

Impact of Mobile Money Transfer on the Performance of Micro and Macro Enterprises in South Sudan

Lual Daniel Kur & Niu Xiongying

Abstract:

Nowadays, Money transfer through mobile phone, referred to as a Mobile Money Transfer (MMT) has gained popularity worldwide. Currently, most of the businesses are accepting MMT to enhance their performances. With time, the number of users of MMT is increasing rapidly in South Sudan. Still, it was not clear how the usages of MMT influences the performance of enterprises. Our study aims to determine how the usage of mobile money can convey economic improvement in South Sudan. Furthermore, as the leading business center in the country, our study area was the Juba city and we considered the biggest five market areas namely Konyonyo, Juba, Custom, Jebel, and Militia. Through the survey questionnaire, we collected data from small and medium enterprises, and collected data were analyzed to measure the relationship among usage of MMT, business performance, and economic improvement. Our findings showed that MMT has a great impact on both business performance and economic improvement.



IJSB

Accepted 07 October 2020
Published 10 October 2020
DOI: 10.5281/zenodo.4077149

Keywords: Transformational Leadership, Employee performance, Local People, task performance, South Sudan.

About Author (s)

Lual Daniel Kur (corresponding author), Business School, University of International Business and Economics (UIBE), Beijing, China.

Professor Niu Xiongying, Business School, University of International Business and Economics (UIBE), Beijing, China.

1. Introduction

The telecom industry has exponentially grown worldwide since the invention of the transistor in 1947. Moreover, this rapid growth means that the way consumers access and use telecom services are also changing (World-Bank, 2012). Besides, this change has shown that globally, countries have the opportunity to empower marginalized population with Information, Communication and Technology (ICTs). Notable among these changes is the opportunity for mobile phones to propel development due to their ability to easily leapfrog the infrastructure barriers in remote and rural areas worldwide (Aarno, 2015). Currently, the mobile revolution is sweeping the world and this is evidenced by the fact that there are over 2 billion people having cell phones in a world where over 2.5 billion do not have bank accounts. Due to its convenience today, the service has spanned through to at least 89 countries around the world with a total of 255 mobile money services in operation (Gartner, 2012). According to McDermott (2016), the introduction of mobile money transfer service in some portions of Africa has brought about accelerated development due to its nature of facilitating financial transactions in a quick, safe and fast way. The author contended that in Africa, only 20 percent of families have bank accounts. According to African Development Bank (2013), the majority of these people are rural dwellers in developing countries. Moreover, the reasons for not having a bank account is the lack of money to use one, bank accounts are too expensive, banks are too far away (especially in rural areas), documentation is lacking, and people do not trust banks (ITU, 2013). Therefore, mobile money was developed as a means of making financial services available to the unbanked.

Davis (1989) stated that mobile money services are information communication technology, business innovation, enabling movement of money from one account to another electronically. The vast of the popular mobile money transfer services in Uganda are phoning to phone money transfer; phone to the bank / bank to phone money transfer, phone to company/organization money transfer, bank to company/organization money transfer, phone to phone airtime credit transfer and phone to phone airtime top-ups (GSMA, 2009). The first Mobile money service was built up and launched in Kenya in 2007 by Safaricom, and today there are 15 million mobile money customers making it the most popular and successful mobile money in the world (Higgins, Kendall, & Lyon, 2012). On the other side, MTN Uganda launched its services in Uganda on October 21, 1998. MTN has since grown to be the leading Telecoms Company in Uganda servicing in excess of 1,400,000 customers and is still projecting growth (IM, 2012). Moreover, it has various branches all over the country with its network coverage going over 80% of Uganda's.

In South Sudan, due to the pro-longed conflicts, the economy became heavily weakened. Research shows, there is hope that the presence of the mobile money services in the country may be a dream come true for the revitalization of the economy. South Sudan mobile money was established in July, 2009 with aims of economic recovery, poverty reduction and improvement of the standard of livelihood. After its launching, the mobile money services became the payment method of choice across South Sudan, given that its use may possess lower risks than informal payment methods, storing the money in mobile phone implies lower risk than carrying cash, and using mobile money services for payment purposes may cost less than bank transfers. Later on, 03 December 2018 South Sudan approves two mobile money services; Nilepay and M-GURUSH. Moreover, South Sudan's communications authority issued its first two licenses for nationwide mobile money services in an attempt to reduce the country's heavy reliance on physical cash. Further, Two companies launched in August: M-

GURUSH, owned by local tech firm Trinity Technologies, and Nilepay, a telecoms firm with Kenyan and South Sudanese owners (VOA , 2019). Also, both have partnered with one of South Sudan's two mobile operators. Additionally, Newswire Xinhua reported that Trinity Technologies South Sudan would be presented one of two licenses from the National Communication Authority (NCA) alongside one, as yet unidentified, party. As a result, any local unlicensed operations currently running are being shut down. Prior to the launch of licensed services, consumers in the country's capital of Juba were able to transfer cash using a platform created by MTN Uganda and Safaricom's m-Pesa. These services were initially created to allow remittance from neighboring countries. In South Sudan, mobile money is becoming the most commonly utilized electronic money service at the markets, especially among the traders both nationals and foreigners. Additionally, the services enable sending and receiving funds by phone, in an attempt to boost the economy after a five-year civil war killed almost 400,000 people (MEDNICK, 2019). Further, cash can be transferred into mobile money deposits and vice versa via specialized agents, which are widespread across the country (Jalakasi, 2019). After being introduced, mobile money usage has grown rapidly. Research shows that there are many reasons for this rapid growth and success of mobile money in South Sudan, including the availability of cheap smart mobile phones, dominant market position of Zain-telecom South Sudan as one of the leading telecom companies after the collapse of Vivacel South Sudan, the aggressive marketing and expansion campaign in the early days, and the need for payment services for families with members often spread across South Sudan and East Africa.

Due to the emerging economic challenges in South Sudan characterized by the low economic gaps, high taxes, high competition among the competing companies, high pricing doubling on the customers, corruption and embezzlement and a basket plenty of others, the country's economy needs to be jumpstarted. However, so many approaches were implemented by the Central Bank of South Sudan but almost all were in-vain. Further, the introduction of mobile money in the country accompanied by the gradual reduction of mobile phones may be a zone for reviving the economy. Therefore, this study will focus on the relevance of mobile money services to business owners (both small and medium) as well as why they should be interested in using mobile money for business purposes. Thus, it is behind this backlog that the researcher sought to investigate the significance of the Mobile Money services in the economic recovery of South Sudan.

The objectives of this study are to examine the roles played by South Sudan mobile money in the economic recovery, establish the effect of mobile money companies on small scale business in South Sudan, ascertain the importance of mobile money to the people of South Sudan and examine the challenges business people, face in accessing mobile money services. Basically, we tried to find answer of four questions in our study (i) What are roles of South Sudan mobile money in boosting economic recovery? (ii) What are the relationship between the South Sudan mobile money and business in South Sudan? (iii) What are challenges face the performance of the mobile money companies in South Sudan? and (iv) What are the significances of the South Sudan mobile money in small scale business operation?

It creates awareness of the services of mobile money companies to the readers most especially south Sudanese, It acts as a platform to some researchers in South Sudan to dig deeper in the topic (significances of mobile money services in the economic recovery of a country), It outlines the weaknesses of the mobile money services and enables the service

providers (companies) to make more improvement. The study may aid in making the government of South Sudan aware of the positive impacts of the mobile money companies in the economic recovery of the country, thus revising the taxing system on the companies.

2. LITERATURE REVIEW

In most developing world, especially the sub-Sahara Africa, there is a growing enthusiasm about the increasing number of mobile phones and the potential relevance of the mobile platform in helping to address the needs of individuals and leaping businesses. Besides, on the back of the rapid consumption of mobile telephony in developing countries, many wireless applications of relevance for small and medium businesses have emerged. Thus, mobile money becomes one of the most notable applications of this trend, a phenomenon that took off in earnest only in the past few years.

2.1. Mobile Money

In simple terms, mobile money may be related to bank in your pocket, which refers to a digital repository of electronic money developed and implemented on mobile devices (Gartner, 2012). More to the above, it permits a person-to-person transaction (P2P) between mobile devices (M2M) from users of the same service (International Financial Corporation, 2010). Thus, it is similar to a normal physical wallet and is able to store money and credit and debit card. There are three major mobile money services: (i) Mobile banking, which is only one type of mobile money service, it allows customers of a financial institution to access their money, only available to people who possess a formal bank account. (ii) Mobile payment (also known as m-payments) is a service allowing unbanked people to purchase or sell goods and services at a merchant shop/store (or remotely) using their mobile wallet through their mobile phone, instead of cash. and (iii) Mobile transfer (also known as money transfer "person-to-person" (P2P) or mobile remittances) it is a service that allows unbanked people to send or receive small sums of money to/from any other mobile phone user (even if they are subscribed to different telephone service providers) across the country, from urban to remote rural areas, and across international borders.

2.2 The revolution of MM companies

In Africa, especially Kenya and Uganda, this new financial innovation proved to be an efficient way for telecom companies to increase their market shares by widening the range of services available to their clients. In concrete, this may be as a result of rapid expansion partly owing to the high rates of both the rollout of mobile phone network and adoption of mobile phones. Research shows that in Uganda, there is a rapid increase of households owning mobile. In clarity, one in two households reported possessing more than one mobile phone in the Mobile Money survey of 2019. Similarly, a quick comparison between mobile money and traditional financial institutions reveal intriguing observations, highlighting on the relative ease of physical access to mobile money service centers. For-instance in Uganda, MTN Mobile Money alone has over 30,000 agents as compared with 900 commercial bank branches with 786 Automated Teller Machines (ATMs) in the country. Therefore, it may imply that MM companies are easily accessed, compared to traditional financial institutions like banks.

According to Must & Ludewig (2010), mobile money allows users to deposit money as e-float on a SIM card-based account, called an m-wallet, which can be converted into cash at the customer's discretion at any mobile money agent location all over the country. The author then urged that in the initial stages of its establishment, the range of services offered via

mobile money was largely limited to person-to-person transfer. However, with the growing interest from various stakeholders, coupled with competition among the mobile network operators (MNOs), service providers have gradually innovated to widen their range of services as evident successfully in Kenya, East Africa (Aarno, 2015). Currently, most MNOs offer more complex functions like payment of utility bills, school fees, airtime purchase and electronic payment for goods and services (Davis, 1989). Moreover, one of the most interesting advances is an arrangement that allows for the payment of government taxes and Kenya Airways tickets using mobile money. As far as the recent developments in the mobile banking arena is concerned, there is possibility for users to access bank account information using their mobile phones and move funds between the bank account and m-wallet without physically visiting their bank branches, thanks to the recent partnerships between MNOs and banking institutions (African Development Bank, 2013). Consequently, the author recommended that mobile money not only has transformational benefits for formerly excluded individuals, but also improve service experience, convenience and quality for the existing users of bank services. As a result of the rapid urbanization in the East Africa, especially Kenya, Uganda and Tanzania over the past years, the number of people migrating to urban centers have been steadily increasing, most often in pursuit of lucrative opportunities in urban centers (International Financial Corporation, 2010). The author further emphasized that those who migrate to cities often extend financial support to their family members and friends in villages in the form of remittances and informal loans. Before the invention of mobile money in the country, the efficiency of such informal risk sharing arrangements heavily relied on the quality of transport infrastructure as most of these transactions has traditionally been made through informal channels like physical movement of cash by the receiver, sender, and agents like bus and taxi drivers (Higgins, Kendall, & Lyon, 2012). Besides, such channels are often risky and involve high transaction costs in terms of transport fares and travel time incurred in sending and receiving money among family members and friends especially across geographically distant and remote locations. Research shows that mobile money lowers the transaction, time and transport costs associated with the usage of financial services, catalyzing their adoption even by rural households (McDermott, 2016). On the other hand, the financial product has made it easier for family members, friends, private money lenders and members of informal social groups to exchange informal credit while others find it convenient and cost-effective to save money in the m-wallets in instances where commercial banks are inaccessible (GSMA, 2009).

2.3 The economics of mobile money

The Economics of Mobile Money: The Micro-view

The novelty of mobile money and its recent introduction in many countries means few studies have examined the economics of mobile money (Zutt, 2010). Moreover, mobile money storage and payment system, and its further linkages to bank savings accounts, micro-insurance, and credit via algorithmic credit scores, could affect households and businesses through several different channels. Therefore, mobile money potentially helps ameliorate several areas of market failure in developing economies.

Reducing Transactions Costs

Mobile money reduces the transaction costs of sending and receiving money, especially given the inadequate and expensive transport infrastructure. Must & Ludewig (2010), observes that in Kenya, where families and social networks are widely dispersed from internal migration, remittances on average travel 200 km. Zutt (2010) state that the costs of transactions, including the transport costs of travel, for example, to a bank, utility company, or government office; the travel time and the waiting time in long queues; The coordination costs between

individuals, between firms and suppliers or customers, and between government and individuals, which can be extended in time and money lost. And, the author argued that the costs of delays and “leakages” through corruption or middlemen, acting like a tax (or complete loss through theft from insecure methods of money transfer). In most cases, there is also an opportunity cost to lost money and time. Whereby, the money could have been invested, spent, or saved; the time could have been spent on productive activities (International Financial Corporation, 2010). Most importantly, the automated delivery of cash transfers, wages, social security funds, and private remittances by electronic transfer increases the certainty of the timing of cash receipts, which helps planning. This further reduces coordination costs, the costs of delays, and hence the opportunity costs.

Reducing Asymmetric Information and Improved Transparency

Davis (1989) stated that recording financial transactions create greater financial transparency and reduces asymmetric information. The author also elaborated that asymmetric information and the fixed costs of servicing an account lie at the heart of the failure of the formal banking sector to advance credit to poor customers who lack collateral and financial histories. But, the way of moving cash from under the mattress into an electronic account turns it into recorded cash. Hence, every deposit, withdrawal, transfer, or payment transaction through mobile money creates a recorded financial history. More importantly, mobile money electronic record of payments potentially protects consumers against theft, fraud, and misinformation. However, such protection can reduce transaction costs for consumers and increase the use of business through trust. For example, Radcliffe and Voorhies (2012) note how the “anonymity of cash” may inhibit trust between traders and new vendors. Further, the authors urged that the greater transparency through records can help regulate the service, including the dissemination and posting of information on transaction costs to promote competition. Likewise, recorded transfers with appropriate ID documentation (“know your customer”) also facilitates cheaper international remittance transfers.

Changing the Nature of Saving and Increasing Savings through Digital Means

Research has it that there are several motives for saving. In clarity, lifecycle motives compensate for differences in time between income and expenditure streams, and these include saving for education, leisure, marriage, consumer durables, housing purchases, retirement, and funeral expenses. Similarly, precautionary motives (buffer stock saving) reflect the uncertainties of future income and expenditures, and include saving for unemployment, illness, accidents, natural disasters, and risks associated with old age. Finally, there is saving for a bequest motive, to give gifts in one’s lifetime or to leave a legacy to heirs. Saving thus helps to allocate consumption over time, and to reduce risk. For the unbanked poor, their “immersion in physical cash creates considerable frictions in their financial lives” (Radcliffe and Voorhies 2012). However, cash-based households have informal saving options, which carry risks of theft or “liquidation”: cash under the mattress; accumulation of assets such as jewelry or livestock; and storing savings with informal savings groups. Hence, the loss of savings in this manner is common. Matter of fact, the mobile money electronic accounts offers the safe storage of cash, though without the payment of interest. Also, another advantage is privacy. In contrast with cash receipts, the reduced observability of the timing and sizes of mobile transfers and the accumulated electronic balances could protect savings for the recipient (Aker et al. 2016). Moreover, in an economic psychology literature on how the poor could be encouraged to accumulate savings, for example, the use of “commitment”

savings accounts (Dupas, Pascaline, & Robinson, 2013), mobile money accounts offer a practical template.

Improving other Aspects of Economic Efficiency

The combination of better communication and coordination with mobile phones and instantaneous mobile payments could improve business planning and efficiency (World-Bank, 2012). Indeed, mobile payments facilitate trade. Moreover, access to credit, informally and through banking services linked to mobile money, can improve investment decisions. Besides, improved risk sharing and cheaper, secure, long-range remittances can expand the scope of labor decisions to encompass high-risk, but higher-return occupations, or migration to higher-return labor markets (Suri & Jack, 2016). Thus, could be a better allocation of savings and labor within the household and in businesses, and more efficient investment decisions affecting agriculture and business, and education and skills. As a result, returns to investment could rise, with a feedback to greater savings.

2.4 Mobile Money Vendors (also known as vendors)

According to Aarno (2015), vendors are those small businesses or individuals who incorporate the Mobile Money Transfer service to their business and act as agents for the mobile network operators and act as intermediary between the operators and subscriber (customers). The vendors are most common in developing countries operating in small scale.

Mobile banking

Mobile banking in simplest term can be the performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). It is also known as M-Banking, m-banking, SMS Banking (World-Bank, 2014).

2.5 Theoretical Literature Review

There are many theories that have been developed on Information Technology (IT) adoption, such as Davis' (1989) Technology Acceptance Model (TAM), Roger's (1995) Diffusion of Innovation (DoI) or Innovation Diffusion Theory (IDT) and the Unified Technology Acceptance User Theory (UTAUT) (Davis, 1989). Moreover, TAM is an information systems theory that models how users accept and use a technology. Additionally, this model suggests that when users are presented with a new technology, two specific factors influence their decision about, how and when they will use it. Consequently, these are 'perceived usefulness', which refers to the degree to which a person believes that using a particular application system would enhance his or her job performance; and 'perceived ease-of-use', which is the degree to which a person believes that using a particular system would be free from effort (Davis, 1989). In some instances, even more than one theory was used. For example, in Germany, Pousttchi and Wiedemann (2007) combined TAM and TTF to explore consumer the acceptance of mobile money payment. Another theory that has been used to describe acceptance of information systems is Rogers' (1995) DoI or the Innovation Diffusion Theory (IDT).

According to Rogers (1995), innovation is defined as an idea, practice or object while diffusion is the process by which innovation or perceived new technology is communicated through certain channels over time among members of a social system (Rogers, 1995). Moreover, DoI includes five significant innovation characteristics, namely, relative advantage, compatibility, complexity, trial ability and observability. Besides, the author emphasized that relative advantage is defined as the degree to which an innovation is considered better than the existing method of performing the same task. Furthermore, the authors suggested that the theory that relative advantage has a positive influence on behavioral intention. Likewise,

compatibility is defined as the degree to which adopting the innovation is compatible with what people do, existing values, experiences, and needs. Also, complexity is defined as the degree to which an innovation is perceived as relatively difficult to understand and use. The author argued that trial ability is defined as the degree to which an innovation may be experimented on a limited basis before making an adoption (or rejection) decision. Then, observability is defined as the degree to which results of an innovation are visible to others (Rogers, 1995). According to Venkatesh et al, (2003), UTAUT was proposed and developed through a review and consolidation of eight IT adaptation theories, namely, TAM, Motivational Model, Theory of Reasoned Action, Theory of Planned Behavior/Technology Acceptance Model, Model of PC Utilization, Innovation Diffusion Theory, and Social Cognitive Theory. Additionally, the UTAUT aims to explain user intentions to use an information system and subsequent usage behavior. Furthermore, the theory suggests that four key constructs: performance expectancy (the extent to which an individual believes that using a system will help him or her achieve better results on the task); effort expectancy (the extent of the ease associated with the use of the system); social influence (the extent to which an individual perceives that important others believe he or she should use the new system); and facilitating conditions (the extent to which an individual believes that an organizational and technical infrastructure exist to support use of the system as direct determinants of usage intention and behavior) (Venkatesh, Morris, Davis, & Davi, 2003).

2.6 Empirical Literature Review

According to a study carried out by Higgins, Kendall, & Lyon (2012), to investigate the mobile money usage patterns of Kenyan SMEs. The authors surveyed 865 SMEs which were urban and semi-urban based businesses. The authors then, found that whether Kenya SME owners used mobile money to receive payment, pay bills, salaries, or suppliers, they are higher in volumes of both mobile money adaptation transactions (Higgins et al., (2012). Later, the data showed that of the 865 SME owners who responded, 861(99.5%) used mobile money services in their personal or business dealings, and 67% used it for business (ibid.).

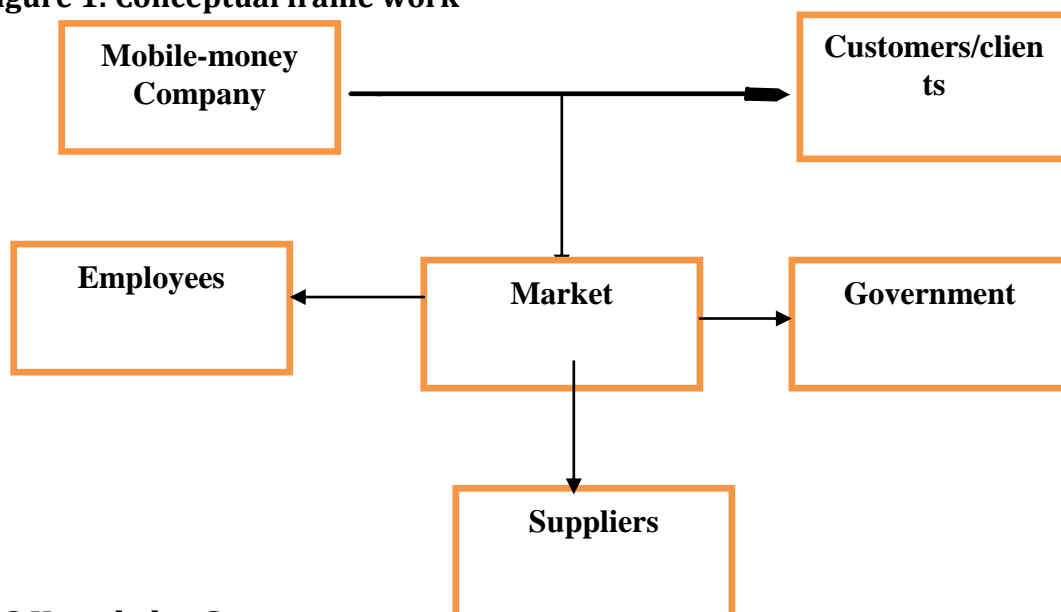
On the other hand, a recent study by Inter-Media directed to investigate uptake, use and market potential of mobile money services in Tanzania. Moreover, the survey involved 2,980 households. Further, data were collected via questionnaires and interviews. Then, the study revealed that the majority of registered mobile money users for business purposes used it primarily to purchase inventory and receive payments for goods and services. Also, the study found that there was no difference between rural, urban and peri-urban registered users in the way they used mobile money services for business (InterMedia, 2013). Likewise, in a study geared to investigate mobile money in Nigeria with insights from Kenya and employed TAM to examine factors that influence a user's intention to use mobile money. Specifically, the research was based on a questionnaire survey and semi-structured interview. Then, the results indicated that predictors of the intention to use mobile money in Nigeria included convenience, security/privacy, trust, perceived ease of use and perceived usefulness, with convenience being the most significant of all factors (Odia, 2012). According to Zutt (2010), the speed and safety of mobile money services have enabled quick and easy transfer of money. Consequently, the author argued that the growth of numerous economic activities sparked out, especially in the rural areas, through increased money circulation thus, boosting local consumption. According to World Bank (2014), It is likely that reduced costs and increased efficiency and reliability of the systems have enabled more people to send money to the rural areas, increasing economic activities in those places. Moreover, this can be evident during the planting season in Rural Africa where farmers receive money to purchase

seeds without unnecessary traveling. But, the author argued that the current data is lacking to support such flow. The data is, however, available to confirm an increase in the movement of money from the rich to the poor when schools reopen, which is an indication of money being made available for school fees (Zutt, 2010). Simiyu & Oloko argue that the availability of mobile money transactions broadens the customer base of SMEs given the fact that the majority of the rural populace now has access to a mobile phone. Furthermore, the accessibility, convenience and lower cost nature of mobile transactions has resulted in the growth of SMEs business activities, especially in rural areas (Simiyu & Oloko, 2015). Most global research on mobile money have focused on the impact on developing countries, revealing that access to financial services through mobile money leads to poverty reduction and financial inclusiveness. Some of these studies reveal that mobile money has proved to be a scalable method to provide financial services in developing countries. Several reasons have contributed to this state, including easier and more affordable ways to send remittances, increasing the reach and affordability of micro-loans, decreasing costs of savings among other services that are required by SMEs (Must & Ludewig, 2010). According to World Bank, increased mobile phone penetration in developing countries is correlated with a 0.8% increase in economic growth. Mobile money penetration has, therefore, had its own contribution, especially in relation to financial inclusiveness. Considering there are over 100 deployments of mobile money systems in developing countries, with around half in Africa alone the service has a clear target population (World Bank, 2012).

2.7 Service providers and stakeholders for mobile money

Three separate business models are currently creating the business environment for the mobile money ecosystem, and the business model depends highly on the regulatory aspects, culture, infrastructure, and population size. The business models are adapted through the entity that is running the business.

Figure 1: Conceptual frame work



2.8 Knowledge Gap

Although numerous studies by World Bank, Global studies and in the Sub Saharan African countries have been conducted on mobile money, there is a knowledge gap on the role of usage of mobile money services among MSMEs and how they impact on the business

performance. More research is clearly needed to further expand our understanding of how MSMEs use mobile money for business growth, the level of service quality of mobile money services and challenges faced by MSMEs in using mobile money for growth. This study sought to address such gap.

3. Methodology

3.1 Research Design and Methodology

This study opted for the pragmatism paradigm. The positivism and interpretive philosophies were adopted in order to collect data from mobile money users in Konyokony, Custom, Juba, Suk-militia and Suk-Jebel markets in Juba city South Sudan. Furthermore, the researcher decided to make use of both quantitative and qualitative research methods in this study to obtain as complete and understanding as possible of the research problem and to make effective use of any converging information which the quantitative and qualitative studies generated. On the other hand, the strategy enabled the researcher to perform a rigorous evaluation of the reliability of the findings by using the qualitative findings to corroborate the results which the survey questionnaire generated through triangulation.

3.2 Sampling Technique

In this study, the researcher was unable to determine, with an acceptable degree of exactitude, how many of the business owners (both small and medium) which qualified for selection in the identified markets were using mobile money services to send and receive payments. Similarly, the criteria concerning the periods for which the owners (both small and medium) had been operating and the numbers of employees which they had made it even more difficult to identify and obtain access to potential participants. Using simple random sampling would have entailed an unacceptable degree of difficulty, being excessively time consuming and entailed expense which the researcher could not afford. According to Polit and Beck, the sampling method is a one that chooses a portion of a target population to represent the population as a whole in the respects in which particular researchers are interested in the purposes of their studies. The researcher elected to use non-probability sampling to select participants who were readily identifiable as fulfilling the criteria for inclusion in the research sample and drew upon their knowledge of local business owners (both small and medium) to locate other potential participants through snowball sampling. Mindful that qualitative phase seeks to understand better the underlying reasons and motivations rather than to quantify and generalize to a broader population, it is inappropriate to use random sampling techniques.¹ The participants for the in-depth interviews were purposively selected from among the respondents to the questionnaire based on their sales turnover, to obtain a research sample whose members represented business owners (both small and medium) whose turnover ranged from the minimum to the maximum levels and also adequately served those with intermediary levels of turnover. The survey questionnaire was administrated over 12 weeks, between June 2020 and July 2020; while in-depth interviews took around six weeks, by mid- July 2020.

3.3 Sampling Size

Conscious of many restrictions, including time, finance and limited access and the fact that the population as a whole is too large to work with, the researcher was not able to collect or analyze data from the entire population. As Dudovski maintains that a sample size of twelve

¹ Fox, N.; Hunn, A.; Mathers, N. Sampling and sample size calculation. NIHR RDS East Midl ./Yorks. Humber **2007**, 1, 1–41.

is sufficiently large for a qualitative study of a homogeneous population, the researcher selected to conduct twelve in-depth interviews.² For the quantitative component, the researcher encountered a considerable amount of difficulty in determining an optimal sample size for the administration of the survey questionnaire, in the absence of official statistics concerning the numbers of the business owners (both small and medium) which were making use of mobile money services in the previously identified markets in Juba city, and even more difficulty in identifying business owners (both small and medium) who had been operating for two years or more. Consequently, the researcher elected to use the formula which Cochran developed to calculate the size of the research sample for the quantitative study. Also, the researcher decided upon a sample size of 250 for the quantitative study. To compensate for any unusable questionnaires and to ensure that the final sample size was as close to 250 as possible, the researcher distributed a total of 300 questionnaires evenly among potential respondents in the markets. After he had collected and sorted the completed questionnaires, it emerged that 285 were usable. As the 285 completed questionnaires significantly exceeded the initial target figure of 250, it was likely that the credibility of the findings would be substantially increased.

3.4 Measures Taken to Ensure the Credibility of the Findings

Although it is not possible to eliminate the possibility of the findings of research studies lacking credibility, researchers need to take all reasonable measures to do so. Credibility refers to the extent to which accounts which are provided by the researchers are plausible and appropriate, particularly concerning the degree to which their findings accord with the perceptions of the participants in their studies. Credibility is predicated upon the criteria of reliability and validity to evaluate the quality of research.

3.4.1. Reliability

Reliability refers to the consistency with which particular research instruments generate data. Consequently, the reliability of the findings of a study is assessed in accordance with the likelihood that other researchers would be able to generate similar findings under the same conditions and using the same research techniques. As such, the reliability of the findings of this paper was ensured by pilot testing both the survey questionnaire and the interview guide and by subsequently corroborating the findings of the quantitative study with those which were obtained from the face-to-face in-depth interviews.

3.4.2. Validity

According to Polit and Beck, validity can be defined as the degree to which a research instrument measures what it is intended to measure. From a slightly different standpoint, Dudovskiy evaluates the validity of findings as a measure of the degree to which the requirements of a particular scientific research methodology have been adhered to during the process of generating research findings.³ In both instances, it is evident that validity is a measure of accuracy. Creswell explains that in mixed methods research, the findings from quantitative studies are used to validate those of qualitative studies and vice-versa.⁴ As this study employed a mixed methods research design, the findings from the administration of the survey questionnaire were validated against those which the in-depth interviews generated.

3.5 Demographic Data and Response Rate

²Dudovskiy, J. The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance. 2018. Available online: <http://research-methodology.net/about-us/ebook/> (accessed on 19 December 2019).

³Dudovskiy, J. The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance. 2018. Available online: <http://research-methodology.net/about-us/ebook/> (accessed on 19 December 2019).

⁴Creswell, J.W. Research Design: Qualitative, Quantitative and Mixed Methods Approaches, 4th ed.; Sage Publications: Los Angeles, CA, USA, 2014.

The researcher collected data from 5 markets around Juba. They include, Juba market, Custom Market, Konyokonyo market, Suk Libya, and Buaba Market. Out of the 300 questionnaires distributed to the respondents, 288 were returned. Therefore, the response rate is 96%. The study comprised of mostly men (70.8%) aged 18 to 24 years old. 47.8% of the respondents are married and another 47.8% are single which forms the majority in the study. Additionally, most respondents (56.3%) in the study completed university as summarized in the table below.

Table-1: Profile of respondents

Gender	Frequency	Percent
Male	204	70.8
Female	84	29.2
Total	288	100
Age		
18 - 24 years	102	35.4
25-30 years	72	25
31-40 years	72	25
41 -50 years	30	10.4
51-60years	12	4.2
Total	288	100
Marital Status		
Married	132	47.8
Single	132	47.8
Divorced	12	4.4
Total	276	100
Primary	6	2.1
Secondary	96	33.3
University	162	56.3
Never attended formal education	24	8.3
Total	288	100

Source: Field study

3.6 Business information

The researcher collected information about Small scale retail shops, Groceries, Restaurants and local tea shops, wholesale businesses, companies and other businesses. According to most respondents (33.3%), they owned small scale retail shops. This means that small scale retail shops provided more information in the study than other business. Also, the main method used by the businesses for paying supplies is through cash pay as reported by 88.6% of the respondents.

Table 2: Business profile

Type of business	Frequency	Percentage
Groceries(Vegetable and fruits)	24	8.3
Restaurant and local tea business	24	8.3
Small scale retail shop	96	33.3
Whole sale	24	8.3
Company owner	30	10.4
Others	90	31.3
Total	288	100
Method for paying supplies		
Credit	30	11.4
Cash	234	88.6
Total	264	100

Source: Field study

As summarized in the table below, most businesses do not use mobile money services for their businesses. According to 51.1% business people interviewed, they do not use mobile money services to do business transactions. However, those who use mobile money services tend to repeatedly use the same mobile money service provider most times as reported by 58.7% of the respondents. Further, most business people use mobile money services from

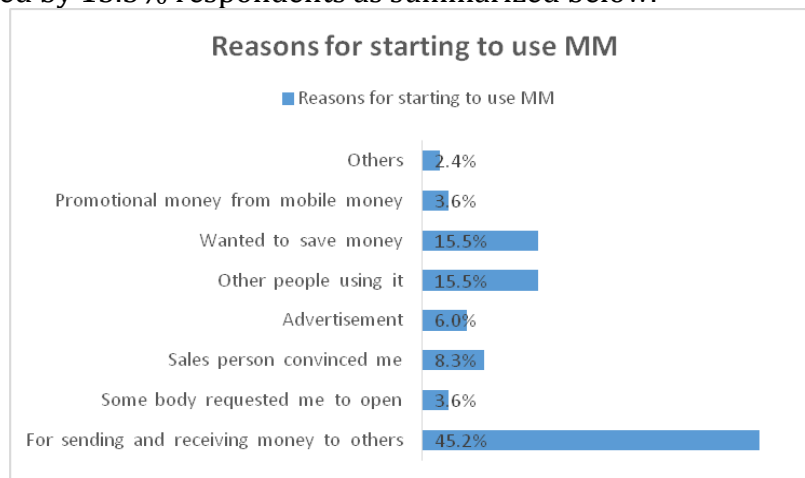
Uganda and Kenya more than the ones in South Sudan. According to most of the 41.2% respondents interviewed, they use MTN mobile money service. This is followed by M-pesa as reported by 11.8% respondents.

Table 3: Mobile money for business transactions

Use of mobile money for business transactions	Frequency	Percent
Yes	132	48.9
No	138	51.1
Total	270	100
Do you tend to use the same mobile money service most times		
Yes	162	58.7
No	114	41.3
Total	276	100
Which mobile money services do you use		
MTN Mobile Money	84	41.2
M-pesa	24	11.8
Airtel Money	6	2.9
M-gurush	60	29.4
Nile-Pay	30	14.7
Total	204	100

Source: Field study

Most beneficiaries were prompted to use mobile money because of the need to send money to relatives, friends and others as well as receive money as reported by 45.2% of the respondents. This is followed by the need to save money as reported by 15.5% respondents. Other respondents were pursued by other people such as friends and relatives to use mobile money as reported by 15.5% respondents as summarized below.



3.7 Reasons business people do not use mobile money

Most people do not use mobile money services because they don't own the businesses, but rather are attendants as reported by 30.6% of the respondents. Additionally, some of the people reported that they have small businesses that do not require mobile money services as reported by 27.8% respondents interviewed. 25% respondents reported that they do not use mobile money services because it will require payment of extra taxes from the government as summarized in the subsequent table.

3.8 Reasons business people use mobile money services preferred

Most beneficiaries reported that they prefer the services of mostly MTN Uganda and M-Pesa because they are the only companies providing mobile money services in South Sudan as reported by 52.5% respondents interviewed. According to 45% other beneficiaries, they trust the mobile money companies' reliability. Additionally, business people found that agents of MTN and M-Pesa are knowledgeable, fast and always have cash on hand while conducting business transactions hence are reasons for them using mobile money services as summarized in the table below.

Table 4: Use of mobile money

Reasons for not using Mobile Money			Reasons for using Mobile Money preferred		
	N	%		N	%
1. Don't own business	66	30.6%	1. it is the only company providing mobile money services	126	52.5%
2. Extra taxes to be paid	54	25%	2. Has agents who are knowledgeable	78	32.5%
3. Bribes will be required to avoid taxes	24	11.1%	3. Has agents who are fast	54	22.5%
4. Business not registered	54	25%	4. I trust this mobile money company reliability	108	45%
5. To pay account fees I will have to raise prices of goods	30	13.9%	5. Agents always have cash to conduct my transactions	48	20%
6. My business is small	60	27.8%	6. Out of courtesy	30	12.5%
7. I don't have an account for my business	30	13.9%	7. Company has friendly agents	30	12.5%
8. I use other methods of payment	48	22.2%	8. The agent is female	6	2.5%
9. It is not a good way to do business payments	18	8.3%	9. No particular reason	6	2.5%
10. I just have not thought about it	36	16.7%	10. Serves many providers	12	5%

Source: Field study

3.9 Impacts of mobile money companies

3.9.1 Timeliness of transactions

Mobile money companies used by the business people provide quick and easy access to financial services in South Sudan as reported by 86.4% of the business people interviewed. According to most of the business people, it takes them 15 or less minutes to access mobile money agent as reported by 55.8% respondents. This is because the places for accessing mobile money services are near shops for buying airtime and also near the home. Summarized in the table below, most respondents (31.7%) access mobile money near the airtime shop followed by near home as reported by 24.4%

Table 5: Agent information

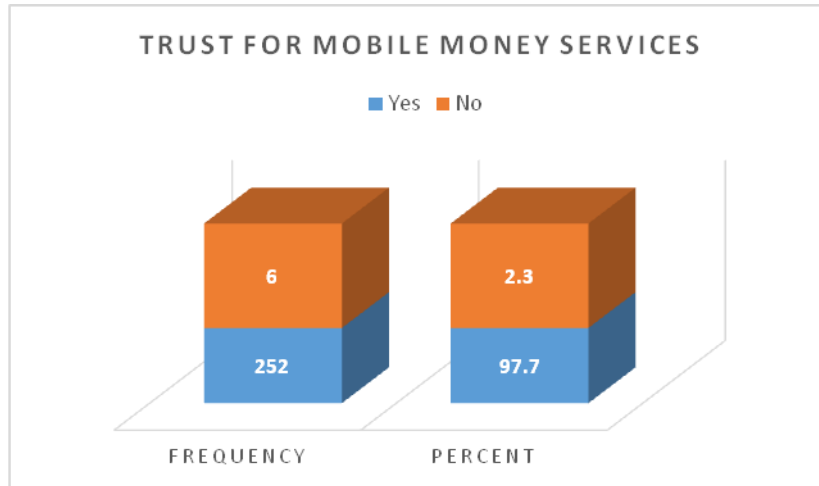
Whether mm companies provide Quick and easy access to financial services in South Sudan		
	Frequency	Percent
Yes	228	86.4
No	36	13.6
Total	264	100.0
How long it takes respondent to get to mobile money agent		
15 minutes or less	144	55.8
30 minutes and above	54	20.9
1 to 2 hours	18	7.0
2 to 4 hours	42	16.3
Total	258	100.0
Nearest location for accessing mobile money services		
Near home	60	24.4%
Near work place	48	19.5%
Near work	30	12.2%
Near shop for food	12	4.9%
Near children school	18	7.3%
Near school or care facility	12	4.9%
Near public transportation hub	36	14.6%

Near a shop for charging	36	14.6%
Near shop for air time	78	31.7%
Other places	36	14.6%

Source: Field study

3.9.2 Trust for mobile money services

Most business people interviewed trust mobile money services. According to 97.7% (252) respondents interviewed, they trust the mobile money services as summarized in the figure below.



3.9.3 Uses of the Mobile money services to the business people

Mobile money services enable business people to deposit, withdraw money, buy airtime top-ups, send money for emergency and support and receive money. According to most business people (75%) they withdraw money using mobile money, followed by 70.5% business people who deposit money using mobile money then 60% who buy air time using mobile money. This means that mobile money helps business people in depositing and withdrawing their money. Also it helps business to acquire credit for communication easily.

Table 6: Uses of mobile money

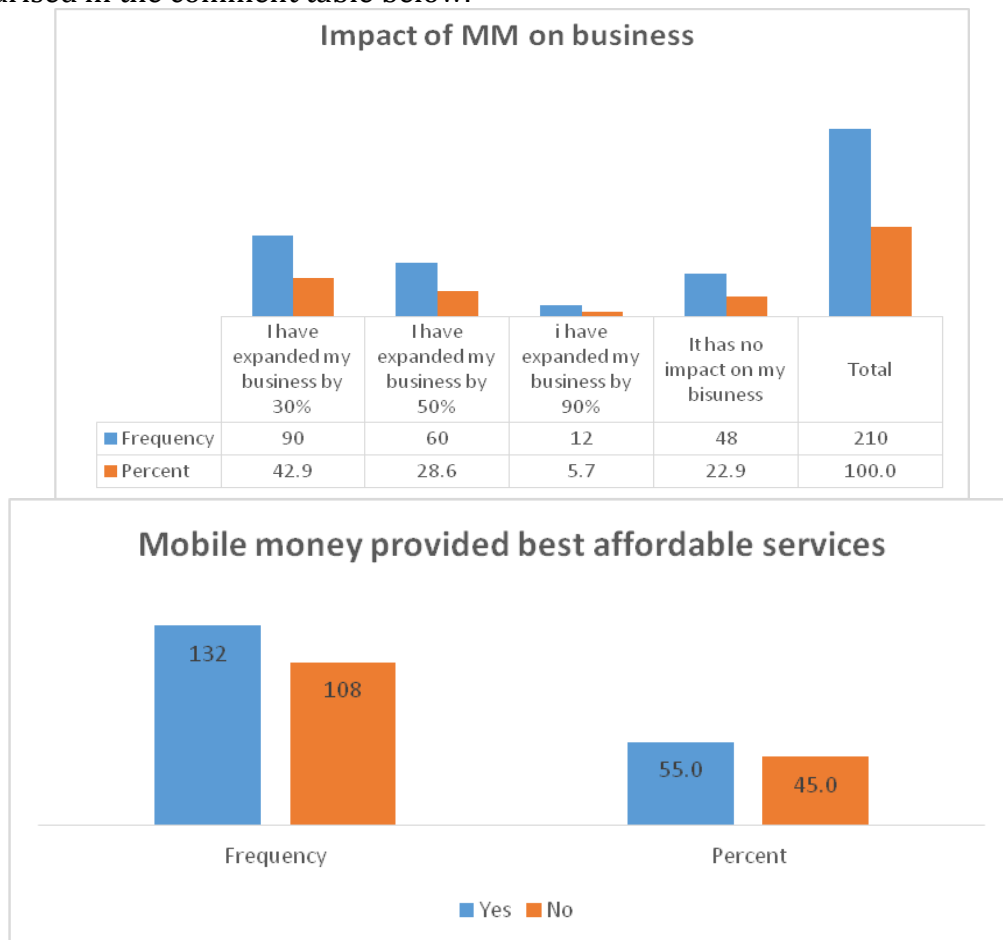
Uses of mobile money	Responses	
	No	Percentage
1. Deposit money	186	70.5%
2. Withdraw money	198	75.0%
3. Buy air time top ups	162	61.4%
4. Pay a school fees	66	25.0%
5. Pay a medical bill	42	15.9%
6. Pay electricity bill	48	18.2%
7. Pay water access	36	13.6%
8. Pay for solar home system	6	2.3%
9. Pay TV cable Satellite bill	24	9.1%
10. Pay a government tax fine fees	12	4.5%
11. Send money for support or allowances	114	43.2%
12. Send money for emergency	114	43.2%
13. Receive money for regular support or allowances	96	36.4%
14. Received money for others	90	34.1%

Source: Field study

4.1 Impact of Mobile Money services on business growth

Most businesses in Juba expanded their businesses by 30% as a result of mobile money services in South Sudan. According to 42.9%(90) respondents, mobile money has enabled

them to expand their businesses by 30%, followed by 50% as summarised in the figure below. This is due to affordable services provided by mobile money companies. According to 55%(132) business people interviewed, mobile money companies provide affordable services to them as summarised in the figure below. Additionally, respondents commented that mobile money provides quick services to businesses than banking services through easy sending and receiving of money. However, they also recommended that mobile money companies should extend the services to rural areas not only in urban areas. Some business people complained that the fees for mobile money charges should be reduced. Additionally, the network should be improved all over South Sudan for access to the mobile money services as summarised in the comment table below.



4.2 Comments from business people about mobile money services in South Sudan

1. The charged fee should be reduced most especially sending rates
2. Mobile Money companies create employment for agents
3. It Mobile money facilitates easy sending and receiving of money
4. Illiteracy is letting mobile money down
5. It saves time hence easy access to services
6. It links South Sudan to the outside world
7. Mobile money has faster service than banking service
8. Mobile money is for people with big business
9. Mobile money is only available in urban areas but not in villages
10. Mobile money needs a lot of advertisement because most people are not aware of mobile

money

11. Mobile money companies need to improve network
12. The telephone companies of South Sudan cannot be trusted because they are not the network providers
13. Mobile Money companies are few and we find challenges finding them hence should increase centers

4.3 Role of government in Promoting Mobile money services

The government plays the role of giving mobile money the platform for mobile money companies to operate and for Citizens to enjoy the mobile money services. For instance, providing security against robbery of mobile money shops and clients doing transactions as summarized in the table below

1. By giving them space to set up mobile money agent centers
2. The government makes sending and receiving easy
3. Helps us from thieves when sending and receiving money
4. I have no idea
5. The government created platform for citizens to enjoy the services
6. Through providing security to companies in their operation
7. Through the faster access of mobile money

5. Discussions

Most business people in South Sudan do not use mobile money for business transaction. However, a few who use it for business transaction mostly use Mtn Uganda and M-Pesa Kenya mobile money services. The main reasons for using MTN Uganda and M-Pesa Kenya are that the services are fast and agents are knowledgeable and trustworthy. Also, the agent's shops have enough available cash for big transactions. According to most of the business people, the reason they don't use South Sudan mobile money services is that they are not the owners of the businesses they operate. Others perceive that they will be required to pay extra taxes for the use of mobile money in South Sudan hence they don't want to risk and yet others perceived that they have a small business to require mobile money services. Additionally, despite such negative perceptions, those who use mobile money found it as a fast way of depositing, withdrawing and buying airtime for doing business communications. Business people found mobile money services to be very affordable and readily available due to the services being near their air time shops and home areas hence enabling faster transactions in less than 15 minutes compared to commercial banking services. As a result, most businesses using mobile money services reported 30% growth in business. However, business men and women complained that the mobile money network is a major challenge. Moreover, mobile money services are available only in urban centers rather than rural areas. Also, the charges per transaction are high.

6. Conclusions

In conclusion, there is less use of mobile money services in South Sudan for business transactions most especially the local services of M-gurush and Nile Pay. The most widely used mobile money service by business people is the foreign companies of MTN Uganda and M-Pesa of Kenya. However, those who use mobile money services their business has expanded by at least 30% due to the faster facilitation of depositing and withdrawal of money

as well as sending and receiving of money. This is despite challenges such as poor network, high transaction charges and availability of mobile money services in urban centers only.

Recommendations

The researcher found that mobile money companies of South Sudan have little impact on business growth in South Sudan; the main reasons are due to inadequate knowledge on the operation and importance of mobile money among South Sudanese. Therefore, local service providers such as M-gurush and M-pesa should provide training to agents on sensitization of the masses about importance and use of mobile money for faster and cheaper business growth. Additionally, should open service centers all over South Sudan including in rural areas to cut off costs of sending and receiving money in rural areas. Zain South Sudan should improve on their signal quality as well as network coverage to avail mobile money service in all over South Sudan. Moreover, due to the insecurity in rural areas it is difficult for mobile money agents to operate in rural areas. As a result, the government should improve on the security in rural areas and engage with local leaders all over South Sudan to provide security to agents in order to facilitate quick business transactions all over South Sudan.

References

- Aarno, J. (2015). Mobile Money as an Enabler for Entrepreneurship: Case of East Africa. School of Business, Department of Management Studies. Uganda, East Africa: Aarno Jussila.
- AfricanDevelopmentBank. (2013). Financial Inclusion and Integration through Mobile Payments and Transfer.
- Aker, J., Boumnijel, R., McClelland, A., & Tieney, N. (2016). "Payment Mechanisms and Anti-Poverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger." *Economic Development and Cultural Change* 65 (1): 1–37.
- Creswell, J. (n.d.). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th ed.; Sage.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and acceptance of information technology. *MIS Quarterly*, 13(3), 319–339.
- Dudovskiy, J. (n.d.). *The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance*. 2018.
- Dupas, Pascaline, & Robinson, J. (2013). "Why Don't the Poor Save More? Evidence from Health Savings Experiments." *American Economic Review* 103 (4): 1138–71.
- Fox, N., Hunn, A., & Mathers, N. (n.d.). Sampling and sample size calculation. NIHR RDS East Midl./Yorks. Humber 2007, 1, 1–41.
- Gartner. (2012). *Market trends: Mobile payments worldwide 2011*. New York, USA: Gartner.
- GSMA. (2009). *Women & Mobile: A Global Opportunity. A study on the mobile phone gender gap in low and middle-income countries*. London, England: GSMA (Global System Mobile Association).
- Higgins, D., Kendall, J., & Lyon, B. (2012). Mobile money usage patterns of Kenyan small and medium enterprises. *Innovations Journal*, 7(2), 67–81.
- IM. (2012). *Mobile money in Uganda, use, barriers and opportunities*. . Washington D.C, USA: Intermedia. .
- International Financial Corporation. (2010). *Mobile Money Product Adoption, IFC Mobile Money Toolkit*. Nairobi, Kenya: IFC (International Financial Corporation). .
- ITU. (2013). *The Mobile Money Revolution Part 1: NFC Mobile Payments*. Policy & Technology Watch Division. Sub Saharan Africa: ITU Telecom, Standardization Bureau.
- Jack, W., & Suri, T. (2016). Risk Sharing and Transactions Costs: Evidence from South Sudan's Mobile Money Revolution. *The American Economic Review*, pp. 104.1: 183–223.
- Jalakasi, W. (2019, October 4). RISE OF THE DIGIBANK . *After years of rapid growth in Africa we're about to enter the age of Mobile Money*.
- McDermott, K. (2016). *The Mobile Payment Revolution 2015, PAYVISION Global Card Processing*.

- MEDNICK, S. (2019, September 26). South Sudan launches mobile money to boost recovery from war. Juba, South Sudan.
- Must, B., & Ludewig, K. (2010). Mobile Money: Cell Phone Banking In Developing Countries. *Policy Matters Journal*, 27(2), 27-33.
- Muya, C. (2015). *Mobile Money in Africa, Barclays Bank PLC*.
- Odia, O. J. (2012). Analysis of the factors influencing consumers' intention to use mobile money in Nigeria. USA: Unpublished MSc Thesis, University of Glamorgan.
- Polit, D.F; Beck, C.T;. (n.d.). *Nursing Research: Principles and Methods*, 7th ed.; Lippincott Williams & Wilkins: Philadelphia, PA, USA, 2003.
- Radcliffe, D., & Voorhies, R. (2012). "A Digital Pathway to Financial Inclusion." (December 11, 2012). Retrieved from <https://ssrn.com/abstract=2186926>.
- Rogers, E. (1995). *Diffusion of innovation*. New York, USA: The Free Press.
- Simiyu, C., & Oloko, M. (2015). Mobile money transfer and the growth of small and medium sized enterprises in Kenya: A case of Kisumu city, Kenya. *International Journal of Economics, Commerce and Management*, 3(5), 1056-1065.
- Suri, T., & Jack, W. (2016). "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science* 354 (6317): 1288-92.
- Tengeh, R. (n.d.). A Business Framework for the Effective Start-Up and Operation of African Immigrant-Owned Businesses in the Cape Town Metropolitan Area, South Africa. Ph.D. Thesis, Cape Peninsula University of Technology, Cape Town, South Africa.
- Venkatesh, V., Morris, M., Davis, G., & Davi. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- VOA . (2019, October 02). South Sudan Launches Mobile Money Service . `<iframe src="https://learningenglish.voanews.com/embed/player/0/5106396.html?type=audio" frameborder="0" scrolling="no" width="100%" height="144" allowfullscreen></iframe>`.
- World-Bank. (2012). *Information and Communications for Development 2012: Maximizing Mobile*. Washington DC, USA: World Bank.
- World-Bank. (2014). *World Bank.Mobile Money Services Development- The case of the Republic of Korea and Uganda*. .
- Zutt, J. (2010). *Kenya Economic Update; Poverty Reduction and Economic Management Unit Africa Region* (3rd ed.). Nairobi, Kenya.

Cite this article:

Lual Daniel Kur & Niu Xiongying (2020). Impact of Mobile Money Transfer on the Performance of Micro and Macro Enterprises in South Sudan. *International Journal of Science and Business*, 4(11), 14-32. doi: <https://doi.org/10.5281/zenodo.4077149>

Retrieved from <http://ijsab.com/wp-content/uploads/607.pdf>

Published by

