

An Investigation Of Factors Influencing The Adoption Of Mobile Banking Services Among Bank Customers: A Case of Kitwe District (Paper ID: CFP/1351/2019)

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Abstract— Mobile banking is causing a flurry of activity in the world 's financial services industry. In fact, it is leapfrogging traditional banking and now many top banks are up and running with their own mobile banking solutions, trying to take advantage of technology that comes with mobile phones and introduce the service as a means of providing fast and efficient services, and financial institutions of all sizes are busy assessing their place in the mobile banking world.

The general objective was to investigate the factors that influence the adoption of mobile banking in Zambia and specifically the Kitwe commercial Banks. The specific objectives were to determine the extent to which social factors influence the adoption of mobile banking; to examine how economic factors influence mobile banking adoption; to assess the effect of technological factors on mobile banking adoption. However, the extent of adoption was relatively minimal in view of the potential that exists in the Zambia.

The study adopted a purposive sampling for selecting the commercial banks in Kitwe, while the simple random sampling was adopted to establish a sample size of 60. However, out of 60 only 50

respondents representing a response rate of 83.3%. Statistical software Package for Social Sciences (SPSS) software was used to analyze the data. The researcher used descriptive (measures of central tendency) statistics.

The study concluded that concluded that most of the account holders possess the knowledge of how to use electronic banking services, and most of them are willing to embrace electronic banking services for their banking needs. The study also concluded that use of mobile banking has enabled customers to access to funds any time they want, and they also consider it a cost-effective way to provide banking services to the unbanked.

Keywords—Adoption, mobile banking services

I. INTRODUCTION

Today, most of the people adopt new generation technologies. In this changing scenario, the banking sector is not an exception. Recent innovations in telecommunications have enabled the launch of new access methods for banking services through various e-channels like, ATMs, credit/debit cards, internet banking, mobile banking, etc. One of these is mobile banking; whereby a customer interacts with a bank via mobile phone.

Highly competitive environment has forced banks to seek strategies to achieve competitive advantage. One of such strategies is Mobile banking. Mobile banking is a kind of electronic banking that applies Short Message System (SMS) and Wireless Application Protocol (WAP) services to facilitate customers in making online transactions (Lee and Benbasat, 2003). This is based on the mobile phone technology platform. Significant reasons that compel financial firms to provide mobile banking services are; appealing to trendy customers, reducing costs per transactions, gaining revenue from service fees, enabling new service channels, and supporting future customers.

Technological innovations witnessed by the corporate sector during the 1990s have introduced a new business paradigm around the world, wherein data technology is increasingly playing a significant role in improving banking services. Demographic changes which have resulted in a higher layer of education, break up of joint families, more women opting for paid employment, and the resultant change in lifestyle, have all helped to fuel demand for the different character of banking mathematical product and services.

The terms m-banking, m-payments, m-transfers, m-payments, and m-finance refer collectively to a set of applications that enable people to use their mobile telephones to manipulate their bank accounts, store value in an account linked to their handsets, transfer funds, or even access credit or

insurance products (Laukkanen and Pasanen, 2007)^[11]. Finance-related services that are offered by employing mobile telecommunication technologies are generally referred to as “Mobile Financial Services” (MFS). They can be divided into two categories: “Mobile Payment” and “Mobile Banking” (Georgi and Pinkl, 2005)^[6Holl]. The term Mobile Banking refers to provision of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information (Tiwari and Buse, 2006)^[23].

Kasyoki (2012)^[8] explains mobile banking as being is divided into various types of banking applications: (a) Mobile accounting refers to utilization of banking services that are specific to a particular account, via mobile telecommunication devices. The offered services may include remittance facilities, access administration and card management, (b) Mobile Brokerage refers to transaction-based, mobile financial services revolving around a securities account. The scope of offered services may include selling and purchasing of financial instruments (e.g. stocks, bonds or derivatives), order book administration and access administration, (c) Mobile financial information services refers to banking - and financial services that are non-transaction based and therefore of purely informational nature. The information may relate to either own bank account(s) or to market developments.

Mobile banking offers a new way to access financial services and mobile applications on smartphones and mobile devices are expected to significantly change the business model (Shaikh & Karjaluoto, 2015). The proliferation of smartphones has increased the demand for mobile banking services, prompting financial service providers to create new services and mobile applications targeting this new demand. These

mobile services and applications are intended to attract new customers, increase customer retention rates, reduce costs, improve efficiency and grow market share (Shaikh & Karjaluo, 2015)^[22].

Up to the early 2000's implementation of mobile banking technology was still at its trial and error phase for many countries. Like any other system, it had many challenges not only for the customers but also for the service providers, the service improved and became more effective but also user friendly as years went by, considering mobile phones continuous inventions provided a blend in platforms. According to Lee and Kim (2007) mobile banking services have managed to provide freedom of time along with cost savings to its users and room for market growth for the service providers.

For last 15 years mobile technology has flourished throughout the developing world faster than any other technology in history (Michaels, 2011)^[15]. The rapid spread of mobile phones on the continent means that the number of users may already exceed the number of banked people in many low-income countries like Zambia. As a result, every bank in Zambia is either migrating or has already migrated to providing services to customers through mobile phones as one of the ways of retaining the currently banked and also penetrate the large market of unbanked mobile phone users.

In Zambia, Zambia National Commercial Bank (ZNCB), now rebranded ZANACO, pioneered mobile banking services in the country in 2008 with the introduction of Xapit account. Prior to this, Barclays Bank Zambia used to have Telephone Banking which could be accessed from a landline. According to Bank of Zambia (2013)^[1], all the 19 banking institutions in Zambia are currently employing e-banking technology to do their business. The pervasiveness of mobile banking technology is perhaps most apparent in the proliferation of mobile banking service providers,

many of which are now shifting their focus on the unbanked (Zambia Banking, 2015). Not too long ago, people would only go to the bank during open hours but now a good number of people who have signed for mobile banking services continue transacting at their own convenient time through their mobile phones.

Currently, three forms of mobile banking services are being offered to Zambian customers. The first is through the short messaging services, the second is through client application software provided by the banks to the customers and the third is by accessing the internet through mobile phones. The services offered by the banks range from checking account balance, fund transfer, cheque book requests to other services such as locating the bank ATM's (Automated Teller Machine) and branches and recharging prepaid mobile phones. Very few people would prefer to go back to the banking services of yesteryear because mobile banking, for example, spares customers tedious tasks, enables customers to buy and bank conveniently online, and helps customers pay utility bills in the comfort of their homes.

The Business Year (2015)^[24] article documents that globally, an average of 3% of the population are using mobile banking to pay bills and send and receive money, while regionally, the market size increases to an impressive 16%. It is predicted that these numbers will continue to increase over the next two years, which would significantly change the banking landscape as unbanked numbers are converted to the banked in both Zambia and Africa on the whole. As a result, large banks and mobile operators are aggressively vying for their share of the market of these as-yet registered customers.

1.1 Statement of the Problem

Although mobile banking is still at an early stage of its development in Zambia, market potential for banks to explore is vast. According to Zambia Information and Communications

Technology Authority (ZICTA) (2017) ^[30], Zambia had 13, 438,539 mobile subscribers in 2017. On the other hand, with 67.2% of the Zambian over the age of 10 years aware of the existence of digital financial services, only 29.5% have transacted before using digital financial services (ZICTA, 2018) ^[31]. ZICTA (2018) ^[31] report concluded that digital financial services continued to play an important role in extending financial inclusion in the country with E-wallets noted to be the most extensive form of financial accounts held by individuals aged 10 years and older. However, the extent of adoption was relatively minimal in view of the potential that exists in the country. In the attempt to answer this phenomenon Davis (1989) explained that for any skills to be successfully introduced and used, the users have to accept and implement the technology. Therefore, this study attempts to investigate the factors that influence the adoption of mobile banking in Zambia and specifically the Kitwe commercial Banks.

1.2 Research Objectives

The general objective was to investigate the factors that influence the adoption of mobile banking in Zambia and specifically the Kitwe commercial Banks. And the specific objectives were

1. To determine the extent to which social factors influence the adoption of mobile banking
2. To examine how economic factors, influence mobile banking adoption
3. To assess the effect of technological factors on mobile banking adoption

1.3 Research Questions

This study was looking for answers to the following questions;

1. To what extent does social factors influence the adoption mobile banking?
2. How do economic factors influence the adoption of mobile banking?

3. What effect does technological factors have on mobile banking adoption?

1.4 Significance of the study

This study will be useful in a number of ways. The study will help economic planners and policy makers in the public sector in formulating policies which will encourage technological innovations as well as adoption in a bid to reduce the poverty levels in the country. In addition, commercial banks to understand the factors influencing mobile banking adoption hence enable them to come up with better services than the existing ones and assist researchers and students of information technology in gaining understanding of the current trends in mobile technologies and their impact. Last but not the least, the research would provide a basis and contribute to the already existing body of knowledge which can be used for future studies on banking industry in Zambia and abroad.

1.5 Scope of Study

In this study, the researcher has investigated factors effecting the adoption of mobile banking in commercial banks located in Kitwe district with the focus on social, economic and technological factors. The data was collected from some banks based Kitwe only. These are Standard Chartered Bank, First National Bank (FNB), ZANACO and Barclays bank.

1.6 Delimitation of study

The study was limited to Kitwe district because of insufficient funds and limited time. Moreover, the researcher found the district to be the most convenient in terms of transportation and accommodation.

The study population consisted of retail bank customers from the four banks in Kitwe First National Bank (FNB), Barclays Bank, ZANACO Bank and Standard Chartered Bank. Late returning of questionnaires from the respondents delayed disclosure of the information.

1.7 Conceptual frameworks

This study used THE most popular model in the adoption of technology in our society i.e. Technology Acceptance Model. Technology Acceptance Model (TAM) is basically an information systems theory that ideally models how users come to accept and use a technology. This model suggests that when presented with a new technology, the user's decision about how and when they will use it is influenced by a number of factors, notably: Perceived usefulness (PU) - This was defined by Davis (1989) as "the degree to which a person believes that using a particular system would enhance his or her job performance".

From the above theoretical framework, a conceptual framework for this study is constructed. Conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. A general conceptualization diagram as shown below illustrates that mobile banking adoption is a dependent variable which means it is the variable whose variation depends on another. Social cultural factors, economic factors and technological factors are independent variables which mean they are variables whose variation does not depend on that of another. This means that the variation in the three variables i.e. Social cultural factors, economic factors and technological factors, will determine the mobile banking adoption.

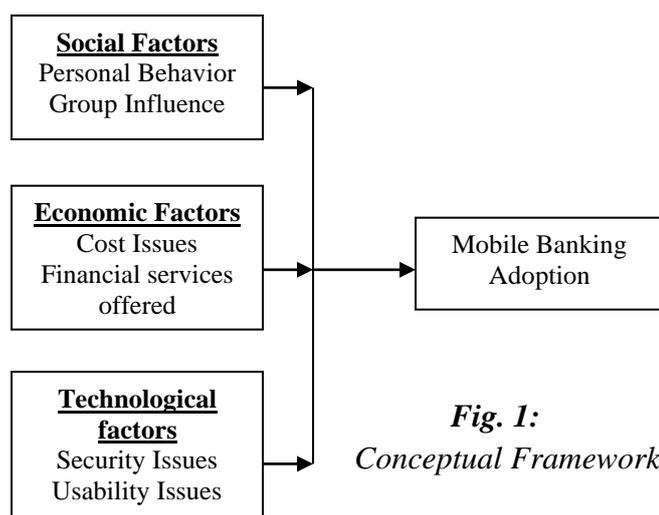


Fig. 1:
Conceptual Framework

1.8 Operational Definitions

Adoption: Adoption in the context of mobile banking means acceptance, being able to accept a new technology as it is introduced and by accepting the service means a customer willing to use the service.

Customer: A customer is an individual who uses a service whereas in this context it means an individual that uses mobile banking services.

Economic Factors: Economic factors comprise the information that influences the value of an investment or business.

Mobile Banking: This is the access to banking services and facilities offered by financial institutions by use of an electronic mobile device.

Social Factors are customs, lifestyles, and values that characterize a society or group.

Technological Factors: These are the influences that have an impact on how an organization operates that are related to the equipment used within the organization's environment.

II. LITERATURE REVIEW

The goal of this chapter is to provide what literature, academic and otherwise is available to support get a well understanding of what effects the adoption of mobile banking in Commercial banks in Kitwe district and the banking system as a whole.

Effects of Social Factors on Mobile Banking Adoption

Personal behavior

Consumer behavior is ever-changing the manner banks run their businesses with many concentrating on satisfying client wants as a means of driving business growth. This includes communication and feedback between the customers and businesses in real time over the web (Ngari, 2014)^[16]. The rise in present computing devices that have web property has disrupted the standard aspects of client

behavior through redefining the data reach and rich.

Client behavior is referred as how persons, groups, or organizations selected, purchased, used, and disposed of merchandise, services, concepts, or experiences that met their wants and needs (Kotler, 2014) ^[10]. This behavior was attributed to society, cultural, and individual factors. Consumer behavior whether or not spontaneous or rational plays a major role on whether or not he/she buys a product or service (Schiffman, Hansen, & Kanuk, 2008) ^[20].

Previous studies also stressed the importance of culture toward a more robust understanding of knowledge system adoption in relation to personal behavior. Al-Gahtani, Hubona, and Wang (2011) stress the role of culture when transferring information technology applications across culture, before any technology transfer, it's necessary to check user necessities and desires. Those desires and demand are heavily influenced by culture. Hence, there's a necessity to explore the role of national culture as one of the factors most likely to influence the acceptance or resistance of electronic banking services.

Kazemi, S.A., et al (2013) this research investigated those factors that affect Isfahanian Mobile Banking Adoption in Iran, Based on the Decomposed Theory of Planned Behavior. The result of this study suggested that there were only two important factors which are Attitude and perceived behavioral control under which factors such as perceived usefulness, perceived ease of use, compatibility and trust have an influence on behavioral attitude to adopt mobile banking.

McElroy et al. (2012) ^[14] concluded that individual's temperament traits explained additional variances in her use of web and on-line selling behavior than her cognitive behavior. Additionally to general web use, the authors called future analysis to concentrate on examining the

impact of temperament on specific kinds of technology adoption and use.

Group Influence

Groups that have an immediate influence and to which an individual belongs are referred to as membership teams. In contrast, reference teams function as direct (face-to-face) or indirect points of comparison or reference in forming a person's perspective or behavior. Marketers attempt to determine the reference groups of their target markets. Reference teams expose an individual to new behaviors and lifestyles, influence the person's attitudes and self-concept, and make pressures to adapt, this has an effect on the person's product and brand decisions (Kotler, 2014) ^[10]. The importance of group influence tends to be strongest once the item is visible to others whom the customer respects. Manufacturers of merchandise and brands subjected to robust group influence should work out the way to reach opinion leaders inside a reference group who, owing to special skills, knowledge, temperament, or alternative characteristics, exert influence on others.

Consumers typically are influenced by reference teams to which they do not belong. As an example, an inspirational cluster is one to that the individual desires to belong (Riquelme & Rios, 2010) ^[17]. Relations will powerfully influence customer behavior. The family is the most significant client shopping for organization in society. Marketers have an interest within the roles and influence of the husband, wife, and youngsters on the acquisition of various merchandise. Husband-wife involvement varies wide by product class and by stage within the purchasing process. Kids may have sturdy influence on family shopping for choices. As an example, kids as young as six years could influence the family motor vehicle purchase decision (Riquelme & Rios, 2010) ^[17]. An individual belongs to several teams – family, clubs, and organizations. The person's position in every cluster are often outlined in terms of each role and

position. A job consists of the activities individuals are expected to perform consistent with the persons around them. Every role carries a status reflective of the general esteem given by society.

Consumer behavior literature conjointly suggests that reference teams, like a social reference cluster, could have an effect on person's behavior. Two competitive influences have been acknowledged on the connection between subjective norm and behavior: conformity and dissension (Simonson and Nowlis, 2011). Conformity is that the results of individuals attempting to adapt to a subjective norm, thereby avoiding criticism and rejection. Dissension measures consumer's independence of the subjective norm, and may be a reflection of sturdy self- JIBC respect and autonomy. A dissentient client is therefore a personal, unique, special, and divisible from the rest.

Pedersen and Ling (2002) emphasized that the construct of social influence cannot be ignored in any adoption model. Jun et al. (2008) identified the facilitating and moderating factors in the continuous use of online and mobile banking in Korea. They argue that usefulness, ease of use, innovativeness, social influence, quality and cost were significantly related to the adoption of on-line and mobile banking; whereas on-line banking service type, social influence and cost were found to be moderators for the adoption of Internet banking and mobile banking.

Effects of Economic Factors on Mobile Banking Adoption

Cost Issues

Cost can be taken a gander at as far as the price of the service and moderateness, progressing costs and in addition cost of the handset. This alludes to how much the client brings about to get to the service and to do the genuine transactions. As per Rosenberg (2010)^[18], client use of portable saving money is impacted by supreme costs as well as

incidentally, a service is valued. For instance, so as to energize trial of cash transactions, a few services offer free stores, which make branchless banking a moderate approach to spare. A portion of the banks mobile arrangements may furnish free services with the main charge being that of the telecoms specialist co-op. For example, while getting to the service a client was charged a little expense in type of broadcast appointment and perform account request and exchange subsidizes between records in a similar bank for nothing out of pocket. Subsequently, contingent upon how much cost the client acquires in playing out all the required transactions it might figure out if that client can bear the cost of it or whether he will pay that much for it, in this way influencing reception of the services.

Mobile saving money is a critical viewpoint since the exchange expenses of installments are significantly diminished when there is an electronically available store of significant worth in most administrative services. The topic of who may hold the store adjust ends up being a pivotal issue influencing the advancement of these models (Salim, 2011). Regardless of the possibility that the attention is on the more extensive viewpoints required in m saving money, the spread of m-managing an account depends to a great extent on improvements in the innovation and direction of m-installment.

For example, services like storing, withdrawals, checking proclamations, adjust request and transactions inside and outside the nation requires confirmation, verification, lastly exchange (InfoDEV, 2006). A cell phone based managing an account arrangement could cover no less than 60% of those at present with financial balances. Such a service would be utilized for putting away money safely and for profiting transactions – individuals presently convey money, utilize the mail station services, and make utilization of broadcast

appointment transactions through a cell phone (Porteous, 2011).

Different activities utilize cell phones to give money related services to the unbanked. These services take an assortment of forms including long-remove settlements, micropayments, and casual broadcast appointment bargaining plans and pass by different names, including mobile saving money, portable transactions, and portable installments. Taken together, they are no longer only pilots; in the Philippines, South Africa, Kenya, and somewhere else, these services are comprehensively accessible and progressively prevalent. Mobile banking is without a doubt compelling on cost and administers services to the unbanked in light of the fact that there is no requirement for branches physical foundation to help the clients. It is just a branchless bank display that has the capacities of taking care of restricted bank dealings through the cell phone (info DEV, 2006).

Hosseini et al. (2015) have conducted a study on factors affecting technology adoption and it was surprisingly found that ease of use and need for interaction with banks were not important from respondents' perspective. Perceived cost and perceived risk also did not have any impact on the users' intention to use mobile banking.

In emerging markets across the globe, formal banking reaches about 37 percent of the population, compared with a 50 percent penetration rate for mobile phones. About one billion people in emerging markets have a mobile phone but no access to banking services; by 2012 this population will reach 1.7 billion (Beshouri and Gravr&k, 2010). It is said that low-cost banking and financial services can bring into its fold a considerable group of consumers who formerly could be served only at too high a cost.

Financial services offered

Karjaluoto (2002); Rugimbana (1995) found that there is endless market potential for mobile managing an account because of its dependably on usefulness and the alternative to do saving money practically whenever and anyplace.

Vyas (2009) propose banks should extend their reasoning about portable managing an account past web based saving money and ought to begin to view versatility as its own intense and convincing conveyance channel that can help them convey to end clients new esteem, for example, quick get to and extra control of individual funds.

Simuchimba (2011) indicated that age affect consumer behavior intention to use Self-service banking Technologies and ZICTA (2015) ^[29] state that lack of awareness is a limiting factor in the adoption of electronic financial services. A recent ZICTA survey (2018) ^[31] concluded that digital financial services continued to play an important role in extending financial inclusion in the country. E-wallets were noted to be the most extensive form of financial accounts held by individuals aged 10 years and older. However, the extent of adoption was relatively minimal in view of the potential that exists in the country. The main barriers to uptake were reported to be related to perceptions that the services are for the economically endowed, non-registration as well as limited access to the services.

Mwaura (2009) highlights that rising access to money services is important to any economy that aims to cut back financial condition although in several developing nations however, just one out of ten is in a position to access to basic monetary services and banking product through mobile phones is the most suitable choice for these establishments to reach the poor folks as several of them have already got access to mobile phones.

Effects of Technological Factors on Mobile Banking Adoption

Security Issues

One of the most important factors that a user considers before opting for a technology is security (Wang et al., 2006). Banking is the most important aspect of anyone's life and potential loss of money could hamper their experience with the institution. Mobile technology is potentially more vulnerable to interception as it is propagated through wireless mode. However, some studies show that "using mobile phone in banking is trustworthy" (Mattila, 2002).

The need for security of personal details and financial information is therefore critical to the success of mobile banking. As a result, the lower the perception of risk involved in using mobile banking, the more likely that it will be adopted, (viii) Self-efficacy: This construct refers to the confidence an individual has in their ability to use a specific technology. Agarwal et al. (2000) further demonstrate the importance of self-efficacy in their study of user behavior with information technology. As with Internet banking it is expected that an individual who is confident in the skills required for mobile banking will be more likely to adopt it and (xiv) Facilitating conditions (technology support)-. This construct may be interpreted to include support from both the cellular service providers as well as from the banks. Mobile banking is more likely to be adopted if there are better facilitating conditions.

With the considerations of security issues, Riquelme and Rios (2010) ^[17] further supported that risk factor is a vital element in investigating mobile technology adoption. As mobile banking is revolutionized from internet banking, therefore mobile banking tends to have similar risks as internet banking (Larsen et al 2003). Despite of the risks, the issues of lose and theft of daily transactions via mobile phones lead to the greatest risk as compared to internet banking (Riquelme and

Rios, 2010) ^[17]. Mobile phone theft and reuse issue is a major problem in many countries around the globe. Inevitably, such trend is wide spreading and increasing in Kenya. This implies that the greater the potential of loss of theft resulting higher perceptions towards security risk. Subsequently, this discourages users to adopt new technology (Brown et al 2005).

Another study conducted by Luo et al. (2010) ^[12] found that user's perception of risk is a crucial driver to determine innovative technology acceptance. The findings show that perceived risk has negative significant relationship towards behavioral intention on mobile banking adoption.

Maduku (2014) ^[13] comments that in order for African banks to increase returns on their investment in e-banking for their retail customers, it is imperative that they understand the factors that influence the adoption of Internet and mobile phone banking services within their environmental context. It is recommended that retail banks devise and implement strategies that will increase customers' trust in the Internet and mobile phone banking systems. This will lead to the rapid and widespread usage of Internet and cellphone banking services in Southern Africa especially in South Africa (Maduku, 2014).

Chitungo, & Munongo, S. (2013) ^[3] investigated the factors that influence mobile their own model wherein reasoning, referencing and contextual factors affecting choice were suggested for the adoption of mobile banking. According to recent literature, e-banking usage and trust are correlated (Delafrooz, Paim & Khatibi, 2011) ^[4]. Customers' lack of trust in the attribute of a bank and the overall e-banking system remain a significant deterrent to its use. For example, Hong et al (2013) denote that the actual and potential users of internet banking are cautious of the dangers of fraud in transactions and lack of privacy regarding their information and data. Therefore, customer trust is a

major challenge for future use of e-banking and its adoption (Yousafzai et al., 2010).

Usability Issues

According to Karjaluo (2002), the first targets for mobile banking applications were consumers in the developed countries. By complementing services offered by the banking system such as cheque books, ATMs among others, the mobile platform offers a convenient additional method for managing money without handling cash. For users in the developing world on the other hand, the appeal for mobile banking may be less about the convenience and more about accessibility and affordability. Generally, mobile banking systems in the developing world enable users to do three things: store value in an account accessible via the handset, convert cash in and out of the stored value account and transfer stored value between accounts.

Previous studies placed their emphasis on the perceived characteristics of e-banking technology and their role as determining factors for potential users' adoption and continuous use of e-banking services. Of these technology factors, the perceived usefulness and the perceived ease of use constructs in the Technology Accepted Model (TAM) (Davies, 1989) [5] appear to be the most ubiquitous. TAM suggests that perceived usefulness and perceived ease of use are the two most important factors in explaining individual users' adoption intentions and actual usage (Davies, 1989) [5]. The TAM construct has been tested in several empirical studies and its ability to predict behavioral intentions towards e-banking use has been found superior to other models (Pikkarainen et al., 2004).

Wang, Chen, & Wang (2015) [26] deduce that within the 2011 survey, over sixty percent of mobile phone users had used mobile banking and this figure has gone up to ninety six percent in line with a 2015 survey. Despite this variation, a challenge to adoption of mobile banking has been

customers as they have a perception that by using plastic money their desires were already being met and so they thus lack interest for the services. Among mobile banking users, there's variation in frequency of use mobile banking services, and what forms of activities they have interaction in. a comparatively little share of mobile banking users (9 percent) indicated that they'd used mobile banking within the previous year however had not used it within the previous month. These low-intensity users have a lower probability of partaking in all forms of mobile banking activities, relative to mobile banking users overall (Board Federal Reserve, 2015) [2]. Like all mobile banking users, the foremost common task for low-intensity users is checking account balances or recent transactions (71 percent).

According to Simuchimba K., (2011) [21] reveal that customers might face challenges because of the negative image they have towards new technologies especially in the Sub-Sahara region. Customers believe that new technologies are too complicated and not useful, thus some customers prefer face-to-face communications other than self-service options.

Kaziya (2017) [9] carried out a study on factors influencing consumer usage of e-banking services through mobile phones in Chingola. The results of the study showed that ease of use, perceived usefulness and trust were found to have significant influence on the usage of e-banking through mobile phones. Among the three factors, perceived usefulness was found to be the most significant influencing factor in the usage of e-banking services through mobile phones.

Establishment of gap and personal critique summary

Various studies have been carried out in the area of mobile banking in North America, Europe, Asia and some from African countries such as Mauritius, South Africa and Zimbabwe. Researchers indicated a number of factors

influencing adoption and use of mobile banking in their respective region and country of study such as perceived usefulness, ease of use and relative advantage. Most of these studies are based in developed world and little has been done in a developing country as well as at the first stage in least developing countries like Zambia. Moreover, the extensive literature available on the topic from other countries portray weakness as its focus is outside Zambia. Therefore, this study attempts to understand factors that influence adoption of mobile banking services in order to create an understanding of this new technology in the banking sector in Zambian.

III. METHODOLOGY

3.1 Research Design

Research design is a systematic plan to study a scientific problem. The design of a study defines the study type (in this case, descriptive) and sub-type, research questions, hypothesis, independent and dependent variables etc.

Zegeye et al. (2009) stated that the goal of descriptive research is to describe some aspect of a phenomenon, i.e., the status of a given phenomenon. However, although some people dismiss descriptive research as 'mere description', good description is fundamental to the research enterprise and it has added immeasurably to our knowledge of the shape and nature of our society (Vaus, 2001) ^[25]. He further argued that good description provokes the 'why' questions of explanatory research. Thus, Descriptive survey is considered to be appropriate for this study since it aims at describing the factors influencing the adoption of mobile banking in Kitwe.

3.2 Target Population

According to Saunders (2007) ^[18] Population refers to full set of groups from which a sample is taken. The target population of this study was collected from the customers registered as users of

mobile banking and employees of some commercial banks that operates in Kitwe Standard Chartered Bank, First National Bank (FNB), ZANACO and Barclays Bank but the exact numbers of mobile bank users are not known because the banks were not allowed to give us for security reasons and informed to us it is confidential.

3.3 Sample size

The sample size is important in achieving the objective of making an inference about a population from a given sample. Holloway and Wheeler (2002) ^[7] assert that sample size does not influence the importance or quality of the study and note that there are no guidelines in determining the size. Therefore, 60 customers from the 4 banks in Kitwe district, namely ZANACO Bank, Barclays Bank, Standard Chartered Bank, First National Bank (FNB) made up the sample size.

3.4 Sampling Procedure

Purposive sampling was used to select the commercial banks in Kitwe while the researcher decided to use probability sample technique to make sample frame. For probability sampling random sampling method was used to identify those who took part in the study. The method also helps to get better representatives of the whole target customers of the selected banks. In addition, the effort was made to ensure that the composition of the employees taking part in the study represented the relevant sections of the bank in order to obtain an accurate representation of facts as far as mobile banking is concerned.

3.5 Instruments of Data Collection

Structured questionnaires were used to collect primary data. The questionnaire aimed at identifying whether the independent variables were statistically significant factors influencing the adoption of mobile banking.

3.6 Data Collection Procedure

The questionnaires were in line with the research objectives and was delivered to the customers. The questionnaire was self-administered. This involves administering the questionnaires to the respondents when they made a visit to the bank for their normal banking business, then requested those who can fill out the questionnaires within the banking premises to do so and those who are in a hurry can take them home then return them during their next visit or we will take from their home or workplace. In addition, the employees of the bank will fill when they have free time in order to answer our research questions.

3.7 Data Analysis

The process of analyzing, cleaning, transforming, and modeling data collected is called data analysis (Wagner, Halley & Zaino 2011). Descriptive has been used to analyze data from the answers to which research questions are found. After editing, data was coded, that is assigning a code number to each answer to survey questions. The data was then entered in the SPSS software for windows from which descriptions such as percentages and frequency were used to answer the research questions.

3.8 Ethical consideration

Ethics as defined by (Strydom, 2000) are a set of moral principles suggested by an individual or group, is widely accepted and which offers rules and behavioral expectations towards respondents and other stakeholders in research. During the study, the researcher observed the ethical considerations by respecting the rights and views of the participants. White (2003) ^[28] cites the relevance of the information to the participants' decision as one key element in informed consent. Permission to conduct research within and around the selected banks' premises was sought for from appropriate authorities before the embarking on the collection of data. Furthermore, participants were

given clear instructions prior to taking part in the study.

IV. RESULTS OF FINDINGS

The presentation in this chapter shows the results as tested according to the objectives of the study, which was to investigation the factors of effecting the adoption of mobile banking Kitwe commercial banks.

4.1 General Information

Response rate

The response rate determines the statistical power of a research and a higher rate is considered better. In this study, a total of 60 questionnaires were distributed and only 50 were filled and returned. This represents a response rate of 83.3 % and this was sufficient as shown in table 1.

Table 1: Response Rate

Response	Frequency	Percentage (%)
Responded	50	83.3%
Not responded	10	16.7%
Total	60	100%

Source: Field Data (2019)

Gender of Respondents

From the study, the variable gender had a majority of the respondents being male accounting for 57.9 % of the population while the female accounted for 42.1% as shown in fig. 2. This was attributed to the fact that male respondents are more accessible during the time of data collection hence they were able to fill in more questionnaires as compared to female respondents.

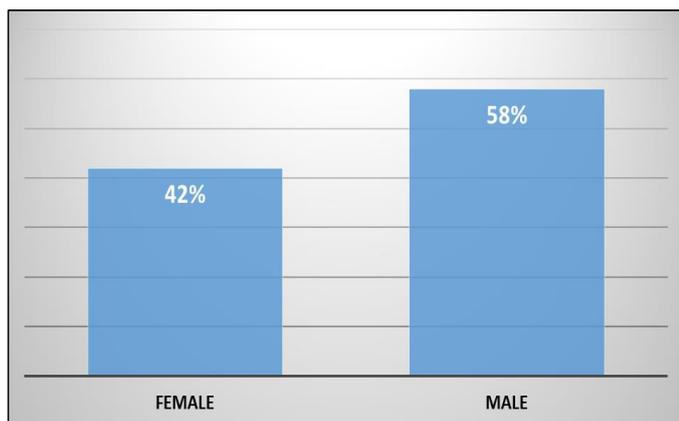


Fig. 2: Gender of Respondents

Source: Field Data (2019)

Age of the Respondents

The researcher was interested to establish the age of the study participants and found that 44% were the age of 26 to 35, respondents of age between 18 and 25 were 26%, 20% comprised the age of 36 to 45, while the least represented were the age of 46 and above with only 10%. Most of the account holders are either employed or run their own firms and this explains the huge numbers of respondents above 25 as shown in fig. 3.

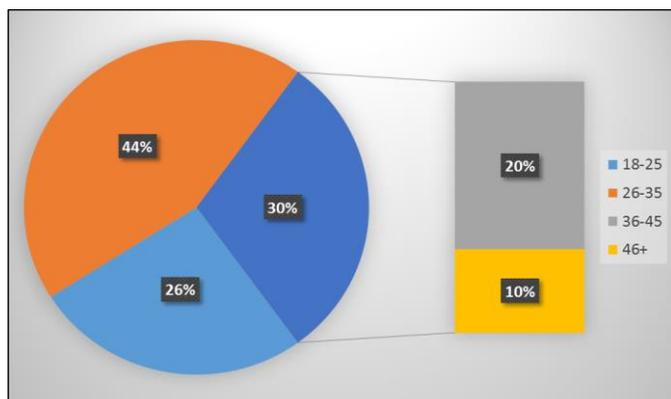


Fig. 3: Age of Respondents

Source: Field Data (2019)

Education level of Respondents

The results show that Bachelor degree holders were the majority with 23 respondents accounting for 46% of the respondents; Diploma holders followed with 15 respondents accounting for 30% of the total. Certificate holders were 8 accounting

for 16% while Masters Holders were 4 and this was 8% of the total as shown in fig. 4. Although this statistic may not be the reflection of all the banked population, most customers who took part in the research have attained some form of tertiary education with degree holders being the majority.

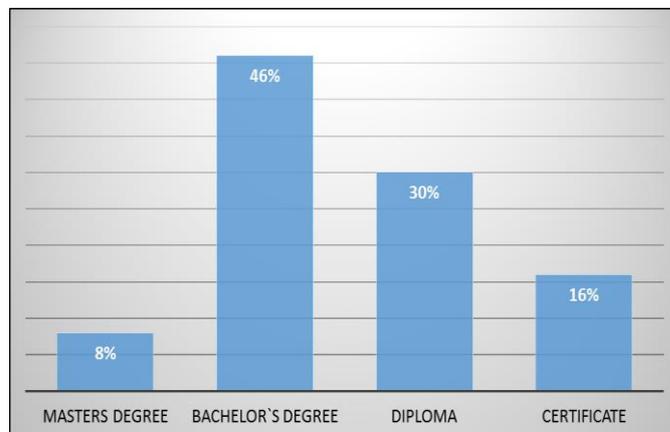


Fig. 4: Education level of Respondents

Source: Field Data (2019)

Duration with the bank

The study intended to see how long the respondents have had an account with their respective banks. According to table 2, respondents who held accounts for less than 2 year were 8 accounting for 16% while respondents who said they have held an account with the bank for more than 10 years were 6 accounting for 12% of the entire sample size.

On the other hand, there was equal representation of respondents who held accounts for 2 to 5 years and 6 to 9 years. Both had 18 respondents accounting for 36% each. Table 2 shows the detailed information on the findings in respect to the duration a customer has held an account with a bank.

Table 2: Duration with the bank

	Frequency	Percent
Valid Less than 2 years	8	16.0
2-5 years	18	36.0
6-9 years	18	36.0
10 years or more	6	12.0
Total	50	100.0

Source: Field Data (2019)

It is evident that the most the respondents have been with their respective banks for a substantial period of time. Fig. 5 which shows the graphical representation of the respondents` duration with their respective banks also entails that the banks clientele base may to decline as the moment customers exceed 10 years with the bank.

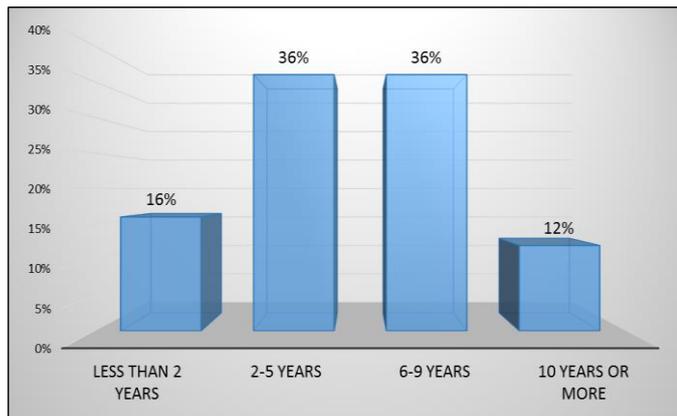


Fig. 5: Duration with the bank

Source: Field Data (2019)

4.2 Social Factors on Mobile Banking Adoption

The first objective of this study was set to the extent to which social cultural factors influence mobile banking. In order to measure this variable, statements were presented to the participants so as to know what extent they agreed or disagreed.

Personal Behavior

Issues on personal behavior were asked and the following were the responses of the participants:

When respondents were asked if they consider mobile banking services to be attractive, 64% strongly agreed while 16% agreed. A combined 8% either disagreed or strongly disagreed having knowledge to use electronic banking services. On the other hand, 8% were neutral on the statement as shown in fig. 6 below.

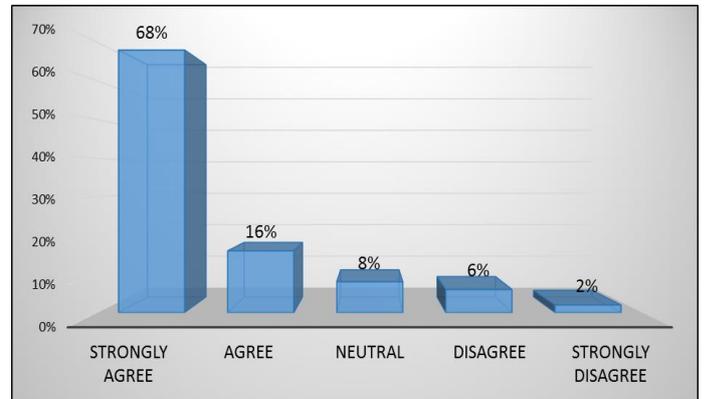


Fig. 6: Mobile banking services are attractive

Source: Field Data (2019)

Majority of respondents agreed that they would continue using mobile banking services for their banking needs. 54% of the respondents strongly agreed to continue using mobile banking 6% strongly disagree. 26% agreed, 12% disagreed while 2% were on the fence concerning the continuous usage of mobile banking as shown in fig 7.

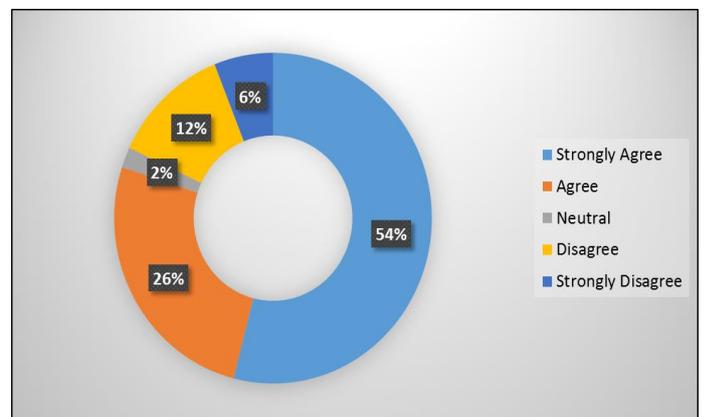


Fig. 7: Continuous usage of mobile banking services

There was uncertainty on whether a respondent is good at learning how to use new technology like mobile banking. 18% strongly agreed that it takes

long to learn how to use mobile banking while the same percentage of 18% thought on the extreme end and strongly disagreed. 20% of the respondents were neutral while 21% agreed to the statement. Those who disagreed to the statement were 24% representing the largest share of the sample as shown in table 4.

The results indicate that there is mixed feeling regarding the continuous usage of mobile banking services among the bank customers. Without a unanimous response as shown in the table (3), it raises more questions on the customer`s perception of using mobile banking services in the future.

Table 3: I am good at learning how to use new technology like mobile banking

	Frequency	Percent
Valid Strongly Agree	9	18.0
Agree	10	20.0
Neutral	10	20.0
Disagree	12	24.0
Strongly Disagree	9	18.0
Total	50	100.0

Source: Field Data (2019)

Group Influence

Issues on group influence were asked and the following were the responses of the participants:

There were mixed reactions on the statement that the use of mobile banking services can be affected because other people may be able to access respondents' accounts. Those who were uncertain about the statement were majority representing 26% followed by those who agreed representing 24%. Respondents who disagreed were 22% and those who strongly agreed were 16% while respondents who strongly disagreed

were 12%. The representation of the same is shown in fig. 8

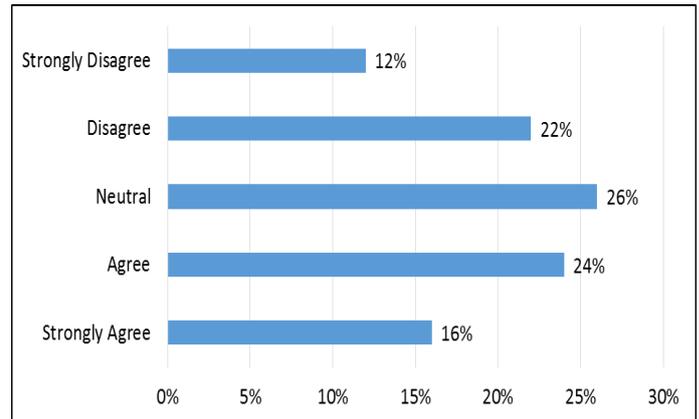


Fig. 8: Mobile banking usage may be affected if others can access my account

Source: Field Data (2019)

The respondents strongly agreed that people whose opinion they value thought they should use mobile banking services with the representation of 16 accounting for 32%. Those who just agreed to the statement were 24 representing 48% of the sample size. Only 12% strongly disagreed and 2% were neutral while 6% disagreed that opinion of others matters in using mobile banking services as shown in fig. 8.

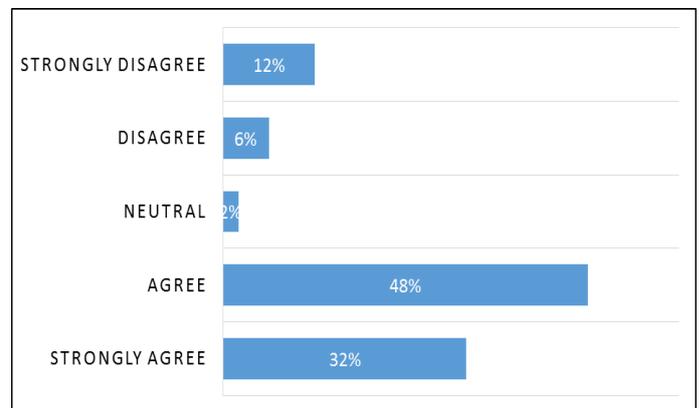


Fig. 9: Value the opinion of others in the usage of mobile banking

Source: Field Data (2019)

Similarly, majority of respondents agreed with the statement that they are influenced to take up mobile banking if people who are important and in

support of the service did the same. Those who agree to were 44% followed by 24% of those who strongly agreed and 16% disagreed. However, 10% of the respondents neither agreed nor disagreed while 6% strongly disagreed to the statement as shown in table 4.

Table 4: I am influenced by others to take up mobile banking

	Frequency	Percent
Valid Strongly Agree	12	24.0
Agree	22	44.0
Neutral	5	10.0
Disagree	8	16.0
Strongly Disagree	3	6.0
Total	50	100.0

Source: Field Data (2019)

On the statement that respondents` decision on the use of mobile banking service are influenced by friends, majority agreed taking up 68% (28% of the respondents strongly agreed to the statement and 40% of the respondents agree to the statement). However, 10% of the respondents disagreed and the other 10% strongly disagreed.

Meanwhile, only 12% of the respondents were uncertain about the statement accounting for 6 out of the 50 bank customers who took part in the study as show in fig. 10 below.

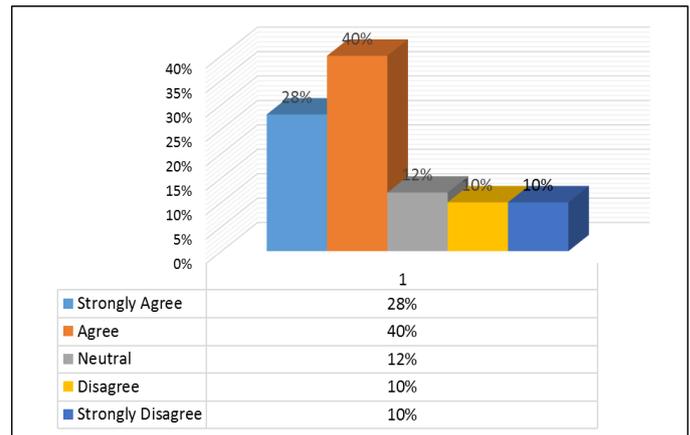


Fig. 10: My decision on the use of mobile banking services is influenced by family and friends

Source: Field Data (2019)

4.3 Economic Factors on Mobile Banking Adoption

Under this objective, the study was set to examine how economic factors influence mobile banking by letting participants respond to statements which ratings from strongly agree to strongly disagree.

Cost Issues

Issues on cost were asked and the following were the responses of the participants:

Majority of respondents express worry on the bank compensating them if transaction errors occurred while using mobile banking services. About 46% of the respondents strongly agreed that they worry on the bank compensating them if transaction errors occurred and 38% followed suit by just agreeing. Meanwhile, 10% disagreed did not express worry together with 4 percent who strongly disagreed with the statement. Only 2% of the respondents were uncertain about the statement. Fig. 11 shows the representation of the results.

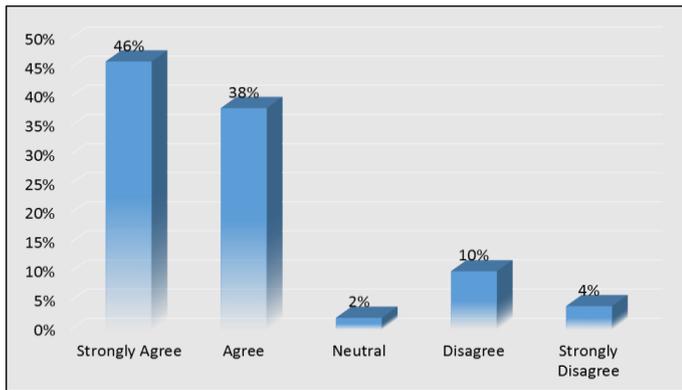


Fig 11: When transaction error occurs, I worry that I cannot get compensation from bank

Source: Field Data (2019)

With regard to saving transaction costs, 50% of the respondents strongly agreed and 32% agreed to the statement. Only 18% of the respondents disagreed to the statement and none of the respondents strongly disagreed with the statement. There was clear division between respondents who agreed and those who disagreed as each respondent either agreed or disagreed with the statement as shown in fig. 12.

The results also show that the majority of the respondents in favor of the statement presented to them as 82% of the respondents either agreed or strongly agreed to the statement. Furthermore, 50% of the respondents strongly agreed with the statement indicating that mobile banking is viewed as a service that could save customers transaction costs as shown in below.

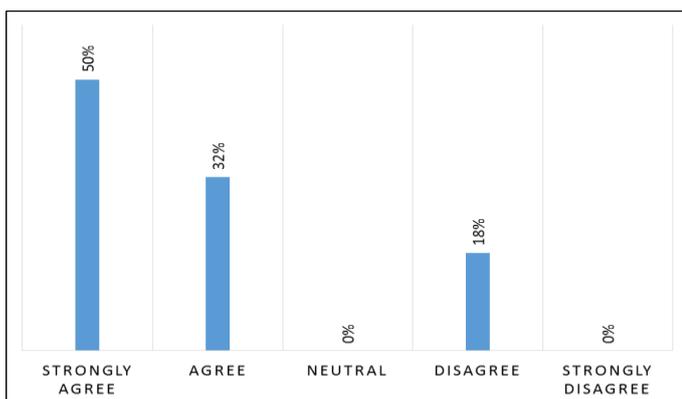


Fig. 12: Mobile banking could save me transaction cost. Source: Field Data (2019)

There were mixed feelings among the respondents on the statement that their usage of mobile banking is influenced by how a service is priced. 34% of the respondents neither agreed nor disagreed with the statement and a combined 30% disagreed with the statement. On the other hand, a combined 36% agreed to the statement as shown in the fig. 13.

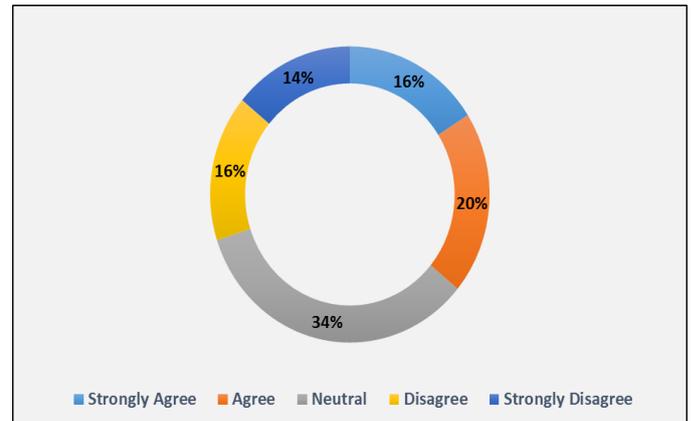


Fig. 13: Customer usage of mobile banking is influenced by how a service is priced

Source: field Data (2019)

On the statement that mobile banking is an important aspect since the transaction costs of payments are greatly reduced when there is an electronically accessible, 46% strongly agreed with the statement followed by 26% of respondents who agreed. 12% disagreed and 10% strongly disagreed while 6% neither agreed nor disagreed as shown in fig. 14.

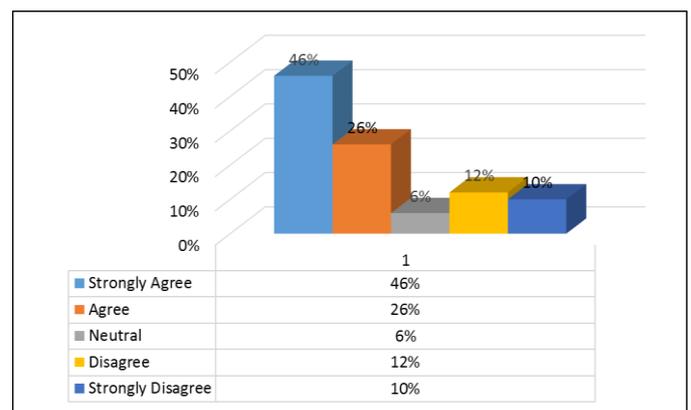


Fig. 14: Mobile banking reduce transaction costs of payments. Source: Field Data (2019)

Financial Services Offered

Issues on financial services offered were asked and the following were the responses of the participants:

Overwhelming majority of the respondents agreed to the statement that various initiatives use mobile phones to provide financial services to the unbanked. 96% of the respondents agreed to the statement with 60% of the respondents having a strong agreement to the statement. Only 4% of the respondents express a disagreement to the statement provided. The fig. 15 below shows the representation of the same.

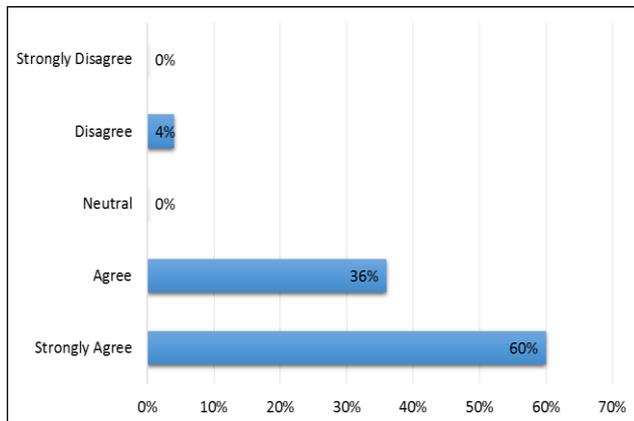


Fig. 15: Various initiatives use mobile phones to provide financial services to the unbanked

Source: Field Data (2019)

Respondents were asked to express their view on the statement that mobile banking is a cost-effective way to provide banking services to the unbanked. A representation of 46% agreed to the statement and 42% strongly agreed whereas 6% were not sure of the statement. A combined 6% expressed otherwise on the statement with 4% disagreeing and 2% strongly disagreeing to the statement as shown in fig. 16.

The pie chart reveals that the majority of bank customers who took part in the study agree that mobile banking is a cost effective way of banking services to the unbanked.

With only 7% of Zambian population above the age of 10 years that have a bank account, mobile banking may be a way of increasing the number of the banked population in the country. This can be attributed to the perceived high fees charged on maintain a bank account which in turn discourage many to open an account with commercial banks.

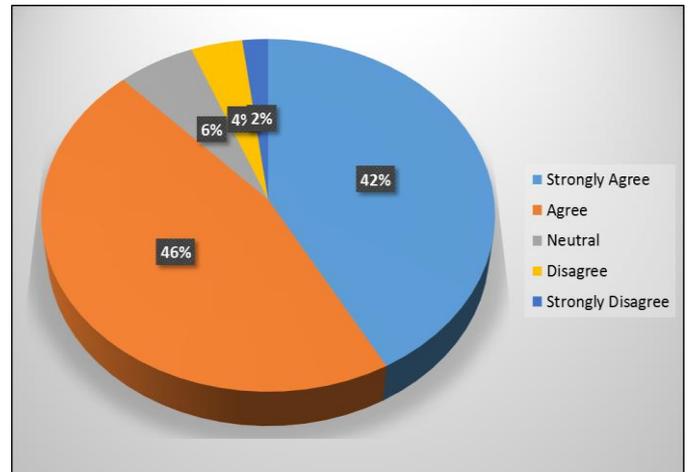


Fig. 16: Mobile banking is a cost effective way to provide banking services to the unbanked

Source: Field Data (2019)

4.4 Technological Factors on Mobile Banking Adoption

The study sought to assess the effect of technological factors on mobile banking adoption and the respondents were asked a number of questions that they rated ranging from Strongly Agree to Strongly Disagree.

Security Issues

Issues on security were asked and the following were the responses of the participants:

Respondents agreed that responsibility must be determined when financial losses occur in mobile transactions with 88% agreeing to the statement. 4% were uncertain about the statement and 8% disagreed with the statement.

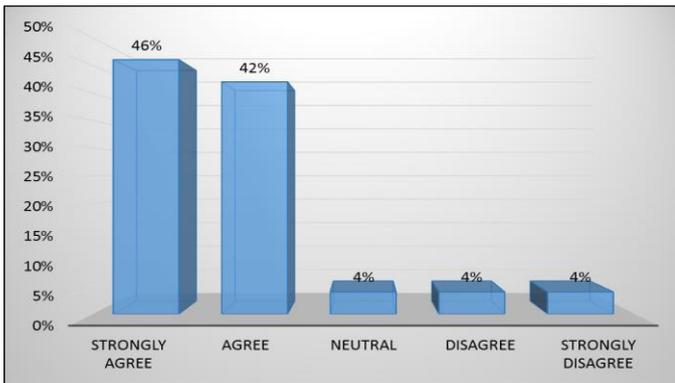


Fig. 17: Responsibility must be determined when financial losses occur in mobile transactions
Source: Field Data (2019)

Similarly, overwhelming number of respondents agreed that losses must be borne by the bank. 56% of the respondents strongly agreed with the statement followed by 42% who just agreed with the statement. Only 2% of the respondents disagreed with the statement as shown in the pie chart.

Usually, customers would not want to engage into a service that will expose them to risk or become prone to fraud. This a major concern in adoption of mobile banking as indicated by Kuisma et al., (2007). Banks are tasked to ensure the security of their customers' money because the study reveals that customers feel banks should borne the loss of their money as a result of mobile banking service offered to them as shown in fig. 18.

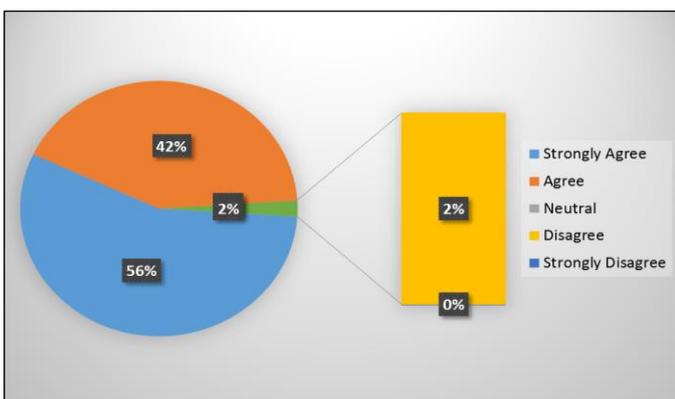


Fig 18: Losses must be borne by the bank
Source: Field Data (2019)

There was uncertainty that mobile banking services may not perform well and process payment incorrectly. 26% strongly agreed while 20% thought otherwise and strongly disagreed. 18% agreed while 22% of the respondents disagreed. The respondents that neither agreed nor disagreed were 14% as shown in fig. 19.

The result also indicates that the functionality of mobile banking service is still being received with skepticism among some bank customers. This can be clearly seen by the large number of customers who either agreed or disagreed to the statement as shown in the figure.

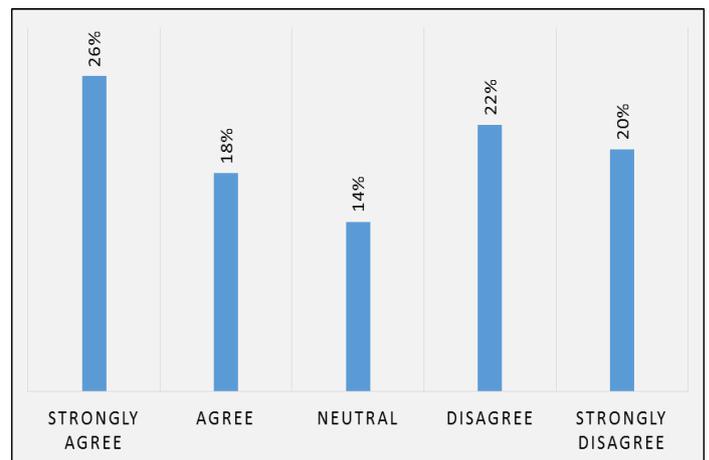


Fig. 19: Mobile banking services may not perform well and process payment incorrectly
Source: Field Data (2019)

Usability Issues

Issues on usability were asked and the following were the responses of the participants:

Respondent expressed the extent to which they agreed to the statement about mobile banking being user friendly. 60% of the respondents agreed that mobile banking is user friendly and while 24% disagreed. Meanwhile 8% of the respondents strongly agreed whereas 4% strongly disagreed and the other 4% were uncertain. Fig. 20 is a graphical representation of the same which is a bar graph.

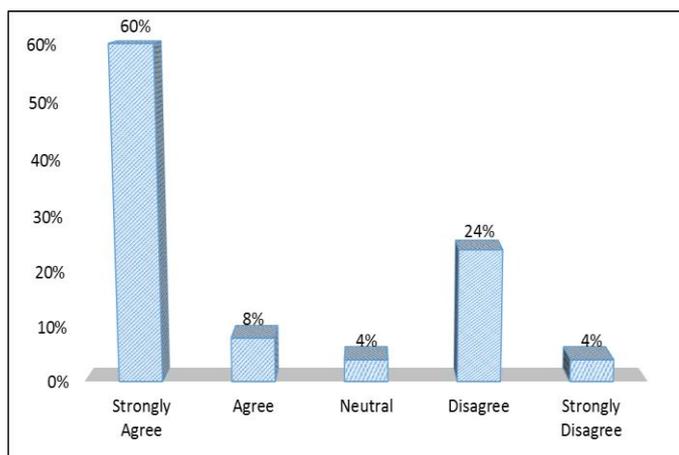


Fig. 20: Mobile banking is user friendly

Source: Field Data (2019)

With regard to improving their performance on banking activities, majority of respondents agreed that mobile banking would improve their banking activities representing 76%. Only 18% of the respondents disagreed with the statement and 6% neither agreed nor disagreed with the statement as shown in table 5.

Table 5: Mobile banking improves my performance on banking activities

	Frequency	Percent
Valid Strongly Agree	38	76.0
Neutral	3	6.0
Disagree	9	18.0
Total	50	100.0

Source: Field Data (2019)

In terms of how quickly the use of mobile phone to access banking is compared to entering bank premises, 36% of the respondents strongly agreed that mobile banking is quicker in transacting than queuing up in the bank while 32% agreed. On the other hand, 20% disagreed and 12% strongly disagreed to the statement as shown in fig. 21.

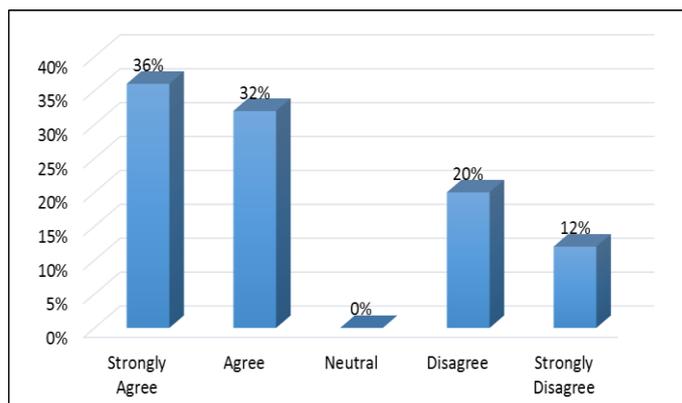


Fig. 21: Mobile banking is quicker in making transaction as compared to queuing in the bank

Source: Field Data (2019)

V. DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

This chapter presents a discussion of the key findings, conclusions drawn from the findings and makes appropriate recommendations. The conclusions and recommendations drawn were aimed at addressing the objective of evaluating the level of adoption of mobile banking among bank customers, and the factors influencing and challenges facing the adoption process.

5.1 Discussions of the Findings

Social Factors and Mobile banking adoption

The study established that most of the respondents found mobile banking services to be attractive and would continue to use mobile banking services. This has been attributed to the individual character of the adopters. Wejnert (2012) ^[27] established that characteristics may be relevant to an individual's adoption capability. Menzel (2010) also showed that certainty and risk-taking characteristic of individual actors affected their acceptance to novel data and applications.

The findings also revealed that the respondents value people opinions to use mobile banking services. This is in line with Riquelme and Rios (2010) ^[17] who established that consumers typically are influenced by reference teams to which they do

not belong. For example, an inspirational cluster is one to that the individual desires to belong relations will powerfully influence customer behavior. Their study gave a case of a family: The family is the most significant client shopping for organization in society.

The findings also revealed that people who are important to the respondents made them think about using mobile banking services. Similarly, Simonson and Nowlis, (2011) in their study noted that individual belongs to several teams –family, clubs, and organizations. The person's position in every cluster are often outlined in terms of each role and position. A job consists of the activities individuals are expected to perform consistent with the persons around them. Every role carries a status reflective of the general esteem given by society.

In addition, the research also established that people who influence the account holder's decisions thought they should use mobile banking services. Simonson and Nowlis, (2011) also established that same and they explained that reference teams, like a social reference cluster, could have an effect on person's behavior. Two competitive influences have been acknowledged on the connection between subjective norm and behavior: conformity and dissension. Conformity is that the results of individuals attempting to adapt to a subjective norm, thereby avoiding criticism and rejection.

There was uncertainty on how good an individual is at learning how to use mobile banking services and fear that other people may be able to access personal account, this could be attributed to the general culture. Previous studies stressed the importance of culture toward a more robust understanding of knowledge system adoption. One study in particular by Al-Gahtani, Hubona, and Wang (2011) stress the role of culture when transferring information technology applications across culture, before any technology transfer, it's necessary to check user necessities and desires.

Those desires and demand are heavily influenced by culture. According to Mohamed (2015) culture may denote the variation between values, beliefs, and motivation of a diverse cluster Shore and Venkatachalam (1996) expressed that culture reflects individual core values and beliefs. These values and beliefs are created through childhood and strengthened throughout their life (Leidner & Kayworth, 2010).

Economic Factors and Mobile Banking Adoption

The study revealed that most of the respondents were able to access funds any time they wanted to. This was similar to what Clark (2008) study recommended that as a channel the cell phone can increase the quantity of channels accessible to customers, accordingly giving buyers all the more ease self-benefit choices by which to get to assets, managing an account data and make installments. Mobile as a channel conveys accommodation, promptness, and decision to buyers.

The study established that mobile banking is a cost-effective way to provide banking services to the unbanked through provision of financial services. Similarly, Porteous, (2011) established that mobile banking is without a doubt compelling on cost and administers services to the unbanked in light of the fact there is no requirement for branches physical foundation to help the clients. InfoDEV (2006) research established that it is just a branchless bank display that has the capacities of taking care of restricted bank dealings through the cell phone. Financial strategy impacts the supply of cash through the impacts it has on banks' intermediation movement.

The respondents agreed that mobile banking could save them transaction cost, and Karjaluo (2012) established that Mobile banking is a critical viewpoint since the exchange expenses of installments are significantly diminished when there is an electronically available store of

significant worth in most administrative services. On the other hand, Karjaluo (2002); Rugimbana (1995) found that there is endless market potential for mobile managing an account because of its dependability on usefulness and the alternative to do saving money practically whenever and anyplace. The study established that mobile banking affect rate of money supply in the economy and Bruno and Shin (2013) illustrated that bank transaction is one vital determinant of cash and credit advancements, both of a repeating and of a more relentless nature.

Technology Factors and Mobile Banking Adoption

The findings revealed that most respondents thought that responsibility must be determined when financial losses occur in internet transactions and losses must be borne by the bank. Thomas, Wolf, Allan and Nadra (2008) established that specified risk is a key lawful issue. Obligation must be resolved when money related misfortunes happen in Internet exchanges, and misfortunes must be borne by the bank, the client, or even other related gatherings in the Internet banking framework, for example, the Internet specialist organization. However, Sir luck et al, (2007) noted that banks ordinarily use internet managing an account contracts or concurrences with constraints of their obligation, taking note of that the bank is not in charge of any misfortune brought about by the Internet saving money administration or client utilization of the administration.

There was uncertainty on whether electronic banking services may not perform well and process payment incorrectly therefore there is a need for the bank to guarantee that as showed by Chellappa (2008) the security affirmations offered by banks and which customers predict should include: Careful reference to their endorsed Web goals in their creations; check by method for the use of a mechanized statement; on-screen and mouse worked keypads for tricky information; virus

protection; firewall use and communicated cutoff focuses to customer hazard for unapproved use of access to codes.

There was also uncertainty on the customer side on whether when transaction error occurs, they would get compensating from bank, Shu-Hsun and Ying-Yin (2008) agree with the statement and in their findings they established that from a client perspective, the issue of trust can be ensured by having the going with trust parts embedded inside the trust appear. Protection which is the method through which customers are satisfied that their own particular information is sufficiently spared by the component assembling the information). According to Chellappa (2008), the lion's share of electronic exchange trades are brought out through Web programs that are related with shipper goals that along these lines interface with some kind of budgetary association. Like any strong information structure, the move when driving such a trade should be reliable and direct for the customer yet feedback ought to be demonstrated remembering the true objective to make an opinion control.

5.2 Conclusion

Under social factors, it can be concluded that most of the account holders possess the knowledge of how to use electronic banking services, and most of them are willing to embrace electronic banking services for their banking needs. Among the services mostly preferred is payment of utility bills. The study also conclude that the uptake of the service is dependent on the group influences.

With regard to economic factors, the study can conclude that use of mobile banking has enabled customers to access to funds any time they want, and they also consider it a cost-effective way to provide banking services to the unbanked. It also enables the users to save on transaction cost.

Last but not the least, the study concludes that usability of electronic banking services for handling banking transactions is friendly. The

study also concludes that bank customer affirms using electronic banking services for handling banking transactions and that responsibility must be determined when financial losses occur in Internet transactions while losses must be borne by the bank in case of fraud.

5.3 Recommendations

Since most of the account holders possess the knowledge of how to use electronic banking services, banks should strive to educate the account holders on the benefits that they would incur from taking up the services. The bank also need to offer the best services to the current users in order for them to convince their peers, friends and family members to take up the service.

Customers need to be encouraged to use of mobile banking as it would have enabled them to access their funds any time they want, and it is also a cost-effective way to provide banking services to the unbanked. The bank needs to ensure that the transaction costs are lower than over the counter cost so as to convince more clients to take up the service.

The study recommends that the governments needs to organize and create good plans to support the development of civilian technology innovation and also do its part to improve the economic growth and development. On issues of security the bank needs to seek ways to minimize fraud, system failures and guaranteeing the users that electronic banking services can handle their banking transactions.

Acknowledgment

As I begin to reflect on the magnitude of this project, I would like to thank the Almighty God for providing me the resources and energy to make this graduation project become a reality. I would like to thank all the lecturers at The Information and Communications University (ICU) who supported me thought the study.

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