

# Factors influencing consumer usage of E-banking services through mobile phones:

## The Chingola District perspective

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### **Abstract—**

*Mobile banking is the latest and most innovative service offered by banks all over the world. It is a subset of electronic banking which underlies not only the determinants of the banking business but also the special conditions of mobile commerce. Mobile banking gives customers access at banking services at any time without the assistance of a bank employee. To this regard, a study was carried out to examine the factors influencing the usage of e-banking services through mobile phones with reference to ease of use, perceived usefulness and trust.*

*A paper based questionnaire was designed and distributed to 50 customers of major banks in Chingola District of Zambia as a primary data collection method. All 50 questionnaires distributed were successfully returned and used for analysis yielding a 100% response rate.*

*The results indicate that ease of use, perceived usefulness and trust have significant influence on consumer usage of e-banking services through mobile phones with perceived usefulness being the most significant of the three. The researcher recommends that banking institutions take necessary steps to extensively educate the consumers regarding mobile banking and other electronic banking services in order to reduce the resistance customers normally have towards services they are not fully aware of.*

**Keywords—***Ease of Use, Mobile Banking, Perceived Usefulness, Trust, Usage.*

## I. INTRODUCTION

The world has experienced a paradigm shift in the way goods and services are being produced, delivered and consumed due to technology advancements. The development of e-commerce, a product of New Age technology, has strengthened various systems around the world especially in Africa. Thus, technology is being used as an enhancing tool for performance, relevance and growth. For instance, the financial system in Africa has allowed banks and other players to diversify their activities, deepen their lending and increase their reach with new e-commerce tools such as a mobile phone (World Bank, 2006).

Luo et.al (2010), defined mobile banking as an innovative method for accessing banking services via a channel whereby the customer interacts with a bank using a mobile device.

Mobile phones open the door to a slew of new applications and services where we can access any information, can do virtual or internet based activity very easily. From the day internet found its way to our pockets through smart phones people didn't need to remember any mobile numbers, now their device can be used to detect their location, purchase and sell items, clearly stating the fact that mobile commerce is going to be the next big revolution in the whole world.

For last 15 years mobile technology has flourished throughout the developing world faster than any other technology in history (Michaels, 2011). 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. Subsequently, almost, if not all, banks in Zambia are providing mobile banking services as one of the ways of retaining the currently banked and also penetrating into the large market of unbanked mobile phone users.

Mobile banking was first introduced in the early 2000s through short messaging service and Wireless Access Protocol (WAP) or General Packet Radio Service (GPRS) enabled mobile web browsing. The first exposure to mobile banking was not pleasant for its users. The mobile web browsers functioned slowly and erratically as compared to their internet banking counterparts, due to limited feature handsets and, much lower speeds of browsing due to narrow bandwidths. Security concerns were also in existence due to the inability of mobile phone producers to provide a secure mode of data transmission through mobiles (Riivari, 2005). The scenario has changed considerably today due to newer technology advancements and the introduction of newer feature rich handsets. Mobile web browsing speeds have also increased considerably due to broadband internet facilities being made available for mobile phones at attractive rates.

In Zambia, Zambia National Commercial Bank (ZNCB), now rebranded ZANACO, pioneered mobile banking services 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) <sup>[1]</sup>, 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 their customers` mobile devices 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.

## 1.1 Statement of the Problem

Despite numerous benefits and the growing number of banks offering mobile banking solutions, the use of mobile phones to conduct banking transactions or access financial information is not as widespread as might be expected (e.g., Dineshwar & Steven, 2013) <sup>[6]</sup>, as demonstrated by popular media reports (e.g., Accenture, 2013).

Locally, as of 2015, the banked population in the country had grown to 19%. However, only 45.9% of the banked are aware of the existence of digital financial services including mobile banking and about 5% are using mobile phones for banking transactions (Finscope, 2015; ZICTA, 2015). The Zambia Information and Communications Authority (2015) <sup>[18]</sup>, further reported that the main limitation to the usage of digital financial services, including mobile banking, among customers aware of the existence of the services in the country is attributed to the lack of knowledge on the operation of digital financial services. This conundrum leads to an important question that needs to be answered: what factors influence the consumer usage of e-

banking services through mobile phones particularly in Zambia?

## 1.2 Purpose of Study

The e-banking transactions via mobile phones is one of banking industry`s brilliant innovations considering the fact that a mobile phone device has become a necessity rather than a luxury for every individual. Nevertheless, the ubiquitous of mobile phone devices doesn`t guarantee the success of mobile banking usage. Therefore, the purpose of this study was to enrich the knowledge and understand factors influencing consumer usage of e-banking services through mobile phones with a special reference to perceived usefulness, ease of use and trust.

## 1.3 Significance of Study

This research may give importance on understanding the factors that influence the use of mobile banking in Zambia. The outcomes and results of this research may also be of potential value to the banking industry as banks would be able to revise and improve the mobile banking service in favor of its users. In addition, 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.

## 1.4 Research Objectives

The overall or general objective of this study was to examine the factors influencing the use of e-banking services through mobile phones.

The specific objectives of this study were to:

- i. To find out the effect of performance on the usage of mobile banking.
- ii. To examine the effect of flexibility on mobile banking usage.
- iii. To find out if reliability influences consumers to use mobile banking.

## 1.5 Research Questions

The following are the research questions that guided the study:

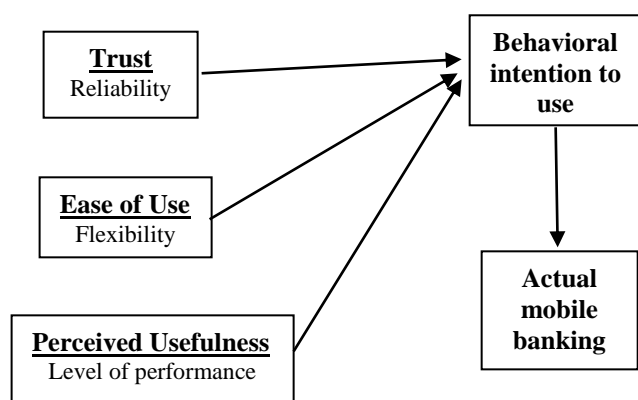
- Does level of performance have any effect on the intention to use mobile banking?
- Does flexibility affect the usage of mobile banking service?
- Does reliability of mobile banking affect its usage?

## 1.6 Identification of Variables

Dependent variables	Independent variables
Usage	Level of performance
Usage	Flexibility
Usage	Reliability

## 1.7 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation. It is a tool used to make conceptual distinctions, organize ideas and develop awareness and understanding of the situation under scrutiny. The framework shows that trust, ease of use and perceived usefulness influence the behavioral intention to use mobile banking which in turn determines the actual mobile banking usage.



## 1.8 Scope of the Study

The study was to examine the factors influencing the usage of e-banking through mobile phones with special reference to trust, ease of use and perceived usefulness in Chingola District of Zambia and give conclusions and recommendations

## 1.9 Limitation of Study

The study was limited to Chingola District because of insufficient fund 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 7 banks in Chingola i.e. First National Bank (FNB), Indo Zambia Bank (IZB) Zanaco Bank, Stanbic Bank, Standard Chartered Bank, Finance Bank and Barclays Bank

## 1.10 Operational Definitions

**Ease of Use:** the extent to which an individual believes that using mobile phone banking would increase flexibility without too much effort.

**Mobile Banking:** A service provided by the bank that enables the user to access banking services using a mobile phone.

**Mobile phone:** A portable device used primarily for communication purposes.

**Perceived usefulness:** the degree to which a prospective user believes that a particular system would enhance his or her performance.

**Trust:** Believe in the reliability or ability of something.

**Usage:** Firmly established and generally accepted practice or procedure

## 2.0 LITERATURE REVIEW

### 2.1 Introduction

This chapter seeks to give an assessment of the past research findings conducted by other researchers so as to identify the gaps in knowledge and improve on the research methodologies that were used. The literature is

categorized in three perspectives; global, regional and Zambian perspective.

## 2.2 Global Perspective

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) <sup>[5]</sup> 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) <sup>[5]</sup>. 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, p. 226) <sup>[12]</sup>.

A study by Moon and Kim (2001, p. 217), however, shows that TAM does not precisely capture the influences of technological and usage context factors that influence user acceptance of IT systems even though it received overwhelming response. As a result, various studies have gone further to include additional factors such as trust, security and privacy, perceived self-efficacy and enjoyment, and perceived usefulness regarding e-banking to provide a broader and fuller understanding of the topic (Yaghoubi, 2010) <sup>[16]</sup>.

Jun et al. (2008) identified the facilitating and moderating factors in the continuous use of on-line 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. Dewan (2009) studied previous adoption models and proposed

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, p. 2839) <sup>[4]</sup>. 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) <sup>[8]</sup> 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) <sup>[17]</sup>.

Kazemi, S.A., et al (2013) <sup>[9]</sup> investigated 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.

Koenig et al (2010) they investigated on the barriers towards Mobile Banking System adoption among young people in Germany. This study was based on the Technology Acceptance Model (TAM). They received 155 responses from all the questionnaires that were sent, they also used a Structure Equation Modeling (SEM) approach to tests the hypothesis. The results of the study indicated that compatibility, perceived usefulness, and risk are significant indicators for the adoption of Mobile banking systems in Germany.

Cheah et al (2011) <sup>[2]</sup>, carried out an empirical study that was conducted with the aim of investigation on the factors that affect the Malaysian consumers from adopting mobile banking services. From the study, variables such

as perceived ease of use, Perceived usefulness and relative advantage were found to be positively and significantly related to the intention to adopt mobile banking services while a constructs such as perceived risk was found to be negatively correlated with the adoption of mobile banking.

Frangos (2009) <sup>[7]</sup> notes that perceived usefulness is the overriding motive behind customers` use of e-banking. While a mobile banking experience generally influences a customer`s usage, the degree to which a mobile banking experience affects a consumer`s usage varies and is subject to the particular technical support being examined. Specifically, the use of mobile banking depends on the technical support itself and the skill or experience level of an individual using it.

### 2.3 Regional Perspective

Maduku (2014) <sup>[10]</sup> 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) <sup>[10]</sup>.

Ramdhony D. and Munien S. (2013) investigated the complex factors that prevent customers from adopting and using mobile banking services in Mauritius. The researchers used a quantitative approach, they also combined the TAM and IDT together with perceived risk and cost construct to investigate perception of m-banking in Mauritius.

Chitungo, S. K., & Munongo, S. (2013) <sup>[3]</sup>, investigated the factors that influence mobile

banking adoption in the rural Zimbabwe through extending the technology acceptance model. The researcher adopted use of stratified random sampling and the results of the study suggested that factors such as perceived usefulness, perceived ease of use, relative advantage, personal innovativeness and social norms influenced the intention to accept and use mobile banking.

According to Makongoro (2014) <sup>[11]</sup>, perceived ease of use, perceived usefulness and time and cost are the most significant influencing factors in mobile banking adoption in Tanzania. The study also found that trust was a negative correlation in influencing adoption of mobile banking. The study recommends that there is a need to extensively educate customers on the use of electronic services such as internet banking and SMS (mobile) banking. The benefit of educating customers regarding mobile banking services is that the knowledge of the service will be readily available to the customers but most importantly the level of understanding will be high compared to the current situation and also because it will help to reduce the resistance to the service use something that customers normally have when they are not informed about the benefits of a service.

### 2.4 Zambian Perspective

According to Simuchimba K., (2011) <sup>[14]</sup>, 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.

In a research on self-service technologies, Simuchimba K., (2011) <sup>[14]</sup> indicates that age had a significant effect on the use of mobile banking. His findings indicate that the average age of Mobile banking users was between 26- 35 years.

In the same research, however, mobile banking and internet banking were found to be less used among Self-Service Banking Technologies because most customers were not familiar and confident in using the new banking services since both services was only enacted in 2007.

ICT survey by ZICTA (2015) articulates that majority of individuals aware of the existence of electronic financial services are in urban areas constituting 58.1 percent of all the people aware of the existence of electronic financial services while only 41.9 percent of the individuals aware of the existence of the services are found in rural areas. However, only 30 percent of the individuals aware of the existence of electronic financial services have used the service to pay for goods and services or transfer funds. This is to show that awareness affects the usage of electronic financial services including mobile banking.

ZICTA (2015), highlighted that the main limitation to the usage of digital financial services among individuals aware of the existence of the services in the country is a lack of knowledge on the operation of electronic financial services as highlighted by 57.9 percent of the people that are aware of the existence the services but do not use the services. A sizeable proportion of individuals that do not use the service but are aware of its existence hold a perception that it is insecure and expensive indicated by 39.2 percent and 38.4 percent of the people that are aware of the existence the services but do not use the services respectively.

## 2.5 Personal critique summary

There have been a number of valuable studies in the area of mobile banking carried out 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. Being the most common factors studied, perceived usefulness, ease of use and relative advantage were found to positively influence usage of mobile banking.

Locally, Simuchimba K., (2011) <sup>[14]</sup> indicated that age affect consumer behavior intention to use Self-service banking Technologies and ZICTA (2015) state that lack of awareness is a limiting factor in the usage of electronic financial services. However, there is dearth in literature on the factors influencing usage of mobile banking in Zambia. Moreover, the extensive literature available on the topic from other countries portray weakness as its focus is outside Zambia. Therefore, this study will shed light on factors that influence usage of mobile banking services in order to create an understanding of this new technology in the banking sector in Zambia.

## 3.0 METHODOLOGY

### 3.1 Introduction

This chapter outlines aspects of the methodology in this study. These include; the research design, study population, study sample, sampling procedure, data collection instruments and data analysis.

### 3.2 Research Design

The research took on a descriptive design because it is concerned with specific predictions, narration of facts and characteristics of situations. The design can yield rich data for detailed analysis and lead to important recommendations in practice. A quantitative method approach was used to describe the current situation because the researcher intends to remain objectively separated from the subject matter as well classify features, count them and construct statistical models in an attempt to explain what is observed.

### 3.3 Target Population

According to Saunders (2007) <sup>[13]</sup> Population refers to full set of groups from which a sample is taken. The target population for this study were

individuals residing in Chingola District. A convenience sampling technique was used in order to obtain data from respondents. Questionnaires were distributed to 50 respondents. The reason for choosing this sample population was that these individuals are people who engage in retail banking and could very well be among the potential customers of mobile banking services now or in the near future.

### 3.4 Sample Size

50 questionnaires were distributed; the reason for this is because it is impractical to assess each and every individual in a population. Therefore, 50 respondents who are account holders with banks in Chingola made up the sample size.

### 3.5 Sampling Technique

According to Saunders (2007) <sup>[13]</sup> Sampling cannot be avoided in a research because it is impracticable to survey the entire targeted population due to budget and time constraints. This study used a non-probability sampling method. Saunders (2007) <sup>[13]</sup> indicated that non-probability sampling methods provide a range of alternatives in terms of techniques that can be used by the researcher. In order to complete the task in a short amount of time and cost effectively, convenient sampling technique was found to be ideal and was used in this study.

### 3.6 Instruments of Data Collection

A paper-based questionnaire was designed according to the aims of the research and given to a total of 50 respondents. This was an instrument used to collect primary data. Secondary data is past data collected for a different purpose, helpful in literature review to clarify gaps existing in the available literature. According to Vartanian (2011), secondary data refers to the data that is meant to bring results or answers to the pending questions of the researcher other than the actual questions. Secondary data for this research largely constitute of information from several published journals and books.

### 3.7 Procedure for Data Collection

The respondents who received the questionnaire were selected on grounds that they hold an account with one of the banks in the Chingola. Respondents were approached around bank premises after seeking permission from bank officials and others were approached within town center. Necessary guidance in answering the questionnaire was given to the respondents and after completion the questionnaires were collected.

### 3.8 Data Analysis Techniques

Data was analyzed using SPSS program and Microsoft Excel. Data was interpreted using descriptive statistics, totals, percentages and frequencies.

### 3.9 Triangulation

According to Cresswell (1998), triangulation is a method of checking data collected for correctness. It is a technique that is common in qualitative research, in which the researcher relies on multiple sources of data. Triangulation was used in this study to collect data from variety of sources such as interviews, observations and review of literature on mobile banking. This is done to ensure that collected data is correct and verifiable.

### 3.10 Ethical Considerations

During the study, the researcher observed the ethical considerations by respecting the rights and views of the participants. White (2003) <sup>[15]</sup> cites the relevance of the information to the participants' decision as one key element in informed consent. Therefore, information collected in this research without the consent of respective respondents was not be used. On the other hand, confidentiality of the information such as respondent's name, was also considered. All in all, before carrying out the research the researcher sought for ethical clearance where necessary.

## 4.0 RESULTS OF FINDINGS



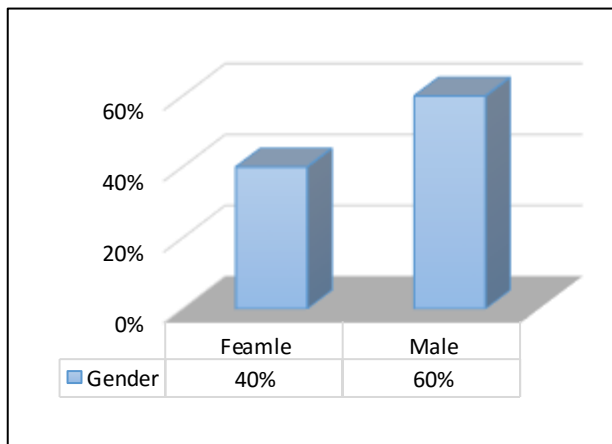
This chapter presents the results of this study and also discusses the interpretation of the graphs, pie charts and tables.

## 4.1 General Information of the Participants

To draw demographic profile of the respondents, the study used frequencies to determine the number of times a respondent answered a particular question. Questions on gender, age and education were asked.

### 4.1.1 Gender of Respondents

From figure 1 below, 30 out of 50 participants who completed the gender information were male representing 60% of the study participants and the number of female participants were 20 representing 40% of the study participants. This shows that both males and females were represented in the sample for this study, however, males were the majority.

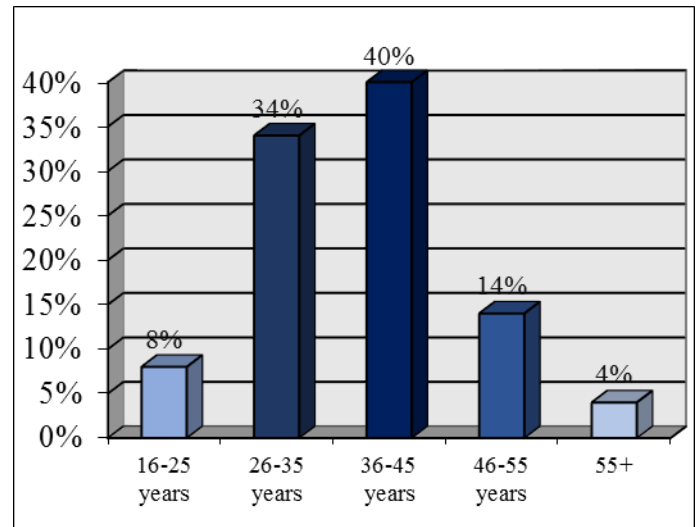


Source: Field Data, 2017

Fig 1: Gender of Respondents

### 4.1.2 Age of Respondents

The majority of respondents for this study are aged from 36 to 45 years representing 40% (figure 2). 34% of the respondents age from 26 to 35 years while respondents from age 46 to 55 years were 14%. Meanwhile, respondents from age 16 to 25 years were 8% and the lowest number of respondents came from the age group 55+ which had only 4%.

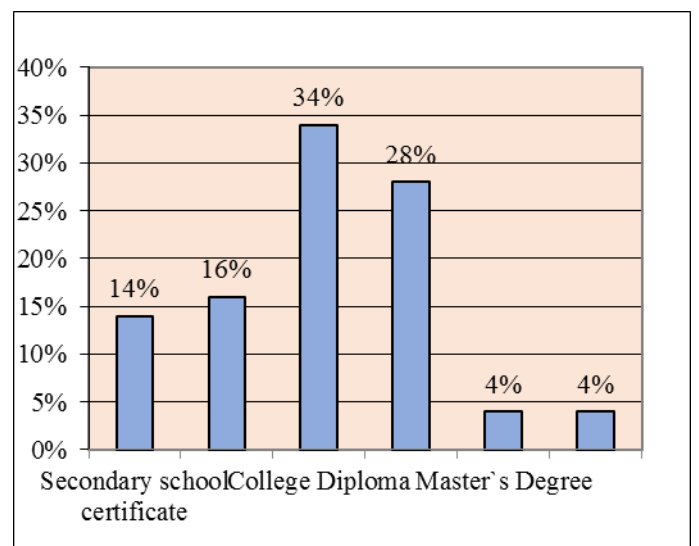


Source: Field Data, 2017

Fig 2: Age of Respondents

### 4.1.3 Education of Respondents

Figure 3 shows that 34% of the respondents have attained a college diploma while 28% have a College/University degree. Respondents who only have a Secondary school certificate were 14% and those who have attained a Trade certificate were 16%. However, only 4% of the respondents have reached a Master's degree level, and respondents who have reached a Professional level (PhD, professorate) were also 4%.

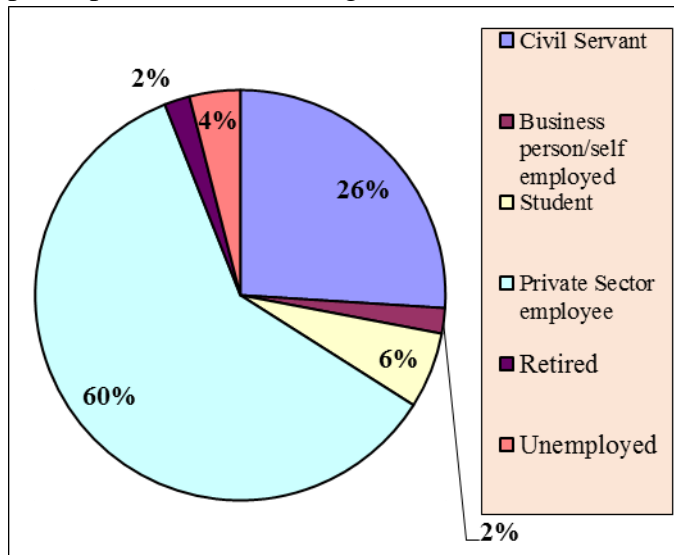


Source: Field Data, 2017

Fig 3: Respondents Level of Education

## 4.1.4 Occupation of Respondents

Out of the 50 participants, 30 participants were private sector employees representing 60% of study participants. 26% of the respondents were civil servants while 6% were students. The unemployed category were represented by 4% of participants, and the categories with least numbers were the retired and business persons with both representing 2% of the study participants as shown in figure 4 below.



Source: Field Data, 2017

Fig 4: Occupation of Respondents

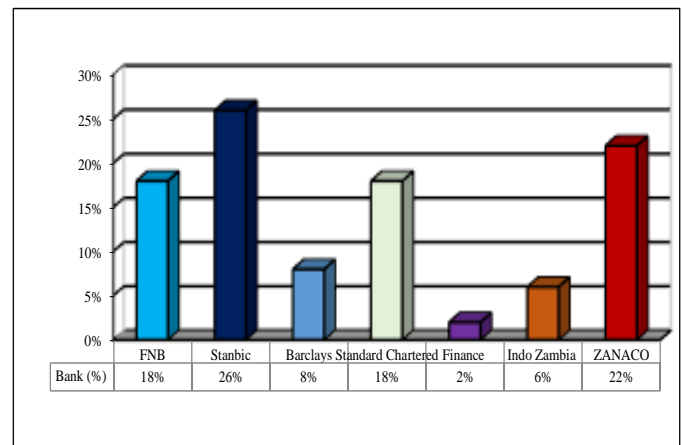
## 4.2 Bank Information of Participants

Responses drawn from this section gave an overview of respondents' bank information such as the bank they have an account with, the availability of mobile banking services and whether they have subscribed to such services.

### 4.2.1 Respondents' bank affiliation

In figure 5 below, 26% of the respondents have an account with Stanbic Bank while 22% of the respondents hold accounts with ZANACO Bank. Respondents who have accounts with First National Bank (FNB) and Standard Chartered Bank both represent 18% of the study participants while 8% of the respondents have accounts with Barclays Bank. Respondents having accounts with Indo Zambia Bank were

6% and only 2% of respondents have an account with Finance Bank.

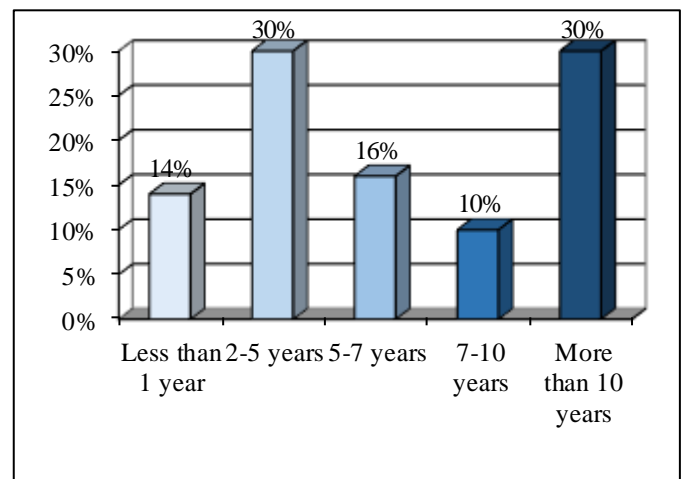


Source: Field Data, 2017

Fig 5: Respondents Bank affiliation

### 4.2.2 Respondents number of years with bank

Respondents who have been with the same bank from 2 to 5 years equaled the respondents who have been with the same bank for more than 10 years (figure 6). Each category represented 30% of the study participants. 16% of the respondents have been with the same bank from 5 to 7 years whereas 14% of the study participants were in the less than one year category. The least number of participants were in the 7 to 10 years category which is 10% of the study participants.

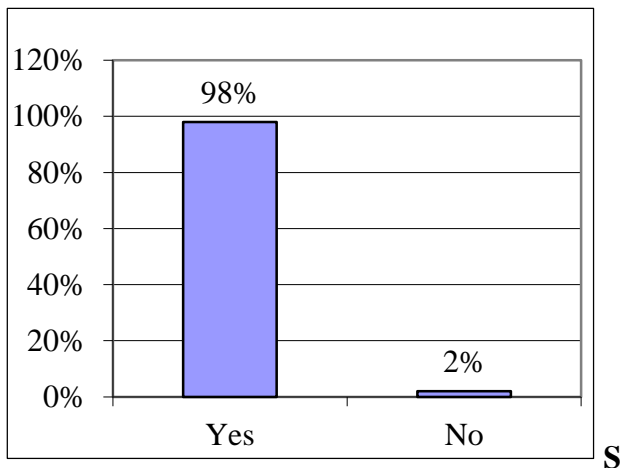


Source: Field Data, 2017

Fig 6: Respondents number of years with Bank

### 4.2.3 Respondents that are aware of their banks offering e-banking services

Figure 7 shows that out of all the study participants 98% answered Yes to their respective banks offering e-banking services while only 2% of the respondents answered No.

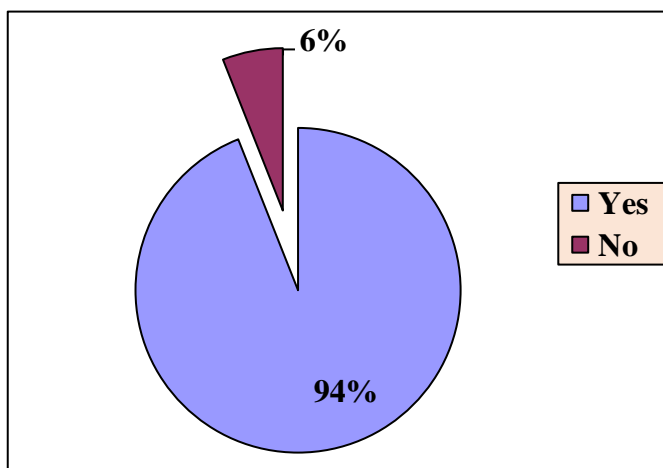


Source: Field Data, 2017

Fig 7: Respondents that are aware of their banks offering e-banking services

### 4.2.4 Respondents that use Mobile banking service

As show in figure 8 below, the number of active users of mobile banking is higher than the inactive users, 94% use mobile banking services every now and then while 6% were not actively using mobile banking services.

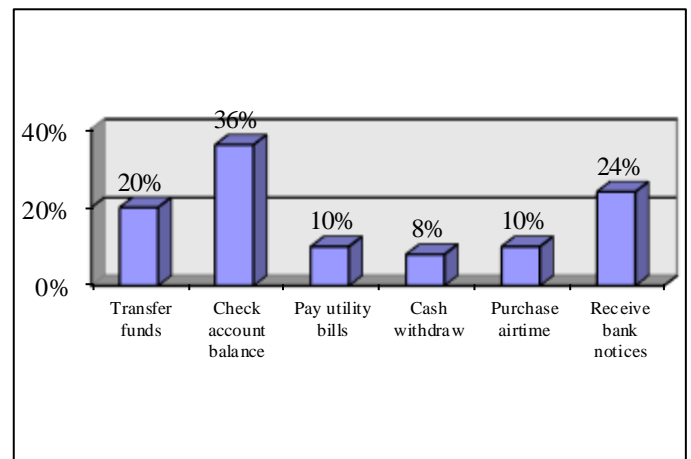


Source: Field Data, 2017

Fig 8: Respondents that use mobile banking services

### 4.2.5 Respondents use for mobile banking services

Figure 9 below shows that majority of the users of mobile banking use it for checking balance which in this case had a 36% response rate as compared to transferring funds which had only a 20% response rate. Meanwhile other methods such as receiving bank notices had a 24% response rate. Using mobile banking for purchasing airtime and paying utility bills got 10% response rate each. Cash withdraw had a least response rate of 8% and the remaining 4% was unaccounted for as two participants did not give a response. This indicates that many respondents use the mobile banking service mostly to check balance and receive bank notices.



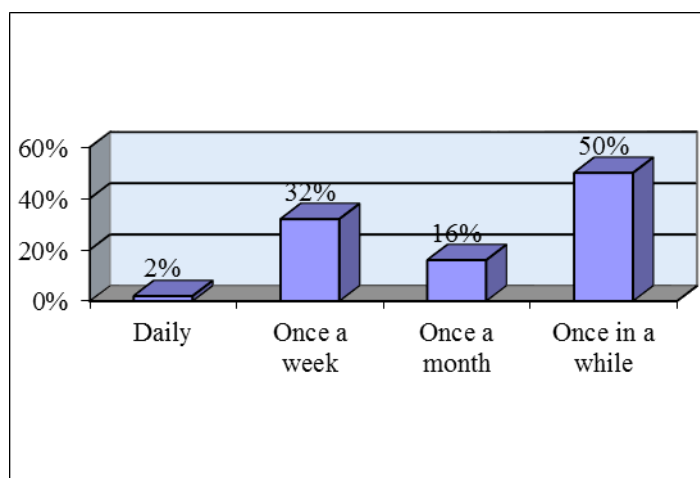
Source: Field Data, 2017

Fig 9: Respondents use for mobile banking

### 4.2.6 Respondents frequency in using mobile banking services

Regarding the number of times a customer would use mobile banking services, figure 10 shows that from the total of 50 respondents, half of the respondents used mobile banking once in a while having a 50% response rate. Other respondents who said they use mobile banking only once a week were 32%. The number of

participants who would use mobile banking services daily yields a 2% response rate while the number of those who use mobile banking once a month was 16% of all the participants.



Source: Field Data, 2017

Fig 10: Respondents frequency in using mobile banking services

### 4.3 Ease of Use

Ease of use was the first independent variable used for analysis in relation with mobile banking usage.

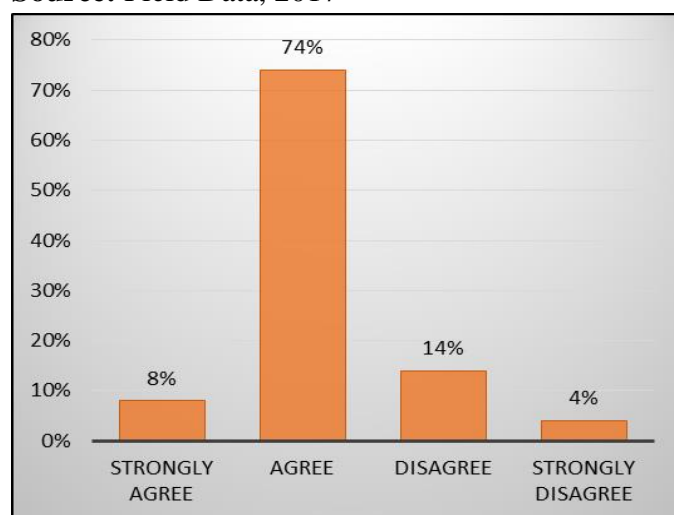
The respondents were asked to express the extent to which they agree to the statement relating to user friendliness and flexibility. The table (Table 1) below shows that 74% of the respondents agreed that they are motivated to use a user friendly and flexible mobile banking service while 14% disagreed. Meanwhile 8% of the respondents strongly agreed whereas 4% strongly disagreed. Figure 11 is a graphical representation of the same which is a bar graph.

Table 1: Motivated to use mobile banking that is user friendly and flexible

	Frequency	Percent
Valid Strongly agree	4	8%
Agree	37	74%
Disagree	7	14%
Strongly disagree	2	4%

	Frequency	Percent
Valid Strongly agree	4	8%
Agree	37	74%
Disagree	7	14%
Strongly disagree	2	4%
Total	50	100%

Source: Field Data, 2017



Source: Field Data, 2017

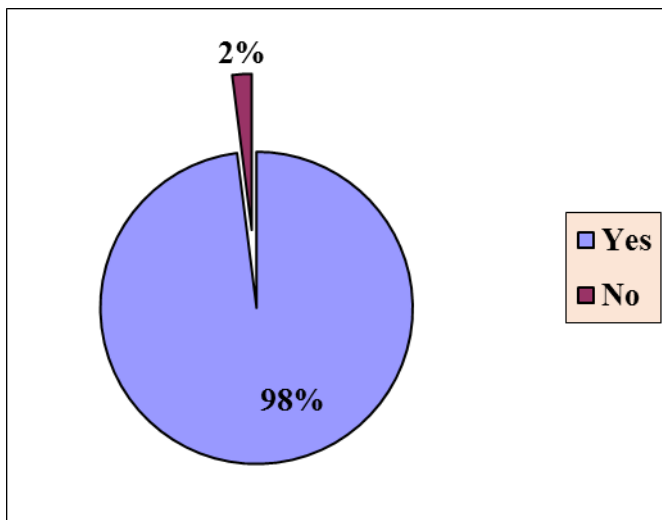
Fig 11: Motivated to use mobile banking that is user friendly and flexible

Respondents were further asked whether they agreed or not to a statement that easy to learn increasing their use of mobile banking. Out of 50 participants, 98% agreed to the statement by responding with a Yes while only 2% disagreed to the statement with a No response as shown below (Table 2). A graphical representation of the same is shown in figure 12.

Table 2: Easy to learn mobile banking service increases my usage

	Frequency	Percent
Valid Yes	49	98%
No	1	2%
Total	50	100%

Source: Field Data, 2017



Source: Field Data, 2017

**Fig 12:** Easy to learn mobile banking service increases my usage

#### 4.4 Perceived Usefulness

Perceived usefulness was the second independent variable used to analyze the relationship with usage of mobile banking. Three questions were asked regarding respondents' perception of mobile banking usefulness.

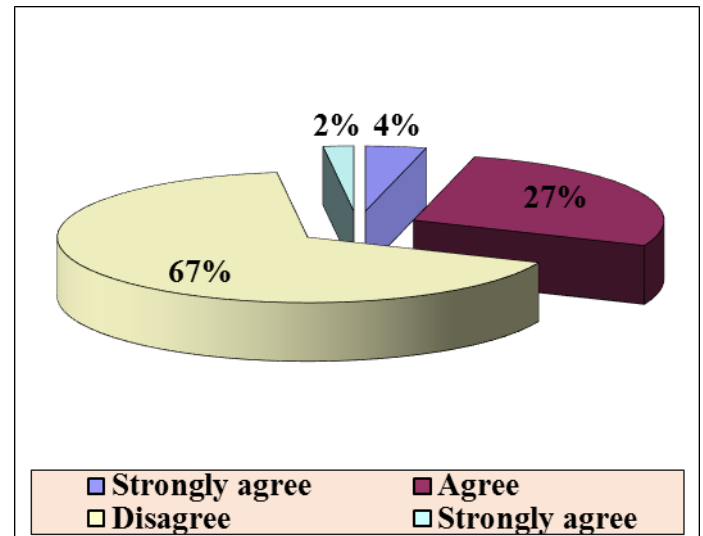
Respondents were asked to express the extent to which they agreed with the statement with regard to mobile banking menu options not providing enough information. In the table (Table 3), 66% of respondents disagreed with the statement while 2% of the respondents strongly disagreed. However, 28% of the respondents agreed with the statement and only 4% strongly agreed.

**Table 3:** Mobile banking service menu options not enough

	Frequency	Percent
Valid Strongly agree	2	4%
Agree	14	28%
Disagree	33	66%
Strongly disagree	1	2%
Total	50	100%

Source: Field Data, 2017

Figure 13 further shows the graphical representation of the study participants' responses in reference to the information above.



Source: Field Data 2017

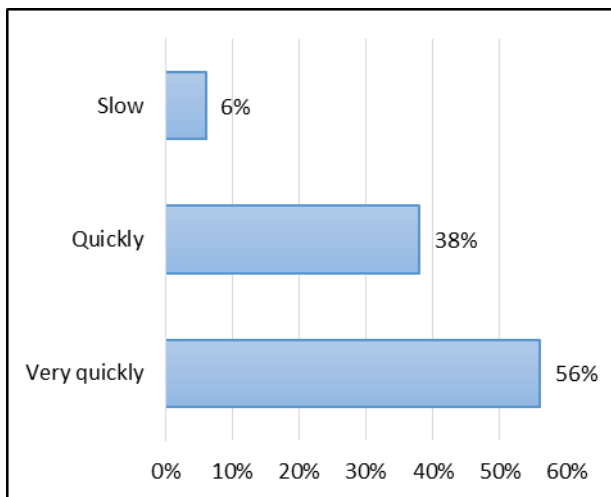
**Fig 13:** Mobile banking service menu options not enough

When asked how quickly the use of mobile phone to access banking help them to accomplish banking activities, 56% of the respondents said Very quickly while 38% said quickly. Only 6% said it is slow as shown in table 5 and figure 14 which is a graphical representation of it.

**Table 4:** How quick mobile banking help accomplish banking activities

	Frequency	Percent
Valid Very quickly	28	56%
Quickly	19	38%
Slow	3	6%
Total	50	100%

Source: Field Data, 2017



Source: Field Data, 2017

**Fig 14:** How quick mobile banking help accomplish banking activities

With regard to improving their performance on banking activities, respondents were asked if they would continue using mobile banking services and all of the respondents gave a Yes response. Table 4.6 below shows the responses of the study participants.

**Table 5:** Continue using mobile banking if it improves performance

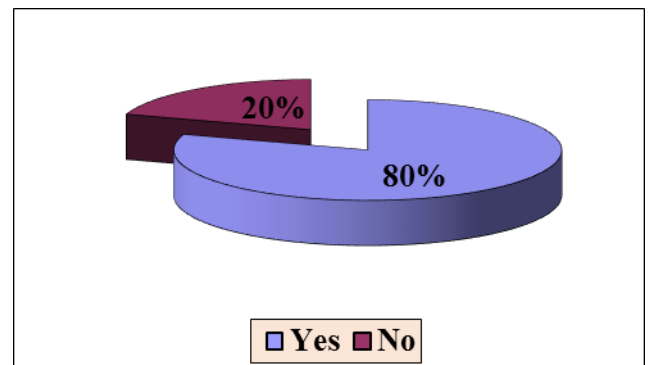
	Frequency	Percent
Valid Yes	50	100%

Source: Field Data, 2017

## 4.5 Trust

The last, but not the least, independent variable to be used in the analysis was trust. Three questions relating to trust were asked and the responses were as follows for each question.

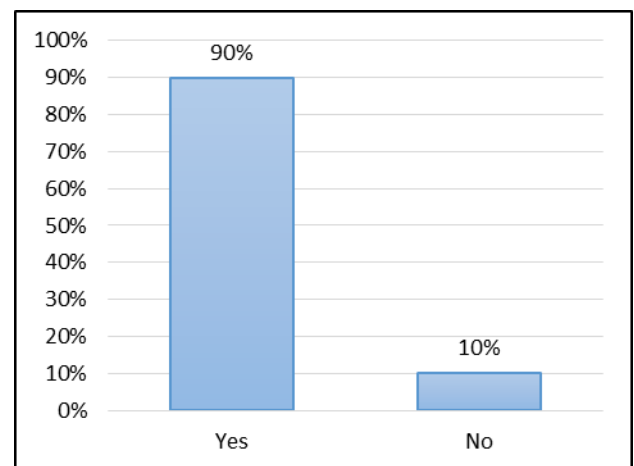
When respondents were asked whether they used mobile banking because of its safety, 80% of the respondents answered Yes while 20% answered No as shown in figure 15.



Source: Field Data, 2017

**Fig 15:** I use mobile banking because it's safe

Table 8 and figure 16 below shows responses of study participants with regard to banks being trustworthy. 90% of the respondents believe that banks are trustworthy while 10% of the respondents believe they are not.



Source: Field Data, 2017

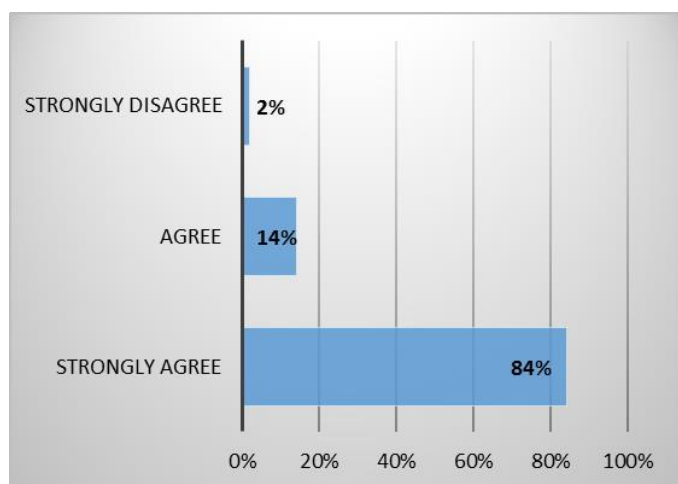
**Fig 16:** Banks are trustworthy

When asked to express the extent to which they agreed with the statement about reliability of mobile banking service affecting their use of it, 84% of the respondents strongly agreed followed by 14% who merely agreed. Only 2% of the respondents strongly disagreed with the statement as shown in table 9 and figure 17 below.

**Table 8:** The more reliable mobile banking the more I can use it

		Frequency	Percent
Valid	Strongly agree	42	84%
	Agree	7	14%
	Strongly disagree	1	2%
	Total	50	100%

Source: Field Data, 2017



Source: Field Data, 2017

**Fig 17:** The more reliable mobile banking the more I can use it

## 4.6 Cross Tabulations

The objective of this study was to examine the factors that influence the usage of mobile banking in Chingola. In order to study the relationship between the dependent and independent variables and specify the best predictors of the dependent variable (mobile banking usage) a Crosstab procedure was applied. Crosstab is an SPSS procedure that cross-tabulates two variables, thus displaying their relationship in tabular form. In contrast to frequencies, which summarizes information about one variable, Crosstabs generates information about bivariate relationships.

### 4.6.1 Ease of Use vs Mobile banking usage

In relation to the use of mobile banking, respondents' view on ease of use of mobile banking was analyzed (table 10). 47 out of 50 respondents said they use mobile banking services. Out of 47 respondents 4 agreed that easy to learn mobile banking service increases their usage and strongly agreed that they are motivated to use mobile banking that is user friendly and flexible. 36 out of 47 also said yes to the statement that easy to learn mobile banking service increases their usage and agreed that they are motivated to use mobile banking that is user friendly and flexible. 6 out of 47 respondents disagreed that they are motivated to use mobile banking service that is user friendly and flexible but agreed that easy to learn mobile banking service increases their usage. 1 out of 47 strongly disagreed that user friendly and flexibility mobile banking motivates usage but said Yes to the statement that easy to learn mobile banking service increases usage.

**Table 9:** Respondents use mobile banking vs Respondents view on ease of use

				Use mobile banking service	
				Yes	No
				Count	Count
I am motivated to use mobile banking that is user friendly and flexible	Strongly agree	Easy to learn mobile banking service increases my usage	Yes	4	0
			No	0	0
	Agree	Easy to learn mobile banking service increases my usage	Yes	36	1
			No	0	0
	Disagree	Easy to learn mobile banking service increases my usage	Yes	6	1
			No	0	0
	Strongly disagree	Easy to learn mobile banking service increases my usage	Yes	1	0
			No	0	1

Source: Field Data, 2017

## 4.6.1 Perceived Usefulness vs Mobile banking usage

The table below (Table 11) shows the relationship between respondents' use of mobile banking service and their perception of its usefulness. Out of 50 respondents, 47 said they use mobile banking service and the remaining 3 respondents said they don't. However, all the 50 respondents agreed that they would continue to use mobile banking if it improved their performance of banking activities.

**Table 10:** Respondents use of mobile banking vs Respondents view of perceived usefulness

		Use mobile banking service	
		Yes	No
		Count	Count
<b>Continue using mobile banking if it improves performance</b>	Yes	47	3
	No	0	0
	I don't know	0	0

Source: Field Data, 2017

## 4.6.1 Trust vs Mobile banking usage

Table 12 below shows that out of 47 respondents who said they use mobile banking service, 38 also agreed that they use mobile banking because it is safe and that banks are trustworthy. 5 out of 47 respondents agreed that banks are trustworthy but disagreed that they use mobile banking because it's safe. 4 out of 47 disagreed with both statements that banks are trustworthy and that they use mobile banking because it's safe as shown below.

**Table 11:** Respondents use of mobile banking vs Respondents view of trust

				Use mobile banking service	
				Yes	No
				Count	Count
<b>I use mobile banking because it's safe</b>	Yes	<b>Banks are trustworthy</b>	Yes	38	2
			No	0	0
	No	<b>Banks are trustworthy</b>	Yes	5	0
			No	4	1

Source: Field Data, 2017

## 5.0 DISCUSSION OF FINDINGS

This discussion will maximally utilize the research objectives to establish the discrepancy and similarities between this research findings and the literature revealed.

### 5.1 Ease of Use

The results of this study indicate that majority of consumers believe that easy to learn mobile banking service that is also user friendly and flexible motivates them to use it even though a few disagreed with the latter. The results of this study are compatible with the study by Davies (1989) <sup>[5]</sup> Cruz et al (2010), Laukkanen (2007) and Cheah et al, (2011) <sup>[2]</sup> who in their respective studies found that, perceived ease of use and perceived usefulness was positively related with the adoption of mobile banking services.

### 5.2 Perceived Usefulness

Undoubtedly all consumers agreed that they would continue using mobile banking service if it improves their performance indicating that perceived usefulness positively influence mobile banking usage. The findings in this study support previous studies by Teo (2001); Venkatesh & Davis (2000); Davis (1989), R. Dineshaw and M. Steven (2013) where their study results suggest



that convenience (perceived usefulness and perceived ease of use) is the strongest determinant of adoption of new technology. Another study by Eastin (2002) also found that perceived usefulness was the strongest predictor. Furthermore, a study by Simuchimba K., (2011) <sup>[14]</sup>, revealed that customers in the Sub-Sahara region believe that new technologies are too complicated and not useful, thus perceived usefulness being a factor in their usage of e-banking services such as mobile banking.

### 5.3 Trust

The results of this study indicate that majority of the customers believe that it is safe to use mobile banking services and that banks are trustworthy. However, there are a few others that still disagree because they feel they will be exposing personal information which may be misused if it falls in wrong hands or disappears as the customer tries to use the service. Regardless, it's important for service providers to ensure security for their customers in order to remove such uncertainties.

The finding was in line with recent literature by Delafrooz, Paim & Khatibi, (2011) <sup>[4]</sup> and Yousafzai et al., (2010) who indicated that e-banking usage and trust are correlated. Delafrooz, Paim & Khatibi, (2011) <sup>[4]</sup> found that customers' lack of trust in the attribute of a bank and the overall e-banking system remain a significant deterrent to its use. In their findings, Yousafzai et al., (2010) stated that customer trust is a major challenge for future use of e-banking and its adoption. However, this was not consistent with results of other study by Makongoro (2014) <sup>[11]</sup> which indicated that adopting a new technology such as mobile banking is not in any way associated with having trust in the service or the service provider.

### 6.0 CONCLUSION

The study provides the understanding of factors that influence the use of e-banking through mobile phones by incorporating three constructs namely; ease of use, perceived usefulness and trust. After analyzing the results of the study, 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.

The research objectives and research questions were proposed and answered through the data analysis. The findings fulfilled the main objective which was to examine the factors influencing the use of e-banking services through mobile phones. Subsequently, all the objectives stated for the study were achieved and the results were similar in most cases with past studies. The effects of ease of use, perceived usefulness and trust towards influencing the use of e-banking services through mobile phones were observed.

## 7.0 RECOMMENDATIONS

In order to provide better e-banking services through mobile phones, the following should be taken into consideration:

Firstly, most, if not all, participants of this study raised a concern that many customers either have little or no knowledge about mobile banking. Therefore, there is need for banks to extensively educate customers on the use of electronic services such as internet banking and mobile banking. The benefit of educating customers regarding mobile banking services is that the knowledge of the service will be readily available to the customers. Moreover, the level of understanding will be high as compared to the current situation and at the same time help reduce the resistance that customers normally have towards a service whose benefits they are not fully aware of.

Secondly, it is recommended that banks in Zambia should invest massively in developing and upgrading the systems that run mobile banking services and other e-banking services in order to increase the usage and rate.

Thirdly, banks should come up with ways of monitoring the growth of e-banking services such as forming Information Technology Units that will help to monitor the progress of e-banking services and also seek for solutions to the challenges faced by customers. This would increase customer efficiency and make the electronic service delivery to be more effective.

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