establish whether savings using Mshwari has influence on access to trade credit by existing microenterprises.

Enriquez & Jackson (2021) used data from the Kenya Financial Diaries (KFD), Data verse and the Financial Inclusion Insights Tracker Surveys (FIITS) to investigate M-Shwari's impact on consumers while taking into account their educational level, revenues, liabilities, and poverty status. There was a significant correlation between higher income and using M-Shwari when the average daily income was examined, compared to a random sample of non-M-Shwari users. According to additional findings, M-Shwari is not succeeding in its mission to provide accessibility for Kenya's unbanked and underbanked.

Bank financing and trade credit are substitutes, according to a study by Tulbug University Research (2017) on trade credit and access to financing in low-income nations. That trade credit is extended by suppliers because it sends a reliable let banks know whether or whether the clients are creditworthy, which can complement bank credit and trade credit at the level of the particular firm. Bank credit serves as a counterbalance to trade credit for informal shops in that greater access to trade credit is correlated with higher bank loan exposure. These findings may indicate that obtaining bank credit makes less transparent informal firms more creditworthy and encourages their suppliers to grant them trade credit. The current study focused on mshwari loans received by customers via mpesa platform and establish its effect on access to trade credit.

2.3.3 Mpesa for business application and access to trade credit

Safaricom Ltd report (2021), a mobile network operator (MNO) indicates that this platform enables the users to have a better visibility of their business transactions in real time. The users can view collections and payments and transact directly from their mpesa business till. The users can withdraw from lipa na mpesa platform to their mpesa accounts, bank accounts or agents using mpesa for business application. Further, the user can access transaction statements in real time, export them and track their business performance from their phones. Users can also pay wages, pay for suppliers and make payments to other businesses through the application. AlleanzTrade (2021) on a study on credit process discovered that expanding the number of payment options available to company clients helps improve on-time payments and optimize the control system. This has been achieved through

technology where businesses can accept online payments without setting up and paying significant charges associated with banking institutions. The current study therefore intent was establish whether mpesa for business application does influence access to trade credit for microenterprises.

In a study by Hakeem (2021) on the relevant information the creditors need to be aware of before advancing credit facility, the study found out that suppliers in business to business set up, need to get professional legal help to write up lending terms and conditions, a dedicated account handlers to ensure the terms are met, clear invoice agreements and good communication to buyer to pay promptly and regularly. This study did not consider the unique nature of microenterprises where majority do not have the knowledge and skills as well as resources to engage the services of professionals to establish credit control system. The current study intent was to establish whether real time financial statements generated from the customers phones does influence access to trade credit by microenterprises.

The results of a study by Ronna and Deloe (2022) on how to use mobile payments to expand the business show that a lot of businesses claim that customers cite payment convenience as the primary factor in repeat business. The study applied descriptive survey design aimed at ascertaining how the ease of payment affects the growth of customer base of companies in USA where primary data was used. The study also revealed that easy access to banks increased business transactions and business efficiency. This study centered on companies whereas the current study focused on whether the use of mpesa for business application by informal microenterprises influences access to trade credit.

2.3.4 Pochi la Biashara App and Access to credit

Aladejibi & Oladimeji (2019) conducted research on the significance of an accounting system that is well-structured and enables organizations to maintain accurate financial statements. The study's intention was to look into how accounting data is utilized to gauge the financial performance of small and medium-sized industries. Surveys were distributed, and the Likert scale was used for analysis. While respondents agreed that knowing a company's performance and maintaining accurate records are essential to its success, the study found that the majority of SMEs' owners lacked rudimentary

accounting knowledge and bemoaned the expense associated with preparing financial statements, so they kept the records manually. This implies that proper records are hard to find in these SMEs. The study suggests that SMEs operators make an effort to maintain accurate records and, when necessary, hire SME professionals to do it at a low cost. The study though emphasizing on need to keep proper business record, focused only on formal sector. The current study not only focused on informal sector but also the role of financial technology in record keeping especially cash flows and access to trade credit.

Esafian (2021) on a study on the importance of separating personal and business finances in United State of America, found out that most of the businesses operated business credit to achieve that. Business credit captures all the transactions of the business and therefore can be used to access credit finance especially to fiancé working capital. The study also came to the conclusion that it is challenging for a company to present actual business income to lending institutions and, as a result, impossible to show its true creditworthiness. The current study focused on informal microenterprise and determine whether using mobile money services has effect on access to trade credit.

Brown (2019) investigated the separation of business and personal expenses and financial performance of a firm, and found out that most firms in Canada used computer programs like FreshBooks or QuickBooks to record business revenues and expenses. Further, the study established that these programs make it easy to generate reports on revenues, profits and costs thereby helping the firms to track their financial performance. This was made feasible for firms to access credit finance from the financial institutions and trade credit from supplies. This study focuses on businesses in Canada and does not give emphasis on the role of financial technology on separating personal and business expenses and income. The current study focused on the mobile money services-poshi la biashara that helps microenterprises to separate personal and business income and whether it affects access their possibility to access trade credit from suppliers.

2.4 Summary of Research Gaps

Few studies have been undertaken in Kenya on trade credit as a source of short-term working capital. It's apparent that few studies have considered access to trade credit by the informal sector especially the microenterprises that create employment to over 60 percent of the population in Kenya. Given that microenterprises rarely keep financial records, the same cannot be relied upon by mainstream financial institutions to facilitate credit fiancé or trade credit.

Jack *et al* (2018) study gives evidence that suggests that use of mobile money by owners of microenterprises is associated with access to external finances. These external finances generally comprise of remittances as well as from friends and relatives. The current study will focus on trade credit as a form of financing to microenterprises indicating there exist a conceptual gap to be filled.

In Ethiopia, Tilbug University Research (2017) finds that bank fiancé and trade credit are substitutes. This argues that being granted bank credit makes one more creditworthy of informal business that have less evidence of ability to pay. This contradicts the fiancé theory of risk management. Therefore, there is a conceptual gap that this study intends to fill. Findings from a study by Ronna and Deloe (2022) show that a lot of businesses claim that customers in the USA cite convenience of payment as the primary justification for recurring business. This means there exists a conceptual gap which the current study intends to fill.

Most of these studies are done in developing countries whose microenterprises are formal and recognized by the authorities contrary to those in Kenya, hence there exists a contextual gap which makes this study important. The summary of research gaps is illustrated in table 2.1.

Table 2.1 Summary of Literature Review and Research Gaps

Author and year	Study Title	Methodology and Findings	Research Gaps Filled
Aladeiibi and Oladimeji (2019)	Accounting System and Financial Performance of SMEs in Ghana	Linear regression model was applied where a questionnaire was administered and analysed using Likert scale. The main finding of the study was that the most of SMEs' owners lacked fundamental accounting expertise and complain about how expensive it is to prepare financial statements.	The current study focused on the technology aided system where business income/expenses are separated from private ones and hence enabling microenterprises to keep track of cashflows at minimal or no cost and how pochi la biashara application influences access to trade credit of which there was a positive and significant effect
AllenzTrade (2021)	Credit Process and Credit Control System	A correlation research design and regression analysis. The study found out that increasing the number of payment paths for business customers can streamline the control system boost on time payments	The current study intent was to establish whether mpesa for business, a supplement to the lipa na mpesa platform, had effect on access to trade credit by microenterprise owners of which there was a positive and significant effect
Wanyonyi and Bwisa (2018)	Mobile Money Transfer services and SMEs Development.	A correlation research design with time series analysis was used in getting inferences. The finding indicates that business to business payment using mobile money transfer improved performance of SMEs.	Whilst this empirical review present literature on mobile money services, it did not focus on access to trade credit by microenterprise owners in the informal sector. The study focused larhely on these informal sector businesses.
Beck *et al* (2018)	Relationship between theft as market friction and its potential to disrupt settlement of transactions.	The study used firm level data where descriptive research design that used primary data was applied. The study revealed that market friction inhibits credit repayment and causes discontinuation in trade credit supply	whilst this study was done when hacking was rampant, the current study intent was to establish whether mobile financial services influences access of trade credit by microenterprise owners of which there was a positive and significant effect
Brown (2019)	Separation of Business and Personal Expenses and Performance of a	Multiple linear regression analysis methodology was utilised where it was found that most firms in Canada used computer programs like QuickBooks to record	The current study focused on the microenterprises in the informal sector that used fintech product to separate personal and business income and

	Firm	business revenues and expenses which made it easy for them to access credit finance	expenses and how it influences access to trade credit of which there was a positive and significant effect.
Enriquez and Jackson (2021)	M-Shwari comparisons: An Investigation of Income	The study used descriptive design with inferential statistics and secondary data was obtained from Kenya Financial Diaries Dataverse and Financial Inclusion Insights Trucker Surveys. The study found a significant correlation between higher income and use of M-shwari	Whilst the study investigated M-Shwari's impact on consumers, it did not focus on its effect on users' ability to access trade credit more so in the informal sector. The study focused on these informal sector businesses and found out that m-shwari had a positive and significant effect on access to trade credit
Esafian(2022)	Separating Personal and Business Finances	Chi-square multiple regression and ANOVA was applied. The study found out that the businesses that operated business credit were able to access credit finance	The current study focused on pochi la biashara as a tool for separating personal and business finances and sought to establish whether it influences access to trade credit by users in the informal sector of which there was a positive and significant effect.
FinAccess(2021)	Usage of Mobile Saving and Loan Services by Informal Sector Households in Kenya	Baseline survey was conducted involving households in Kenya in 2019. The data was collected at county level using primary data. The key findings indicate that saving using mpesa application (M-Shwari) to start new business and investing in farming related ventures started in 2021	The current study intent was to find out whether savings using M-Shwari has influence on access to trade credit by existing microenterprises of which there was a positive and significant effect
Hakeem (2021)	Trade Credit: What Creditors Need to be Aware of?	Correlation and multiple analysis were applied in this study where it was found out that suppliers in business-to-business formal set up have to incur debt collection costs in order to ensure prompt and regular payment of debts	The current study intent was to establish whether real time financial statements generated from mobile app users influence the access to trade credit.
Jack, Ray and Suri (2018)	Mobile Money and Access to External Finance by Household in Kenya	A descriptive research design was utilised and primary data was gathered from households between 2014 to 2017. It was revealed that mobile money has significant effect on household access to credit finance as well as external finance suggesting ability to receive and offer trade credit	The current study sought to establish whether a specific business till (lipa na m-pesa) influenced access to trade credit by microenterprise owners of which there was a positive and significant effect.

Roma and Deloe (2022)	Mobile Money Transfers and Growth of a Firm	A correlation analysis methodology was applied. According to the study, customers' convenience of payment is the primary driver of repeat business.	The current study tested whether the use of m-pesa for business application influences the access of trade credit by microenterprises of which it was found to have a positive and significant effect

Source: Author (2022)

2.5 Conceptual Framework

The dependent and independent variables are conceptualized as a framework in the study. The independent variable includes Safaricom Ltd M-pesa Services being proxied by Digital payment (Lipa na M-pesa), Savings and loan services (m-shwari), M-pesa for Business and Pochi la Biashara. The dependent variable is access to trade credit. Figure 2.1, below illustrates the conceptual framework for the study, which depicts the relationship between the independent factors and the dependent variable.

Independent Variables **Dependent Variable**

[Mobile Money Services] [Access to Trade Credit]

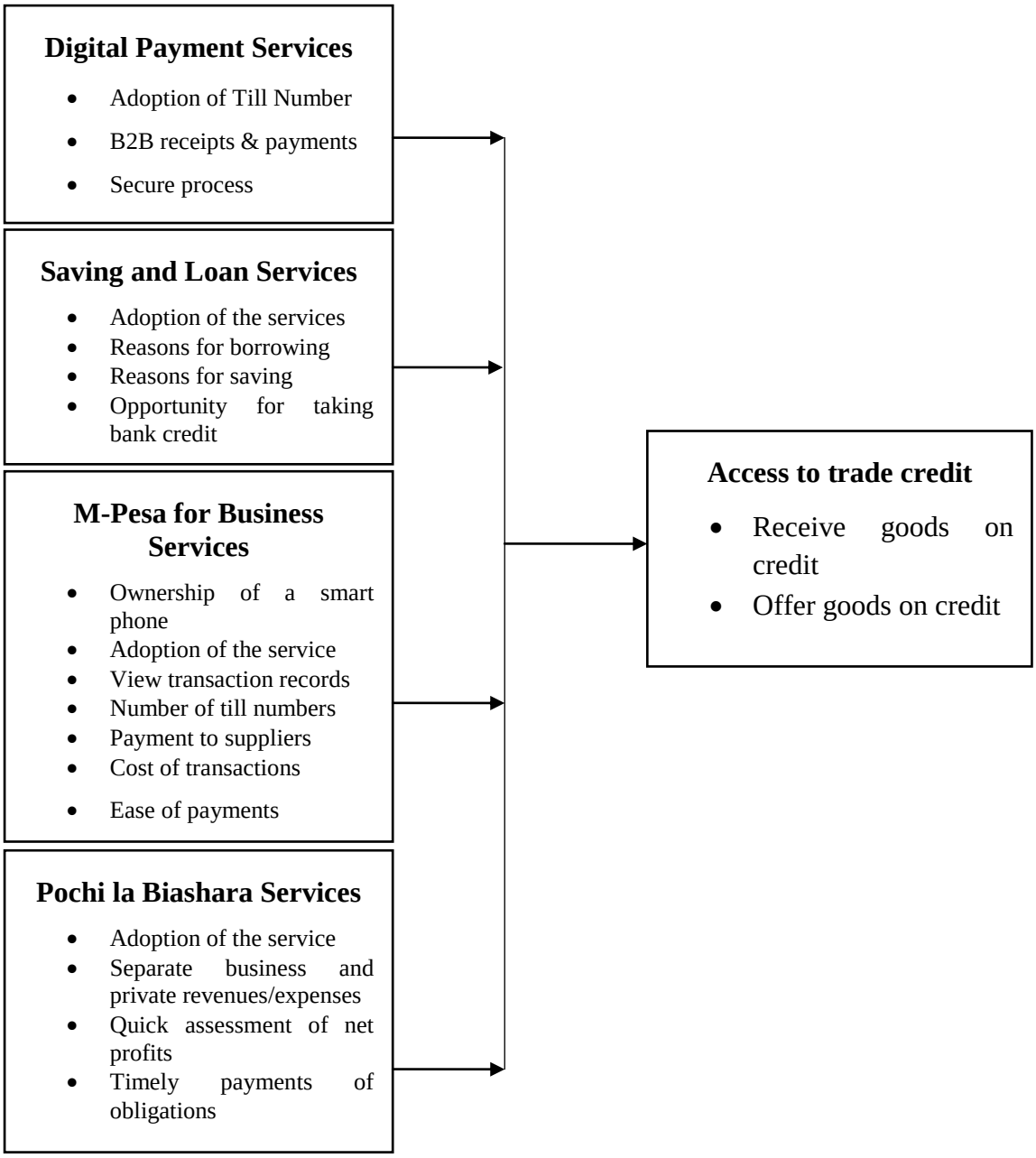

Figure 2.1: Conceptual Framework

Source: Author (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The method of analysis to be used to meet the study's objectives are discussed in this chapter. Thus, this section includes the study's research design, and empirical model. It also includes variables' operationalization and measurements as well as the target population, sampling technique, data processing and diagnostic tests. It also includes pilot testing and ethical consideration.

3.2 Research Design

Research design is a comprehensive approach to the steps a researcher should take to accomplish the goals of the study (Srivatava & Rego, 2011). The research design utilised in the study was descriptive. The design is an organized, empirical investigation in which the researcher has no explicit control over the independent variables because their expression cannot be changed. Ogula (2012). The study was best served by a descriptive design since it provides information on the respondent's characteristics and the findings in a way that facilitates addressing the research's questions.

3.3 Target Population

The study's was 4,080 registered microenterprises in Kamukunji Market, Nairobi City County, Kenya, according to the County's Business Register of 2021. The unit of observation were the owners/mangers of these enterprises. A target population is a a specific collection of participants or items that the researcher uses to collect data from or a sample is chosen for additional investigation and inspection to draw conclusions from (Kothari 2011). Mugenda & Mugenda (2011) orate that population is the entire entity or entities from which a researcher aims to collect a sample for the study, with the population being the subject of interest.

3.4 Sampling and Sampling Procedure

Stratified sampling procedures was applied which enabled picking a sample size from the population. In this sampling technique, the overall population was split into seven

more compact groupings or strata to accomplish the sampling procedure. Mugenda and Mugenda (2011), asserts that for a study that heterogeneous, a stratified or delineated sampling method was appropriated. Proportional stratified random sample was employed for the study as it looked for several heterogeneous classifications of microenterprises in Kamukunji Market. This enabled the researcher to cluster the microenterprises into a number of sectors, including food products, plastics, apparel, cutlery, shoes, toys and beauty products from Kamukunji Market where the actual sample size will be drawn.

Babbie (2010) orates that sample size is the component of the study that most closely resembles the target population or the study's subject matter, allowing for the generalization of findings to the entire population. A sample is a portion of the population that has been arbitrarily selected to serve as a representative of the population. Once an experimental sample has been obtained, the results can be applied to the full population. The sampling flame consisting of 4,080 registered microenterprises registered with Nairobi City County according to the Business Register of 2021. Sampling is the process of choosing a subset of a particular population to be studied using the sampling approach (Cooper & Schindler 2012)

To determine the sample size, Krejcie & Morgan (1997) approach was employed. Proportional stratified random sampling was then used to select 351 microenterprises, as shown below:

$$\boldsymbol{S = \frac{X^2(1-P)}{d^2(N-1)+X^2(1-X)}}$$

$S = \text{Sample Size}$

$X^2 = \text{Chi} - \text{Square at 1 degree of freedom } (3.841)$

$N = \text{Population Size}$

$p = \text{Population proportion (assumed to be 0.50)}$

$d = \text{Degree of accuracy expressed as a proportion } (.50)$

$$S = \frac{3.841 \times 4080 \times 0.5(1-0.5)}{0.05^2(4080-1) + 3.841 \times 0.5(1-0.5)}$$

Sample size S=351.

Table 3.1 Sampling Frame

Microenterprise sector	Population	Sample	Percentage
Food products	196	17	4.8%
Plastics products	926	80	22.8%
Apparel	1053	91	26%
Cutlery& Kitchen ware	555	48	13.7%
Shoes	412	35	10.0%
Toys	312	27	7.6%
Beauty Products	628	53	15.1%
Totals	**4080**	**351**	**100%**

Source: Nairobi City County Register 2022

3.5 Empirical Model

Multiple regression analyses was used to assess if the four variables have any influence on the access to trade credit by microenterprises in Kamukunji Market. The sample correlation between the observed outcomes and the expected values was calculated using the decision coefficient, (r2). The percentage of the dependent variable's variation that can be accounted for by changes in the independent variables, or how much of the dependent variable's variation can be simplified by those changes (access to trade credit).

Multiple regression model (Keith, 2019) adopted will be as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y=Access to trade credit

β_0 =represents Constant

$\beta_1, \beta_2, \beta_3$ and β_4 are beta coefficients for the study independent variables

X_1=Digital payments-till number services

X_2=Saving and loan product-Mshwari

X_3=Mpesa for business application services

X_4=Pochi la biasahra services

ε=represents Error

3.6 Variable Operationalization and Measurement

This study sought to ascertian the effects of mobile money services and trade credit access: A case of microenterprises in Kamukunji market, Nairobi City County Kenya. Primary data was utilized and multiple linear regression panel was adopted. Variables were evaluated as illustrated in Table 3.2.

Table 3.2: Operationalization and Measurement of Variables

Variable	Variable type	Operationalization	Measurement	Hypotheses outcome
Access to trade credit	Dependent	Credit Purchases	Likelihood of buying or selling goods on credit	
Digital payments-	Independent	Use of mobile wallets to pay for goods purchased	Use of till number to pay or receive payments	Positive and significant
Saving and Loan service-	Independent	Use of virtual accounts to save and borrow soft loans	Frequency of use of mshwari products	Positive and significant
Bloom Finance Service Integrated business accounting	Independent	Using the Mpesa for business app to withdraw from till number account, transfer to other till number, check cash flow statements, transaction monitoring	Volume of sales, receipt of payments.	Positive and significant
Separate business entiry	Independent	Separation of private and business funds	Pochi la Biashara	Positive and significant

3.7 Data Collection Instrument, Data Analysis and Presentation

A structured questionnaire was the most effective for gathering accurate information from respondents because this study employed primary data. It was also the greatest way to observe respondents' emotions, attitudes, and experiences (Baker & Ponton 2013). In general, closed-ended questions were utilized to convey additional information that open-ended questions might not have included. The close ended questions require the respondent to respond based on a 5 point Likert continuum scale of 1 to 4 whereby 1 is Very low extent, 2-Low extent, 3-Great extent and 4-Very great extent. The questionnaire reflects data relative to respondents' background. Likert scale was used where ordered variable applied accordingly.

The respondents were given the assurance of nondisclosure since a questionnaire was employed. that the only purpose of their comments would be for study. Prior to physically delivering the questionnaires to the respondents, a letter of authorization from the institution was requested, followed by a government data collecting certificate from the NACOSTI. For hand delivered questionnaires, 5 data collection assistants were hired where they assisted in guiding and follow up to ensure they have been filled and offer assistant where needed.

Data from the field was first be censored, cleaned, and reviewed for correctness, uniformity, and relevance before being encoded and fed into analysis software. The Statistical Package for Social Sciences (SPSS) version 24 and descriptive statistics including frequency distributions, percentages, means, and standard deviation will be utilized to examine quantitative data. The acquired results were then displayed in tables. Multiple models were utilized for inferential analysis to examine whether the four variables had any impact on how easily microbusinesses in Kamukunji Market could acquire trade credit.

3.8 Pilot Test

Pilot tests were carried out prior to the collection of actual data. Prior to the primary inquiry, this activity comprised evaluating the type and quality of the questionnaire (Tandon 2014). The pre testing of the questionnaire was done using alternate microenterprises which were included in the study. Connelly (2008) advises that pilot testing can be conducted on 10% of the sampled population from the main study. 35

respondents in this study constitute 10% of the sampled individuals. The pilot study conducted in the neighboring Gikomba Market as it had characteristics similar to Kamukunji market.

3.9 Validity and Reliability of the Study

3.9.1 Validity of the Research Instrument

A validity test is utilized to determine how well an instrument includes the study's objectives in a sufficient amount of detail. This includes testing the concept, conclusion or measurement where ascertaining whether it exactly matches the real reality was done as contended by Brains and Manheim (2011). Alternatively put, the extent to which a survey instrument as a questionnaire—quantifies what it promises to quantify is assumed to be a criterion for its validity. It was the goal of the investigation to determine whether the research instrument was valid in terms of its content. Before giving them to the sampled population, they must be authenticated in order to guarantee that the tool collected the information as intended. To validate them, various validity types, including face and content validity, were applied. To confirm the questionnaire's validity in terms of its content, the researcher sought the advice of research specialists, peers, and their academic advisor. Typographical flaws, spelling issues, and any other uncertainties that can compromise the validity of the instrument were fixed using the parties' feedback.

3.9.2 Reliability of the Research Instrument

Reliability is the correctness, dependability, and stability of a measurement's results. Cooper and Schindler (2011), claims that the research instrument can produce equivalent results when dependability is preserved and when applied to several sampling groups with comparable characteristics. Cronbach alpha, a coefficient of internal consistency, was utilized to quantify the consistency in order to test for the internal consistent reliability study. Cronbach's alpha was employed to evaluate the reliability of the questionnaire. It would be a sign of sufficient reliability if the Cronbach alpha coefficient was 0.7 or above (Field 2009).

3.10 Diagnostic Tests

Various diagnostic tests were carried out to evaluate the validity of the regression model and ensure accuracy in addressing various form of bias that is likely to occur,. Some of the tests which were applied by the researcher included;

3.10.1 Normality Test

A data set's suitability for modeling by the normal distribution can be assessed using the normality test, which also assesses the likelihood that a random variable underpinning the data set is normally distributed (Cooper & Schindler 2011). The researcher utilised the Shapiro-Wilk test to validate the normality test. The data were tested under the null hypothesis that they were normally distributed if the significant value (p-value) was greater than 0.05; on the other hand, the null hypothesis was rejected if the value was less than 0.05, indicating that the data were not normally distributed.

3.10.2 Multicollinearity Test

Multicollinearity analysis will be done to see if independent variables are substantially connected with one another. Kothari & Garg (2014), suggest that a very strong connection exists if the independent variables are related in any way. The Variance Inflation Factor (VIF), a measure of multicollinearity in the set of multiple regression variables, was utilized by the researcher. The association between this variable and the others is larger the higher the value of VIF. A VIF rating of 1 to 10 was used to indicate the absence of multicollinearity indicators.

3.11 Ethical Considerations

The researcher promised that all information gathered would be handled in the strictest of confidence and purely used for scholarly reasons. Ethics, according to Field (2009), entail making decisions on respondent confidentiality and identity. No respondents were required to disclose their names or any other information pertaining to their identification proof for this study, so their identities remained a secret. The researcher further promised that participation in the studies would be entirely optional.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The study determined the effect of Safaricom Ltd mobile money services and access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Descriptive and inferential statistics were utilised to ascertain the data, and charts, tables, and graphs were employed to illustrate the results. Following that, the findings were evaluated in light of the specific goals. The chapter presents the response rate, respondents' demographic data, reliability and validity testing, descriptive and inferential analysis, hypotheses, and discussion of major findings.

4.2 Response Rate

The response rate was determined to make sure that the responses were representative and of high quality for the study's result. The 351 respondents that made up the sample were given a total of three hundred fifty-one (351) questions. The response rate and frequency are summarized in Table 4.1.

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	292	83.2%
Unreturned	59	16.8%%
Total	**351**	**100%**

According to the findings in Table 4.1, 292 of the 351 questionnaires that were sent were duly completed and returned. This results in an 83.2% response rate. This response rate was far higher than what is usually considered acceptable for surveys. Deutskens, De Ruyter, Wetzels, and Oosterveld (2004) quoted earlier researchers in earlier local doctorate studies and said that the typical response rate for empirical studies was 65% of the sample. This was also consistent with Orodho's (2009) observation that a response rate of more than 50% facilitates the collection of adequate data that may be extrapolated to reflect respondents' attitudes about the research problem in the target population. Mugenda and Mugenda (2003) and Kothari (2004) argues that a response rate of 60% or more of the intended sample population

should suffice. A response rate of more than 30% of the entire sample size, according to Cooper and Schindler (2003), is considered sufficient for generalizing the characteristics of a study problem as demonstrated by the sentiments of a small number of respondents in the target population. Due to this, the findings can be viewed as broad and representative of the population.

4.3 Reliability and Validity Test

This section presents reliability and validity test results.

4.3.1 Reliability Test

The level to which measurements are error-free and produce consistent findings is a general definition of reliability (Thanasegaran, 2009). Consistency in responses is referred to as reliability, which is the level to which an instrument measures consistently under the same circumstances every time. For each statement in the questionnaire, Cronbach alpha was determined. Between two sets of data, Cronbach alpha is a correlation coefficient. According to Field (2013), scores between 0.4 and 0.7 are seen as having a typical consistency level, while scores above 0.7 are regarded as having a high consistency level. Cronbach's alpha was employed to calculate reliability for this study, and SPSS was used to produce the results. Table 4.2 shows the reliability test results.

Table 4.2: Reliability Analysis

Variable	Number of items	Cronbach Alpha	Comments
Savings and Loan Service	6	0.826	Reliable
Digital Payment Service	3	0.739	Reliable
Mpesa for Business Service	12	0.919	Reliable
Pochi la biashara Service	8	0.716	Reliable
Access to Trade Credit	2	0.809	Reliable

The results in Table 4.2 demonstrate that the instrument was satisfactorily trustworthy for measurement because the cronbach's alpha for each item was over 0.7. All variables were dependable and approved due to the fact that they all had a cronbach's alpha of more than 0.7.

4.3.2 Validity Test

Validity is a measure that determines how well an instrument accomplishes its goal. According to Creswell (2009), a valid study is one in which the findings can be generalized to subjects and situations other than the specific ones which have been studied. This is ascertained through scrutiny and careful designing of items of the tools with focus on research objectives (Creswell, 2009). The validity of the tools was thus determined by submitting the questionnaires to a contingent of experts who examined the instruments' questions and statements that determined their relation to the study goals in each sub-section. Both content and construct validity were utilised in this study. Content validity was tested by submitting the questionnaires to experts and supervisors, in which the questionnaire was put through a rigorous scrutiny by supervisors in charge of proposal development to ensure content validity.

On the other hand, construct validity was tested using KMO and factor analysis. The validity of the responses was tested statistically using Kaiser-Meyer-Olkin (KMO), which was employed to determine the validity of the responses according to their values. The value of KMO was greater than 0.5 for a data set to be considered as valid and suitable for statistical analysis (Field, 2013). For questionnaire, the findings of the KMO and Bartlett's Test of Sphericity (significance) was computed and presented as in Table 4.3.

Table 4.3: Validity Test using KMO and Bartlett's Test

Variable	KMO	Significance
Savings and Loan Service	.601	.000
Digital Payment Service	.508	.000
Mpesa for Business Service	.612	.000
Pochi la biashara Service	.528	.000
Access to Trade Credit	.652	.000

The results in Table 4.3 indicates that the KMO statistic for all variables were above 0.5 with critical level of significance, which was set at 0.5 (Field, 2013). Besides the KMO test, the Sphericality test of Bartlett was significant (0.00, at $p<.05$) for all the

variables of the study. These findings offered superb validation of the study variables for additional statistical analysis.

4.4 Demographic and Firm Characteristics

The section of the data collection instrument included questions about the respondents' demographics and business information. Provided below are the key components of the background data that was analyzed. Discussions about the makeup of the sample size required consideration of the demographic characteristics.

4.4.1 Gender of Respondents

The responders were asked to specify their gender as this was necessary in ascertaining the composition of the ownership of businesses in Kamukunji market, Nairobi City County Kenya. Figure 4.1 shows gender of respondent.

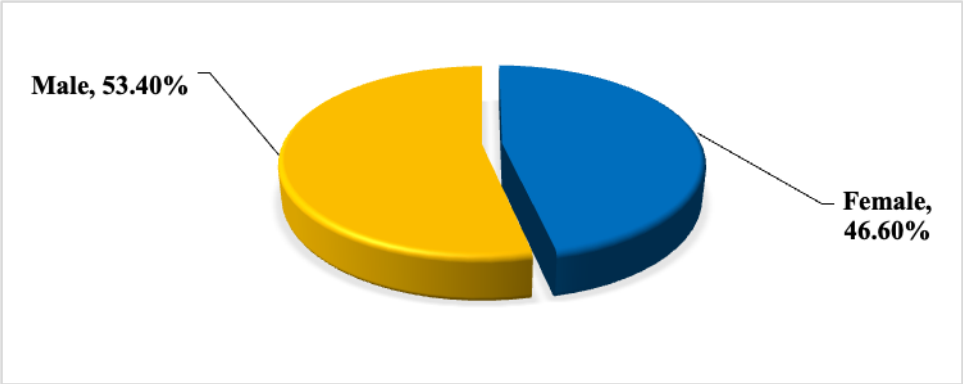

Figure 4.1: Gender of Respondent

On the basis of the results in Figure 4.1, more than a half (53.4%) of the responders were male, compared to 46.6% female. This implies that more men than women participated in the study. The results also mean that most of the businesses in the market are operated by men.

4.4.2 Position Held

The responders were asked to specify the positions they were holding in the business, as to whether they were the owners or just employees running the business on behalf of the owners. The results are illustrated in Figure 4.2.

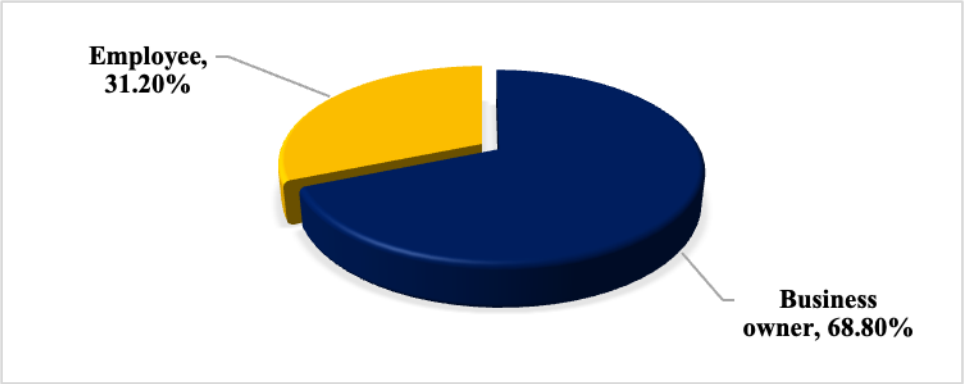

Figure 4.2: Position of Respondent

From the results, majority of the respondents (68.8%) were the actual business owners, while 31.2% were employees in the businesses. This implies that most of the businesses in Kamukunji market, Nairobi City County Kenya are operated by their proprietors, consequently, they were in an able to give the study with the information it needed.

4.4.3 SME Sector of Operation

The responders were further asked to specify the SME sectors in which they were operating their businesses. Their responses were as illustrated in Figure 4.3.

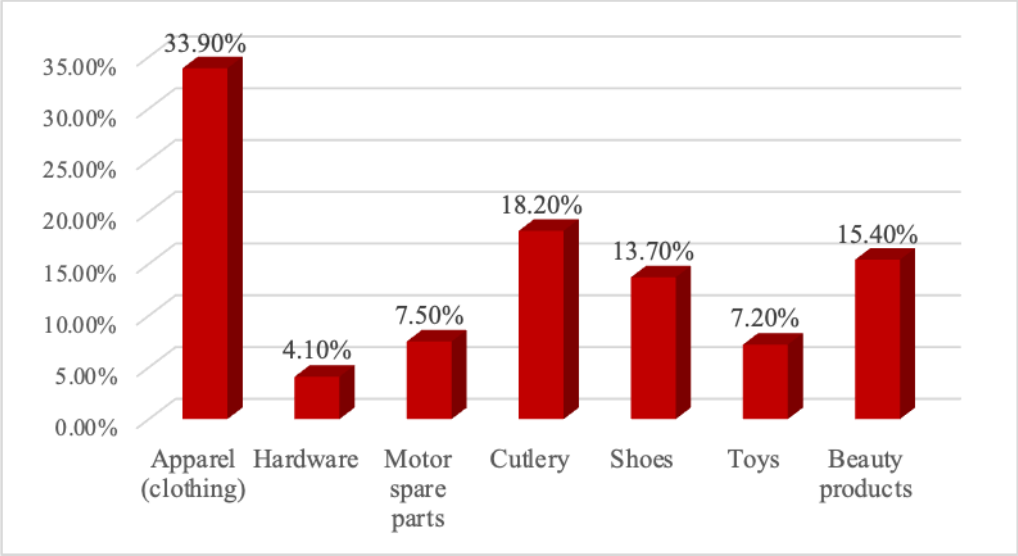

Figure 4.3: SME of Operation

Majority (33.9%) of the responders indicated that they were operation in apparel/clothing sector, 18.2% were from cutlery, 15.4% from beauty and products sector, 13.7% were dealing in shoes, 7.5% were operating in motor spare parts, 7.20% toys and 4.1% were operating in hardware sector. The results imply that most businesses in Kamukunji market are dealing in clothing, while hardware is the least dominated sector in the market.

4.4.4 Age Group

The study sought to ascertain the respondents' ages Figure 4.4 illustrates the responses on age group of respondents.

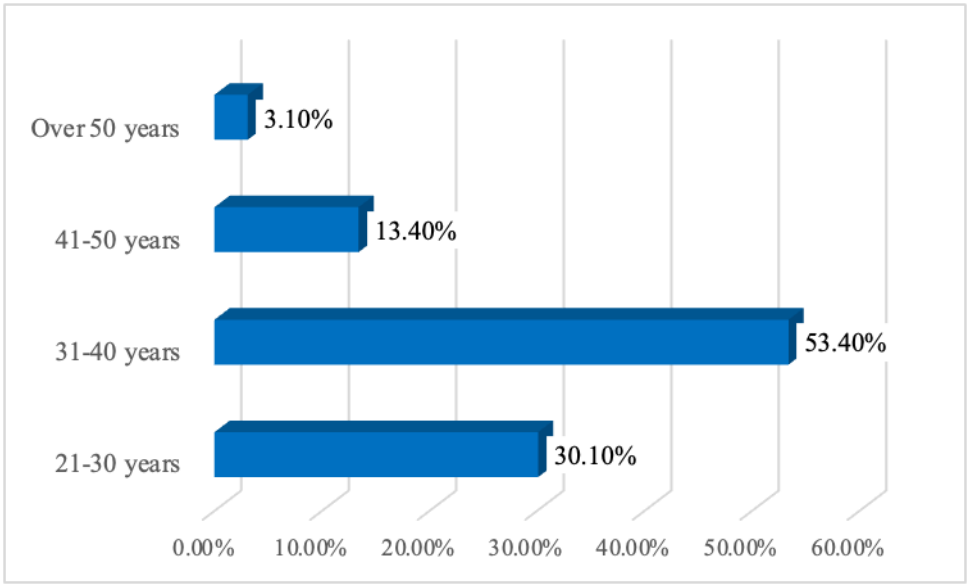

Figure 4.4: Age of Respondent

the results in Figure 4.4, illustrates that most (53.4%) of the study participants were within the age bracket of 31-40 years, 30.1% between 21-30 years, 13.4% were within the age bracket of 41-50 years, while only 3.1% were aged at least 50 years. The results imply that the study sample was made up of respondents of diverse age groups, however majority were between 31 and 40 years, implying that most businesses in the market are operated by mature people who understand and could provide information sought.

4.4.5 Level of Education

The responders were asked to state their highest educational level. This was necessary in determining the ability of the respondents to comprehend the research questions and provide useful information for the study. The results are exhibited in Figure 4.5.

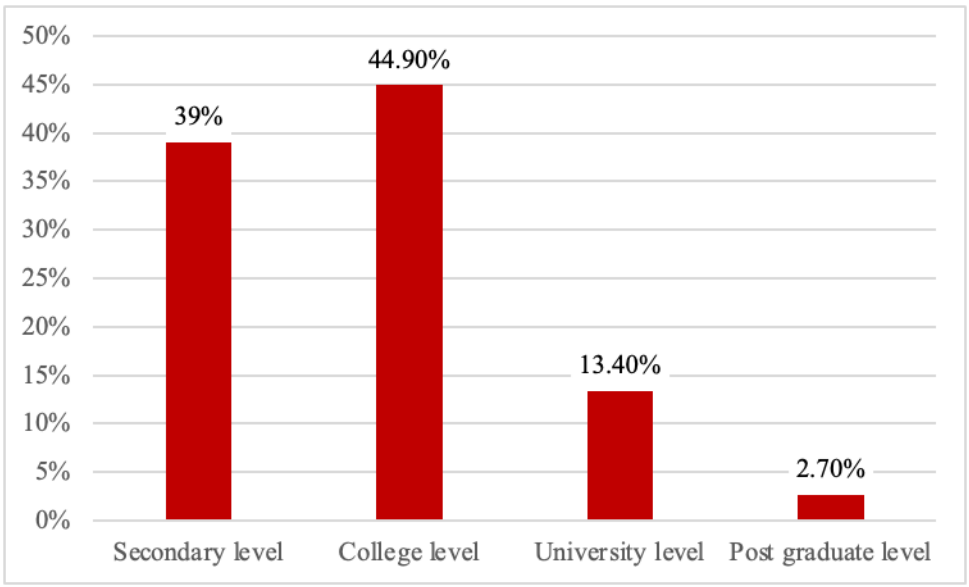

Figure 4.5: Highest Level of Education

Majority (44.9%) of the study participants attained college level of education, 39% had basic secondary education, and 13.4% were holders of bachelor's degree, while 2.7% had at least post graduate degrees. These findings suggest that the majority of respondents were well educated persons, who were in position to read and understand the concerns of the study and provide reliable information.

4.4.6 Number of Employees

The respondents were questioned about how many people were employed by their businesses. The responses were as illustrated in Figure 4.6.

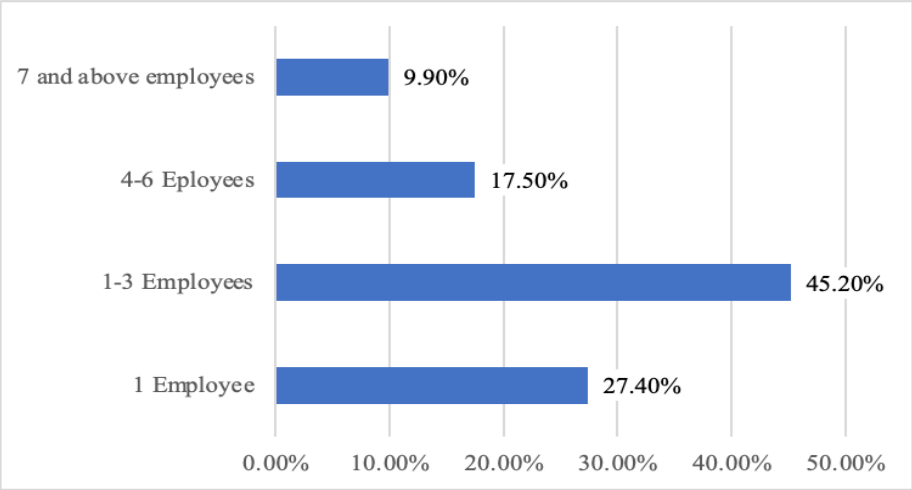

Figure 4.6: Number of Employees

The results in Figure 4.6 demonstrate that most (45.2%) of the businesses in Kamukunji market, Nairobi City County Kenya had between 1-3 employees, 27.4% had just a single employee, 17.5% had between 4-6 employees, while 9.9% had at least 7 employees. This implies that most of the businesses in the market are well developed to be able to absorb more employees.

4.4.7 Age of Business

The study aimed to ascertain how old the businesses in the market were, and the findings were as illustrated in Figure 4.7.

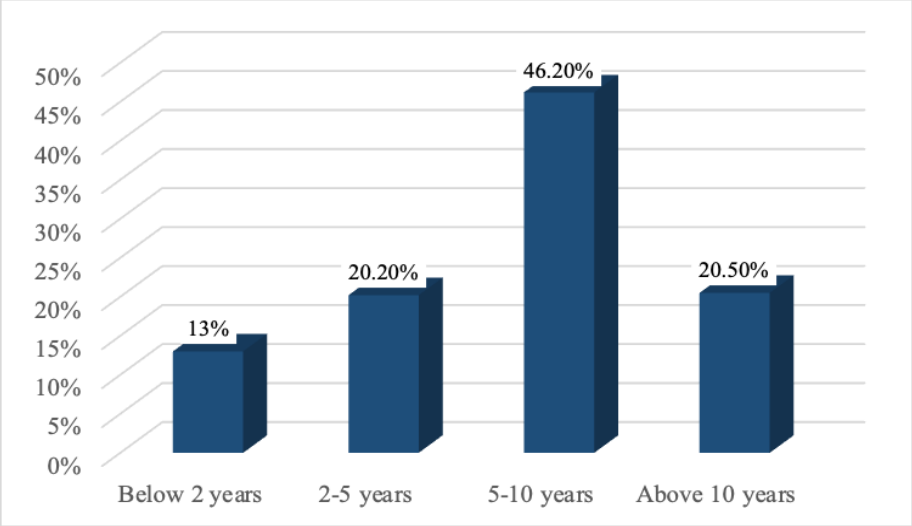

Figure 4.7: Age of Business

Based on the results in Figure 4.7, most (46.2%) of the businesses had been in existence for a period of between 5-10 years, 20.5% of the businesses were fund to have been in operation for more than 10 years, 20.2% had been operating in the market for between 2-5 years, while 12%of the businesses were barely 2 years old. This suggests that the majority of businesses in the study locale had existed long enough to be able to provide the data sought by the study.

4.4.8 Average Annual Turnover

The responders were additionally requested to list the average annual turnover of their businesses, and the responses were as illustrated in Table 4.4.

Table 4.4: Average Annual Turnover

Turnover	Frequency	Percentage
Below Kes.1(m)	25	8.6
Between Kes.1m to 2m	8	2.7
Between Kes.2m to 3m	39	13.4
Between Kes.3m to 4m	62	21.2
Between Kes.4m to 5m	43	14.7
Above Kes.5 Million	115	39.4
Total	**292**	**100**

Based on these results, majority of the businesses (39.4%) were found to be recording an annual turnover of more than 5 million Kenyan shillings, 21.2% of the businesses were registering an average annual turnover of between 3 million to 4 million shillings, 14.7% of the businesses had average annual turnover of between 4 and 5 million shillings, 13.4% between 2-3 million 8.6% recorded an average annual turnover less than 1 million Kenya shillings, while the least (2.7%) of the businesses recorded an average turnover of between 1-2 million shillings. The implication of this is that most businesses in the market are profitable, which may point to the successes from Safaricom digital credit. Table 4.5 illustrates the sources of capital for the businesses.

Table 4.5: Source of Capital

	Yes		No	
Question	**%**	**f**	**%**	**f**
Did your business borrow working capital money from digital money lenders over the last six months?	62.70%	183	37.30%	109
Did your business borrow working capital money from microfinance institutions (eg Musoni MFI, Mwananchi) over the last six months?	46.90%	137	53.10%	155
Did your business borrow working capital money from commercial banks (eg Equity, KCB, Coop Bank) over the last six months?	62.90%	183	37.10%	108

As presented in Table 4.5, majority (62.7%) of the businesses borrowed working capital money from digital money lenders over the last six months, 46.9% borrowed working capital money from microfinance institutions (eg Musoni MFI, Mwananchi) over the last six months, while 62.9% were found to have borrowed working capital money from commercial banks (eg Equity, KCB, Coop Bank) over the last six months. This implies that most of the businesses in Kamukunji market get their capital from mobile money services.

4.4.9 Records on Credit Sales

The respondents were asked if they were keeping written records on credit sales and creditors over the last six months or not. Their responses were as exhibited in Figure 4.8.

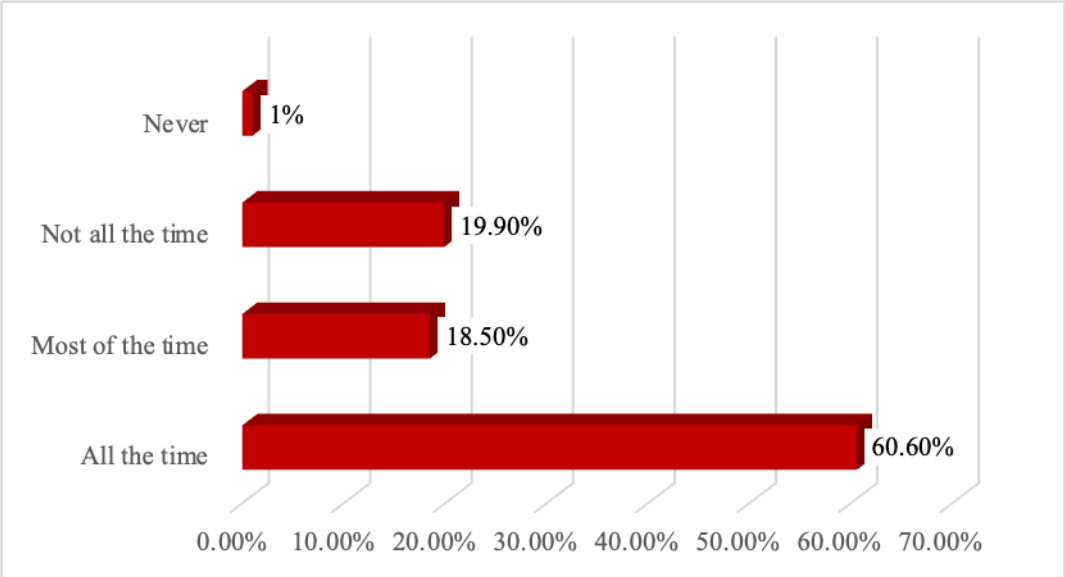

Figure 4.8: Records on Credit Sales

Considering the results in Figure 4.8, most of the businesses (60.6%) were keeping written records on credit sales and creditors all the time over the past 6 months, 19.9% were keeping then records but not all the time, 18.5% of the businesses were keeping the records most of the time, while only 1% of the businesses were found have never had any written records on the same over the previous six months. This implies most of the businesses in Kamukunji market have good recording keeping history.

4.4.10 Safaricom Mobile Money Services Registered to

Finally under the demographic characteristics, the respondents were asked to identify the various Safaricom Mobile Money Services they were registered to, and the results are illustrated in Figure 4.9.

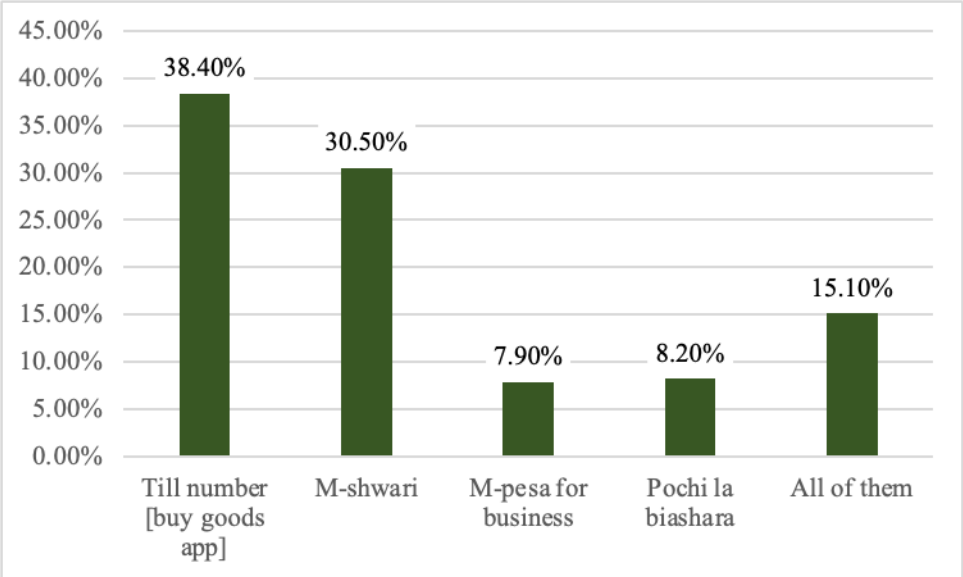

Figure 4.9: Safaricom Mobile Money Services Registered to

Based on these results, majority (38.4%) of the businesses were found to have registered to use Till number (buy goods app), 30.5% had registerd to use M-shwari services, 15.1% had registered to all the services, 8.2% were found to have been registered to Pochi la biashara services, while 7.9% had registered to M-pesa for business. This implies that most businesses prefer till number service since customers can send more for free and the money they receive cannot be reversed.

4.5 Descriptive Statistics

Descriptive statistics are utilised to illustrate the characteristics of the data in a study because they offer concise descriptions of the sample and the measures. The mean, percentages, and standard deviation are all part of descriptive analysis, which serves as the foundation for all quantitative analyses of data (Conradie & Paduri 2014). For savings and loan services, digital payments, mpesa for businesses, pochi la biashara, and access to trade credit, this section provides descriptive analysis. Responders were requested to rate their level of agreement with a statement on a Likert scale of 1 to 4 (1=Very low extent, 2-Low extent, 3=Great extent, and 4=Very great extent).

4.5.1 Descriptive Statistics on Savings and Loan Service

The first study objective was to ascertain effect of savings and loan service on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Table 4.6 shows the descriptive analysis results on savings and loan service.

Table 4.6: Descriptive Analysis Results on Savings and Loan Service

Statement	Very low extent	Low extent	Great extent	Very great extent	Mean	Std. Dev.
The main reason for saving with M-shwari is to increase chances of qualifying for high loan amount.	1.40%	5.50%	68.50 %	24.70%	3.164	0.575
I use the M-shwari saving to buy my business stock	11.60%	19.20 %	53.80 %	15.40%	2.729	0.861
Paying the suppliers	9.20%	18.50 %	30.80 %	41.40%	3.045	0.985
Buying more stock	18.50%	11.00 %	37.70 %	32.90%	2.849	1.077
For private use	27.10%	4.10%	37.00 %	31.80%	2.736	1.173
Does use of M-shwari loan increase your business chance for bank/microfinance finance credit?	3.10%	24.70 %	55.80 %	16.40%	2.856	0.718
Overall					**2.897**	**0.898**

The results in Table 4.6 show that majority (93.2%) of the respondents agreed that to a great extent, the main reason for saving with M-shwari was to increase chances of qualifying for high loan amount, 69.2% which is a majority of the responders to a great extent were using the M-shwari saving to buy business stock, 72.2% of the responders to a great extent were Paying the suppliers using soft loans borrowed from M-shwari.

Furthermore, majority of the responders (70.6%) to a great extent were using soft loans borrowed from M-shwari to buying more stock. Moreover, most (68.8%) of the businesses were to a great extent using soft loans borrowed from M-shwari for private uses. Finally, most (72.2%) of the responders agreed that to a great extent, use of M-shwari loan increase their business chance for bank/microfinance finance credit. The results overall had a mean and standard deviation of 2.897 and 0.898 respectively. Beck et al. (2018) claims that ccess to trade credit and the adoption of mobile money have a sizable beneficial association. There are three potential connections between

mobile money and trade credit, which is seen as a cure-all for theft. Additionally, the use of mobile money as a theft-deterrent payment method has the potentiality to raise adopters' future credit market price and, as a result, expand the amount of trade credit that is accessible to business owners. This will increase business owners' need for mobile money.

4.5.2 Descriptive Statistics on Digital Payment Services (Till Number)

The second study objective was to ascertain the impact of digital payment on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Table 4.7 illustrates the descriptive analysis results on digital payment services (Till Number).

Table 4.7: Descriptive Analysis Results on Digital Payment Services (Till Number)

Statement	Very low extent	Low extent	Great extent	Very great extent	Mean	Std. Dev.
In your view what is the extent which receipt of payments from multiple customers on your till number help to organize your business sales reconciliation?	0.00%	2.10%	74.00 %	24.00 %	3.219	0.461
Has the use of till number for payment reduced the fear for payment reversal?	0.00%	11.60 %	28.10 %	60.30 %	3.486	0.696
Do your business credit customers use friends to pay for goods bought on credit using the business till number?	28.80 %	47.60 %	18.50 %	5.10%	2.000	0.825
Overall					**2.902**	**0.661**

From the findings in Table 4.7, it is evident that majority (98%) to a great extent agreed that receipt of payments from multiple customers on till number help to organize their businesses sales reconciliation. This was affirmed by a mean and standard deviation of 3.219 and 0.461 respectively. Additionally, majority (88.4%) of the study participants were positive that to a great extent the use of till number for payment reduced the fear for payment reversal. The same was shown by mean and

standard deviation of 3.486 and 0.696 respectively. However, majority (76.4%) of the responders indicated that their businesses credit customers use friends to pay for goods bought on credit using the business till number to low extent. The results had an average mean and standard deviation of 2.902 and 0.661. These findings are consistent with assertions of Enriquez and Jackson (2021) that M-Shwari is failing to meet its objectives with regard to the unbanked and underbanked in Kenya.

4.5.3 Descriptive Statistics on Mpesa for Business

The third study objective was to assess the effect of Mpesa for business on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Table 4.8 shows the descriptive analysis results on Mpesa for business.

Table 4.8: Descriptive Analysis on Mpesa for Business

	Yes		No	
Question	**%**	**f**	**%**	**f**
Do you own a smart phone?	100.00%	292	0.00%	0
If yes, do you have mpesa for business application?	94.90%	277	5.10%	15

On the basis of the results in Table 4.8, all the respondents were owning smart phones. The results also show that most (94.9%) of the respondents had mpesa for business application. Table 4.8 shows more descriptive analysis results on mpesa for business.

Table 4.9: Descriptive Analysis Results on Mpesa for Business

Statement	Very low extent	Low extent	Great extent	Very great extent	Mean	Std. Dev.
I can pay my suppliers directly from the till number	2.70%	0.00%	76.00 %	21.20 %	3.158	0.546
I can receive payment from my customers through the till number	0.00%	2.40%	68.80 %	28.80 %	3.264	0.493
I can make withdrawals from multiple till numbers under my business name located elsewhere	2.10%	1.00%	58.90 %	38.00 %	3.329	0.605
I can view the sales revenue and payments of my business	0.00%	4.10%	62.30 %	33.60 %	3.295	0.539

for the past six months						
Do you ask customers who request trade credit, their business cash flow statements provided by M-pesa for business application?	59.60 %	20.50 %	17.80 %	2.10%	1.623	0.847
Do the data/cash flow statements help in deciding whether to give trade credit or not?	39.70 %	31.50 %	15.10 %	13.70 %	2.027	1.048
I can access instant soft loan based on the number of transactions	0.00%	0.70%	19.20 %	80.10 %	3.795	0.421
I can use the app to pay my suppliers directly to their mpesa till account	6.20%	0.00%	19.90 %	74.00 %	3.616	0.780
Does the ease of payment via this application influence your decision to sell on credit?	4.50%	48.60 %	46.60 %	0.30%	2.428	0.585
Does your supplier requests to see past transaction records before giving trade credit?	28.80 %	55.80 %	14.40 %	1.00%	1.877	0.677
Overall					**2.841**	**0.654**

Most of the respondents (97.2%) agreed that they were able to pay their suppliers directly from the till number to a great extent. The study also show that most (97.6%) of the responders were able to receive payment from customers through the till number to a great extent, 96.9% of them were to a great extent able to make withdrawals from multiple till numbers under business name located elsewhere, while 95.9% were able to view the sales revenue and payments of their businesses for the past six months to a great extent.

Furthermore, the results demonstrates that majority (80.1%) of the respondents were to a low extent asking their customers who request trade credit, their business cash flow statements provided by M-pesa for business application, 71.25 of the respondents that data/cash flow statements helped in deciding whether to give trade credit or not to a low extent. Furthermore, most of the responders (99.3%) indicated that they were able to access instant soft loan based on the number of transactions through the app to a great extent.

Similarly, most (93.9%) of the businesses were to a great extent able to use the Mpesa for Business services app to pay my suppliers directly to their mpesa till account, 53.1% of the business indicated that the ease of payment via the application was influencing their decision to sell on credit to low extent. Finally, most of the respondents (84.6%) did indicate that their supplier requests to see past transaction records before giving trade credit was to low extent. The results had an overall mean and standard deviation of 2.841 and 0.654 respectively. This suggests that most of the businesses agreed Mpesa for Business services app was influencing their businesses to great extent. The results agree with these of Safaricom Ltd report (2021) that the users can view collections and payments and transact directly from their mpesa business till. The users can withdraw from lipa na mpesa platform to their mpesa accounts, bank accounts or agents using mpesa for business application.

4.5.4 Descriptive Statistics on Pochi la Biashara Services

The fourth objective of the study was to ascertain the effect of pochi la biashara on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The respondents were asked if their businesses were using Pochi la biashara or not. The results illustrated are in Figure 4.10.

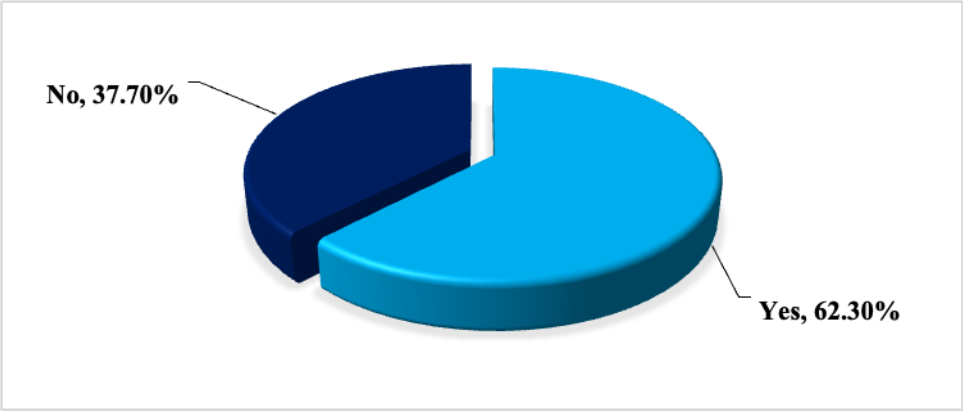

Figure 4.10: Use of Pochi la Biashara Service

Based on the results, most (62.3%) of the businesses were using Pochi la biashara, while 37.7% others were yet to start using pochi la biashara services. This shows that Pochi la biashara services from Safaricom is very important to most businesses in

Kamukunji market. Table 4.10 shows more descriptive analysis results on pochi la biashara.

Table 4.10: Descriptive Analysis Results on Pochi la Biashara Service

Statement	Very low extent	Low extent	Great extent	Very great extent	Mean	Std. Dev.
Pochi la Biashara helps in separation of my business funds from personal funds?	0.00%	0.00%	50.70%	49.30%	3.493	0.501
I am able to account for business money better	0.00%	0.00%	55.50%	44.50%	3.445	0.498
I am assured of payment security since the transactions cannot be reversed without my consent	0.00%	0.00%	51.70%	48.30%	3.483	0.501
The transactions can accommodate large amounts of sh.300,000 per day	1.40%	1.40%	28.10%	69.20%	3.651	0.581
I can use pochi la biashara app to access soft loan	1.40%	0.30%	44.90%	53.40%	3.503	0.583
Do you give preference to customers who use this application when they ask for trade credit?	30.50%	43.50%	7.20%	18.80%	2.144	1.055
My suppliers can assess the credit worthiness of my business from pochi la biashara transactions report whenever I request for trade credit?	7.20%	22.90%	48.30%	21.60%	2.842	0.843
Overall					**3.223**	**0.652**

The results in Table 4.10 shows that all the respondents were in agreement that Pochi la Biashara was helping them in separation of business funds from personal funds to a great extent, all the responders also indicated that they were able to account for business money better to a great extent. Similarly, all the respondents agreed that they were assured of payment security since the transactions could not be reversed without my consent to a great extent.

Moreover, majority (97.3%) of the participants indicated that the transactions could accommodate large amounts of sh.300, 000 per day to a greater extent, 98.3% of the responders were in consensus that they could use pochi la biashara app to access soft loan to a great extent. However, it is evident that most of the respondents (74%)

suggested that they were giving preference to customers who use pochi la biashara application when they ask for trade credit to a low extent.

Finally, most (69.9%) of the respondents agreed that their suppliers were able to assess the credit worthiness of their businesses from pochi la biashara transactions report whenever they request for trade credit to a great extent. According to Gogtay & Thatte (2017), Operators of SMEs should make an effort to maintain accurate records and, when necessary, utilize the services of SME expertise to do so at a reasonable price. The study though emphasizing on need to keep proper business record, focused only on formal sector. The current study not only focuses on informal sector but also the role of financial technology in record keeping especially cash flows and access to trade credit

4.5.5 Descriptive Statistics on access to trade credit

The dependent variable of the study was access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The respondents were asked to indicate how often their businesses received goods and services on credit from merchants on credit purchase. The response were as shown in Figure 4.11.

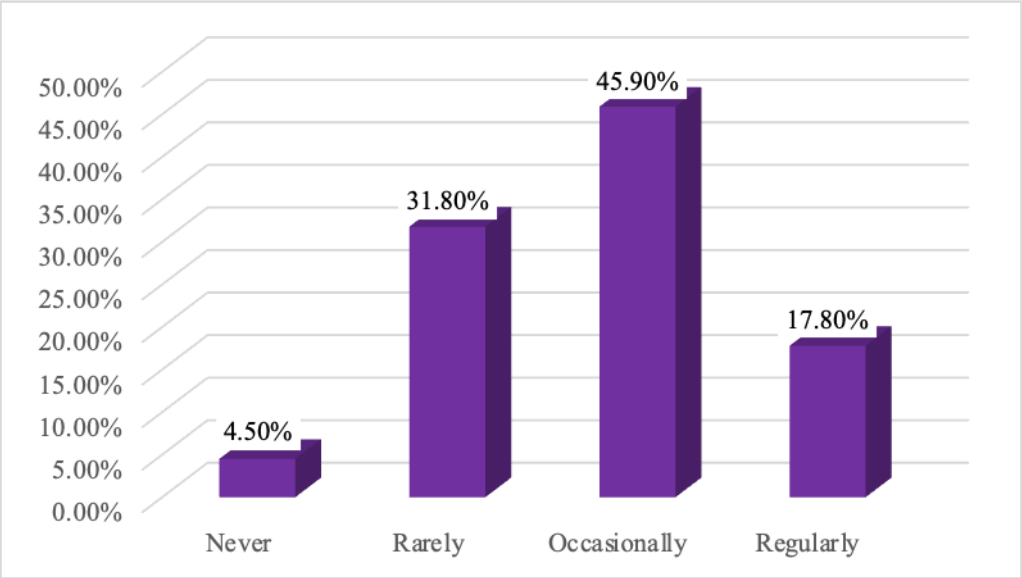

Figure 4.11: Goods and Services on Credit

Most (45.9%) of the businesses were found to be receiving goods and services from their suppliers occasionally, 31.8% were rarely receiving goods and services from their suppliers on credit, for 17.8% it was regularly, while 4.5% of the businesses had

never received any good or services from suppliers on credit. This implies that Safaricom credit apps are very important to most businesses in Kamukunji market. The respondents were further asked if their businesses were offering trade credits (credit sales to customers) or not. The results are in Figure 4.12.

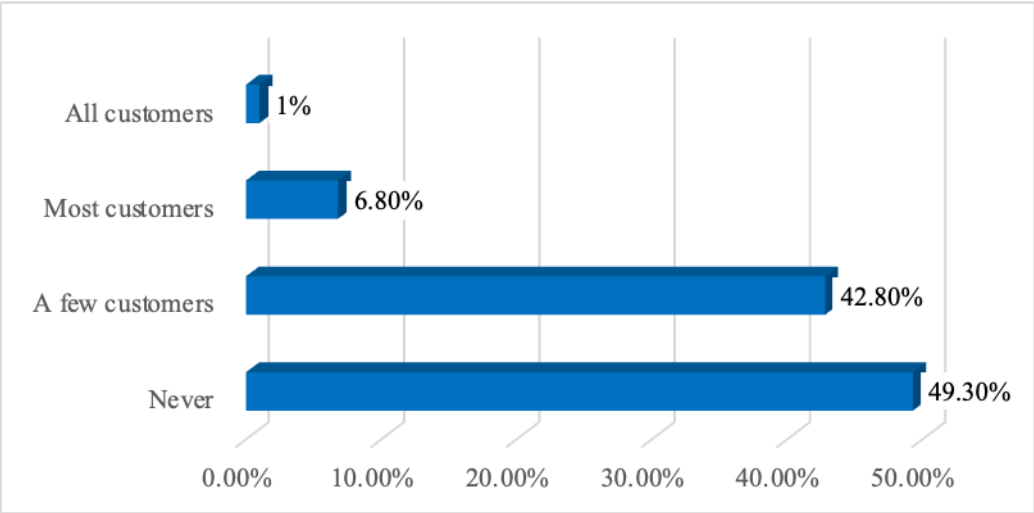

Figure 4.12: Trade Credits

Based on the results in Figure 4.12, most (49.3%) of the businesses had never offered trade credits (credit sales) to customers, 42.8% had offered trade credits (credit sales) to a few customers, 6.8% to most customers and only 1% had offered trade credits (credit sales) to all their customers. This implies that most of the businesses in Kamukunji are yet to be in position to provide trade credits to their customers.

4.6 Correlation Analysis

The term "correlation" is employed to explain the connection or link between two (or more) numerical variables. This analysis assesses the "strength" or "extent" of an association between the variables as well as its direction. Its core premise is that the quantitative variables have a straight-line linear relationship. Correlation coefficients have values between -1 and +1 and are the output of correlation analyses. If the correlation coefficient is one, it means that the two variables are perfectly related in a positive (linear) way; if it is one, it means that the two variables are perfectly related in a negative (linear) way; and if it is zero, it means that the two variables under study do not have a linear connection. (Gogtay &Thatte, 2017).

Correlation analysis was carried out to ascertain the correlation between the study variables of savings and loan service, digital payment, mpesa for business, pochi la biashara and access to trade credit. SPSS was utilised to create the combined Pearson correlation for the variables. To determine whether independent factors were interdependent and whether the independent variables were related to the dependent variable, employee Performance, the correlation coefficient was calculated. The correlation results are exhibited in Table 4.11.

Table 4.11: Correlation Matrix

		Access to trade credit	Saving and Loan services	Digital payment service	Mpesa for Business	Pochi la Biashara Service
Access to trade credit	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Saving and Loan services	Pearson Correlation	.678**	1.000			
	Sig. (2-tailed)	0.000				
Digital payment service	Pearson Correlation	.509**	.604**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Mpesa for Business	Pearson Correlation	.634**	.565**	.521**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Pochi la Biashara Service	Pearson Correlation	.645**	.598**	.507**	.570**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed).

The correlation results in table 4.11 shows that saving and loan services and access to trade credit were positively and significantly correlated (r=0.678, p=0.000<.05), Digital payment service was found to have strong positive and significant association with access to trade credit among businesses in Kamukunji market (r=0.509, p=0.000<.05). Additionally, Mpesa for business had strong positive and significant association with access to trade credit among businesses in Kamukunji market (r=0.634, p=0.000<.05). Finally, there existed strong positive and significant association between Pochi la Biashara Service access to trade credit among businesses in Kamukunji market (r=0.645, p=0.000<.05). The findings support the claims made by Gosavi (2017) that there existed a significant positive association between mobile

money use and firms' access to external finance. The study also discovered that access to outside funding is another route by which mobile money influences business owners' decisions to accept or extend trade credit.

4.7 Diagnostic Tests

4.7.1Test for Normality of Data

Normality describes if the data are properly modeled and have a normal distribution. By examining the graph and determining whether the distribution significantly departed from a bell-shaped normal distribution, it is possible to determine how far the data deviates from the Gaussian distribution. It determines the probability that a random variable will have a normal distribution. It is a determination of the data's normalcy in statistical tests. The data may contain outliers, various modes, inaccurate measurement devices, inaccurate distributions, zero or infinite limits, or sparse collections if the tests are non-normal (Singh & Masuku, 2014). The dependant variable has to be regularly distributed so as to fit a linear model. The researcher utilised the Shapiro-Wilk test to validate the normality test. If the significant result (p-value) for the test of the data was > 0.05, the null hypothesis was accepted; on the other hand, the null hypothesis was to be rejected if the value was <0.05. Shapiro Wilk test results are exhibited in table 4.12.

Table 4.12: Test for Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Access to Trade Credit	.128	292	.160	.936	292	.213

a. Lilliefors Significance Correction

As shown in Table 4.12, the dependent variable was normally distributed because the p-values for Shapiro-Wilk tests were greater than 0.05. This provides more evidence that the data was distributed normally.

4.7.2 Test for Multicollinearity

Multicollinearity analysis was done to determine if independent variables were highly associated with one another. Kothari & Garg (2014), orate that if the independent variables are similar in any manner, there is a very strong link. The Variance Inflation

Factor (VIF), a measure of multicollinearity in the set of multiple regression variables, was utilized by the researcher. The association between this variable and the others is larger the higher the value of VIF. A VIF value of 1-10 demonstrated the absence of Multicollinearity indications. The results are exhibited in Table 4.13.

Table 4.13: Multicollinearity Test

Variable	Collinearity Statistics	
	Tolerance	VIF
Savings and Loan Service	0.492	2.033
Digital Payment Service	0.575	1.739
Mpesa for Business Service	0.57	1.755
Pochi la biashara Service	0.551	1.815

The findings in Table 4.13 demonstrate that there was no multicollinearity among the independent variables, which were savings and loan service, digital payment, mpesa for business, and pochi la biashara. All the variables had tolerance values >0.2 and VIF values 10, showing this.

4.8 Regression Analysis

Using regression analysis, it was possible to determine the statistical link between the independent variables savings and loan service, digital payment, mpesa for business, pochi la biashara and the dependent variable access to trade credit. Each of the independent variables underwent linear regressions to determine how they related to Performance. Additionally, multiple regression analysis was done to determine the overall impact of the research factors on employee performance.

R squared was utilised to determine how well the model fit the data in order to grasp and comprehend the results of the regression study. Because it indicates the percentage of a variable's variance that can be predicted from another, the coefficient of determination, or R2, was utilized in this investigation. It is a metric that makes it possible to decide how relevant specific variables can be when extrapolating predictions from a certain model. Table 4.14 shows the model summary.

Table 4.14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.906a	0.821	0.818	0.31899

a Predictors: (Constant), Pochi la Biashara Service, Digital payment service, Mpesa for Business, Saving and Loan services

From the results on Table 4.14, savings and loan service, digital payment service, mpesa for business, pochi la biashara services were satisfactory variables in explaining access to trade credit among businesses in Kamukunji market. This fact is backed up by the coefficient of determination, also referred to as the R square of 0.821. This implies that savings and loan service, digital payment service, mpesa for business and pochi la biashara services jointly explain 82.1% of the variations in the dependent variable, which is access to trade credit among businesses in Kamukunji market. Table 4.15 illustrates the ANOVA Analysis results for the Overall Model.

Table 4.15: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	133.769	4	33.442	328.652	.000[b]
	Residual	29.204	287	0.102		
	Total	162.973	291			

a. Dependent Variable: Access to Trade Credit

b. Predictors: (Constant), Pochi la Biashara Service, Digital payment service, Mpesa for Business, Saving and Loan services

The outcomes of the analysis of variance (ANOVA) in Table 4.15 show that the general model was scientifically valid in describing the relationship between savings and loan service, digital payment service, mpesa for business, pochi la biashara services and access to trade credit among businesses in Kamukunji market. Further, the outcomes suggest that savings and loan service, digital payment service, mpesa for business and pochi la biashara services were good indicators of access to trade credit among businesses in Kamukunji market. The stated p value (0.000), which was less than the usual probability of 0.05 significance level, and an F statistic of 328.652 confirmed this. The regression of coefficients results is exhibited in Table 4.16.

Table 4.16: Regression of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.141	0.09		-1.568	0.118
	Savings and Loan Service	0.268	0.031	0.312	8.763	0.000
	Digital Payment Service	0.206	0.029	0.234	7.088	0.000
	Mpesa for Business Service	0.252	0.031	0.273	8.252	0.000
	Pochi la Biashara Service	0.250	0.03	0.285	8.452	0.000

a. Dependent Variable: Access to Trade Credit

Regression of coefficients results in Table 4.16 demonstrates that savings and loan service and access to trade credit among businesses in Kamukunji market are positively and significant related (β =.268, p=0.000<.05). The results also indicated that digital payment service and access to trade credit among businesses in Kamukunji market are positively and significant related (β =.206, p=0.000<.05). Similarly, Mpesa for business service and access to trade credit among businesses in Kamukunji market are positively and significant related (β =.252, p=0.000<.05). Finally, the results showed that Pochi la Biashara Service and access to trade credit among businesses in Kamukunji market are positively and significant related (β =.250, p=0.000<.05). This suggests that an increase in savings and loan service, digital payment service, mpesa for business and pochi la biashara services leads to an improvement in access to trade credit among businesses in Kamukunji market by 0. 268, 0.206, 0.252 and 0.250 units respectively.

These findings support the finding by Beck et al. (2018) that, for a given productivity level, trade credit has the ability to affect how much mobile money entrepreneurs use to buy inputs from suppliers. Second, fraud during trade credit payment impairs an entrepreneur's ability to obtain future credit. Therefore, mobile money as a theft-deterrent payment method has the potential to raise adopters' future credit market price and, as a result, raise the quantity of trade credit that is accessible to an entrepreneur. This will increase business owners' need for mobile money. Thirdly, given the possibility of theft, those who use cash are more likely to have a heavier

repayment load than those who utilize mobile money, which may limit the amount of products that may be financed.

Additionally, the results support those of a study by Enriquez and Jackson (2021), which demonstrated a significant link between M-Shwari use and higher income. Additional findings suggest that M-Shwari is falling short of its targets in terms of accessibility for Kenya's unbanked and underbanked. Furthermore, the findings were consistent with the conclusion by Safaricom Ltd report (2021) that this platform enables the users to have a better visibility of their business transactions in real time. The users can view collections and payments and transact directly from their mpesa business till.

4.9 Hypotheses Testing

Multiple linear regression analysis was utilised to assess the hypotheses, as illustrated in Table 4.15.

The First Hypothesis Tested was:

H_{01}: *Savings and loan service has no significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.*

The multiple linear regression was utlised to test the hypothesis, and the p-value was calculated. The H01 hypothesis was rejected if the p-value was less than.05; however, if $p > 0.05$, H01 was not rejected and was therefore embraced. The null hypothesis was that savings and loan services have no discernible impact on microbusinesses' access to trade credit in Nairobi City County, Kenya's Kamukunji market. Results in Table 4.15 show that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that savings and loan service has significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

The second Hypothesis Tested was:

H_{02}: *Digital payment has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya*

The multiple linear regression was utilised to test the hypothesis, and the p-value was calculated. The H02 hypothesis was rejected if the p-value was less than.05; however,

if p > 0.05, H02 was not rejected and was therefore embraced. Therefore, the null hypothesis was that access to trade credit by microenterprises in Kamukunji market, Nairobi City County, is not significantly impacted by digital payment. Kenya. Results in Table 4.15 show that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted digital payment has significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

The third Hypothesis Tested was:

H_{03}: *Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.*

The hypothesis was tested by utilizatuin a multiple linear regression and determined using p-value. The acceptance/rejection condition was that, if the p-value is less than .05, H_{03} is rejected; however, if p > 0.05, then H_{03} is not rejected, henceforth adopted. So the null hypothesis was that Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Results in Table 4.15 show that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

The fourth Hypothesis Tested was:

H_{04}: *Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.*

The multiple linear regression utilised to test the hypothesis yielded a p-value result. The acceptance/rejection condition was that, if the p-value is less than .05, H_{04} is rejected; conversely, if p > 0.05, then H_{04} is not rejected, henceforth adopted. So the null hypothesis was that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Results in Table 4.15 illustrates that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya.

4.10 Discussion of Findings

the study aimed to ascertain the effect of Safaricom Ltd mobile money services and access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya. The findings of the study were discussed per objective.

4.10.1 Savings & Loan Service and Access to Trade Credit

The first study objective was to determine effect of savings and loan service on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The descriptive results revealed that majority (93.2%) of the respondents agreed that to a great extent, the main reason for saving with M-shwari was to increase chances of qualifying for high loan amount, 69.2% which is a majority of the responders to a great extent were using the M-shwari saving to buy business stock, 72.2% of the respondents to a great extent were Paying the suppliers using soft loans borrowed from M-shwari.

Furthermore, the research revealed that majority of the respondents (70.6%) to a great extent were using soft loans borrowed from M-shwari to buying more stock. Moreover, most (68.8%) of the businesses were to a great extent using soft loans borrowed from M-shwari for private uses. The study also found that most (72.2%) of the respondents agreed that to a great extent, use of M-shwari loan increase their business chance for bank/microfinance finance credit.

The correlation analysis established that saving and loan services and access to trade credit were positively and significantly associated ($r=0.678$, $p=0.000<.05$). Moreover, regression analysis results revealed that savings and loan service and access to trade credit among businesses in Kamukunji market are positively and significant related ($\beta =.268$, $p=0.000<.05$). Finally, hypothesis test results led to the rejection of the null hypothesis and the conclusion was that savings and loan service has significant effect on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya.

The outcomes are consistent with Beck *et al* (2018).'s findings, which indicated a substantial positive connection between access to trade credit and mobile money adoption. There are three potential connections between mobile money and trade credit, which is seen as a cure-all for theft. Additionally, the use of mobile money as a

theft-deterrent payment method has the potential to raise adopters' future credit market price and, as a result, expand the amount of trade credit that is accessible to business owners. This in turn will increase business owners' need for mobile money.

4.10.2 Digital Payment Service and Access to Trade Credit

The second study objective was to ascertain the influence of digital payment on access to trade credit by microenterprises in Kamukunji market, Nairobi City County, Kenya. Descriptive results demonstrated that majority (98%) to a great extent agreed that receipt of payments from multiple customers on till number help to organize their businesses sales reconciliation. This was affirmed by a mean and standard deviation of 3.219 and 0.461 respectively.

Additionally, majority (88.4%) of the study participants were positive that to a great extent the use of till number for payment reduced the fear for payment reversal. The same was shown by mean and standard deviation of 3.486 and 0.696 respectively. However, majority (76.4%) of the respondents indicated that their businesses credit customers use friends to pay for goods bought on credit using the business till number to low extent. The results had an average mean and standard deviation of 2.902 and 0.661.

Correlation analysis results revealed that digital payment service was discovered to have strong positive and significant association with access to trade credit among businesses in Kamukunji market ($r=0.509$, $p=0.000<.05$). Additionally, regression analysis results revealed that digital payment service and access to trade credit among businesses in Kamukunji market were positively and significant related ($\beta =.206$, $p=0.000<.05$). Finally, the study tested the null hypothesis that digital payment has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The results showed that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted digital payment has significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. These findings support the finding by Wanyonyi and Bwisa (2018) that there is a strong beneficial impact on mobile money transfer and sale voumes of small and medium enterprises. Whereas this study focused on SMEs,

the current study will focus on microenterprises and establish whether use of till number as payment tool influences access to trade credit.

4.10.3 Mpesa for Business Service and Access to Trade Credit

The third objective of the study was to assess the effect of Mpesa for business on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Descriptive statistics results revealed that Most of the respondents (97.2%) agreed that they were able to pay their suppliers directly from the till number to a great extent. The study also show that most (97.6%) of the respondents were able to receive payment from customers through the till number to a great extent, 96.9% of them were to a great extent able to make withdrawals from multiple till numbers under business name located elsewhere, while 95.9% were able to view the sales revenue and payments of their businesses for the past six months to a great extent.

Furthermore, the results show that majority (80.1%) of the responders were to a low extent asking their customers who request trade credit, their business cash flow statements provided by M-pesa for business application, 71.25 of the respondents that data/cash flow statements helped in deciding whether to give trade credit or not to a low extent. Furthermore, most of the respondents (99.3%) suggested that they were able to access instant soft loan based on the number of transactions through the app to a great extent.

Similarly, most (93.9%) of the businesses were to a great extent able to use the Mpesa for Business services app to pay my suppliers directly to their mpesa till account, 53.1% of the business indicated that the ease of payment via the application was influencing their decision to sell on credit to low extent. Finally, most of the respondents (84.6%) did indicate that their supplier requests to see past transaction records before giving trade credit was to low extent.

Correlation analysis results revealed that Mpesa for business had strong positive and significant association with access to trade credit among businesses in Kamukunji market ($r=0.634$, $p=0.000<.05$). Regression analysis results revealed that Mpesa for business service and access to trade credit among businesses in Kamukunji market were positively and significant related ($\beta =.252$, $p=0.000<.05$). Finally, the study tested a null hypothesis that Mpesa for business has no significant on access to trade

credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The findings suggest that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The results agree with these of Safaricom Ltd report (2021) that the users can view collections and payments and transact directly from their mpesa business till. The users can withdraw from lipa na mpesa platform to their mpesa accounts, bank accounts or agents using mpesa for business application.

4.10.4 Pochi la Biashara Service and Access to Trade Credit

The fourth study objective was to ascertain the effect of pochi la biashara on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Descriptive analysis results revealed that all the respondents were in agreement that Pochi la Biashara was helping them in separation of business funds from personal funds to a great extent, all the respondents also indicated that they were able to account for business money better to a great extent. Similarly, all the respondents agreed that they were assured of payment security since the transactions could not be reversed without my consent to a great extent.

Moreover, majority (97.3%) of the participants indicated that the transactions could accommodate large amounts of sh.300, 000 per day to a greater extent, 98.3% of the respondents were in consensus that they could use pochi la biashara app to access soft loan to a great extent. However, it is evident that most of the respondents (74%) indicated that they were giving preference to customers who use pochi la biashara application when they ask for trade credit to a low extent. Finally, most (69.9%) of the respondents agreed that their suppliers were able to assess the credit worthiness of their businesses from pochi la biashara transactions report whenever they request for trade credit to a great extent.

Correlation analysis demonstrated that there existed strong positive and significant association between Pochi la Biashara Service access to trade credit among businesses in Kamukunji market ($r=0.645$, $p=0.000<.05$). Regression analysis results revealed that Pochi la Biashara Service and access to trade credit among businesses in Kamukunji market are positively and significant related ($\beta =.250$, $p=0.000<.05$).

Finally, the study tested a null hypothesis that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The findings showed that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

The results agree with those of Gogtay & Thatte (2017) which recommended that business owners of SMEs make an effort to maintain accurate records and, where necessary, use professionals in the field to do so for a reasonable fee. The study though emphasizing on need to keep proper business record, focused only on formal sector. The current study not only focuses on informal sector but also the role of financial technology in record keeping especially cash flows and access to trade credit.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The overview of the main conclusions, recommendations, and ideas for more research based on the findings are provided below. The study pursued to determine the effect of Safaricom Ltd mobile money services and access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The summary of the study findings was completed in accordance with the objective.

5.2 Summary of Major Findings

5.2.1 Savings & Loan Service and Access to Trade Credit

The first study objective was to determine effect of savings and loan service on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The descriptive findings showed that majority (93.2%) of the respondents agreed that to a great extent, the main reason for saving with M-shwari was to increase chances of qualifying for high loan amount, 69.2% which is a majority of the respondents to a great extent were using the M-shwari saving to buy business stock, 72.2% of the responders to a great extent were Paying the suppliers using soft loans borrowed from M-shwari.

Furthermore, the study found out that majority of the responders (70.6%) to a great extent were using soft loans borrowed from M-shwari to buying more stock. Moreover, most (68.8%) of the businesses were to a great extent using soft loans borrowed from M-shwari for private uses. The study also found that most (72.2%) of the responders agreed that to a great extent, use of M-shwari loan increase their business chance for bank/microfinance finance credit.

The correlation analysis established that saving and loan services and access to trade credit were positively and significantly associated ($r=0.678$, $p=0.000<.05$). Moreover, regression analysis results revealed that savings and loan service and access to trade credit among businesses in Kamukunji market are positively and significant related ($\beta =.268$, $p=0.000<.05$). Finally, hypothesis test results led to the rejection of the null hypothesis and the conclusion was that savings and loan service has significant effect

on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

5.2.2 Digital Payment Service and Access to Trade Credit

The second study objective was to ascertain the influence of digital payment on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Descriptive findings demonstrated that majority (98%) to a great extent agreed that receipt of payments from multiple customers on till number help to organize their businesses sales reconciliation. This was affirmed by a mean and standard deviation of 3.219 and 0.461 respectively.

Additionally, majority (88.4%) of the study participants were positive that to a great extent the use of till number for payment reduced the fear for payment reversal. The same was shown by mean and standard deviation of 3.486 and 0.696 respectively. However, majority (76.4%) of the respondents indicated that their businesses credit customers use friends to pay for goods bought on credit using the business till number to low extent. The results had an average mean and standard deviation of 2.902 and 0.661.

Correlation analysis results revealed that digital payment service was found to have strong positive and significant association with access to trade credit among businesses in Kamukunji market ($r=0.509$, $p=0.000<.05$). Additionally, regression analysis results revealed that digital payment service and access to trade credit among businesses in Kamukunji market were positively and significant related ($\beta =.206$, $p=0.000<.05$). Finally, the study tested the null hypothesis that digital payment has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The results suggested that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted digital payment has significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

5.2.3 Mpesa for Business Service and Access to Trade Credit

The third study objective was to assess the effect of Mpesa for business on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

Descriptive statistics results revealed that Most of the respondents (97.2%) agreed that they were able to pay their suppliers directly from the till number to a great extent. The study also show that most (97.6%) of the respondents were able to receive payment from customers through the till number to a great extent, 96.9% of them were to a great extent able to make withdrawals from multiple till numbers under business name located elsewhere, while 95.9% were able to view the sales revenue and payments of their businesses for the past six months to a great extent.

Furthermore, the results show that majority (80.1%) of the respondents were to a low extent asking their customers who request trade credit, their business cash flow statements provided by M-pesa for business application, 71.25 of the respondents that data/cash flow statements helped in deciding whether to give trade credit or not to a low extent. Furthermore, most of the respondents (99.3%) showed that they were able to access instant soft loan based on the number of transactions through the app to a great extent.

Similarly, most (93.9%) of the businesses were to a great extent able to use the Mpesa for Business services app to pay my suppliers directly to their mpesa till account, 53.1% of the business indicated that the ease of payment via the application was influencing their decision to sell on credit to low extent. Finally, most of the respondents (84.6%) did indicate that their supplier requests to see past transaction records before giving trade credit was to low extent.

Correlation analysis results revealed that Mpesa for business had strong positive and significant association with access to trade credit among businesses in Kamukunji market ($r=0.634$, $p=0.000<.05$). Regression analysis results revealed that Mpesa for business service and access to trade credit among businesses in Kamukunji market were positively and significant related ($\beta =.252$, $p=0.000<.05$). Finally, the study tested a null hypothesis that Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The results revealed that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Mpesa for business has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

5.2.4 Pochi la Biashara Service and Access to Trade Credit

The fourth objective of the study was to ascertain the effect of pochi la biashara on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. Descriptive analysis results revealed that all the respondents were in agreement that Pochi la Biashara was helping them in separation of business funds from personal funds to a great extent, all the respondents also indicated that they were able to account for business money better to a great extent. Similarly, all the respondents agreed that they were assured of payment security since the transactions could not be reversed without my consent to a great extent.

Moreover, majority (97.3%) of the participants indicated that the transactions could accommodate large amounts of sh.300, 000 per day to a greater extent, 98.3% of the respondents were in consensus that they could use pochi la biashara app to access soft loan to a great extent. However, it is evident that most of the respondents (74%) indicated that they were giving preference to customers who use pochi la biashara application when they ask for trade credit to a low extent. Finally, most (69.9%) of the respondents agreed that their suppliers were able to assess the credit worthiness of their businesses from pochi la biashara transactions report whenever they request for trade credit to a great extent.

Correlation analysis demonstrated there existed strong positive and significant association between Pochi la Biashara Service access to trade credit among businesses in Kamukunji market ($r=0.645$, $p=0.000<.05$). Regression analysis results revealed that Pochi la Biashara Service and access to trade credit among businesses in Kamukunji market are positively and significant related ($\beta =.250$, $p=0.000<.05$). Finally, the study tested a null hypothesis that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The findings showed that the p-value was less than 0.05. The null hypothesis was therefore rejected and alternative hypothesis adopted that Pochi la biashara has no significant on access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya.

5.3 Conclusions

The study concludes that to a great extent, the main reason for saving with M-shwari by most businesses is to increase chances of qualifying for high loan amount, to a great extent most businesses are using the M-shwari saving to buy business stock, most businesses in Kamukunji to a great extent are paying the suppliers using soft loans borrowed from M-shwari. To a great extent most businesses in Kamukunji market are sing soft loans borrowed from M-shwari to buying more stock. Moreover, most of the businesses in Kamukunj are to a great extent using soft loans borrowed from M-shwari for private uses. The study also concludes that the use of M-shwari loan increases business chance for bank/microfinance finance credit. Moreover, the study concludes that savings and loan service has positive and significant influence on access to trade credit among businesses in Kamukunji market.

Additionally, the study concludes that to a great extent most businesses in Kamukunji market believe receipt of payments from multiple customers on till number help to organize their businesses sales reconciliation. Also, use of till number for payment reduced the fear for payment reversal. The businesses credit customers use friends to pay for goods bought on credit using the business till number to low extent. The study also concludes that digital payment service and access to trade credit among businesses in Kamukunji market were positively and significant related.

Most businesses are able to pay their suppliers directly from the till number to a great extent, able to receive payment from customers through the till number to a great extent, able to make withdrawals from multiple till numbers under business name located elsewhere, and able to view the sales revenue and payments of their businesses for the past six months to a great extent thanks to Safaricom credit service apps. The study concludes that Mpesa for business service and access to trade credit among businesses in Kamukunji market were positively and significant related.

From the results, it can be concluded that Pochi la Biashara is helping businesses in separation of business funds from personal funds to a great extent, all the respondents also indicated that they were able to account for business money better to a great extent. With Pochi a Biashar, businesses are assured of payment security since the transactions could not be reversed without my consent to a great extent. Most

businesses give preference to customers who use pochi la biashara application when they ask for trade credit to a low extent, their suppliers are able to assess the credit worthiness of their businesses from pochi la biashara transactions report whenever they request for trade credit to a great extent. Finally, the study concludes that Pochi la Biashara Service and access to trade credit among businesses in Kamukunji market are positively and significant related.

5.4 Recommendations

5.4.1 Savings & Loan Service and Access to Trade Credit

On the basis of the findings and conclusions, this study recommends that businesses in Kamukunji County should strive to embrace Safaricom Ltd mobile money services such as savings and loan service, digital payment, mpesa for business, pochi la biashara since they enhance access to trade credit for the businesses. Since most of the businesses in Kamukunji market are small businesses, should adopt the use of Pochi la biashara since it makes it impossible for customers to reverse money once they pay for goods and services. The reversal option was meant to help those who had sent funds to the wrong number be able to easily recover their funds. However, when it comes to small businesses that usually operate without using Lipa Na M-PESA, this has become a thorn in their flesh. This is because some unscrupulous customers have formed the habit of reversing the payment as soon as they get the goods or service leaving the business owner counting losses.

5.4.2 Digital Payment Service and Access to Trade Credit

The study also recommends mobile operators to advertise mobile money services in order to improve customer share of wallet and to reach out to a new consumer group by introducing new services that would boost market share. Cross-selling opportunities for telecom services will become available as a result of the growing market share from the new customer categories, driving revenue growth for both businesses and companies.

5.4.3 Mpesa for Business Service and Access to Trade Credit

Furthermore, the study recommends that mobile money service providers find platforms with little lag time and quick answers to boost adoption rates in other

Kenyan major cities. Systems that reduce the chance of losing money are of particular interest. Examples include giving a way to verify the business identity someone has registered on their systems, verifying using the business name rather than the business mobile number, and giving a quicker way to cancel a bad transaction when it occurs.

5.4.4 Pochi la Biashara Service and Access to Trade Credit

There is need for Safaricom to ensure there is increasingly user-friendly support services that target small businesses like these in Kamukunji market. For instance, the availability of more support services has led to the usage of mobile internet and money on various transportation services. These are but a few illustrations of the crucial role service providers play in encouraging the usage of goods that could be advantageous to consumersTo promote the use of currently accessible products such as pochi la biashara and aid in the design of more business-directed services, it is advised to increase service provider and mall business collaborations.

5.5 Suggestion for Future Studies

The current study determined the effect of Safaricom Ltd mobile money services and access to trade credit by microenterprises in Kamukunji market, Nairobi City County Kenya. The findings revealed that the variables utilised in this study which included savings and loan service, digital payment service, mpesa for business, pochi la biashara services could jointly explain 82.1% of the variations in the dependent variable, which is access to trade credit among businesses in Kamukunji market. Further study should be conducted to establish the other variables responsible for the remaining 17.9%. Additionally, the current study used neither moderating nor intervening variable. Therefore, future studies may try to conduct the same study but included ether moderating variable such as customers preference or intervening variables such as government policies.

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APPENDICES

APPENDIX 1: INTRODUCTION LETTER

Dear Respondent,

I am a graduate student of Master of Business Administration at Kenyatta University. As part of the course requirements, I am undertaking a research on “Safaricom Ltd mobile money services and access to trade credit by microenterprises in Nairobi City County Kenya.” This letter's purpose is to ask that you take your time to complete this questionnaire or respond to the questions included within it. The information collected will be used solely for this study and will be kept in strict confidence. Your assistance in completing the questionnaire would be extremely valuable and greatly appreciated.

I appreciate your support and cooperation.

Regards,

Eva Ngigi

APPENDIX II: QUESTIONNAIRE

At Kenyatta University, I am an MBA student. I based the following questionnaire on the subject mentioned above. Please take a moment to respond to the questions to the best of your ability. The only purpose for which the data gathered through this questionnaire will be used is for this study.

INSTRUCTION: Tick [] in the space provided to indicate:

Part A: General Information

1. Indicate your gender?

   Male ( )

   Female ( )

2. Describe your position in the company?

   Business Owner ( )

   Employed ( )

3. Which SME industry do you work in?

   Apparel (Clothing) ( )

   Hardware ( )

   Motor Spare Parts ( )

   Cultery ( )

   Shooes ( )

   Toys ( )

   Beauty Products ( )

   Any other (specify) […….]

4. What age group are you?

   Below 20 years ( )

21 – 30 years ( )

31 – 40 years ( )

41 – 50 years ( )

Over 50 years ( )

5. What is your highest educational level?

Primary Level ( )

Secondary level ( )

College Level ( )

University Level ( )

Postgraduate Level ( )

6. How many people work for your company?

1 ( )

1 – 3 ( )

4 – 6 ( )

7 and Above ( )

7. How long has your company been around?

Below 2 years ( )

2 – 5 years ( )

5 – 10 years ( )

10 years and above ( )

8. What is your typical yearly revenue in Kenyan Shillings?

Below Kes. 1m. ( )

Between Kes. 1m. −2m. ( )

Between Kes. 2m. −3m. ( )

Between Kes. 3m. −4m. ( )

Between Kes. 4m. −5m. ( )

Above Kes. 5.

9. Did your business borrow working capital money from digital money lenders over the last six months?

   Yes [ ]

   No [ ]

10. Did your business borrow working capital money from microfinance institutions (eg Musoni MFI, Mwananchi) over the last six months?

    Yes [ ]

    No [ ]

11. Did your business borrow working capital money from commercial banks(eg Equity, KCB, Coop Bank) over the last six months?

    Yes [ ]

    No [ ]

12. Did your business borrow working capital money from friends over the last six months?

    Yes [ ]

    No [ ]

13. Has your business kept written records on credit sales and creditors over the last six months?

    All the time [ ]

    Most of the time [ ]

    Not all the time [ ]

    Never [ ]

14. Are you a registered Safaricom mobile money user of any of the following services?

    Till number [buy goods app] [ ]

    M-shwari [ ]

M-pesa for business [ ]

Pochi la biashara [ ]

SECTION B: Safaricom Ltd Mobile Money Services: (Tick where appropriate)

Key

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

I. Digital Payment Services (Till Number)

15. In your view what is the extent which receipt of payments from multiple customers on your till number help to organize your business sales reconciliation?

    1 = Very Low Extent

    2 = Low Extent

    3 = Great Extent

    4 = Very Great Extent

16. Has the use of till number for payment reduced the fear for payment reversal?

    1 = Very Low Extent

    2 = Low Extent

    3 = Great Extent

    4 = Very Great Extent

17. Do your business credit customers use friends to pay for goods bought on credit using the business till number?

    1 = Very Low Extent

    2 = Low Extent

3 = Great Extent

4 = Very Great Extent

II. Savings and Loan Services (M-shwari)

18. The main reason for saving with M-shwari is to increase chances of qualifying for high loan amount.

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

19. I use the M-shwari saving to buy my business stock

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

20. What does your business do with the soft loan borrowed from M-shwari for?

Key

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

	1	2	3	4
Paying the suppliers				

Buying more stock				
For private use				

21. Does use of M-shwari loan increase your business chance for bank/microfinance finance credit?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

III. Mpesa for Business Services

22. Do you own a smart phone

Yes [ ]

No [ ]

23. If yes, do you have mpesa for business application?

Yes [ ]

No [ ]

24. If yes, what services do you derive from this service:

Key

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

	1	2	3	4
I can pay my suppliers directly form the till number				
I can receive payment from my customers through the till number				

I can make withdrawals from multiple till numbers under my business name located elsewhere				
I can view the sales revenue and payments of my business for the past six months				

25. Do you ask customers who request trade credit, their business cash flow statements provided by M-pesa for business application?

    1 = Very Low Extent

    2 = Low Extent

    3 = Great Extent

    4 = Very Great Extent

26. Do the data/cash flow statements help in deciding whether to give trade credit or not?

    1 = Very Low Extent

    2 = Low Extent

    3 = Great Extent

    4 = Very Great Extent

27. What other benefits does this app provide to your business:

Key

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

	1	2	3	4
I can access instant soft loan based on the number of transactions				
I can use the app to pay my suppliers directly to their mpesa till account				

28. Does the ease of payment via this application influence your decision to sell on credit?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

29. Does your supplier requests to see past transaction records before giving trade credit?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

IV. Pochi la Biashara services

30. Does your business use this application?

Yes [ ]

No [ ]

31. If no , provide possible reasons for not using it

i. ……

ii. ……

32. Pochi la Biashara helps in separation of my business funds from personal funds?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

33. If your business is using this service, how has it benefited your business?

Key

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

	1	2	3	4
I am able to account for business money better				
I am assured of payment security since the transactions cannot be reversed without my consent				
The transactions can accommodate large amounts of sh.300,000 per day				
I can use pochi la biashara app to access soft loan				

34. Do you give preference to customers who use this application when they ask for trade credit?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

35. My suppliers can assess the credit worthiness of my business from pochi la biashara transactions report whenever I request for trade credit?

1 = Very Low Extent

2 = Low Extent

3 = Great Extent

4 = Very Great Extent

SECTION C: Access to Trade Credit (Tick where appropriate)

36. How often does your business receive goods and services on credit from suppliers (credit purchases)?

Never [ ]
Rarely [ ]
Occasionally [ ]
Regularly [ ]

37. Does your business offer trade credit (credit sales to customers)?

Never [ ]
A few customers [ ]
Most customers [ ]
All customers [ ]

38. What do you require from your customers before selling your goods to them on credit?

i. ……
ii. ……
iii. ……
iv. ……

APPENDIX III: APPROVAL OF RESEARCH PROJECT PROPOSAL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
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P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 28th September, 2022

TO: Eva Ngigi
C/o Accounting and Finance Dept.

REF: D53/PT/28346/2019

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

We acknowledge receipt of your revised Project Proposal as per our recommendations raised by the Graduate School Board at its meeting of 14th September, 2022, Entitled, **"Safaricom Limited's Mobile Money Services and Access to Trade Credit by Microenterprises in Nairobi City County, Kenya".**

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

DR. HARRIET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, Department of Accounting and Finance

Supervisors:

1. Dr. Jeremiah Koori
   C/o Accounting and Finance Dept.
   Kenyatta University

APPENDIX IV: NACOSTI PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 798124

Date of Issue: 07/October/2022

RESEARCH LICENSE

This is to Certify that Ms.. EVA WARUGURU NGIGI of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: SAFARICOM LIMITED'S MOBILE MONEY SERVICES AND ACCESS TO TRADE CREDIT BY MICROENTERPRISES IN NAIROBI CITY COUNTY KENYA for the period ending : 07/October/2023.

License No: NACOSTI/P/22/20799

798124

Applicant Identification Number

Director General
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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

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