

MIDLANDS STATE UNIVERSITY
FACULTY OF COMMERCE
DEPARTMENT OF BUSINESS MANAGEMENT



**AN ANALYSIS OF MOBILE BANKING AS A STRATEGY TO CURB CASH
SHORTAGES IN THE ZIMBABWE BANKING INDUSTRY: A CASE OF
AGRIBANK**

BY

R15502H

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NAME OF AUTHOR : R15502H

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KAROI

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APPROVAL FORM

The undersigned certify that they have read and recommended to the Midlands State University for acceptance of a project entitled “ An analysis of mobile banking as a strategy to curb cash shortages in the Zimbabwe Banking Industry: A case of Agribank”, submitted by R15502H in partial fulfillment of the requirements of Bachelor of Commerce Honours Degree in Business Management.

.....

SUPERVISOR

.....

Date

.....

PROGRAMME/ SUBJECT COORDINATOR

.....

Date

.....

EXTERNAL EXAMINER

.....

Date

DEDICATION

This research work is dedicated to my wife Brenda, my sons, Alvin, Ervin and Ethan, my mother, my brothers and sisters for their support and guidance to the completion of this honours degree.

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ABSTRACT

The research sought to analyse mobile banking as a strategy to curb cash shortages in the Zimbabwe Banking Industry with specific emphasis on Agribank. Banks in Zimbabwe were experiencing cash shortages as evidenced by long queues as well as continuous reduction of daily cash withdrawal limits. Mobile banking is one of the many strategies implemented to curb cash shortages. In August 2016 Agribank introduced mobile banking to its customers. In this research, data was collected through questionnaires completed by one hundred and forty (140) conveniently sampled customers and employees of Agribank in order to investigate customers' knowledge about mobile banking in Agribank, to identify factors that influence adoption of mobile banking, to determine the relationship between mobile banking adoption and demand for physical cash as well as to determine the causes of cash shortages. The research is an explanatory and cross-sectional study and data was analysed quantitatively through the use of descriptive statistics and qualitatively through thematic analysis. The study unveiled that, customers knowledge about mobile banking was fairly high in Agribank at 63%. All the factors reviewed such as perceived ease of use, perceived usefulness, credibility, self-efficacy, normative pressure, innovativeness and financial cost of mobile service can have an influence on customers' adoption of mobile banking services. Perceived usefulness and perceived ease of use were proposed by Davis (1989). The research work established that the use of mobile banking reduced customers demand for physical cash thus a negative relationship exists between mobile banking adoption and demand for physical cash. Improvements in wireless technologies and increased uptake of advanced mobile handsets have led to a growing trend in mobile banking activities in Zimbabwe. Mobile banking technology benefited both customers and banks because of its effectiveness in effecting payments, convenience and time saving. It was recommended that banks should deal with security issues and reduce the cost of their mobile banking service to attract more users. The researcher proposes that further research on this topic should not be limited by time and financial resources so that all aspects of mobile banking are sufficiently covered.

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DEFINITION OF KEY TERMS

Analysis- Detailed examination of elements of something in order to determine its essential features.

Cash- bank notes and coins including bond notes.

Cash Shortage: is a situation whereby customers fail to access cash in their bank accounts from banks and other financial institutions.

Curb- to control

Mobile Banking: Refers to provisions of banking and financial services with the help of mobile telecommunication devices.

ACRONYMS

AGRIBANK	Agricultural Development Bank of Zimbabwe
ATM	Automated Teller Machine
EFT	Electronic Funds Transfer
POS	Point Of Sale
RBZ	Reserve Bank of Zimbabwe
RTGS	Real Time Gross Settlement
USD	United States Dollars
ZAR	South African Rand

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Zimbabwe banking industry is facing cash shortages. Most banks are failing to pay demand deposits on time and long queues on banks are now the order of the day. Agricultural Development Bank of Zimbabwe (Agribank) is facing the same problem and this bank is implementing various strategies to curb cash shortages. These strategies include use of Debit cards and Point of Sale machines, Internet Banking, Ecocash banking service, cash withdrawal limits as well as Mobile banking. In this study, the researcher aims at analyzing mobile banking as a strategy being implemented by Agribank to curb cash shortages. This chapter covers the background of the study, statement of the problem, research objectives and research questions, significance of the study, delimitation of the study, limitations and research assumptions.

1.1 Background of the study

The problem of cash shortage is not new in the Zimbabwean banking industry. In the period 2003 to 2004 this industry experienced some severe cash shortages to the extent that some banks were forced to close for example Trust Bank, CFX bank and Renaissance bank. In 2007 to 2008 Zimbabwe banking industry was shaken by currency challenges as well resulting in severe cash shortages.

Zimbabwe used to have its own currency popularly known as the 'Zimdollar' prior to the adoption of the multicurrency system in January 2009. The Zimdollar was dropped after it lost value due to hyperinflation in 2008. Multi-currency system is whereby a country uses more than one currency in the economy to perform all functions of money. However, in the case of Zimbabwe, although more than five currencies were adopted, the United States Dollar (USD) and the South African Rand (ZAR) became popular. In 2015, the South African Rand lost its significance in the Zimbabwean economy, this resulted in transacting public mostly using the US Dollar to perform all functions of money.

The currency utilization level under the multi-currency system has continued to be skewed towards the USD as shown in table 1 below:

Table 1: Currency utilization statistics in the multi-currency system

CURRENCY	2009	2013	2014	2015	2016
USD	49%	50%	60%	70%	95%
Rand	49%	50%	40%	30%	5%
Other	2%	-	-	-	-

Source: Mangudya (2016)

In February 2016, Banks in Zimbabwe started to experience severe cash shortages. Banking institutions including The Reserve Bank of Zimbabwe (RBZ) started to implement various strategies to curb cash shortages.

Some of the alleged causes of the current cash shortages are low levels of exports, low Diaspora remittances, low foreign direct investments, externalization, high imports of consumable goods and luxury goods such as motor vehicles. Furthermore, most transactions in Zimbabwe were done using cash as a result the demand for the US Dollar continued to increase. The transacting public preferred to use the USD as a store of value rather than a medium of exchange. This reduced the US Dollar in circulation. In February 2016, the government through the Reserve bank announced that they will introduce the bond notes and that announcement triggered panic cash withdrawals by the transacting public. Banks started to get less and less cash deposits from their customers and long queues started to emerge in all banks. However, in this study the writer focused on Agribank and carries out a research on mobile banking as a strategy being implemented by this bank to curb cash shortage.

Agribank is a registered commercial bank. It was granted a commercial banking license in June 1999. This bank is 100% owned by the government of Zimbabwe. Agribank started banking operations as a commercial bank on 10 January 2000. This banks primary focus was agricultural lending targeting small scale farmers but it has also established a place in retail banking operations. This bank has a wider branch network. Currently Agribank has forty operational branches and it is well represented in all the ten provinces

of the country including remote areas like Binga. Agribank`s customers include farmers, salaried people, companies as well as schools.

In February 2016, Agribank started to experience cash shortages. Long queues of customers with the intention of withdrawing some cash started to emerge. Agribank responded to this by implementing various strategies to curb cash shortages. These strategies include use of debit cards and point of sales machines, internet banking, ecocash banking services and limiting cash withdrawals for individuals and corporate customers, an indication that the bank was struggling to meet daily cash demand.

Table 2 below shows daily cash withdrawal limits introduced by Agribank since 2013 in an effort to curb cash shortage.

Table 2: Agribank daily cash withdrawal limits from 2013 to 2017.

Year	Daily Cash withdrawal limit for Individuals:	Daily Cash withdrawal limit for Corporates:
2013	No limit	No limit
2014	US\$5 000.00	US\$10 000.00
2015	US\$1 000.00	US\$5 000.00
2016	US\$200.00	US\$500.00
2017	US\$50.00	US\$100.00

Source: Agribank banking operations circulars

Table 2 shows that in 2013 there were no limits to cash clients could withdraw from Agribank. Cash was always available and clients could get whatever amount they want provided their bank accounts were adequately funded. The same table also shows that amount of cash clients were allowed to withdraw daily from their bank accounts continued to decline an indication that Agribank is facing cash shortages. In 2017 even though daily withdrawal limits were pegged at \$50.00 and \$100 for individuals and corporate customers, most clients are going home empty handed after failing to get cash from the bank.

The concept of mobile banking being adopted by banks as a strategy to curb the cash shortage problem involves elimination of the need to use physical cash. Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct a range of financial transactions remotely using a mobile device such as a mobile phone and using software provided by the financial institution. Through mobile banking, bank customers are now able to buy airtime, pay bills and transfer money from one account to another without the need to move with large sums of cash. Currently it is still unclear on whether the implementation of this strategy will be effective in dealing with the cash shortage problem hence the need for this research.

1.2 Statement of the problem

Agribank is facing cash shortages as evidenced by its failure to meet daily cash withdrawals on demand deposits. This bank is continuously reducing daily cash withdrawals as highlighted in the background of the study. Long queues are now the order of the day at all Agribank branches. Some customers are even sleeping on bank pavements after failing to get some cash. Other banks such as ZB Bank, CABS and POSB have also reduced daily cash withdrawals to a mere \$50.00 per day, an indication that banks in Zimbabwe are struggling to pay depositors their money on time. One of the strategies that were adopted by most banks to curb cash shortage is mobile banking.

The concept of mobile banking is new in most developing countries such as Zimbabwe. Research was carried out looking at other variables of mobile banking such as adoption and consumer behavior. There is lack of empirical research on use of mobile banking as a strategy to curb cash shortage in Zimbabwe. In August 2016, Agribank introduced mobile banking as a strategy to address cash shortage problem. The organization believes that the use of mobile banking might reduce demand for physical cash thereby addressing the cash shortage problem. This research aims at analyzing mobile banking as a strategy being implemented to curb cash shortage.

1.3 Research Objectives

- To investigate customer`s knowledge about mobile banking in Agribank.
- To identify factors that influence adoption of mobile banking.
- To determine the relationship between mobile banking adoption and demand for physical cash.
- To determine the causes of cash shortages.

1.4 Research questions

- What is the level of consumer`s knowledge about mobile banking in Agribank?
- What are the factors influencing adoption of mobile banking in Agribank?
- To what extend is mobile banking reducing demand for cash in Agribank?

1.5 Significance of the study

If banks are to open doors for business transactions to their customers, then they must have cash to meet customers demand on a continuous basis. Cash is the most liquid asset of all banks. There is no way one can mention the word bank without thinking of cash. In its simplest form a bank can be defined as a deposit taking institution. Banks perform various functions in a country`s economy but the basic one is cash deposit taking and processing of cash withdrawals. The shortage of cash especially in banks is therefore not only a worrying but an important issue which warrants a research to establish the causes, assess the impact to the transacting public as well as find solutions to curb this cancer affecting banking institutions in Zimbabwe. This research is important to Agribank, Agribank customers, banking industry and RBZ.

Agribank :

Agribank benefits from the study to the extent that the bank can know whether it is implementing the correct strategies to curb cash shortage. This study helps Agribank to appreciate the concept of mobile banking, its successes and challenges so that the bank prepares and fine tune this service for the benefit of the bank and its customers.

Agribank Customers:

Agribank customers' benefits from the findings of this study in the sense that once a solution is found to the cash shortage situation, challenges relating to sleeping at banks, wastage of valuable time and resources trying to access cash and convenience are going to be addressed.

Zimbabwe Banking Industry:

This study aims at analyzing the extent to which mobile banking solves the current cash shortages affecting Zimbabwe Banking Industry. This study provides detailed knowledge about mobile banking and factors that influence adoption of mobile banking by bank customers. This helps other banks as well since cash shortage problem is affecting all banks in the Zimbabwe banking industry.

Reserve Bank of Zimbabwe:

RBZ as the monetary authority is having some challenges in finding a permanent solution to the cash shortage problem. The apex bank is being blamed for the currently cash shortages. RBZ is advocating for use of plastic money and electronic transfers to reduce demand for physical cash. Mobile banking has the potential to assist RBZ to realize this objective.

1.6 Delimitation of the study

This research is delimited in terms of the following:

Geographical delimitation:

Cash shortage is affecting Zimbabwe Banking Industry and all banking customers but this research focuses on Agribank head office as well as Agribank branches in Mashonaland West Province (Chinhoyi, Karoi and Magunje). This is because, the researcher is based in Karoi and this research is being undertaken at a time the researcher is also committed with other demanding final year modules.

Period of focus:

The researcher focuses on the period 2013 to 2017 because this is the period when banks started to face cash shortages since the adoption of multicurrency system in February 2009.

Theoretical delimitation:

This study focuses on mobile banking only even though some other related concepts such as Internet banking may also affect the demand for cash.

1.7 Limitations

Population size- Cash shortage in Zimbabwe is not only being experienced by Agribank customers but by almost all banking customers and the general public. Even informal traders operations are negatively affected by the cash shortage. Therefore to get an in-depth assessment of cash shortage, the researcher was supposed to interview other banks as well as the general public. However in order to get to the findings of a research that can be generalized, the researcher used a bigger sample drawn from Agribank customers in Karoi, Chinhoyi and Magunje.

Time constraints- This research was undertaken at a time the researcher was also committed with other demanding final year modules, however the researcher prepared a plan and use time economically to make this study a success. The researcher also made use of a sample and not a census to complete the research in the required time.

Limited Literature- Not much literature has been written in Zimbabwe about cash shortage and mobile banking, this leaves the writer to rely more on journal articles from other countries, websites and information from newspapers to ensure success of this research.

1.8 Research Assumptions

In this research, the writer makes the following assumptions:

- The multi-currency system remains in place until the study is complete.
- Bond notes are going to be printed only to the value of \$200 million and mainly to serve as an exporter incentive as promised by the RBZ.
- The economic environment is not going to change during the course of study.
- Respondents answers honestly to interviews and questionnaires.

1.9 Chapter summary

The chapter has outlined the background of the study discussing and explaining the problem existing in Agribank which triggered the researcher to undertake the study. Objectives and research questions have also been presented in this chapter. It also covered the significance of the study to Agribank, bank customers as well as other banks in Zimbabwe. The next chapter looks at the literature review.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher critically reviews literature on mobile banking, starting from the definition, overview of mobile banking in other countries and narrowing down to mobile banking in Zimbabwe banking industry and then look at mobile banking in Agribank. The researcher will rely more on information from academic journals, books and even newspapers. Saunders, et al (2009) outlined that reviewing the literature critically will provide the foundation on which one`s research is built. Agribank launched mobile banking product on 1st of August 2016. With mobile banking, Agribank customers are now able to buy airtime, perform banking transactions as well as pay bills without holding cash.

2.2 Mobile Banking Defined:

Suoranta (2003) defined mobile banking as an application of mobile commerce that enables customers to bank virtually at any convenient time and place. In support of this, Barnes and Corbitt (2003) highlighted that mobile banking allows consumers to perform banking services like, sms alerts, banking transactions and balance enquiry using their mobile devices. Tiwari et al (2007) defined mobile banking as the use of mobile telecommunication device in provision and availing of banking services to customers. Stair and Reynolds (2008) defined mobile banking as a facility which provides banking services such as balance enquiry, funds transfers, bill payment, and transaction history using one`s mobile phone. This was supported by Ciuci (2010) when he argued that mobile banking is banking “on the move”, meaning mobile banking enables one to do banking related transactions even when travelling. Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct a range of

financial transactions remotely using a mobile device such as a mobile phone and using software provided by the financial institution.

2.3 Mobile banking in African countries:

According to Jenkins (2008), mobile banking involves several players and stakeholders who are involved with different roles and with diverse benefits from the whole mobile banking value chain. The players are Banks, Mobile network operators, merchants and retailers, users and regulatory institutions. Mobile banking dates back to the end of the 1990s when the German company Paybox, in collaboration with Deutsche Bank, launched the first service. Initially, it was deployed and tested mostly in European countries: Germany, Spain, Sweden, Austria, and the United Kingdom. However this researcher focused on mobile banking developments in African countries because the research topic was about an analysis of mobile banking as a strategy to curb cash shortage in Zimbabwe Banking Industry.

It is interesting to note that in most African countries, Mobile network operators took the innovative role and introduced mobile services and banks sort of reacted to actions of these operators. For example, mobile network operators introduced mobile money services and then banks reacted and introduced mobile banking services. In the case of Zimbabwe, mobile network operators are Econet, Telecel and Netone. These operators introduced mobile money services that is EcoCash, Telecash and Onewallet respectively and banks reacted to this and partnered with these network operators to introduce mobile banking services. In order to have a solid background of the concept of mobile banking, this researcher briefly researched on mobile banking developments in Kenya, Ghana, Tanzania and then researched on Zimbabwe in detail.

Mobile banking in Kenya

Among developing countries, Kenya was the first to introduce a text-based mobile banking service called M-Pesa, in 2007. By 2012, there were more than seven million registered M-Pesa users in Kenya. While the explosive growth of M-PESA in Kenya has not been replicated else-where, there are promising signs from other markets. Leishman (2010) argued that MTN Uganda's Mobile Money was launched in 2009 in partnership

with Stanbic Bank, has registered customers at roughly half the rate of M-PESA in Kenya and processed over 400,000 domestic money transfers per month. Veijalainen et al. (2006) weighed in and mentioned that the main driving force for the rapid acceptance of small mobile devices is the capability they offer for obtaining services and running applications at any time and any place even when one is travelling.

Herzberg (2003) mentioned that while cash and cheques are still prevalent in some parts of the world, electronic payment mechanisms and especially, mobile payments have gained consumer acceptance in many economies due to the high penetration of mobile phone technology. In some countries, more advanced smart payment systems have been introduced. For instance, in Hong Kong, a contactless and rechargeable smart card allows consumers to pay their bus and train fares, buy snacks at vending machines and cafes, pay parking fees and also pay for access to sporting facilities, Yoon (2001). This was also supported by Safeena et al (2012), when they argued that although automated teller machine (ATM), telephone, and Internet banking offer effective delivery channels for traditional banking products, but as the newest delivery channel established by retail and microfinance banks in many developed and developing countries, mobile-banking is likely to have significant effects on the market.

Juniper Research (2013) revealed that more than 1 billion people are expected to use mobile banking globally by 2017. According to Shaikh (2013), “the expanded uses of smart- phones have increased demand for m-banking services, prompting many more banks, microfinance institutions, software houses, and service providers to offer this innovative service together with new sets of products and applications designed to extend their client reach (including to unbanked populations), improve customer retention, enhance operational efficiency, increase market share, and provide new employment opportunities.” However, Dineshwar and Steven (2013) after carrying out a research on mobile banking adoption and usage in Mauritius argued that despite such benefits, the use of mobile phones or tablets to conduct banking transactions or access financial information is not as widespread as might be expected. In addition, approximately half of all mobile subscribers remain unbanked, with limited access to traditional financial services.

Mobile banking in Ghana

Ghana is also another African country that has embraced mobile banking. In 2015, eleven out of twenty nine licensed banks were offering mobile banking services. Table 3 contains information about name of bank and name of mobile banking service.

Table 3 : Banks and Mobile banking service in Ghana

NAME OF BANK	NAME OF MOBILE BANKING SERVICE
Barclays Bank	Mobile Banking
Carl Bank	SMS Banking
Ecobank	SMS Banking
Fidelity	SMS Banking
GCB	Mobile Banking
Intercontinental	I-Mobile
Prudential Bank	SMS Banking
UBA	U-Mobile
UniBank	Uni-Mobile
Standard Chartered	Mobile Banking
Zenith Bank	Z-Mobile

Source: Iddris (2013).

Mobile banking in Tanzania

In Tanzania, mobile banking was first introduced by E-fulusi African Limited in partnership with FMBE bank through Mobipawa platform in 2007 .E-fulusi African Limited is a registered mobile network operator similar to Econet, Telecel or Netone of Zimbabwe. Mobipawa platform allowed subscribers to transfer, receive, save and withdraw money as well as purchase goods and services through the use of mobile phones. In 2008 Vodacom Tanzania in collaboration with Vodafone launched Vodafone

M-Pesa (a version of M-Pesa in Kenya). Other mobile network operators which also introduced similar mobile money services in partnership with banks are Zantel and Airtel.

2.4 Mobile banking in Zimbabwe

In Zimbabwe firms in the telecommunication industry, Netone, Econet Wireless Zimbabwe and Telecel Zimbabwe launched mobile money services. Mobile money refers to the ability of cell phone users to transfer money from one subscriber to another as well as withdrawing cash from appointed agents. Banks responded to this and introduced mobile banking services which enabled bank customers to make use of their cell phones to perform banking transactions. In Zimbabwe mobile money services by telecommunication firms, provided the foundation of mobile banking.

Econet Zimbabwe as the dominant mobile network operator became the leading player in mobile money through the popularity of EcoCash and acquisition of Steward bank. The idea was to ensure rural communities gain access to financial services, leveraging on the high mobile phone usage amongst the Zimbabweans. As in other countries for example Kenya, the case of mobile money in Zimbabwe was initially the ease, affordability, and convenience with which money could be sent over distance, in comparison to banks electronic transfers, delivering in person, or entrusting an envelope with a bus driver. Reading from the success of EcoCash, banks initially tried to fight Econet through the courts and later realized that they were losing out. Some banks like Agribank and CBZ then partnered with Econet to offer mobile money services hence the term EcoCash banking services. Table 4 contains information about telecommunication firm, mobile money service name and date of launch of that service.

Table 4: Telecommunication firms in Zimbabwe and their mobile services

Firm name	Name of mobile money service	Year Launched
Econet	EcoCash	2008
Netone	Onewallet	2011
Telecel	Telecash	2014

Source; Financial Gazette (2015)

The surge in mobile money adoption has stimulated competition between banks and mobile money providers. Each side was worried of the other taking its customer base and the banks particularly have the good reason to be worried because transfer of money was primarily a function of banks. For example when Econet launched EcoSave, a mobile savings product that offers interests banks complained that Econet was skirting banking regulations, leading to Econet`s purchase of Steward Bank in 2014. Table 5 below shows name of bank and mobile banking service name.

Table 5 : Banks and mobile banking service in Zimbabwe

Name of Bank	Mobile banking service name
Agribank	Mobile banking
Cabs	Textacash
CBZ	Mobile banking

Boadi et al. (2007) argued that mobile banking has been taken up rapidly in many developing countries which have experienced a high penetration rate of mobile handsets in the market, however in Zimbabwe mobile banking adoption is still very low. Banks and mobile network operators are working together to ensure success of mobile banking but the adoption rate is still very low. Mobile banking became popular in 2016 when cash became scarce and bank customers were left with no choice but to embrace this new technology.

2.5 Factors influencing adoption of mobile banking

Sathye (1999) agrees with Rogers (2003) in acknowledging that consumers go through a process of knowledge, persuasion, decision and confirmation before they are ready to adopt a product or service. Safeena et al. (2012) defined adoption as the acceptance and continued use of a particular product, service or idea. Adoption or rejection of an innovation like mobile banking begins when the consumer becomes aware of the product or service.

This research makes use of Technology Acceptance Model (TAM) to identify factors that influence customer`s decision to register for mobile banking in Agribank. Davis (1989) proposed the popular Technology Acceptance Model (TAM), in an effort to explain factors that influence technology acceptance related decisions. The model demonstrates the relationship connecting belief, attitude and action purpose. TAM was adopted from the Theory of Reasoned Action (TRA) which was developed by Ajzen and Fishbein (1980) to explain virtually any human behaviour. According to Davis (1989), the acceptance and rejection of technology can be predicted by using TAM. Legris et al. (2003) supported this when they mentioned that TAM has proven to be theoretical model in helping to explain and predict user behavior of information technology. In this model, Davis highlighted perceived usefulness (PU) and perceived ease of use (PEOU) as two major factors that influence adoption of any new technology.

TAM was chosen in this research because of two main reasons. First, TAM is based on its predictive power which makes it easy to apply in different technologies that one may think of as supported by Luarn and Lin (2005). Secondly, TAM helps to better understand the relationship between six important factors that influence adoption of mobile banking, notably, perceived usefulness, perceived ease of use, perceived credibility, perceived self efficacy, normative pressure and behavioural intention.

2.5.1 Perceived usefulness is the prospective user`s subjective probability that using a specific application system will enhance one`s job or life performance. Perceived usefulness is strongly associated with productivity, improve job performance and enhance job effectiveness. Davis (1989) said, ‘perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance.’

In the context of mobile banking, customers will be concerned about value or benefits that accrue as a result of adopting mobile banking. These benefits include convenience, reduced cost of doing transactions, instant transactions and reduced need to carry cash always. There is a positive relationship between perceived usefulness and usage intention. Luarn and Lin (2005) indicated that perceived usefulness has significant impact on the development of initial willingness to use mobile banking. Similarly, Cheong and Park (2005) also found that there exists a positive causality between perceived usefulness and mobile banking adoption. It is highly predictable that people use mobile banking because they find it useful.

2.5.2 Perceived ease of use can be defined as the degree to which the prospective user expects the target system to be free of effort, Davis (1989). In this research, the target system is mobile banking. Customers will be expecting mobile banking application to be very simple to use. Guriting and Ndubisi (2006) found that perceived ease of use has a significant positive effect on behavioural intention to use online banking in Malaysia. Ramayah et al. (2003) showed that perceived ease of use has a significant impact on the development of initial willingness to use mobile banking. The result corroborates the findings by Wang et al. (2003). Similarly, in the study about wireless finance in Netherlands, Kleijnen et al. (2004) concluded that perceived ease of use was a significant measure in the development of people's intention to use wireless finance such as mobile banking. In this vein, bank customers are likely to use mobile banking when they find it easy to use the technology.

Many researchers have investigated and agreed that perceived usefulness and perceived ease of use are valid factors in understanding an individual's intention to adopt any technology, however relating to mobile banking, additional factors helps to better reflect on the level of adoption in the Zimbabwe Banking Industry. Riquelme and Rios (2010) and various other authors suggest that there are other possible factors that might affect mobile banking adoption such as perceived risk or uncertainty (Chung and Kwon, 2009; Donner and Tellez, 2008, Luo et al, 2010), social norms (Pederson and Ling, 2002 and Rios, 2010), financial cost (Yang, 2009), demographic factors (Amin, et al. 2006). In view of the different constructs being used in literature, this study will extend the TAM and

consider these other factors such as perceived credibility, perceived self efficacy and normative pressure as they may also be influencing adoption of mobile banking in Agribank.

2.5.3 Perceived Credibility

Mobile banking adoption can also be influenced by the security and privacy concerns of the users. This was supported by Wang et al. (2003) when they argued that security and privacy are two important dimensions in perceived credibility. Perceived credibility is one's judgment on the privacy and security issues of mobile banking. Fear of lack of security is recognized as an important factor impacting the acceptance of mobile banking. Luarn and Lin (2005) found that perceived credibility has a significant impact on the development of willingness to use mobile banking. Perceived credibility that people have in a system that is used by banks to facilitate mobile banking transactions may affect their voluntary acceptance of mobile banking. Customers may be concerned about confidentiality of their personal information. Benamati and Serva (2007) suggest that the adoption of electronic banking forces consumers to consider concerns about password integrity, privacy, data encryption, hacking and the protection of personal information. Similarly, a study conducted by Laforet and Li (2005), investigated consumers' attitude towards online and mobile banking in China, security was found to be the most important determinant for consumer adoption of mobile banking. In Agribank mobile banking is fairly new, it is likely that perceived credibility has the ability to negatively influence intention of users to adopt mobile banking.

2.5.4 Perceived Self-efficacy

According to Compeau and Higgins (1995), self efficacy refers to the belief that one has the capability to perform a particular function. In the context of mobile banking, perceived self-efficacy can be defined as one's ability to use mobile banking. Luarn and Chiu et al. (2005) argued that perceived self-efficacy had a significant positive influence on behavioural intention to use an Information System(IS). This was also supported by Wang et al. (2003) who found that computer self-efficacy had a significant positive influence on behavioural intention to use a particular technology like mobile banking. Bank customers are likely to adopt mobile banking when they have the ability to use it.

2.5.5 Normative Pressure

Nysveen et al. (2005) defined normative pressure as the person's perception that most people who are important to her or him should or should not perform the behaviour in question. Most customers are influenced by people around them to exploit mobile banking. In the study of Nysveen et al. (2005), normative pressure is found to be an important factor that accounts for the success of Information System. Mobile banking is more often used as a new means of banking transaction where social pressure may be even more prominent among customers to distinguish themselves from the others. Nysveen(2005) argued that in a society, there is the assumption that people who use mobile banking are special. This encourages others to adopt mobile banking and also discourage others who feel inferior. Pedersen and Ling (2002) weighed in and emphasize that the construct of social influence cannot be ignored in any adoption model.

2.5.6 Relative Advantage

Relative advantages are the identified merits of using a particular product or service. As compared to other banking channels, mobile banking offers convenient benefits in terms of mobility, which are not availed by traditional offline banking and non-mobile internet banking. It is purported that relative advantages has a positive influence on mobile banking adoption. Brown et al. (2011) in their research on factors that influence the adoption of mobile banking in South Africa, they discovered that relative advantage has a major positive influence on the adoption of mobile banking.

2.5.7 Personal Innovativeness

According to Rao and Toshani (2010), personal innovativeness is the innate willingness of an individual to try and embrace new technologies and their related services for accomplishing specific goals. Personal innovativeness represents a confluence of technology related beliefs which jointly contribute to determining an individual's pre-disposition to adopt mobile devices and related services. Individuals with higher personal innovativeness are likely to develop positive attitudes towards adopting mobile banking than less innovative individuals. Subsequently, this view justified the need to see if possibly there would be contrary findings when applying the antecedent of personal innovativeness to the adoption of mobile banking by Agribank customers.

2.5.8 Costs

Cost is defined as the extent to which a person believes that using mobile banking would cost money, Luarn and Lin (2005). The cost may include the transaction cost in the form of bank charges, mobile network charges and mobile device cost. Cruz and Laukkanen (2010) are of the view that subscription and service fees for accessing mobile services such as banking, promotional offers and shopping have significant influence on user acceptance. This study will also reveal whether cost has influence on adoption of mobile banking in Agribank.

2.5.9 Information

In Finland, Laukkanen and Kiviniemi (2010), conducted a study on the role of information in mobile banking resistance. They pointed out that information and guidance offered by a bank has the most significant effect on decreasing the usage barrier. This was supported by Tobbin (2012) when he argued that the level of knowledge of mobile banking services is a major factor on how consumers perceived the ease with which to use mobile banking services.

2.6 Advantages of mobile banking

- **Convenience**

Mobile banking enables bank customers to perform banking related transactions such as buying air-time, pay bills, transfer funds from one account to the other, balance enquiry as well as download bank statements. All this can be done anywhere any time without having the customers to visit the bank. Customers are no longer confined to visit the brick and mortar banking set ups but they can perform transactions even after banks have closed their doors as guided by their trading hours. In Zimbabwe banks open doors for the transaction public at 800hrs and close at 1500hrs. Some few banks such as ZB Bank are offering extended banking hours to close doors at 1600hrs. Before adoption of mobile banking in Zimbabwe banking Industry, customers were confined to perform their banking transactions within the mentioned trading hours. The ability to access bank accounts, make payments and even track investments regardless of where you are can be a big advantage to banking customers. With mobile banking there is no need to wait in long queues for banking services.

- **Time Saving**

With mobile banking, instead of allocating time to walk or travel to a bank, customers can check account balance, pay bills, and transfer or receive money in the comfort of their homes and in the process valuable time is saved and used productively.

- **Secure**

Generally, good mobile banking applications have a security guarantee or send you an SMS verification code you need to input to authorize a payment for added security. In Zimbabwe Banking Industry, customers make use of PIN number to access and secure mobile banking transactions. Bank customers are able to change their PIN numbers any time they want to. This ensures customers are in control of their banking transactions.

- **Easy Access to money**

With mobile banking, banking customers are able to access their money when they want to. One is able to access financial information even beyond the bank's working hours. When banks are closed for holidays, customers may perform some banking transactions using their mobile phones.

- **Increased Efficiency**

Mobile banking functions are efficient and competitive. It also helps in decongesting the banking halls and reduces the amount of paper work both to the banker and the customer. Through mobile banking, banks are empowering customers to do transactions on their own. Banks become efficient as they decongest their banking halls and concentrate on other important transactions that customers cannot do on their own. Most banks in Zimbabwe have significantly reduced paper transactions in form of funds transfers and statement request on behalf of customers. With mobile banking, paperless culture is easy to enforce.

- **No need for Internet Connection**

Mobile banking utilizes the mobile connectivity of telecommunication operators and therefore does not require an internet connection. One can also perform mobile banking

transaction using any cell phone handset. In Zimbabwe banks like Agribank, POSB and Cabs make use of Unstructured Supplementary Service Data (USSD) code to access mobile banking transaction menu as opposed to Internet banking which requires internet connection. For example an Agribank customer can dial *277#, then one is able to transact. USSD technology is very fast and highly cost effective.

- **Cost Reduction**

Mobile banking drastically cuts down the costs of providing service to banking customers. Through mobile banking, banks are able to serve more clients with few human resources on the ground. Though mobile banking requires meaningful investment in ICT, Financial institutions have derived immense benefit through reduction in operational costs, customer loyalty creation and increase in banking penetration. To the customer, transactions done through mobile banking attracts lesser charges compared to transactions submitted by customers to the bank for processing. For example Agribank charges \$2.50 to processes a funds transfer from one Agribank account holder to another. The same transaction cost \$1.10 when done through mobile banking.

- **Easy to avail mobile services**

A mobile device handset is always with the customer as such it can be used over a vast geographical area. The use of mobile technologies is thus a win-win proposition for both the bank and the bank`s customer.

2.7 Disadvantages of mobile banking

- **Security concerns**

Mobile banking is vulnerable to security threats the same way internet banking is exposed. One of the great threats to mobile banking is `smishing`. Smishing is a security attack in which the owner of the mobile phone receives fake messages asking for their banking details. The message appears as if it is coming from the bank. The owner of the mobile handset may respond to such messages and disclose confidential information which is then used for fraudulent purposes. Some bank clients have a tendency of storing their mobile Personal Identification Numbers (PIN) in their mobile handset. In the event that one loses the handset, fraudsters can make use of it and transact to their own benefit.

- **Bank account requirement**

Bank account is a requirement for one to access mobile banking. In Zimbabwe monthly bank charges are very high to the extent that one must have regular income to service that account. This can be disadvantage to those people who does not earn regular income. In addition to bank charges, certain accounts require one to submit 2 passport size photos, photocopy of the National Identification document and proof of residence. Some customers end up failing to have bank accounts after failing to secure these documents.

2.8 Causes of cash shortages

Mangudya (2016) argued that the USD has replaced all the other currencies in multi-currency basket, namely the Rand, Euro, British Pound, Yuan, Pula, Australian Dollar, Indian Rupee and Japanese Yen. Mangudya (2016) further highlighted that, the shortage of USD cash in Zimbabwe as evidenced by long queues at most banks and Automated Teller Machines(ATMs) is attributed to a number of intertwined factors that include, the dysfunctional multi-currency system, low levels of plastic money, low levels of local production, low confidence and inefficient distribution of scarce foreign exchange resources.

- **Dysfunctional Multi-currency system.**

Zimbabwe adopted the multi-currency system in February 2009. This was after the Zimbabwean dollar has lost value due to hyperinflation of 2008. Initially five currencies were adopted namely, the US Dollar, the British pound, Euro, Rand and the Pula. In 2016, the RBZ also add two currencies to this list that is the Chinese Yuan and the Japanese Yen. The idea was to avoid concentration on one currency thereby eliminating currency risk. Although there are seven currencies that can be used legally in Zimbabwe, facts on the ground suggest that the US Dollar is the dominant and in most cases the only acceptable currency. The dysfunctional multi- currency system is a result of the strong USD. In the case of Zimbabwe, the USD has become to be more of a commodity, a safe haven currency or asset than a medium of exchange, Mangudya (2016).

- **Low usage of plastic money**

Zimbabwe is predominantly a cash economy, Mangudya (2016). Most Zimbabweans especially those in rural areas are comfortable to transact using the physical cash. In

simple terms, plastic money refers to use of cards such as ATM cards to perform financial transactions. This eliminates the need to hold physical cash. In response to the cash shortages, most banks in Zimbabwe started to offer instant ATM cards, but the uptake by banking customers is still very low.

- **Low levels of local production**

Hyperinflation of 2008 triggered the collapse of the manufacturing industry, leaving factories shuttered and Zimbabweans dependent on imports for everything from cars to maize. The prevailing low level of local production to meet consumer demand has led to heavy reliance on imports of consumer goods. Evidence suggests we are importing virtually everything from household consumables, cars, machinery and raw material for industrial use. All imports payments are settled using foreign currency and specifically the USD. High imports versus low exports result in trade deficit and Zimbabwe has been in this situation for a prolonged period. According to Mangudya (2016), trade deficits have increased from moderate levels of around USD40 million during 2004-2006 to unsustainable levels of USD2.5 billion between 2011 and 2015. The persistent trade deficits have continued to drain cash from the economy. Chinamasa (2017) argued that high fiscal deficit that is further exacerbated by the current account deficit have contributed to the current cash shortages and queues for cash at banks. He further argued that there is a direct association between high fiscal deficits and current queues for cash at banks.

- **Low confidence levels**

Low consumer and business confidence in the banking system as reflected by high appetite to keep cash outside the banking system is the other cause of the current cash shortages, Mangudya (2016). The precautionary motive for holding money is working against the Zimbabwe's financial system. Economic agents prefer to hold money and transact outside the banking system. In Zimbabwe, most individuals and firms have lost trust in the financial system due to bank failures and previous losses they suffered in the hyperinflation period of 2007 to 2008. Banks in Zimbabwe are well known for charging prohibitive interest rates on borrowing customers as well as high bank charges. This reduced people's confidence in banking sector.

- **Non- banking of cash by traders**

According to Chinamasa (2017), non-banking of cash by traders is also a major cause of cash shortages and queues for cash at banks. Money is like blood, it needs to circulate for the economy to survive. Money should circulate in order to deal with queues at banks. Most traders in Retail and wholesale trade, transport industry are not banking cash. Bank Use Promotion Act (chapter 24:24) compels such traders to bank their surplus cash on a daily basis when banks are open for business. Traders are now taking advantage of pos machines and suggesting excuses that they are no longer receiving cash even though in reality in some cases some consumers pay for goods and services in cash.

2.9 Chapter Summary

This chapter covered definition of mobile banking, overview of mobile banking in other countries and mobile banking adoption in Zimbabwe. Factors influencing adoption of mobile banking were discussed basing on the TAM model and other factors. The researcher went on and discussed advantages of mobile banking and finally concluded by examining the causes of cash shortages in Zimbabwe. The next chapter looks at the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at the methods used to achieve the objectives of the study. It highlights research design, the sources of data and the methods that were used in the data collection for the research. It also identifies the target population for the study, the sample size and frame, sampling technique and how data obtained from the study were analysed.

3.2 Research Methodology

Research methodology is the science of studying how research about a particular topic is to be carried out. Rajaseker (2013) described research methodology as a systematic way to solve a problem. This involves problem identification, data collection, data presentation and data analysis. Saunders et al (2007) described the research process as an “onion” and highlighted that by peeling away the layers one gets to the central point.

3.3 Research Design

Research design as a systematic approach taken towards the collection of data so that valuable information for decision making can be generated. This research is an explanatory and a cross-sectional study that is mainly aimed at analysing mobile banking adoption as a strategy to curb cash shortages in Zimbabwe banking sector with specific emphasis on Agribank. Saunders et al. (2009) argued that explanatory research seeks to establish relationship that exists between variables, that is, to identify how one variable affects the other and it also seeks to provide an explanation to the causes and/ or effects of one or more variables. Cross-sectional study focuses on a particular phenomenon at a specific period of time as opposed to longitudinal research which focuses on the phenomenon successive time interval, Saunders et al. (2009). The researcher used structured questionnaire as the primary data collection instrument to gather information. Data analysis was done qualitatively.

3.4 Target Population

The population of interest for the study comprised all employees and customers of Agribank in Zimbabwe. Gall (2009) defined population as a large group one wants to learn about. Population is a complete set of elements (persons and objects) that possesses some common characteristics defined by the sampling criteria established by the researcher. The target population is the particular population in which information is looked for.

Table 6: Target population

Description/ Population Identity	Size
Agribank employees	450
Agribank Customers	90 000
Population Size	90 450

Source: Agribank

3.5 Sampling

Gall (2007) defined sampling as selecting a given number of persons or units from a defined population as a representation of that whole population. A sample was used because the population was very large and it was impossible to study the whole population. In addition due to financial constraints and time limitation, the researcher preferred to use a sample rather than the total population. This was also supported by Saunders et al. (2007) when they argued that the need to sample arises when the entire population cannot be surveyed or sampled because of budget constraints or time limitation.

3.5.1 Sample Frame

The sample frame for the study was all customers of Agribank who have been using mobile banking services for at least one year.

3.5.2 Sample Size

Sample size refers to the subset of the entire population under study whose characteristics are synonymous to the entire population. Saunders et al. (2009) indicated that, the size of the sample and the way in which it is selected will definitely have implication for the

confidence you can have in your data and the extent to which you can generalize. Owing to the fact that, the population of all customers of Agribank in Mashonaland West Province of Zimbabwe was too large and unknown to the researcher at the time of the study, one hundred and fifty (150) questionnaires were administered to customers selected from three branches. Responses were however collected from one hundred and forty (140) respondents as follows, fifty (50) from Karoi, forty five (45) from Magunje and forty five (45) from Chinhoyi. Twenty (20) sampled employees were selected from the three branches as follows, Ten (10) from Karoi, five (5) from Magunje and five (5) from Chinhoyi. These branches were selected due to the fact that the research was based in Karoi. Chinhoyi and Magunje Agribank branches are close to Karoi. The sample size is presented in Table 7 below.

Table 7: Sample Size

Description	Size
Agribank Employees- Karoi	10
- Chinhoyi	5
- Magunje	5
Agribank Customers- Karoi	50
- Chinhoyi	35
- Magunje	35
Sample Size	140

Source: Researcher, 2017

3.5.3 Sampling Techniques

Convenience sampling technique was used in this research. This is a non-probability sampling technique. This refers to a sampling technique in which elements have been selected from the target population on the basis of their accessibility or convenience to the researcher, Ross (2005). The important of this method arises from its factual accuracy which enhances the validity of the findings. This method was selected to enable the researcher to target specific customers of Agribank who were in position to provide the information needed for the study. The target population was relatively homogeneous and convenience sampling enabled the researcher to get the information efficiently.

3.6 Data collection Instruments

Data are the facts presented to the researcher from the study environment, Cooper and Schindler (2008). The researcher draws conclusion from data for the research study. There are two sets of data namely primary data and secondary data.

3.6.1 Primary Data Collection

Primary data consist of information gathered to address a specific issue or problem at hand, Evans and Berman (2005). Primary data is collected from the original sources from the field of study. The researcher used primary data because it resulted in the accumulation of current and relevant information for conclusions and recommendations to the topic under study.

In this research primary data was collected from Agribank employees and Agribank customers domiciled in Mashonaland West Province of Zimbabwe, specifically Karoi, Chinhoyi and Magunje. The researcher designed questionnaire and administered it for completion by customers and employees of the sampled Agribank branches in Mashonaland West province of Zimbabwe. Both closed and open ended questions were used to gather data for this research. Some of the closed- ended questions were developed on a five point Likert scales ranging from 5 (strongly agree) to 1 (strongly disagree).

3.6.2 Secondary Data

Collins and Hussey (2008) argued that the use of secondary data is a vital exploratory that enables the researcher to find out what is already known on the topic, identify gaps and develop new ideas. In this research secondary sources of data were used to obtain additional information about the topic. According to Kumor (2009) secondary data refers to the available data that was collected for some other purposes other than solving the current problem. The study relied on both unpublished and published data such as, articles from journals and the internet which is related to the topic. Text books were also consulted to get views of other scholars on the topic at hand. Monetary policy statements from RBZ also formed part of the reference point for secondary data. Sources of all secondary data were duly acknowledged at the reference section of this research.

3.7 Research Instruments

Research instruments are tools used to collect data, Robson (2005). Saunders et al.(2009), highlighted that there are many research instruments which can be used by researchers to carry out the research, namely interviews, questionnaires, surveys as well as experiments. The researcher used both questionnaires and interviews so that they complement each other and reduces the shortfalls of each instrument if used on its own.

3.7.1 Questionnaire

Chikoko and Mhloyo (2009) defined a questionnaire as a document containing questions designed to solicit information appropriate for analysis. The researcher used both open and closed ended questions. Open ended questions give room for respondents to clarify or elaborate their own views or opinions. When quoting Marshal (2005), Muzvidziwa (2014) argued that open ended questions help the researcher to obtain much more qualitative data as respondents gave their views. Closed ended questions were used to collect quantitative data.

The researcher adopted the use of questionnaire because it allows collection of data from a large sample and is less time consuming. Questionnaires are used often in qualitative research. This was supported by Haralambos and Holborn (2010:707) when they said “questionnaire collects qualitative data which is richer, more vital and having great depth and is more likely to present a true picture of life of peoples experiences, attitudes and beliefs”.

The researcher used self- administered questionnaire and this involved actual distribution of questionnaires to sampled population explaining and instilling confidence in the respondents in terms of confidentiality of data collected. All completed questionnaires were collected by the researcher at agreed possible times. Self- administered questionnaires also gave the respondents a chance to express their feelings freely and anonymously.

The questionnaires were preferred by the researcher because the interviewer bias was eliminated since the questionnaires were filled in the absence of the researcher.

Standardised questions and response format of the questionnaires ensured that every participant responded in identical stimuli and this facilitated easy results presentation, analysis and discussion of findings. Also, questionnaires did not require the respondents to leave their job and attend to them so there was no problem with management as no working time was wasted.

However, questionnaires had its setbacks which includes that, some respondents took their time to respond to the questionnaires hence delay the analysis of data. The questionnaires did not allow the researcher to ask follow-up questions to probe a particular answer, hence the researcher had to follow-up for explanations.

3.7.2 Interview

This is a data collection tool in which data is collected through direct questioning. In an interview, data is collected through direct verbal interaction between the interviewer and the interviewee. The researcher used telephone interviews to collect data from 10 Agribank managers based at Agribank Head Office. These interviews were, to a large extent, structured interviews whereby the content and possible sequences of the questions were determined in advance. This was done to avoid wasting valuable time asking irrelevant questions. The researcher prepared an interview guide first before conducting the interviews. This was done to manage the telephone bill but at the same time collecting all the required data. Interviewees were asked similar questions. This helped in comparing data from the respondents. Interviews guarantees instant feedback and allowed the researcher to seek clarification on certain responses.

3.8 Validity and reliability

3.8.1 Validity

Validity refers to the credibility or believability of the research. Validity can also be defined as the essential truthfulness of a piece of data. Validity ensures that the findings from a research are genuine. Kumer (2005) argued that validity means that correct procedures have been applied to find answers to research questions. Data is said to be valid when it provides a picture of what is being studied. There are two aspects of validity which are internal validity and external validity. Internal validity means the instruments

or procedures used in the research measured what they were suppose to measure. External validity means the results can be generalized beyond the immediate study. By asserting validity, the researcher is asserting that the data actually measure or reflect the specific phenomenon claimed.

In order to achieve internal validity, the researcher conducted a pilot test of the questionnaire before it was administered to all respondents. This enabled the researcher to fine tune the questionnaire hence improving quality of data collected from the field. In order to achieve external validity, the researcher used a bigger sample of one hundred and fifty (150) respondents drawn from three Agribank branches to ensure results can be generalised. In this study, the researcher personally administered questionnaires to the respondents and gave them adequate time to complete the questionnaire. The researcher then went back to collect the completed questionnaire and asked for some clarification on some open ended questions which were not well answered by the respondents.

3.8.2 Reliability

Reliability refers to the repeatability of findings. If the study were to be done a second time, would it yield the same results? If so the data is reliable. Reliability relates to researchers` claims regarding the accuracy of their data. In other words reliability is about consistency of a research instrument to generate the same responses under similar conditions.

In order to achieve reliability, the researcher ensured that the questionnaire administered was bias free. This was done by carrying out a pilot test before the actual questionnaire was administered. The pilot study helped to reveal the misconceptions of the respondents and the need to rephrase some of the questions for clarity and relevance. Reliability was also achieved by triangulation of research instruments that is the researcher used two instruments on same respondents. These were questionnaires and interviews.

3.9 Data presentation

Bell (2006) argued that raw data taken from questionnaires and interviews needs to be recorded, analysed and interpreted. The researcher used tables to present the findings. A

table can be defined as a way of presenting data in rows and columns. Tables act as a quick point of reference and hence are easy to use and interpret. Tables were used to present responses made to questionnaires due to the nature of the collected data because of the easy with which they can be read.

3.10 Data Analysis

Data analysis is the process of systematically applying statistical or logical techniques to describe and illustrate, condense and recap as well as evaluate data. Data analysis involves explanations of tables, graphs and pie charts used to present data. According to Shamoo and Resnik (2006) various analytical procedures provide a way of drawing inductive conclusion from data and distinguish the phenomenon of interest from the statistical fluctuations present in the data. The pattern of the information that will emerge from the analysis and interpretation will help the researcher to establish whether the researcher`s initial launch will be proven or not. That is the analysis of the data gained from the respondents will lead to the conclusion being made on the bases of the research findings.

3.11 Research Ethics

These are norms that guide the research process. Hatch (2002) recommends that a study needs to be sensitive to vulnerable respondents and respect the power inequalities by eluding placing the respondents at risk. To ensure that the research ethics were maintained, data collection was done with informed consent. It was guaranteed to the respondents that information collected was to be used for academic purposes only. The respondents were asked not to write their names so as to ensure confidentiality.

3.12 Chapter summary

This chapter covered research design, target population and sampling techniques used in this research. Data collection methods used in primary data and secondary data were highlighted. The researcher then looked at research validity and reliability. The next chapter is about data presentation and analysis.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the data collected from the respondents through the use of questionnaires and interviews. The data is presented in form of tables. In this chapter data is presented and analysed in line with the objectives of the study. The chapter is structured as follows: presentation and analysis of questionnaire response rate, demographic characteristics of respondents, customers' knowledge about mobile banking, mobile banking usage of respondents and factors influencing usage of mobile banking in Agribank.

4.2 Questionnaire response rate

The researcher self-administered one hundred and fifty (150) questionnaires but managed to collect one hundred and forty (140) responses. This showed a response rate of 93%. The response rate is big enough and it means the collected data can be presented, analysed and used to make sound conclusions of this research. This was supported by Best and Kahn (2006) who argued that a favorable response to a survey should be at least 80% for it to be used to make sound recommendations or conclusions about a particular research topic. Ten (10) customers failed to respond. The reason for non-respondents was due to misplacement of questionnaires and procrastination by other respondents. Information about response rate is shown in table 8.

Table 8: Questionnaire response rate

Group	Targeted Population	Number of responses	Response percentage (%)
Customers	130	120	92
Employees	20	20	100
Total	150	140	93

Source: Survey data, 2017.

4.3 Interview response rate

The researcher managed to interview 10 out of the targeted 11 Agribank managers. This translates to a 91% response rate. This high response rate was achieved because the researcher arranged for appointments through email to these managers. The researcher also sends the interview guide in advance to these managers before the interview dates. These interviews were done to supplement data collected using questionnaires. The researcher saw it very important to interview managers because they have more information about mobile banking and they interact with customers daily as well as solve customer queries related to mobile banking.

4.4 Respondents Demographic Characteristics

Questionnaires were distributed to Agribank employees and customers. The demographic details showed the gender, age, academic qualification and occupation and these were shown in tables as follows:

4.4.1 Gender of respondents

As reflected in Table 9, ninety seven (97) of the entire respondents were males and forty three (43) were females. This indicated that there were more male respondents than females. From the same table, eighty eight (88) out of one hundred and forty (140) respondents that is 63% were mobile banking users and fifty two (52) out of one hundred and forty (140) that is 37% were non-mobile banking users.

Table 9: A cross-tabulation of gender and mobile banking usage

Gender	Respondents		Total
	Users	Non Users	
Male	60	37	97
Female	28	15	43
Total	88	52	140

Source: Survey data, 2017.

4.4.2 Age distribution of respondents

Table 10 below unveiled the age groups of the respondents included in the study. 38 respondents fell within the lowest age group which is below 30 years while the majority of respondents 60 were between the ages of 30-40, with 42 respondents indicating 41 and above as their age group range. The study showed that, respondents between the ages of 30 to 40 are in the dominant group.

Table 10: A cross-tabulation of age of respondents and their mobile banking usage

Respondents	Age of respondents (Years)			Total
	Below 30	30-40	41 and above	
Mobile banking Users	29	34	25	88
Mobile banking Non-Users	9	26	17	52
Total	38	60	42	140

Source: Survey data, 2017.

4.4.3 Academic qualification of respondents

Respondents had different academic qualifications and for the purposes of this research their qualifications were classified into five groups as shown in Table 11. From table 11, 58 of the respondents have O' level qualification, followed by 38 with A' level qualification, 29 have Diplomas, 14 have a first degree qualification, 1 responded had a

Masters in Business Administration. This means the majority of Agribank customers are educated and have at least O`Level qualification although some are not using mobile banking.

Table 11: A cross tabulation of academic qualifications of respondents and their mobile banking usage.

Respondents	Qualification of respondents						Total
	O`Level	A`Level	Diploma	Degree	Masters	None	
Users	34	21	22	10	1	0	88
Non-Users	24	17	7	4	0	0	52
Total	58	38	29	14	1	0	140

Source: Survey data, 2017.

4.4.4 Occupation of respondents

Occupation of respondents were categorised into five groups in line with Agribank`s categories of customers. The study revealed that, the highest respondents were office workers with 50 respondents, followed by self employed with 39 of respondents. All 20 bankers were using mobile banking and 20 students were also using mobile banking, the remaining 11 did not disclose their occupation. Table 12 below contains these statistics.

Table 12: A cross-tabulation of occupation of respondents and mobile banking usage

Respondents	Occupation of Respondents					Total
	Banker	Student	Office Worker	Self employed	Other	
Users	20	12	34	18	4	88
Non-Users	0	8	16	21	7	52
Total	20	20	50	39	11	140

Source: Survey data, 2017.

4.5 Customers knowledge about mobile banking in Agribank

140 respondents were Agribank account holders. 88 out of 140, 63% have registered for mobile banking. As shown in table 13, majority of Agribank customers included in the study, thus, 64% have heard of mobile banking facility as well as the benefits they could derive from using this innovation. 36% indicated that they have been using Agribank mobile banking services for over nine months. 55% indicated that they have heard about mobile banking from Agribank Staff and 7% have heard about it from TV or newspaper, meaning the bank is not doing much in terms of marketing this innovation through these traditional channels of marketing.

Table 13: Customers knowledge of mobile banking

Customers knowledge of mobile banking	responses	Frequency	Percentage (%)
Do you have an account with Agribank?	Yes	140	100
	No	0	0
	Total	140	100
Have you heard of mobile banking?	Yes	90	64
	No	50	36
	Total	140	100
Are you registered for mobile banking?	Yes	88	63
	No	52	37
	Total	140	100

Customers knowledge of mobile banking	responses	frequency	Percentage
How long have you been using mobile banking?	Not yet	52	37
	3 months	8	6
	6months	30	21
	9 months and above	50	36
	Total	140	100
How did you get to know of mobile banking service?	Friends	53	38
	Agribank staff	77	55
	TV/ Newspaper	10	7
	Total	140	100

Source: Survey data, 2017.

4.6 Relationship between usage of mobile banking and demand for physical cash

In determine whether a negative relationship exists between adoption of mobile banking and demand for physical cash, the researcher collected data from the field and the results are shown in table 14. The researcher then used a descriptive statistic, mean, to draw conclusion about the collected data. Table 14, indicated that 61% of mobile banking users strongly agree that mobile banking reduced their demand for physical cash by 75%. This is supported by a mean of 4.545 and a standard deviation of 2.342 which is very close to the mean. For example when one has \$400 in his or her bank account, he/she needs only \$100 as physical cash and \$300 can be utilized using mobile banking. 32% agreed that mobile banking reduced their demand for physical cash by 50%. This means when one

has \$400 in a bank account, one need \$200 in physical cash and \$200 can be spend using mobile banking. The remaining 7% believed that mobile banking reduced their demand for physical cash by 25%.

Table 14: Mobile banking usage and physical cash demand

	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1	Mean	Standard deviation
Did the use of mobile banking reduce your demand for physical cash?	54	28	6	0	0	4.545	2.342
By what percentage did the use of mobile banking reduced your cash requirements.	75%	50%	25%	0	0		
Response Percentage (%)	61%	32%	7%	0	0		

Source: Survey data, 2017.

The mean result falls in class 5 of the scale that is for those who strongly agree that the use of mobile banking reduced demand for physical cash. From these results it can be concluded that there is a negative relationship between the use of mobile banking and demand for physical cash.

4.7 Factors influencing customer adoption of mobile banking in Agribank

There are various factors that influence customers' decision to adopt mobile banking, in this research data was collected from the field to assess the extent to which the following

factors influence customers as far as adoption of mobile banking is concerned: perceived usefulness, perceived ease of use, credibility, self-efficacy, normative pressure, financial costs associated with mobile banking and innovativeness of an individual.

4.7.1 Usefulness of mobile banking and its impact on usage

From the results shown in table 15, responses from Agribank customers sampled for the research unveiled that, majority of them (128) agreed that, the usefulness of mobile banking services is very important to their decision to use the service while 12 argued that the usefulness of the self service was not likely to influence their decision to use it. The 12 respondents were skeptical about the usefulness of mobile banking service having considered the issue of security. This research finding is consistent with that of Luarn and Lin (2005), who carried out a research in Nigeria, and collected data from 300 customers of 30 banks and found out that, the issue of security of a technology has an impact on the perceived usefulness of customers. It was interesting to note that 48 out of 52 non- users of mobile banking believed usefulness of an innovation like mobile banking influences one`s decision to adopt that innovation. The researcher further calculated descriptive statistics from collected data and results supported that majority of respondents agree and strongly agree that usefulness is an important factor in determining mobile banking usage. These results are tabulated below.

Table 15: A cross tabulation of usefulness and mobile banking usage

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	50	30	0	8	0	88	4.386	2.214
Non-Users	41	7	0	4	0	52	4.635	2.417
Total	91	37	0	12	0	140		

Source: Survey data, 2017.

4.7.2 Ease of use of mobile banking service and its impact on usage

The results obtained from sampled customers of Agribank included in the research showed that, majority 132 confirmed that ease of use is important for their decision to adopt mobile banking service. These respondents acknowledge that, their perception about the ease of use of this concept helped their decision to use this innovation having been informed about its advantages and disadvantage while 8 strongly testified against the statement. Findings from this study are consistent with that of Adesina et al. (2010) who argued that when innovation is easy to use consumers will adopt it. This finding therefore shows that, perceived ease of use has a positive effect on consumer intention to adopt and use mobile banking services. Descriptive statistics calculated indicated that most respondents strongly agree that ease of use of an innovation determines its usage.

Table 16: A cross tabulation of ease of use and mobile banking usage

	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1	Total	Mean	Standard deviation
Users	60	22	0	6	0	88	4.545	2.342
Non-Users	40	10	0	2	0	52	4.846	2.599
Total	100	32	0	8	0	140		

Source: Survey data, 2017.

4.7.3 Credibility and its impact on mobile banking adoption

Findings from the responses gathered from the questionnaires administered to the sampled customers of Agribank presented in table 17 revealed that, as many as 122 respondents do consider security and privacy as an issue before applying to use mobile banking service. Surprisingly, 18 of respondents do not consider security and privacy as an issue before applying to use mobile banking service. The result from this research is in support with findings by Yang (2009) and Adesina et al. (2010) and who carried out a research of users acceptance of e-banking in Nigeria and concluded that, credibility of an

innovation, such as mobile banking service rendered by Agribank do have an impact on the customers` adoption of mobile banking services. Mean and standard deviation calculated supported the same argument.

Table 17: A cross tabulation of credibility and mobile banking usage

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	30	45	0	3	10	88	3.931	1.893
Non-Users	40	7	0	5	0	52	4.577	2.368
Total	70	52	0	8	10	140		

Source: Survey data, 2017.

4.7.4 Self-efficacy of mobile banking service and its impact on usage

Analysis with regards to self- efficacy of mobile banking service and its impact on usage presented in table 18 revealed that, as many as 134 of respondents indicated that, their previous use of electronic device could make develop interest in using mobile banking services. However 6 of the respondents believed that this would not influence their decision to use mobile banking services. The conclusion that can be drawn for the research was that, self-efficacy of mobile banking service could have an influence on customers` decision towards the adoption of mobile banking. This result is in agreement with that of Adesina et al. (2010) who found out that perceived sel-fficay has a significant effect on consumer intention to adopt an innovation. Results from descriptive statistics calculated supported that majority of respondents agree that self-efficacy is an important determinant of mobile banking adoption.

Table 18: A cross tabulation of self-efficacy and mobile banking usage

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	43	42	0	1	2	88	4.397	2.222
Non-Users	31	18	0	3	0	52	4.481	2.348
Total	74	60	0	4	2	140		

Source: Survey data, 2017.

4.7.5 Normative pressure and its impact on usage of mobile banking.

In the quest to find out the impact of social influence on customer adoption of mobile banking services in Agribank, the responses obtained from the questionnaires revealed that, 125 of the entire respondents included in the study considered the importance of social influence with regards their adoption of mobile banking services provided by Agribank. However, 15 respondents saw it in the negative direction and took a stand that, social influence could not in any way have an impact on their usage of mobile banking services rendered by Agribank. This finding showed that, customers can be influenced by people they know after finding out the benefits they could derive from using a particular service. Results obtained from this research attest to the findings of Zhao et al. (2010) that, social influence has a significant effect on customer adoption of mobile banking. The results are tabulated in table 19.

Table 19: A cross tabulation of normative pressure (social influence) and mobile banking usage

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	34	40	0	10	4	88	4.022	1.21
Non-Users	40	11	0	1	0	52	4.731	2.499
Total	74	51	0	11	4	140		

Source: Survey data, 2017.

4.7.6 Financial cost of mobile banking services and its impact on usage

Results from the questionnaires administered revealed that, a total number of 137 respondents strongly testified that, financial cost of using mobile banking services would have an impact on their decision towards the adoption and use of mobile banking services provided by Agribank. This means that they expected mobile banking transaction charges to be less than branch-based transaction costs. The result from this research is in support with the findings of Min et al. (2008) that, where the costs are low, this will encourage greater usage of mobile banking service. The results are shown in table 20 below.

Table 20 : A cross tabulation of financial cost of mobile banking and usage

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	47	41	0	0	0	88	4.534	2.333
Non-Users	30	19	0	3	0	52	4.462	2.274
Total	77	60	0	3	0	140		

Source: Survey data, 2017.

4.7.7 Innovativeness and its impact on mobile banking usage

In measuring the innovativeness of customers against mobile banking usage at Agribank, the results showed that, majority of the respondents, thus, 112 believed that, the services provided through their bank using mobile devices requires one to be innovative to adopt such services. Nevertheless, other respondents summing up to 28 testified against the requirement for one to be innovative in order to use mobile banking services. They believed that mobile banking transactions are too simple to perform such that anyone who can operate a mobile handset can easily perform such transactions. The results are shown in table 21.

Table 21: A cross tabulation of innovativeness and mobile banking adoption

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean	Standard deviation
	5	4	3	2	1			
Users	61	9	0	7	11	88	4.193	2.069
Non-Users	20	22	0	3	7	52	3.865	1.853
Total	81	31	0	10	18	140		

Source: Survey data, 2017.

4.8 Causes of cash shortages

In the quest to find out customers knowledge about the causes of cash shortages being experienced by banks in Zimbabwe, the responses obtained from the questionnaires revealed that most customers were aware of the causes of cash shortages. The researcher proposed five causes to which questionnaires were administered to gather data as to establish what respondents knew about the causes. The responses are shown in table 22. The majority of customers, 130 out of 140 customers indicated that they were aware of the causes but 10 customers were not sure of the causes of cash shortages.

Feedback from questionnaire respondents indicated that low usage of plastic money was the most contributing factor to the cash shortages being experienced by banks. 26% of the respondents pointed to this cause. 22% of the respondents highlighted that cash shortages was a result of the dysfunctional multicurrency system. 20% highlighted low depositor confidence as the cause. From table 22, 14 % and 11% of the respondents pointed out low levels of production and non-banking of cash by depositors respectively as the causes of the cash shortages. 7% of the respondents were not sure of the causes.

Table 22: Causes of cash shortage

Cause	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1	Total	%	Mean	Standard deviation
Dysfunctional multi-currency system	20	11	0	0	0	31	22	4.645	2.425
Low usage of plastic money	19	18	0	0	0	37	26	4.514	2.316
Low levels of local production	9	10	0	0	0	19	14	4.474	2.284
Low depositor confidence	21	7	0	0	0	28	20	4.750	2.516
Non banking of cash by traders	5	10	0	0	0	15	11	4.333	2.173
Not sure of the causes	0	0	10	0	0	10	7	3.000	1.581

Source: Survey data, 2017.

4.9 Chapter Summary

In this chapter data collected from the field through questionnaires and interviews was presented and analysed quantitatively through the use of descriptive statistics and qualitatively through thematic analysis. Data presentation was done in line with the objectives of the research. The following chapter will provide major research findings, conclusions and recommendations.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covered summary of research major findings, the research conclusions as well as recommendations to Agribank and Zimbabwe Banking Industry. Suggested areas for further study on mobile banking issues were also highlighted.

5.2 Major research findings

Findings of this study were presented and analysed as per foundation provided by the research objectives.

5.2.1 Customers knowledge about mobile banking

Customers' knowledge about mobile banking was fairly high at 63%. 55% of the respondents heard about mobile banking through Agribank employees, 38% got to know of mobile banking through family and friends. However the major concern was that only 7% of Agribank customers heard about mobile banking through television and newspapers. This showed that Agribank was not making use of traditional mass advertising channels to market their mobile banking service to customers. Most people in Zimbabwe get information about products and services through these traditional ways that is through the radio, television and newspapers.

5.2.2 Factors influencing adoption of mobile banking

All the factors as reviewed from the analysis such as perceived ease of use, perceived usefulness, credibility, self-efficacy, normative pressure, innovativeness and financial cost of mobile service can have a significant influence on customers adoption of the mobile banking service. Customers adopted mobile banking because it was simple to use and beneficial to them. The simplicity of using Agribank mobile banking was justified by the fact that it took one just to dial *277# to access mobile banking services. The benefits enjoyed by customers were convenience, secure connection, increased efficiency and cost reduction. 38% of Agribank customers indicated that they got to know about mobile

banking through their friends. This proved that normative pressure had a bearing in customer's decisions to adopt an innovation like mobile banking.

The perceived credibility (security and privacy) and perceived financial cost were the major drawbacks to mobile banking adoption while the other factors such as perceived ease of use, perceived usefulness, self-efficacy, normative pressure and innovativeness were seen as main factors which influenced mobile banking adoption in Agribank. The majority of non-users of mobile banking confirmed that security and privacy and costs were their major concern of not using mobile banking.

5.2.3 Relationship between mobile banking and demand for cash

The research established that there is a negative relationship between mobile banking adoption and demand for physical cash. This was supported by the fact that 61% of the respondents to administered questionnaire indicated that mobile banking usage has reduced their demand for physical cash by 75%. This is because mobile banking provides an efficient payments system and enables customers to pay for services like water and electricity bills. One can also transfer money to anyone in the same bank or other banks. Prior to mobile banking, people were using physical cash to pay for such services.

5.2.4 Causes of cash shortages

Factors which contributed to cash shortages in Zimbabwe included, dysfunctional multi-currency system, low usage of plastic money, low levels of local production, low customer confidence in banks as well as non-banking of cash by traders. In February 2016, it became clear that the Agribank and the Zimbabwe Banking Industry were facing shortages. Long queues of bank customers started to emerge in all banks, a scenario similar to 2008 economic crisis. The research established that 93% of Agribank customers who completed the questionnaire were aware of the causes of cash shortages and only 7% of the respondents were not sure of the causes.

5.2.5 Interview response from Managers

All ten (10) interviewed managers agreed that mobile banking was fairly new in Zimbabwe but most customers are excited to embrace this innovation. It was also established that in some instances Agribank core banking system encountered some challenges resulting in customers mobile banking transactions failing to complete successfully. These managers then ensure that customer queries are resolved. Managers also believed that mobile banking is contributing positively to curb cash shortages faced by the Zimbabwe Banking Industry. Managers also agreed that banks have to market and educate their customers about mobile banking in order to increase the number of mobile banking users.

5.3 Conclusions

From this research it can be concluded that, customers' knowledge about mobile banking is fairly high in Agribank. When it comes to all factors that can influence the adoption of mobile banking services, majority of the respondents in the research attested to the findings that all the factors as reviewed from the analysis such as perceived ease of use, perceived usefulness, credibility, self-efficacy, normative pressure, innovativeness and financial cost of mobile service can have an influence on their adoption of the service. It was established that the use of mobile banking reduces customers demand for physical cash thus a negative relationship exists between mobile banking adoption and demand for physical cash. Zimbabwe Banking Industry experienced cash shortages because of dysfunctional multi-currency system, low usage of plastic money, low levels of local production, low customer confidence in banks as well as non-banking of cash by traders. The research work is valid, useful and could be used by other researchers and banks to improve mobile banking adoption in Zimbabwe.

5.4 Recommendations

- 88 out of 90 that is 98% of Agribank customers who heard about mobile banking have adopted the service. This showed that customers were willing to embrace mobile banking. It is recommended that Agribank should ensure that all their customers get information about mobile banking service. Agribank can make use

of mass advertising channels such as television, radio and newspapers to market mobile banking to their customers.

- There was evidence that some Agribank customers have not heard about mobile banking at all. 60 out of the 140 who completed the questionnaires have bank accounts with Agribank but they have not heard about mobile banking services. This supports the argument by Maurer (2008) that sufficient effort has not been made to increase customer awareness and confidence in mobile banking and other online facilities. Agribank can also make use of social platforms such as Facebook, Twitter and WhatsApp to market their mobile banking service. Equally, the bank employees should be trained and be knowledgeable about how to use mobile banking and how to handle customer queries so as to provide support to customers.
- This research work can be used by all banks in Zimbabwe to realize the benefits that could be derived if mobile banking is well adopted. Banks should take drastic steps to address issues militating against mobile banking growth such as security concerns and the perception that mobile banking is expensive. The banks need to build the confidence of their customers which will lead to more patronage. All customer queries must be addressed within the shortest possible time and customers must be assured that banks have the capacity to handle all queries to do with this service. The banks should ensure that the cost of mobile banking service is reasonable and affordable for students, office workers and business persons in order not to discourage current users and the intending users.
- The effectiveness and efficiency of mobile banking service in the bank will reduce manpower labour and reduce congestion in the banking hall. The higher the number of customers that use mobile banking services at a reduced price, the higher the return on investment for banks. Banks need to visit tertiary institutions and make the benefit known to students through seminars and conferences, which is likely to increase their customer base and also activate intending users to use mobile banking service since there is a high significant number of mobile phone users in this category.

- Due to fear of fraud and uncertainty many Zimbabweans have kept a distance from innovations such as mobile banking and internet banking as a result they will rather go to the banks to carry out their banking transactions. Customers will be more willing to accept mobile banking if the regulatory body, Reserve Bank of Zimbabwe, takes initiative to tackle the security issues of mobile banking transactions in the country.

5.5 Suggested areas for further research

- In future research, a larger population size could be considered and also the research work should include other provinces in Zimbabwe in order to have a more generalized view about customers' perceptions about mobile banking.
- This research specifically focused on Agribank but further research should include other banks in Zimbabwe as well.
- The researcher proposes that further research on this topic should not be limited by time and financial resources so that all aspects of mobile banking are sufficiently covered.

5.6 Chapter summary

This chapter covered major research findings in reference to the objectives of this research, conclusion, recommendations and suggested areas for further research. It can be concluded that mobile banking is the solution to curb cash shortages being experienced in Zimbabwe.

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APPENDICES

APPENDIX 1- COVER LETTER



P Bag 9055

Gweru

25 August 2017

To whom it may concern

REF: QUESTIONNAIRE TO SOLICIT FOR INFORMATION

My Name is R15502H, a final year student of **Bachelor of Commerce Business Management Honours Degree** at the above mentioned university. I am carrying out a research on a topic of my interest in fulfillment of my programme's requirements on a topic called, "An analysis of Mobile Banking as a strategy to curb cash shortages in Zimbabwe Banking Industry: A case of Agricultural Development Bank of Zimbabwe t/a Agribank".

I am kindly requesting you to participate by completing my questionnaire, which will assist in my data gathering for this research. All the information that will be gathered will be used for study purposes only and your responses will be treated with utmost confidentiality. Please indicate your opinion by ticking in the boxes provided and commending where applicable. I would like to thank you for devoting your valuable time to complete my questionnaire.

Yours faithfully

APPENDIX 2- QUESTIONNAIRE FOR BANK CUSTOMERS

I am R15502H, a final year student at the Midlands State University, undertaking a Bachelor of Commerce Business Management Honours Degree. My study seeks to analyse mobile banking as a strategy to curb cash shortages in the Zimbabwe Banking Industry. I am kindly requesting you to participate by answering the questions below. The information gathered is going to be used for academic purpose only. Your cooperation in this study will be appreciated.

Questionnaire

There are four sections (A to D). Thank you for completing all sections

Section A-Demographic Information

Kindly tick the appropriate box on information about yourself:

1. Gender Male Female

2. How old are you? Below 30 31-40 41 and above

3. What is your academic qualification? O` Level
A `Level Diploma First Degree Masters None

4. What is your occupation?
Banker Student Office worker Self-employed Other

Section B- Customers knowledge about mobile banking in Agribank

5. Do you have an account with Agribank? Yes No

6. Do you know what mobile banking is? Yes No

7. Are you registered for mobile banking? Yes No

8. If you are registered, how long have you been using Agribank mobile banking services?

Note yet 3 months 6 months more than 9 months

9. How did you get to know about Agribank mobile banking services?

Friends Family Agribank Staff TV/Newspaper

10. Did the use of mobile banking reduced your demand for physical cash?

Yes by 25% Yes by 50% Yes by 75% Not at all.

Section C- Factors that influence adoption of mobile banking in Agribank

For the following statements kindly tick the appropriate box about factors that influence adoption of mobile banking:

		5	4	3	2	1	0
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Sure
11	You are using mobile banking because it is useful (Usefulness)						
12	You are using mobile banking because you find it easy to use (Ease of Use)						
13	People use mobile banking because it is secure and guarantees privacy. (Credibility)						

14	You are using mobile banking because of your ability to perform transactions (Self efficacy)	5 Strongly agree	4 Agree	3 Neutral	2 Disagree	1 Strongly disagree	0 Not sure
15	Your family and friends encouraged you to use mobile banking (Normative pressure)						
16	People use mobile banking because of its advantages (Relative advantage)						
17	You are using mobile banking because of your willingness to try new things (Innovativeness)						
18	Are you using mobile banking because it is less costly? (Costs)						

Section D- Causes of cash shortages

19. On a scale of 1 to 5, kindly rank the following factors as to which ones contribute the most to the current cash shortages, with 1 being the least contributing factor and 5 being the most contributing factor.

Factors	1	2	3	4	5	Not sure
Dysfunctional multi- currency system						
Low usage of plastic money						
Low levels of local production						
Low confidence in banks						
Non- banking of cash by traders						
No idea of the causes						

20. Besides mobile banking, what other measures would you recommend to the banks to reduce cash shortages?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Cash withdral limits					
Use of atm cards					
Internet banking					
Rtgs					

APPENDIX 3- INTERVIEW GUIDE FOR BANK MANAGERS

1. What is mobile banking?
2. Which mobile banking transactions do you perform often?
3. Do you think mobile banking is the right solution to the current cash shortages?
4. Do you at times encounter challenges in using Agribank mobile banking service?
5. Do customers encounter challenges in using mobile banking?
6. What should be done to encourage more people to use mobile banking?
7. Do you think usage of mobile banking reduce demand for physical cash?
8. What could be the causes of the current cash shortages?
9. Besides mobile banking, what should be done to curb cash shortages?