

**IMPACT OF MOBILE BANKING SERVICES ON THE PERFORMANCE OF
SMALL AND MEDIUM SCALED BUSINESSES IN NASARAWA STATE, NIGERIA**

BY

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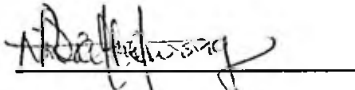
**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF POSTGRADUATE
STUDIES, NASARAWA STATE UNIVERSITY, KEFFI, IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
POSTGRADUATE DIPLOMA IN BUSINESS ADMINISTRATION (PGD)**

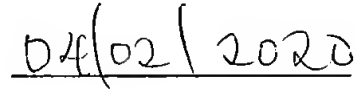
**DEPARTMENT OF BUSINESS ADMINISTRATION
FAULTY OF ADMINISTRATION
NASARAWA STATE UNIVERSITY, KEFFI
NIGERIA**

DECEMBER, 2020

DECLARATION

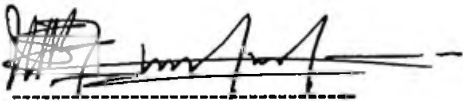
I hereby declare that this project has been written by me and it is a report of my research work. It has not been presented in any previous application for any Post Graduate Diploma in Business Administration. All quotations are indicated and sources of information specifically acknowledged by means of references.


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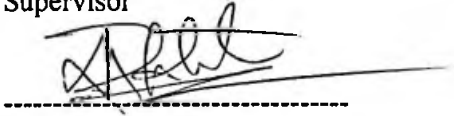

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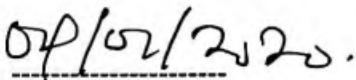
CERTIFICATION

This project, "Impact of Mobile Banking Services on the Performance of Small and Medium Scaled Businesses in Nasarawa State, Nigeria" meets the regulations governing the award of Post Graduate Diploma (PGD) in Business Administration of the School of the School of Postgraduate Studies, Nasarawa State University, Keffi, and is approved for its contribution to knowledge.



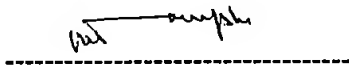
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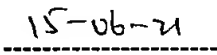


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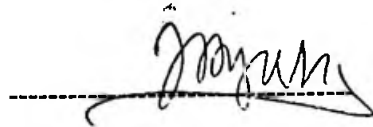
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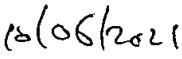
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Date

DEDICATION

This project work is dedicated to Almighty God, creator of the universe.

ACKNOWLEDGEMENTS

My deepest appreciation goes to Almighty God for the grace given to me throughout this programme.

I wish to say a big thank you to my project supervisor, Dr. Vincent Paul for his advice, suggestion, contribution and patience toward the success of this project work.

With all sense of honour, I will like to express my delight to the Dean Faculty of Administration; Prof. B. E. Barde, the Head of Department Business Administration; Dr. Abdul Adamu and all the Departmental Lecturers who stood by me and supported my academic pursuit. May the God Almighty meet you all at the point of need, Amen.

I am greatly indebted to my parent; Mr. and Mrs. Kireapomo Ndatuwon for their supports towards the success of my programme in this great institution.

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ABSTRACT

The increase in technological awareness in developing economies and growing acceptance of new technology is a matter of concern of which some economies are yet to fully align to the trend while others have accepted the global order in the technological world. The convenience of this development is an issue that has to be looked into. This study examined the impact of mobile banking services on the performance of SMEs in Nasarawa state. The study adopted a descriptive design of which all SMEs within Nasarawa State constitutes the study population and random sampling technique was employed to select 350 SMEs across Nasarawa State. Primary data were collected through the use of the survey questionnaire. The data collected were analyzed with the use of tables and simple percentages, as well as the use of graphs. The analysis was carried out with the Statistical Package of Social Scientists (SPSS) (version 25). The study reveals that that respondents had a widespread knowledge of mobile money services in the locality in respect of sending and receiving money, purchase of airtime, viewing transactions and depositing cash, banking services through mobile money such as viewing bank statements or receiving notifications of transactions. It was found that the impact of mobile money service on operating cost of SMEs was positive, although low, it was found that the use of mobile banking had very high positive impact on sales volume of SMEs and it was also found that the effect of adopting mobile banking services by SMEs in Nasarawa state made them perform better. This study therefore, concludes that mobile money has made a positive contribution to the SME sector since majority of the traders rely on it as opposed to the formal banking sector for their day to day transactions.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Developments in banking innovations has seen the application of mobile banking services in the provision of payment solutions, as well as other financial benefits to modern day businesses. The use of electronic money accounts that can be accessed via the mobile phone is of immense benefit to small enterprises, whose needs might otherwise, not be properly served by commercial banks. Mobile banking enables anywhere, anytime banking. Overcoming limitations of conventional banking, customers are given the ability to make financial transactions and have access to financial services on the go. Mobile banking refers to the platform that enables customers have access to services such as fund transfers, bill payments, balance information and available investment options (Lacmanovic, Lacmanovic, & Markoski, 2012).

With the increasing technological awareness in developing economies and growing acceptance of new technology, Benanati and Serva (2007) point out that the benefits of increasing penetration and anytime availability will bring about mobile-based business models that would be crucial for achieving branchless banking, digressing from brick and mortar establishments towards offering financial services at low cost, and real time transactions over secure networks. Mobile banking in developing nations such as Nigeria are driven by high mobile penetration and limited conventional banking facilities. Offering mobile banking services gives banks the opportunity to offer innovative banking and payment services. Retail and commercial banks around the world are deploying a range of mobile banking solutions aimed at

customer convenience and cost reduction (Lacmanovic, Lacmanovic, & Markoski, 2012).

SMEs in Africa have been recognized by Lennart and Björn (2010) to have a very strong cash-based heritage, which established cash as the default means of carrying out its business transactions. Cash is therefore established as the key to doing business, so that the success of the business depends to a large extent on how quickly cash is mobilized from savings, credit from suppliers or customer payments upon delivery. The implication of this therefore, is that the performance of SMEs is dependent on the speed to which cash is received and paid, as any delay negatively affects the business. The adoption of mobile banking services can, therefore, be seen as tool of upgrading the financial functionality of SMEs.

An important aspect of mobile banking is that mobile networks can reach remote areas, thereby making it possible for financial transactions to be made with ease and speed from any location that has cellular service. The research study thus, sought to find out the level of mobile banking adoption among SMEs in Nigeria (with particular focus on SMEs in Nasarawa state), as well as the impact of mobile banking among these businesses on various aspects of performance of these business enterprises.

1.2 Statement of the Problem

Mobile money service providers have brought new innovation to the financial service sector. While many people have quickly embraced the innovation of the mobile money transfer service, some people have argued that the service is too expensive and inaccessible by the poor and small businesses. On the other hand, there is other school of thoughts that as viewed mobile money service as conventional, cheap and inclusive has--n the introduction of mobile money service benefited those communities that

were previously financially exceeded. Should rural folks, poor communities and SMEs rejoice due to the introduction of mobile money transfer services?

The other problems encountered by mobile phone users that they do sometimes find the agents with low amount of money for withdrawals and no counter payments. This simply defeats the objective of making financial services convenient to the mobile phone users (Mabveka, 2017). It on this note that this project work found credence to examine the adoption of mobile money services and its impact on the performance of small and medium scale businesses in Nasarawa State, Nigeria.

1.3 Research Questions

- i. What is the impact of mobile banking on operating costs for SMEs in Nasarawa state?
- ii. To what extent does payment solutions provided by mobile banking have an impact on sales revenue for SMEs in Nasarawa state?
- iii. What is the impact of mobile banking on operational effectiveness of SMEs in Nasarawa state?

1.4 Objectives of the Study

The main objective of this work was to examine the impact of mobile banking services on the performance of SMEs in Nasarawa state. However, the objectives of the study were specifically to:

- i. determine the impact of mobile banking on operating costs of SMEs in Nasarawa state.

- ii. examine the extent to which payment solutions provided by mobile banking have an impact on sales revenue for SMEs in Nasarawa state?
- iii. evaluate the impact of mobile banking on the operational effectiveness of SMEs in Nasarawa state?

1.5 Statement of Hypothesis

H₀₁: Mobile banking does not have a significant impact on operating costs of SMEs in Nasarawa state.

H₀₂: Payment solutions provided by mobile banking does not have significant impact on sales revenue of SMEs in Nasarawa state.

H₀₃: Mobile banking does not have significant impact on operational effectiveness of SMEs in Nasarawa state.

1.6 Significance of the Study

The study is significant, as SMEs are believed to be the heart of Nasarawa economy as they contributed significantly to the GDP of the state ranging from \$1,588 in per capital income and amounting to \$3.02billion in total. The study will therefore be crucial for policy makers and various stakeholders when they come up with policies that affects SMEs. Through recommendations provided by the study, these groups of individuals will have the competency to effectively put policies in place that would spur wide use of mobile banking platforms among SMEs in the country, towards the achievement of both an increased contribution of SMEs on the economy, as well as the achievement of the cashless policy that has been pushed by the federal government and Central Bank of Nigeria (CBN).

The study will be of help to network providers as it unveils the negatives and positives associated with the use of mobile banking platforms among individuals and businesses in the country. This would allow them put in efforts aimed at effectively ensuring an improvement in the efficiency and effectiveness of mobile money transfer services, mobile cellular provider will be guided on the issues that need further improvement.

As an important addition to existing literature in the area of mobile banking and its adoption by, and effect on SMEs in the country, the study will serve as an indispensable source of information and direction for prospective researchers who aiming to carrying out empirical investigations into related areas as well as those not adequately covered by the current study. It will also serve as a source of information for the general public in giving information on areas related to the study area, allowing for a comprehension of the subject matter.

1.7 Scope of the Study

The study was specifically focused on measuring the impact of mobile banking on the performance of SMEs in Nasarawa state. The study depended on the use of primary data collected through the application of questionnaires distributed to selected SMEs in the state for all variables under consideration.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Mobile Banking

The infusion of Information and Communication Technology (ICT) in business practice has revolutionized the way businesses carrying out their operations, allowing businesses function via financial avenues which were hitherto not available. One of the ways this has occurred, and perhaps the most common, is in the area of mobile banking (Harris, 2013). Mobile banking entails individuals having access to financial services from their mobile phones through usage of Unstructured Supplementary Service Data (USSD) codes. USSD is a communications protocol for mobile communication technology which is used to send text between mobile telephones and an application programme in the mobile network, which does not require users to have access to the internet (Shrier, Canale, & Pentland, 2016; FINMARK, 2017).

Mobile phones have become integral tools in modern day socio-economic frameworks, especially in less developed economies, such as those is Africa which lack formal financial systems. This application will only continue to increase with the growing appetite for mobile phones on that continent. The mobile phone penetration rate for sub-Saharan Africa is estimated to at 52%, with smartphone penetration at 45% (Chibango, 2014; Gilbert, 2020). “Mobile” is the keyword in mobile banking. As observed by Venkatesh and Davis (2016), the innovation that is mobile banking functions through the mobile network to connect the mobile device with banking services through various interfaces such as SMS, USSD or mobile applications (on

smartphones). Customers, through this framework, can get access to financial services without time or geographical constraints. The banking sector has accommodated this by drifting more towards the provision of services that are more professional and personalized (Ibrahim, Joseph, & Ibex, 2016).

The mobile banking framework is structured in a way that addresses a number of problems. According to Mabveka (2017), the structure is disaggregated into the following:

- i. Owner/Operator: this is usually the Mobile Network Operator or a financial institution.
- ii. Bank Account Operator: the transferred money is put in a regulated account.
- iii. Offered Service: this can be peer to peer transfers, remittance, bill payments/receipt, salary payments/receipt, retail payments, and money storage/savings.
- iv. Delivery: the service is delivered through the customer's phone or over the counter.
- v. Distribution: this involves having agent networks to carry out the necessary procedures to work out the system.
- vi. Customers Served: at least one party in a transaction have to be a subscriber of the mobile network services.
- vii. Fee: the charge is either a transaction based fee or just a fee chargeable to the consumer.

Lacmanovic, Lacmanovic and Markoski (2012) highlight some common services offered by banks to their consumers:

- i. Account alerts, security alerts and reminders
- ii. Account balances, updates and history
- iii. Customer service via mobile
- iv. Branch or ATM location information
- v. Electric bill, deliver online payments by secure
- vi. agents and mobile client applications
- vii. Domestic and international funds transfers
- viii. Transaction verification
- ix. Insurance policy management
- x. Pension plan management
- xi. Mortgage alerts
- xii. Blocking of (lost, stolen) cards
- xiii. Withdrawal at banking agent
- xiv. Deposit at banking agent
- xv. Mobile recharging
- xvi. Peer to Peer payments

2.1.2 Concept of Small and Medium Scale Businesses Performance

SMEs have been defined in different ways based on different criteria such as culture, purpose and the policy governing SME sector in a particular country. According to Ali, Rashid and Khan (2014), SMEs have been defined by some authors based on capital assets, and others have explained them on the basis of skill and turnover. Bolton (1971) differentiates between economic and statistical definitions of SMEs. The former sees SMEs as independent firms with market shares and management handled by owners themselves, or part owners personally, and not by the medium of formalized management structure. In terms of statistics, on the other hand, SMEs are defined with respect to size, contribution to GDP, employment opportunities provided by these firms, exports, and their contribution to national economy. As observed by Ali, Rashid and Khan (2014), SMEs in developing countries are classified as below:

- i. Micro-firms with less than five workers.
- ii. Small-firms with 5 to 19 workers.
- iii. Medium-firms with 20 to 99 employees.
- iv. Large-firms with 100 or more employees.

Although SMEs have been defined by different economists differently but they have been recognized as an important potential sector for generation of employment opportunities and major contributor of livelihood for the poor. Importance of SMEs has been recognized all over the world. SMEs increase productivity growth in the economy. Increased productivity growth plays an important role for public welfare and reduction in poverty. SMEs not only play significant complementary role in industrialization of the economy but also act as driver of structural change. The

productivity growth in the economy implies innovation in the economy. SMEs growth also enhances the degree of specialization (Ali, Rashid, & Khan, 2014).

SMEs have received a lot of attention in recent times owing to such socio-economic impact. These businesses have been recognized by economic managers as crucial in resolving the problems of poverty and unemployment in most developing countries. Rahanaty (2009) argue that the importance of SMEs is reflected in their stimulation of indigenous entrepreneurship, facilitation of effective mobilization of local resources including capital and skill as well as reduction in regional disparities. Moreover, in a country like Nigeria with an adverse Balance of payment situation, the growing contribution of the small scale industries sector in Nigeria's export portfolio goes a long way in generating foreign exchange and smoothening out the adverse balanced of payment situation. This is important to the economy in that large percentage of their production inputs are sourced locally thus, reducing the pressure on the limited foreign exchange earnings and helping to eliminate some of the deficit in the balance of payment.

According to Ikherehon (2002), SMEs constitute the very basis of the national economy in terms of development of local technology, stimulation of indigenous entrepreneurship, mobilization and utilization of domestic savings, employment creation, structural balancing of large and small industry sectors in both rural and urban areas, supply of high quality intermediate products thereby strengthening the international competitiveness of manufacturer's goods, stimulate technological development and innovations, provide the capacity to expand export possibility and substitute import effectively.

There is a consensus among policymakers, development economists and international development partners that SMEs are tools for industrial growth and overall economic development. The renewed attention given to SMEs is a digression from the historical preference for large sized business enterprises, based on the traditional economies of scale. This viewpoint is premised on the perception that bigger is better. Ironically, all big enterprises were initially small, implying that small enterprises eventually, become big. Udhe (1999) identified the lifecycle of SMEs as passing through four major stages: start up, accelerated growth, stable growth and maturity.

The Start-up period typically lasts for a period of 1-3 years, during which the founder supervises the whole business activities that may be carried out by family members, friends or small number of employees. After the start-up period is that of Accelerated Growth, which lasts for 3-4 years. During this period, the founder or a management expert handles management. At this point, a corporate organization is developed thereby leading to separation of ownership from management.

In the stable growth phase, management expertise and the corporate organization are divided into numerous departments and inflow of stable, long-term venture capital from corporate investors begins to appear. This aspect of growth lasts for 2-5 years. Finally, the Phase of Maturity that may start after several years of beginning in the business adopts the same type of management as stable growth phase but major difference being that sources of funding may become more diverse.

2.1.3 Importance of SMEs

SMEs have been seen to provide numerous specific socio-economic benefits. Some of these are explored as follows.

- i. **Employment:** In most developing countries, micro enterprises and small-scale enterprises account for the majority of firms and a large share of the employment. The relative importance of SMEs varies significantly across countries and within a given country, across stages of development over time. A comparative study of manufacturing firms by Snodgrass and Briggs (1996) shows common pattern in the transformation of the size distribution of firms as industrialization by concluding that small-scale enterprises play a declining role as countries develop.
- ii. **Labour Intensity:** Small firm employ a large share of the labour force in many developing countries. Theoretically, SMEs are regarded to be more labour intensive than large firms. However, some research evidence suggests that many SMEs are in fact more capital intensive (Little, Mazumbar and Page, 1987). Labour intensity exhibits more variation across industries than among firm-sized groups within industries (Snodgrass and Biggs, 1996).
- iii. **Job Creation:** It is often argued that SMEs are important for employment growth. This conviction has not been supported by empirical evidence, while job creation rates are substantially higher for small firms, so are gross destruction rates, SMEs exhibit high birth rates and high death rates and many small firms fail to grow (Davis, Haltiwagner, Schuh, 1993).
- iv. **Efficiency:** Most studies of developing countries show that the smallest firms are least efficient and there is some evidence that both small and large firms are relatively inefficient compared to medium-scale firms (Little, Mazumdar and Page, 1987). It is often argued that SMEs are more innovative than larger firms probably due to the adoption of 'niche strategies', such as high product quality, flexibility and responsibility to customer needs as means of competing

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with large-scale businesses (Snodgrass and Biggs 1996). However, ACS, Morck and Young (1999) found that these innovations often take time, and large firms may have more resources to adopt and implement them.

- v. **Wages and Benefits:** Although, research evidence suggests that larger employers offer better jobs in terms of working conditions than SMEs. (David, Haltiwanger and Schuh, 1993). There is some evidence that this disparity narrows as industrialization proceeds (Snodgrass and Biggs, 1996). **Social, Political and Equity Justifications:** SMEs are often said to contribute to a more equal distribution of income or wealth.

2.1.4 Problems of SMEs in Nigeria

The operation of SMEs in Nigeria is not without challenges, given the dynamism in the business environment, in addition of other prevailing situations. According to Baadom (2004), there are numerous factors that act against effective functionality of SMEs in the country, including:

- i. **Poor Policy Implementation:**

There have been many good policies formulated in the past by the government to improve, but weak implementation has made it impossible to realize the goal.

- ii. **Lack of Continuity:**

Most small scale establishments are sole proprietorship and such establishment often ceases to function as soon as the owner loses interest or dies. This raises the risk of financing such business.

iii. Poor Capital Outlay:

Inadequate capital outlay has often affected small scale business adversely. Financiers often regard the sector as high risk area and therefore feel sceptical about committing their fund to it. Poor

iv. Management Expertise:

Management has always been a problem in this sector as most small scale businesses do not have the required management expertise to carry them through once the business start growing. The situation gets compounded as training is not usually accorded priority in such establishments.

v. Inadequate Information Base:

Small scale business enterprises are usually characterized by poor recordkeeping and that usually starve of necessary information required for planning and management purposes. This usually affects the realization of the sector.

vi. Lack of Raw Materials:

In some small scale business enterprises, raw materials are sourced externally, hence the fate of such enterprises to foreign exchange behavior. The fluctuation of foreign exchange may therefore make it difficult to plan and that may precipitate same stock that may destabilize the setup.

vii. Poor Accounting System:

The accounting system of most small scale business enterprises lack standard and does not make room for the assessment of their performances. That creates opportunity for mismanagement, which consequently may lead to enterprise failure.

viii. **Unstable Policy Environment:**

Government policy instability has not been helpful to small scale businesses.

That has been destabilizing and has indeed sent many SMEs to early fold-ups.

2.1.5 Mobile Banking Service and Performance of SMEs

Simiyu & Oloko (2015), argue that the availability of mobile money transactions broaden the customer base of SMEs given the fact that majority of the rural populace now has access to a mobile phone. Furthermore, the accessibility, convenience and lower costs nature of mobile transactions has resulted in the growth of SMEs business activities especially in rural areas (Simiyu & Oloko, 2015). Nyaga & Okonga (2014), argue that mobile money transactions enhance the performance of SMEs. Kirui & Onyuma (2015), concur by citing that mobile money transactions easy the way in which payments and receipts are made. Kirui & Onyuma (2015), allude that mobile money transactions improve the performance of SMEs in that it is time saving, cost saving as well as flexible given that a transaction can be done anywhere at any given time.

A plethora of studies agree that mobile money service usage improves the performance of SMEs in terms of sales growth, market share and profitability (Wanyonyi & Bwisa, 2013; Kirui & Onyuma, 2015; Mararo & Ngahu, 2017). Onyango, Ongus, Awuor and Nyamboga (2014), examined the nexus between mobile money services and the performance of small businesses in Kenya. The study reported a positive relationship between the use of mobile money services and the performance of small businesses in Kenya. Similarly, studies such as Nyaga & Okonga (2014) as well as Kirui & Onyuma (2015) found a significant positive association between mobile money usage and performance of SMEs using different sample groups. However, another strand of researchers reports an insignificant relationship between

mobile money services and the performance of SMEs (Ngaruiya, Bosire & Kamau, 2014).

Any individual that wants to subscribe to the mobile money services he/she must have a Subscriber Identity Module (SIM) card which has to be activated in a mobile device. Then the client has to register to have a money account with the mobile provider of choice and start receiving and sending money (Mabveka, 2017).

When deposits are made into the money account the customer can start enjoying services like paying bills, purchase goods and services, buy airtime and many other funds services. The subscriber is notified of the transaction details, account balance and other essential notifications through a text message. With mobile money service, it is possible to make direct electronic transfers to mobile money accounts from certain banks that have established systems to do so and access insurance policies too (Mabveka, 2017).

Currently, the most used service in mobile money is the sending and receiving money. This is seconded by the purchase of airtime followed by savings, receive payments, purchase of goods and services, pay bills, pay salaries/wages (Zutt, 2010).

The objective of mobile money financial transaction is to improve the efficiency of micro finance by using mobile technology to make transaction faster, cheaper and more secured. Mbiti and Weil (2001) note that mobile phones technology has made it easier for SMEs to conduct their financial transactions. This is because mobile phones financial transactions save time and provides a safer means of handling money transfer.

Additionally, mobile technology can be used to reach more customers and facilitate exchange of information and decision making.

According to Jack and Suri(2016), the launch of M-PESA has enabled SMEs to expand and grow. This is because the service provides easier ways of paying and receiving payments of goods and service thereby facilitating the trading activities. (Chogi, 2011) observes that the M-PESA service allows users to deposit and withdraw money in the account as well as to send money using SMEs technology as well as increase the ability to expand their business networks, thus enabling them to increase their performance. Mobile money since the focusing on providing convenient, safe and affordable financial services to both banked and unbanked individuals in the northern region of the country.

Oluwatayo(2012) views that mobile technology has revealed opportunities and allowed nearly 3billion people without bank accounts to access financial service.

SMEs has embraced the technology of using mobile phones in their operation, as this is viewed as relatively affordable, personal and can be used anywhere at any time. (Anur etal, 2010). There is an appeal and utility of mobile banking and mobile payment service across the country as there are probably more people with mobile handsets than with bank accounts (kunle,2017).

According to Guagraw (2007), one of the objectives of mobile financial transactions is to improve the efficiency of SMEs through the use of mobile technology by making business operation more efficient, making transaction faster, more secure and cheaper. Mobile financial transaction comprise account transactions, balance checks and payment.

According to Mbiti and Weil (2011) observed that mobile phones technology has made it easier for SMEs to perform their financial transaction, save time and provide

a safer means of handling mobile transfers. Furthermore, Mbiri (2010) adds that mobile technology can be used to reach more customers facilitates the exchange of information and the process of decision making. He supported the idea that mobile phones transactions provides SMEs with a platform on which they can manage their operating cost and thus increasing their ability to extend business networking improving the performance of SMEs.

According to Priteo (2006), mobile data technologies which embrace mobile phone technology eliminate time and distance which are often regarded as barriers to regional business. Jeusens (2007) lay emphasis on the fact that mobile phone transaction help SMEs in calling for a reduce information symmetry and market inefficiency hence enabling them to attain improved performance.

2.1.6 Mobile Money and Financial Accessibility

For a business to prosper there is that need that it must have access to finances whether debt or equity. One of the challenges faced by SMEs to grow their business is availability of capital which could be access from financial institutions or other lenders (Mabveka, 2017).

The introduction of mobile money where SMEs do act as agents of the Network Operators does provide a source of capital for their business. That is the case as customers of Network Operator do deposit their money with the SMEs which provide them with money that could be used as capital than getting a loan from the Bank. Though the available money is not that much for a big investment. Nonetheless, the money and the commission they get from each transaction, provide them some income. On the other hand, the subscribers do access similar banking facilities at a

lower transactional fee when have done a withdraw, and deposit credit from and into his account at an agent than what a bank would have charged (Mabveka, 2017).

2.2 Empirical Studies

Higgins, Kendall and Lyon (2012), studied the pattern of mobile usage by SMEs in Kenya. They studied a total of 865 SMEs businesses located in both urban and semi-urban areas. They established that for any activity owners of SMEs use mobile money for e.g. paying bills, supplies, salaries, etc., they are always in large quantities. From the data out of 865 SME owners, 861 (99.5%) did use services of mobile money in business activities and also personal and 67% used it for the purpose of the business.

Moog (2010), investigated success factors which were being credited to the use of mobile payments by micro-business operators. The foundation of the study was a survey carried out by issuing of questionnaires. The study collected data from 409 micro-business owners in Nairobi, Kenya. The study made use of TAM, which was expounded to include other factors to help in making a prediction of triumph and development in micro-businesses.

Odia (2012), studied mobile money in Nigeria with insights from Kenya and used TAM to study elements influencing a user's reasons of using mobile money. The basis of the research was survey done using questionnaire and interview that were semi-structured in nature. The findings showed that the predicting variables of the reasons for use of mobile money in Nigeria is inclusive of convenience, it's easy to use and usefulness, with convenience being the most significant factor.

Tobin (2011), generalized technology acceptance model and diffusion of innovation to research on major factors influencing consumers' in Ghana accepting and using

mobile money. Data was gathered using self-administered questionnaire. The determinants of behavioral intent of using mobile money transfer in Ghana that were most significant were ease of use and usefulness. Behavioral reason were established to be significantly impacted by Perceived trust, trial ability and perceived risk. Despite the useful information on the factors that contributed to mobile money adaptation in Ghana, there are limitations. First, the researcher had to explain to most of the respondents about mobile money transfer since it was still in its early stages. Second, the respondents had a problem in understanding and interpreting the questionnaire since they were illiterate and the researcher had to interpret the questionnaire for them.

Abdelghani and Aziz (2013), researched on the intents of Moroccan customers to accept and use mobile money using diffusion of innovation. Descriptive statistics was applied, t-test and multiple regressions. A total of 400 questionnaires issued at random to Moroccan banks' clients were used, they established that Moroccan clients were willing to embrace the use of mobile money. Further, the findings revealed that uneasy, relative advantage, harmony and trial ability predictors are great intents for adoption of adopt mobile money in Morocco.

Lula, Moans and Weems (2012), used acceptance of technology model to investigate on m-banking acceptance in Kenya. The basis of the study was 450 questionnaires given to mobile money customers. The study found out that ease of use, usefulness and perceived credibility influence customers' opinion on usage of m-banking in a significant way.

Salem and Rashid (2011), investigated the association of clients' satisfaction and m-banking case study of Pakistan. 230 Questionnaires were administered to bank

workers and 230 clients of the bank. From the results it was established that concerns by the customers on security, authenticity and technology reliability were important. The findings implied that organizations should concentrate on IT application, services of innovation, security, and trust from customer and risk because of them being primary determinants of technology acceptance.

Morawczynski and Pickens (2009), carried out an ethnographic study in Kenya, on the way poverty-stricken individuals make use of M-PESA and its implications on their livelihood. Above 350 individuals were interviewed. Most of those interviewed revealed that mobile money services satisfied them and above two thirds indicated that mobile money services have impacted their lives positively.

Ayo et al (2012), carried out an experiment with 30 users of mobile money on an original mobile money implementation in Nigeria, to investigate how mobile money system components performed. To get users' feeling of the system of mobile money and how users' are satisfied with the system questionnaire was issued. About two thirds indicated that, to them the system was satisfying.

Nugget, Pelosi and Gumbo (2010), studied crucial elements leading to speedy growth of mobile money banking services in Kenya. 102 people who were sent questionnaire through email responded. Also, 67 individuals of ages bracket of 20 to 40 years filled the entire questionnaire, thus it's a reflection of the young, internet visiting generation. Major challenge was repeated failure of system, security and challenges that are related to fraud and also shortage of electronic float among majority of the agents, thus restricting the amount received by an individual at any given time. The study expounded on mobile money adaptation, despite that, the participants sample

might not be efficient representation of the Kenyan population at large because this involved young generation.

Ngaruiya, Bossier and Kama (2014), studied the effects of transactions by mobile money on SME performance, financially in Nauru CBD. The intention of the study was to establish the impact mobile money transactions impose on SME financial performance in Nauru CBD. Descriptive type of research design was used. 120 out of 640 businesses were sampled by use of purposive method of sampling. Questionnaire technique was applied in collecting data. The study findings revealed that transactions by mobile money significantly affect sales revenue.

Sibiu (2015), studied mobile money transfer and the growth of SMEs in Kenya a case study of Kyushu city, Kenya. The study revealed that mobile money exhibited to have important contribution to the SME sector. The study thus attained its objectives and got comprehensive insight accruing from use of services offered by mobile money by SMEs. In reference to the conceptual framework, mobile money transactional rates and financial accessibility have an impact on the development of SMEs.

Bangers and Overberg (2008), did an investigation on the task of m-banking and its capability in providing of primary banking services majority of people in Sub-Saharan Africa. Primary and secondary sources were applied to obtain data used in the research study. From the results, though mobile banking financial transactions has been made possible and also payment of funds. In addition, the findings of the study showed that through mobile banking operations and competitiveness of SMEs has been improved.

Using a case of Kenya, Ambary (2009), who studied m-banking in countries that are developing. The objective of the study was to come up with significance of m-banking in daily running of small businesses in Kenya and to make an understanding on the challenges associated in the use of m-banking as tool of business and cherish its advantages. The study explained that the acceptance and usage of mobile phones is a product of social process.

Lawrence (2015), examined the elements that have influence on the acceptance of ICT in SMEs: A Research Preliminary Findings. Through the use of ICT in organizations many opportunities are available, especially in SMEs with the early adopters' successes well publicized. Thus, most of organizations that aren't taking advantages of the ICT are currently revisiting their options. The intentions of this study are to check factors influencing SMEs' decision in adopting ICT in business. The diffusion theory, the technology acceptance model and information richness will give the theoretical basis for this study. Prior findings of the research study are expressed and sample questions emerging from the study to be placed in use in final questionnaire.

Garg (2016), dicta study on ICT adoption and SME's: a contextual framework. The basis of the paper was rooted on the objective of impact of ICT on small scale industrial units of India; trial to explain different problems in the sector and overpower them to make small scale industries competitive through academic literature. SME's has a significant part in the industrial economy general growth of the country. SME' sin India are referred to as economy's backbone. About 40% of India's workforce are employed by these enterprises and contribute 45% to India's manufacturing revenue, that's the reason for them being the economy's backbone;

they create a lot of low-skill job opportunities (millions). 40% of general exports in India are accounted by country's 1.3 million SME. With the current state the growth of our economy is impossible without growth and development of the SMEs; these enterprises are far behind the large counterparts in the economy. The purpose of this study is to establish how and why SMEs get or embrace ICT and the challenges surrounding the process.

Osorio-Gallegos, Londoflo-Metaute and Lopez-Zapata (2016), did an analysis on factors influencing ICT acceptance by SMEs in Colombia. The objective of this study was analyzing the elements that influence the acceptance of ICT by SMEs in Colombia. For the hypothesis to be proven, a sample of 474 SMEs in Colombia was administered with questionnaire concerning the abrasion of ICT and independent type of variables that were established in the literature review. Multiple regression models were then done using the collected data. The researcher came up with a model displaying how new business opportunities that ICT offer and their levels of adoption are related. The research also established that a perception of ICT cost-benefit lack of balance influences implementation of technologies negatively.

Alma and Nor (2009), studied ICT Adoption in SMEs: an Empirical Evidence of Service Sectors in Malaysia. The objective of the study was to acquire anon-depth knowledge on factors that affect the acceptance and usage of ICT by SMEs in Malaysia. This study examined the relationship between information and communication technologies (ICT) adoption and its five factors which are perceived benefits, perceived cost, ICT knowledge, external pressure and government support. From the three factors that were studied are of great importance to the adoption of

ICT whereas perceived cost and external pressure are insignificant in finding out its adoption.

Kafue (2013), studied the determinants of adoption of ICT and its usage by SMEs: The Case of SMEs in Theca Municipality, Kenya. This study was done to investigate the factors that determine adoption of ICT and its usage by SMEs in Thika Municipality, Kenya. Cross-sectional survey of 75 SMEs was performed; from a total of 240 SMEs, stratified random sampling technique was applied to come up with a sample size. The results showed that 68% ICT adoption index; of the most adopted were mobile phones and ICT usage, followed by fixed phones and computers. For the purpose of basic applications of communication and office automation most enterprises used ICT. Very low use of advanced ICT applications was experienced.

Huang (2008) carried out a study to determine the impact of mobile phones on SMEs performance in Auckland, New Zealand. In collecting primary data, he made use of a questionnaire. In addition, the results for his study highlighted that the use of mobile technology enabled SMEs to increase their annual turnover due to additional business network.

Additionally, Bengenes and Sodereiberg (2008) assessed the role of banking and its potential to provide basic bank services to the vast majority of people in sub-Saharan Africa. He made use of both secondary and primary data in his research. According to his findings, they revealed that mobile banking facilitated financial transactions and remittance of funds. Moreover, the results he got from his research indicated that mobile banking has enhanced the operations and competitiveness of SMEs.

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Chogi (2006), also carried out a study to investigate the impact of mobile phone technologies on SMEs in Nairobi. A questionnaire being his tool for data collection. From his findings, it was highlighted that mobile phones had a positive impact on the relevance posted by SMEs. Also in addition, the result revealed that most SMEs perceived that mobile phone enabled them to reduce cost of operation.

Wambai (2012), carried out a study in South Africa, investigating the impact of mobile money services. In his case study, he made use of a sample of 20 SMEs which to them he presented a semi-structured questionnaire that he used as a tool of data collection. From the result he obtained, they clearly indicated that the adoption of mobile money service has enabled SMEs to increase their sales thereby leading to improved financial performances.

Donner and Escobari (2010), asserted the use of mobile phones by SMEs in developing countries. They used questionnaire to collect data from fourteen research studies that had examined mobile use by SMEs. According to their findings, mobile phones have helped SMEs to become more productive and to improve their sales thereby improving their financial performances.

2.3 Theoretical Framework

Social Theory

Traditional payments instruments, methods and habits may be unpractical and complicated in some exchange situations. For example, when mobile context is purchased according to classical and neoclassical economic payment instrument methods and habits compete with each other for the attention of parties that participate into an exchange transaction. This means that payment with a mobile

device must increase productivity and decrease cost for both parties and other stakeholders of the ecosystem.

The social theory of money is close to the classical and neo-classical theories of money but take an ecological stance and builds on the work of Simmel and Webber. Money is considered a social construct which is continually renegotiated and which is constituted in the social relations between the monetary and other economic agencies of the society. What are the implications of mobile payment providers? A mobile payment service provider needs to identify such merchant, consumer and public sector payment. The replacement of physical cash is a potential candidate in addition to payment for mobile contents and services.

The new catalyst or state theory of money built on snaps and its extension keys. they regard money as fundamental state money which is why this approach has become also labeled neo-catalyst. independent central bank are given the adjusted power of the state or several states to issue money, to control money flow, to support taxation, growth of economy and price stability.

The real economy perspective is typical to classical and new classical thinking. Hence most theories of money adhere for the real economy perspective, which needed to make exchanges happen. Smith describes most crisis in the economy are related to money. what is important from mobile payment services and other new payment services perspective is that Bit coin has been able to capture a short Time the key role of money but also all the other role of money. As indicated, Bit coin started as the medium of exchange similar to barter trade. Classical and neo-classical theories of money explain thus: post-Keynesian theory of money with the concept of endogenous

money has similarities to credit theory of money the source of endogenous money concept has been described in many ways.

What the different description have common is that money is seen to flow into the monetary system result of one or more expenditure type growing rapidly and often financial by bank credit.

The Theory of Technological Acceptance Model

The study also focuses on factors that influence mobile money service wage by small and medium enterprise and applies the theory of technology acceptance model (TAM). According to Davies (1989), TAM as the theoretical model that explains how users come to accept and technology.

Ndubuisi and Richardson (2002), acknowledge that TAM has been widely adopted to predict user acceptance and usage of the new technology there are a number of factors that will influence their decision of whether or not to adopt the new technology. These factors include:

i. Perceived As Usefulness:

This refers to the extent to which an individual believes that adopting a particular system will enhance his/her current performance.

ii. Perceived As Easy To Use:

This is defined as the extent to which an individual believes a particular system would be free from effort (Dave, 1989). There two factor are regarded as the main primary determinants one adopting and using new technology.

Lu, Yu, Liu and Yao (2013), advocates that there are also other factors that may influence one's decision of adopting new technology such as convenience, satisfaction, security, concerns and costs. Therefore, TAM is the most appropriate as it encompasses other factors such as perceived as easy to use, accessibility of mobile payment services, convenient, security, support from the mobile service providers, low cost of the mobile payment services and usage of mobile payments.

iii. Accessibility:

Pagoni (2004), states that accessibility (ability to reach that required services) is one of the main advantages of the mobile payment services. SMEs are among the greatest beneficiaries of using mobile money services.

iv. Transaction Cost:

The transaction costs charged on sending through mobile payment technology are lower compared to those charged by banks and money transfer operators.

The transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies (Onwansa, 2009). The cost of a payment transaction has a direct effect on consumer adoption if the cost is passed on to customers (Mallat 2007). Transaction costs should be low to make the total cost of the transaction competitive. The cost of the mobile payments should be affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions. There are many different mobile handsets which are easy to operate and have the functionalities required for the mobile payment technology.

Comwansa and Mallat (2007) propounded that the charge added to payment transaction impacts directly on a consumer if the cost is passed on to these consumers.

v. Convenience And Security:

Davidson(2013) States that has a lost or stolen mobile phone does not mean catastrophe as on one can access ones mobile money account without a correct personal identification number (pin) .Additional, the proposes that in a country where majority of individuals excluded ,mobile transfer services provides both convenience and safety .This ,individuals can move around with virtual money and can have access to withdrawing at any given time.

Njanga (2009) states that although the mobile phone balances may seem low, the fact that there are balances proves that there is storage which can be perceived as acceptance of deposit. This is a significant indication of the high value placed on the convenience associated with the use of the mobile payment services. Omwansa (2009) states that a lost or stolen mobile phone does not mean catastrophe as no one can access an MTN account without a correct personal identification number (PIN). He further explains that in a country where majority of people have no bank accounts. MTN provides both convenience and safety. People walk around with their virtual money knowing they can withdraw cash any time at a minimal fee.

In a mobile environment, it is necessary to have perceived security and trust in the vendors and the payment system. (Siau, et al., 2004, Mallat, 2007). Security and safety of mobile payment transactions is one of the primary concerns for users (NAM, YI Lee and Lim, 2005). They state that safety represents no delay, no transaction in completeness and no private information disclosure during payment transactions.

Shone & Swatmann (1998) supports the confidentiality of information and security as this is guaranteed by the use of pin, which is a secret code for the mobile transaction services. Nam, Yi, Lee and Hun (2005) have found out the primary concern off. Use of mobile money transfer is more secured. The mobile payment system is regarded safe in that process and also no private information is disclosed by the agent during the process carrying out transactions (Shone & Swatsman, 1998).

Perceived support from the mobile network provides payment systems needed network externalities as the values of a payment system to increase when more users begin to use it (Van, Hoile, 2001, Mallet, 2007)

Consumer decision to adopt a payment system is therefore significantly affected by the number of consumers and traders using it. Failure to build an acute mass contributes to discontinuance of several prior payment systems including several smart card systems (Migin & Bourne, 1999).

vi. Satisfaction

Oluwatosin (2018), from the studies he conducted through his personal encounters with a vast number of individuals he found that mobile money transfer technology is used friendly. Also with reference to his prior studies they revealed that speed, convenience, usability and usefulness of the service itself determines how one reaches a decision of adopting technology. The continued increase in the usage of mobile phone outweighs the banked population (2018) and further propounds that the performances of an organization largely depend on what is referred to as an enabling environment, which is a set of conditions which endorse sustainable circumstances necessary for market development. Mobile money payment provider

agent are spread throughout the country, thus MTN has provisions for an enabling environment and SMEs can make cash deposits and cash out transactions. Since agents are spread around the country this makes the service easily accessible to SMES giving functions.

Demand and Supply Twin Theory

Demand and supply twin theory is a model of twin pillar between financial inclusion and financial literacy, (chakrabarty, 2011) while financial inclusion acts from supply side providing the financial market services what people demand. Financial literacy emulates the demand side and the two aspects must be present and coexist in an inclusive growing economy.

Gol (2007), observed that the development of rural economy is imperative for inclusive and equitable growth and to unlock huge potential of the population that is presently trapped in poverty with its associated deprivations.

According to mehrotra et al (2009), there are supply side and demand side factors driving inclusive growth in the financial economy. The banks largely are expected to mitigate the supply side processes that prevent poor and disadvantaged social groups from gaining access to the financial system,. Despite the risk, financing g of first time entrepreneurs is a must for financial inclusion and growth. Apart from the supply side factors, demand factors, such as lower income and or asset holdings also have a significant bearing on financial inclusion. Owing to difficulties in accessing formal sources of credit, poor individuals and small and macro enterprises usually rely on their personal savings or internal sources to invest in health, education, housing and entrepreneurial activities to make use of growth opportunities.

Thorat (2008), observes that while there is no doubt that there is a need to stimulate the demand for formal financial sector products among the financially excluded consumers, appropriate and effective supply side interventions hold the key to increasing financial inclusion, especially in the short term.

2.4 Summary

This chapter presented and critically reviewed the literature on mobile money services and its impact on the performances of SMEs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

The research study adopted a descriptive design based on the collection and analysis of questionnaire responses.

3.2 Population, Sample and Sampling Techniques

Bryman (2001) defines a study population as the entire universe of all individuals and/or items which the researcher is interested in obtaining information and making inferences with. The population of the study was therefore, all the registered SMEs in Nasarawa state. As this number was too large to manage, the use of a sample was necessary, to provide a manageable number representative of the population that can be confidently used for policy responses. Henry (2015) defined sampling as a process of selecting representative's subset of observations from a population to determine the characteristics of random variables under investigation. Sampling can be classified into two basic methods: non-probabilistic or probabilistic (Bannett, 2012).

In the determination of appropriate sample size, the study adopted sampling technique to allow the researcher derive a sample from population. The study therefore adopted Random Sampling to select 350 SMEs across Nasarawa State.

3.3 Methods of Data Collection

The data relied on the use of primary data collected through the use of the questionnaire instrument. Primary sources provide the most recent and specific data against which decisions can be made. The advantage of primary data is that it is

directly relevant to a specific problem and the others greater validity of data accuracy by the researcher (Jacob, 2004). Primary data for the study was collected as perceptions and opinions of owners/managers, as well as employees of the selected SMEs. The instrument was formulated to collect pertinent data for each variable scale over all the selected SMEs. The questionnaires were distributed, filled and collected on the spot with the help of two research assistants.

3.4 Technique for Data Analysis and Model Specification

The research used qualitative techniques in the analysis of the collected primary data. Data were analyzed with the use of tables and simple percentages, as well as the use of graphs. The analysis was carried out with the Statistical Package of Social Scientists (SPSS) (version 25).

3.5 Justification of Method Used

As pointed out by Silverman (2003), qualitative data has several features to take into consideration when planning the proration of results obtained. The data are subjective, interpretative, descriptive, holistic and copious and it can be difficult to know when or how to start (Silverman, 2003). Additionally, Blanche, Durheem and Panter (2011) maintain that qualitative methods allow the researcher try, choose issues on details, they pin point and try to understand the categories of information that emerge from the data. Additionally, as quantitative research is a deductive approach, it allows the researcher to develop concept, insights an understanding and form patterns in the data free from determined hypothesis or theories.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

In this section, collected data is presented to give a good picture of the research process. Out of the 350 questionnaires distributed, 301 were properly filled and returned while 41 were found to be unusable from not being properly filled, or empty from respondents not willing to participate in the study. The rest of the sub-sections under this section explores different aspects of the questionnaire formulated to extract relevant data.

4.1.1 Respondents Demographics

Most of the surveyed respondents were female as can be seen in the information summarized in Table 1.

Table 1: Sex of Respondents

Sex	Frequency	Percentage	Cumulative Percentage
Female	170	56.48	56.48
Male	131	43.52	100
Total	301	100	

Source: Field survey, 2020.

As can be seen from Table 1, 170 respondents, making up 56.48% of the total respondents were female. On the other hand, 43.52% of the total respondents were male. This was the percentage reported by 131 males.

The study sought to know the position of the respondent in the business and found that a significant 45.18% of the respondents were the business owners. The target for this study was to have more owners as opposed to employees responding to the

questionnaire, and this was achieved. However, 32.23% of the respondents were employees. Whereas, 22.59% were business partners.

Table 2: Position held in Business.

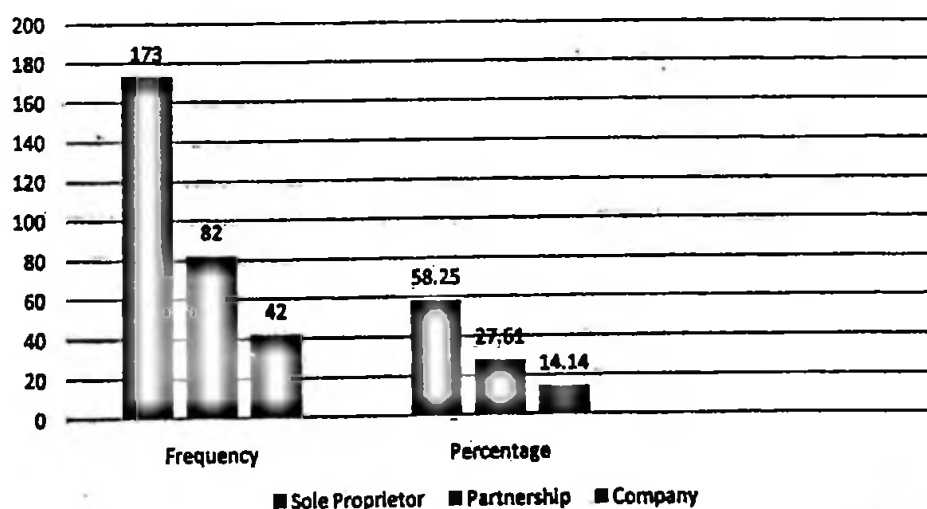
Position	Frequency	Percentage	Cumulative Percentage
Owner	136	45.18	45.1
Partner	68	22.59	67.7
Employee	97	32.23	100.
Total	301	100	

Source: Field survey, 2020.

4.1.2 Type of Business

The study sought to find out the form of businesses operated by SMEs within the locality and it was found out that 14% of the businesses had been registered as companies. It was further observed that 28% of the businesses surveyed were partnerships while majority of the businesses were sole proprietorships topping the list at 58% of the sample. This shows that majority of the businesses in the area of study were sole proprietorships.

Figure 1: Business Ownership



4.1.3 Business Operations

In order to obtain a more detailed understanding of the SME sector in the locality, the study looked at specific aspects of each business. It was found that 53.49% of the businesses have been in operation for between 1-5 years with only 9.3% having exceeded 15 years of business operations.

Table 3: Business Duration

Duration (Years)	Frequency	Percentage	Cumulative Percentage
1-5	161	53.49	53.49
6-10	48	15.95	69.44
11-15	64	21.26	90.70
More than 5	28	9.30	100
Total	301	100	

Source: Field Survey, 2020.

4.1.4 Knowledge of Mobile Money Services

In this session, the results related to respondent awareness of various mobile money services explored at the time this survey was undertaken are presented. The study evaluated the level of awareness of the respondents regarding mobile money services. 78% of the respondents were positive; an indication of widespread knowledge of mobile money services in the locality. On further enquiry into mobile service provider, it was established that MTN service is most widely used followed by Airtel Money.

In order to establish the validity of the above findings, the study sought to find out how the various respondents used mobile money products. It was established that

99% of the respondents had the correct information on buying airtime, sending money, receiving money, viewing mobile transactions, depositing cash and understanding deposit notifications. In contrast, 84% of the respondents had detailed understanding of how to pay bills, 81% were able to check bank balances while only 75% could understand a bank deposit notification.

4.2 Data Analysis and Results

The data collected for the study was analyzed with the use of tables, graphs and simple percentages. The study explored the impact of the use of mobile banking by SMEs in three major aspects: operating costs, sales revenue and operational effectiveness. The pertinent hypothesis and research questions were tested and answered accordingly.

4.2.1 Test of Hypothesis I

H₀₁: Mobile banking does not have a significant impact on operating costs of SMEs in Nasarawa state.

Table 4 gives information on the impact of the adoption of mobile banking services on the operating cost of SMEs in Nasarawa state. Most of the respondents, as can be seen from the Table were of the opinion that mobile banking has minimal impact on the operating cost of their businesses.

Table 4: Impact of Mobile Banking on Operating Cost of SMEs

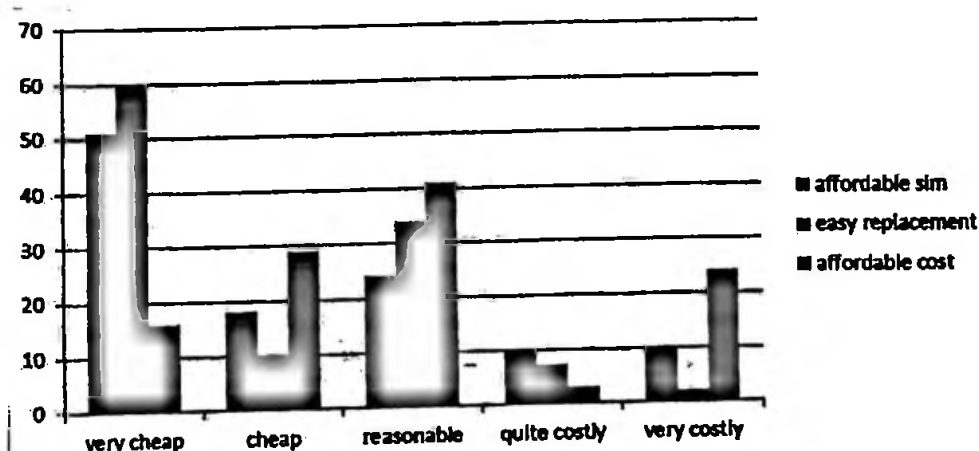
Response	Frequency	Percentage	Cumulative Percentage
Very Low Impact	32	11.31	11.31
Low Impact	132	46.64	57.95
High	101	35.69	93.64
Very High	18	6.36	100
Total	283	100	

Source: Field Survey, 2020.

From the information gathered, 32 respondents, making up 11.31% of the total respondents that took part in the survey were of the opinion that the use of mobile banking services had very low impact on the operating cost of their business. Similarly, 132 respondents reported to the impact of mobile banking as having low impact on operating cost. This was the perception expressed by 46.64% of the surveyed respondents. On the other hand, 18 respondents reported that using mobile banking exerted very high impact on the cost of day-to-day running of their business. This made up 6.36% of the total collected responses. The remaining 101 respondents, or 35.69% of the collected responses attested to the fact that using mobile banking had an impact on their operating cost which was on the high side.

Mobile Money services were generally not considered costly. To determine if cost had a significant had on SMEs, further analysis was conducted on 48% of respondents who initially viewed the service as costly. It was discovered that those who thought mobile money transactions were expensive, were still more likely to think that mobile money services contributed to business growth through increased customer base and sales.

Figure 2: Perceived Cost of Mobile Banking



Further analysis of the responses of those using a particular mobile money service and their opinion on mobile money transactional cost compared to business growth was carried out. It was found that majority of the respondents using a particular mobile money service were likely to rate the transactional cost as expensive, On the other hand, those not using the service were more likely to rate the service as cheap and affordable. Despite rating mobile money service transactional cost as expensive, they were still likely to positively rate the contribution of mobile money to their business growth through increased sales.

As the impact of mobile banking was found to be low on operating cost, the study therefore concluded that the use of mobile banking services by SMEs in Nasarawa state had significant positive impact on the operating cost of these businesses. The null hypothesis is therefore rejected.

4.2.2 Test of Hypothesis II

H₀₂: Payment solutions provided by mobile banking does not have significant impact on sales revenue of SMEs in Nasarawa state.

To test the second hypothesis, the impact of mobile banking services on the sales revenue of SMEs in Nasarawa state was analyzed from collected responses of survey respondents. Table 5 summarizes information on the sale revenue profile of the selected SMEs.

Table 5: Estimated Annual turnover.

Annual Sales Volume	Frequency	Percentage	Cumulative Percentage
₦10,000-₦100,000	54	17.94	17.94
₦101,000-₦350,000	148	49.17	67.11
₦351,000-₦900,000	60	19.93	87.04
ABOVE ₦1000,000	39	12.96	100
Total	301	100	

Source: Field Survey, 2020.

The study used data collected on annual sales of the business to give a picture of their size. It was gathered from the collected responses that 17.94% of the businesses had an annual turnover of ₦10,000 to ₦100,000, while majority, 49.17%, had an annual turnover of ₦101,000- ₦350,000. Of the businesses surveyed for the study 19.93% had an annual turnover of up to ₦900,000 with only 12.96% of the respondents recording an annual turnover of over ₦1,000,000.

The majority of the SMEs surveyed were discovered, as can be seen from Table 5, not to be large in size in terms of annual sales volume. However, respondents were asked to report whether the use of mobile banking had an impact on their sales revenue. Table 6 gives a summary on the responses of the surveyed respondents.

Table 6: Impact of Mobile Banking on Sales Revenue

Impact of Mobile Banking on Sales Revenue	Frequency	Percentage	Cumulative Percentage
Very Low	0	0	0
Low	7	2.33	2.33
High	73	24.25	26.58

Very High	221	73.42	100
Total	301	100	

Source: Field Survey, 2020.

From Table 6, it can be seen that the perception of most of the respondents was that their use of mobile banking had very high impact on sales revenue. This was the view reported by 221 respondents, making up 73.42% of the total collected responses. On the other hand, 7 respondents were of the opinion that mobile banking indeed exerted only low impact on their sales volume. This was the standpoint supported by 2.33% of the population. 24.25% of the collected responses represented the view of 73 respondents who felt that the impact on sales was high. No respondent reported very low sales impact of mobile banking on sales.

4.2.3 Test of Hypothesis III

H₀₃: Mobile banking does not have significant impact on operational effectiveness of SMEs in Nasarawa state.

The third hypothesis tested was concerned with the impact of mobile banking services adopted by SMEs in Nasarawa state on their operational effectiveness. The use of mobile banking services by SMEs was discovered to impact positively on the operational effectiveness of these businesses (see Table 7).

Table 7: Mobile Banking Services and SMEs Operational Effectiveness

Response	Frequency	Percentage	Cumulative Percentage
Very Low	0	0	0
Low	7	2.33	2.33
High	73	24.25	26.58
Very High	221	73.42	100
Total	301	100	

Source: Field Survey, 2020.

Most of the respondents surveyed, which made up 73.42% of the total surveyed supplied information pointing to the fact that the impact of the use of mobile banking on the effectiveness of their business function was very high. This was gathered from opinions supplied by 221 respondents who took part in the survey. 73 respondents, making up 24.25% and 7 respondents, making up 2.33% of collected responses said that the impact on the effectiveness of the operation of their business was high and low respectively. As the impact on operational effectiveness of the SMEs was found to be very high, as can be seen from Table 7, the study concludes that mobile banking has significant positive impact on the operational effectiveness of SMEs in Nasarawa state, and therefore, the null hypothesis is rejected.

In relation to ascertaining the impact of the adoption of mobile banking on the effectiveness of the businesses, respondents were interviewed to expose further areas that have witnessed improvements. It was established that all the respondents agreed it made loan applications easier. There was significant variation in the responses to whether mobile money had any impact on payment to suppliers with most businesses strongly agreeing to positive impact.

It was noted that SMEs in Nasarawa state recognized that mobile money had contributed to business growth. Of those surveyed 90% of stating that mobile money services were convenient and as a result they had increased the amount of money transacted in their businesses when mobile money services were added to the conventional methods of transacting business. These findings are summarized below.

4.3 Discussion of Findings

The primary aim of this study was to determine the impact of mobile banking services on the performance of SMEs in Nasarawa State. From the analysis carried out in testing the formulated hypotheses for the study, it was found that respondents had a widespread knowledge of mobile money services in the locality in respect of sending and receiving money, purchase of airtime, viewing transactions and depositing cash, banking services through mobile money such as viewing bank statements or receiving notifications of transactions.

Mobile money services were primarily provided through the MTN platform from MTN as opposed to other mobile money services available in the same locality. It is worth noting that we did not to assess the number of businesses that have a dedicated mobile money phone/line for the business. Such a survey was undertaken by Financial Sector Deepening (FSD) Insights (2012), who found that few businesses have a dedicated mobile money account for conducting financial transactions resulting in an overlap between personal and business related transactions. Majority of SMEs were utilizing this service for traditional functions like sending and receiving money, a study finding consistent with Njenga (2010) who also found that mobile money services were mostly used for sending and receiving money. However, those using a

particular mobile money services were more likely to rate that service as important to the business.

SMEs in this region do not seem to interact with the banking sector for other or supportive banking services. Linkage to the banking sector from this study was minimal. This could be because respondents viewed mobile money service as a variation of branchless banking with delivery of financial services outside conventional banking. This conclusion made by Wambari and Mwaura (2009) and supported by some of the findings of this study, may warrant further investigation to see if enrolment into mainstream banking has been affected by the introduction of mobile money services.

The first study objective was to establish if mobile banking use by SMEs influenced their operating costs. It was found that the impact of mobile money service on operating cost of SMEs was positive, although low. The reflection of this was that, from the perceptions of respondents, the use of mobile banking was seen as cheap. Those who were more likely to use the service were also more likely to rate the transactional cost as expensive in comparison to those who did not use the service who were more likely to rate the service as cheap or reasonable. This finding could have resulted from many of the mobile money subscribers being on the MTN platform which had recently increased their transaction costs. Those not using the service may not have been aware of the true cost of using the service after these changes. Mbogo (2010) had determined that low cost positively correlated to the behavioral intention to use mobile money services, but our findings revealed that the perception of transaction cost as expensive amongst actual users of the service had no

effect on their use since customers continued to use the service despite this perception.

The Second study objective was to establish if the adoption of mobile banking services had any impact on sales. It was found that the use of mobile banking had very high positive impact on sales volume of SMEs. This finding needs further investigation to determine how this applies against price elasticity of demand. It will also be important to evaluate if other towns would note similar findings as this region. Equally, considering that MTN was by far the biggest provider of service in this region, it will be useful to evaluate how they have managed to achieve high uptake despite other cheaper providers like Airtel Money. We found out that 77% of respondents strongly agreed that mobile money had a positive impact on their sales. The biggest reason for this the convenience of the mobile money services, echoed by 90% of respondents. Those who used mobile money services were more likely to give more informed feedback on the importance of the service to their business compared to those that did not.

Thirdly, the study aimed to find out if the use of mobile banking services had impact on the operational effectiveness of the SMEs used in the study. It was found that this effect was high. Adopting mobile banking services by SMEs in Nasarawa state made them perform better.

The majority of the respondents were only using mobile money for services like receiving or sending money, and few were using the mobile money services to pay bills, counter transactions or access loans. As already outlined above, Mbiti and Weil (2011) found that most people used the mobile money service to send or receive money as opposed to savings or other services. High volumes in mobile money

transfers have also been well demonstrated by the FSD (2012) report which noted that high volumes of mobile money payments account for over 90% of the Nasarawa state economy compared to other forms of money transfers. These forms of cashless transaction have the benefits of increased financial liquidity which has benefits to the SMEs industry.

Thus, this study achieved its objectives and obtained detailed information arising from the use of mobile money services by SMEs. In respect of the conceptual framework, mobile money transactional costs, convenience and financial accessibility have all been shown to affect SMEs performance through the service leading to increased enrolment in mobile money services, increased financial transactions resulting in increased sales and therefore perceivable contribution to business growth. We can argue that these factors will increase business competitiveness (increased sales and resultant higher profits) due to a variety of transaction options when applied in a business as compared to those that may not have applied them. Further studies, however, may need to be undertaken to describe the effect and relationships. Mobile money transactional cost may require further evaluation since our study found that even when the perception amongst users was that the service was expensive, they were still more likely to use it and think of the service as important to the business.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study recorded more female respondents compared to males. Majority of the respondents were the business owners which was desirable for this study. Most of the businesses were sole proprietorships accounting for 58% of the sample. Moreover, the study established that a significant 53% of the businesses have been in operation for between 1-5 years with only 9% of them having exceeded 5 years of business operations.

All the responses regarding knowledge of currently available mobile money services were positive; an indication of a widespread knowledge of mobile money services available in the locality. The study established that 78% of the respondents had correct information on buying airtime, sending money, receiving money, viewing mobile transactions, depositing cash and understanding deposit notifications.

MTN service was the most widely used service followed by Airtel money. The very low penetration rates of other mobile money services providers like YU-Cash and Orange Money was a unique finding amongst this group.

A simple majority of 51% strongly agreed that mobile money has had a positive impact on their sales. Considering most of the SMEs are small businesses, majority of the transactions are in cash. Mobile money is new and has not penetrated the market which account for 37% of the respondents strongly disagreeing with the concept of

mobile money as a mode of payment and 36% being against the idea of mobile money as a model for paying suppliers.

This study demonstrated increased use of mobile money services for various financial transactions in Nasarawa state. For those using a particular mobile money service, respondents were likely to rate the transaction cost as expensive. However, those using any mobile money service were more likely than those not using the service to rate it as important to the business. Inferential statistics failed to prove that mobile money had a positive impact to business growth.

Thus, the study concludes that there is no significant relationship between mobile money services and the growth of SME's in Nasarawa state. This implies that the growth of SME's does not depend upon the mobile.

5.2 Conclusion

The study found high knowledge of currently available mobile money services surveyed. Additionally, this study demonstrated increasing use of mobile money services for various financial transactions in Nasarawa state. Majority of study respondents agreed that mobile money has had a positive impact on their sales even though fewer respondents are using the service as a savings facility or to access loans services. Some business owners are using mobile money services for business related transactions like to pay bills, pay salaries, deposit or withdraw money from their banks, and to buy or sell business related goods. Majority of SMEs were utilizing this service for traditional functions like sending and receiving money for the business.

Respondents did not find it easy to use mobile money services to access loans even though currently this function is available through collaborations with some banks.

Functions like salary payment and loan repayment have not been used or preferred by SMEs in Nasarawa state. To be noted however, mobile money has a positive impact on sales amongst SMEs in this region and the biggest reason for this was due to convenience of the mobile money services. There is a positive correlation between SME growth and transaction cost, convenience and financial accessibility even though a weak relation.

This study concludes that mobile money has made a positive contribution to the SME sector since majority of the traders rely on it as opposed to the formal banking sector for their day to day transactions. Secondly, it is evident that all the respondents in this study have a deep understanding of the basic functions of mobile money. However, it is worth noting that majority of the respondents have reservations on the cost of the service. From the findings, it is evident that, mobile money users are not well conversant with mobile-bank transactions on loan applications and repayment and possibly prefer the normal banking system to mobile banking when it comes to loans and advances, or other forms of business loans applicable to SMEs.

5.3 Recommendations

- i. Mobile banking service use by SMEs in Nasarawa state was found to be cheap and offer low transaction cost for these businesses, and as a result, have only minimal impact on their operating cost. It is therefore recommended that the use of mobile banking be expanded among SMEs in the state. Offering important service at low cost, mobile banking could be integrated into the business strategy of SMEs as an avenue for improving their business in terms of growth and gaining competitive advantage.

- ii. SMEs who adopt mobile banking are more likely to enjoy very high sales revenue as a result. The application of mobile banking should thus, be increased in the day to day sales transactions of SMEs in Nasarawa state.
- iii. The application of mobile banking services by SMEs increases how effective they are in carrying out their daily business operations. To be effective therefore, SMEs in Nasarawa state need to strategize in effectively applying mobile banking in the way they do business.

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