

**EFFECT OF MOBILE MONEY SERVICES ON SAVINGS INTENTION OF  
CUSTOMERS WITHIN KUMASI METROPOLIS**

By

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**(BSc. Marketing)**

A thesis submitted to the Department of Marketing and Corporate Strategy of the Kwame Nkrumah University of Science and Technology in partial fulfillment of the award of the degree of Master of Business Administration (MARKETING).

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## DECLARATION

I hereby declare that this submission is my own work towards the Masters of Business Administration and that, to the best of my knowledge, it contains no material previously published by another person or material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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## **DEDICATION**

This work is dedicated to my lovely wife Mrs. Peace Mpiani

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## **ABSTRACT**

The mobile money operation as an aspect of the financial sector has witnessed tremendous patronage over the years. Users have developed passion for the mobile money services which has affected their savings intention with the traditional banks. The study focused on assessing mobile money operation and its effect on savings intention among customers within Kumasi metropolis in the Ashanti region of Ghana. The study was conducted on a total of 350 customers out of which 294 responses were received representing 84% response rate. The study collected data using questionnaires. The study adopted purposive and convenience sampling techniques in selecting customers. Statistical Package for Social Sciences was the software used in analysis of the data. The study adopted regression, correlation and descriptive analysis in the interpretation of the results. The results show that, service withdrawal and cash deposit as part of mobile money services positively impacts savings intention and are statistically significant. Cash transfer has a positive impact on consumer's savings intention however not statistically significant and recharge card inversely affect customers savings intention but not statistically significant. Customers have trust in the use of mobile money services and are satisfied with convenience and easy accessibility of mobile money services. The study recommended strong regulatory framework to protect customer's money and improved service delivery from service providers.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

The financial sector over the past years has witnessed a tremendous change due to competition as a result of the emergence of mobile devices for carrying out or transacting financial transactions (Masamila et al., 2010). There are some relevant services rendered by the use of mobile money services which include, its fast and reliable transaction of financial services such as the cash withdrawal, transferring of cash deposit, transferring of bills, transacting other related activities especially in the developing countries, and it has the capacity to integrate the poor population with the financial transaction (Aker & Mbiti, 2010). Likewise, the third world or the developing countries are harnessing the advantages of the emergence of the mobile money services through fast and reliable transfer and deposit of cash with the mobile money services providers. Hence it is very important to take note that most of the less developed countries for which Ghana is of no exception discovered the need to engage in conducting safe and secure means of engaging in financial transaction which include sending remittances to families and relations regularly of which the use of mobile money has been critical in achieving such transactions successfully (Pope et al., 2011).

The entry or emergence of the mobile money services in Ghana has witnessed a significant increase within the fourth year (2012 to 2016) with 2015 transaction value of GHc35.4billion which has been an increment of more than 216 percent over the 2015 (Bank of Ghana, 2016). As at the year 2015, the transactional value recorded were more than 260

million transactions in the market. Mobile money transactions when put together would total amount of GHc5.85 billion, a figure which is likely to increase by the mobile money operators in 2016. In Ghana, the service is usually regulated through the Bank of Ghana with the Banking Act, 2004 (Act 673) and Section 4 (1) (d) and (e) of the Bank of Ghana Act, 2002 (Act 612), which permit and mandate and check the electronic and other payment, transfer, clearing and settling debts under the Payment system Act 2003 (Act 662). In July 2015, the Bank of Ghana issued the guidelines for the electronic money issuers which took over from the branchless system of banking. The new guidelines were granted by the National Communication Authority to play a key role in giving the new regulations and the guidelines.

Operators of mobile money services have consistently argued that the mobile money could enhance savings opportunities more accessible, most especially for individuals that are not saving with any bank (Wolman, 2012). Kusimba, et al., (2013) was of the view that the rate at which customers or individuals saves has been enhanced and facilitated through the adoption of the mobile money services. And obviously, the non-governmental organizations are seriously having interest in adopting the mobile money services as a major means of payment in various means. Moreover, the mobile money is projected to have a significant influence on various money related issues and practices at both the business and personal level. MM is duly sold and marketed in Ghana as a means of buying talk time for mobile phones units without necessarily buying the recharge cards itself, it further a means of transferring money. It was evidently clear that the use of mobile money services in Ghana would create avenue and opportunities for Ghanaian who does not have access to the formal

banking system (Mensah & Dzokoto, 2011). Moreover, the mobile money services has drastically reduced the difficulties that individuals go through in accessing services from the banks in a form of being in the long queue and the era where customers or individuals carry large sums of money on them has seen significant improvement as a result of the mobile money services. And in most cases, banks only accept checks from trusted and confidential customers, all this has creates inconveniences to individuals until the emergence of the mobile money system that has solve such difficulties (Mensah & Dzokoto, 2011).

Customers, merchants, banks, service operators among others are the stakeholders that have stakes in the operation of MM with each stakeholder pursuing its own interest. Across the world, there is a tremendous increase in the number of people that are using mobile money as the possession of mobile phone has also increased; as a result mobile money subscribers are not more than the people that are having bank account (Tobbin, 2012). Individuals with poor financial background scarcely transact business with banks but instead resort to save any little amount with mobile money merchant and this was evident in the literature. Hence M-money seems to be the only alternatives in achieving the objective of including allowing individuals with low or poor financial status to equally achieve their aims through savings. In a very remote areas, buying the electronic money from the agent of working with the bank or either the mobile money operators leads to the creation of a “pseudo account”. With this, the individuals can send money to another who in return can receive the money from the area where another local agent or mobile money merchant works (Aker & Mbiti, 2010). With regards to such experiences mobile money can be used or acts as a very convenience means of transacting financial services (Must & Ludewig, 2010).

Mobile money seems to be the best way to achieve the objective of financial inclusion for people below the poverty line. Just as how customers purchase and pay for the transaction cost, likewise the mobile money services also involve a situation of paying for the services received, withdrawal or transfer of money using mobile technology (International Telecommunications Union, 2011). This has explain how devices meant for just receiving enjoyment through calls and music has turn to be a global means of development and enhancing financial transaction among the service operators. The high penetration of mobile phones in recent time into the developing countries has significantly led to increase in economic growth in Sub-Saharan African countries and has assist in very cost effective communication technologies. This has the potential to stimulate economic growth within the African sub-regions and has effectively increased access to communication and financial services which include the adoption of mobile money. The mobile money system which serves as a means of intermediation is seen to create avenue for people to effectively transact business without necessarily going to banks.

## **1.2 Problem Statement**

Emergence of MM services has affect customers to transact business with the banks when it comes to saving money. Most customers especially find it convenient to patronize the services of mobile money to saving with the traditional banks. Sending money to relatives and friends especially those in rural areas has also increased MM usage to saving with the traditional banks (Aker & Mbiti, 2010). However, in most cases the transaction is usually affected by low network which makes it difficult for subscribers to either do deposit or withdrawal in their daily transactions, hence technological failures pose a threat to the

smooth operation and service delivery of the MM operations. There are also issues with whether customers can trust mobile money services to protect their money and have access to their money at any time.

Service delivery in most cases is accompanied by service charges in any business transactions and mobile money merchant equally place charges on any withdrawal or deposit made by mobile money subscribers (Donovan, 2012). However, most of the subscribers usually complain about these service charges and tend to be a serious problem facing the MM operation in recent times. There is also an issue of the trust customers has with MM services and how satisfied they are with the services of MM. Recently, most customers do not want to open account with the traditional banks and even so, those who have bank accounts prefer to save their money on mobile money account (Must & Ludewig, 2010). These have had problems on the banking sector in terms of low profit, reduction in market share, increase cost of attracting new customers and difficulty in customer loyalty programme. MM patronage has also impacted on customers thereby reducing savings and investment attitude reducing ability to create wealth. It is in the light of the foregoing that this study sets out to unearth the effect of mobile money service on behavioural intention of customers to save

### **1.3 Objectives of the Study**

The general objective of the study is to examine the effect of mobile money services on savings intention of customers within Kumasi metropolis. Specifically, the study:

1. Examine the trust customers have with the use of mobile money services

2. Evaluate customer level of satisfaction of mobile money services
3. Ascertain the effect of mobile money services on intention to safe

#### **1.4 Research Questions**

In order to accomplish the objectives of the study the following questions were asked;

1. What is the level of trust that customers have in the use of Mobile Money services?
2. What is the level of satisfaction customers get when they use mobile money services?
3. What effect does mobile money services have on customer's savings intention?

#### **1.5 Significance of the Study**

The study seeks to provide an idea on the assessment of mobile money operation. This study is of value to mobile money services and the electronic financial services at large in providing more relevant ideas and means of improving the system in order to achieve its sustainability in the long run. The study will further highlight on the challenges encountered by both customers and the merchant and means and mechanisms that need to be adopted so as to effectively address those challenges. The study can further be used as point of reference for individuals that conduct research into the electronic and the network system in promoting financial services and its related issues.

Further the study will immensely assist researchers and other policy makers through the provision of concise understanding of how the mobile money system operates. What has been done in relation to the mobile money operation with regards to the Ghanaian context

can effectively assist any future researchers who wish to work in this areas and hence the study will help in identifying where there are some gaps that needs to be filled. As the mobile money operation has become a vibrant sector in the economy, issues and problems that affect the sector need to be identified and make known.

Studies conducted will be of significant important as the Government has committed resources in developing the SMEs and the financial sector in order to enhance economic growth. Hence the study will provide some recommendation as to how to improve the mobile money operations and the financial sector at large.

### **1.6 Scope of the Study**

The research examines mobile money operations and its effects on savings intention from customer's perspectives. Telecommunication services providers that offer mobile money services made up of Telecommunication Network (MTN), Tigo, Vodafone and Airtel Ghana were used for the study. Customers who patronize mobile money services within Kumasi metropolis were used in the study

### **1.7 Overview of Methodology**

The population of the study comprised of customers who use mobile money services within the Kumasi metropolis running into millions of clients. A sample of 350 was used and purposive as well as convenience sampling techniques were used in selecting respondents. The study used Statistical Package for Social Scientist (SPSS) software to analyze the data. Regression, correlation, mean, standard deviation and percentages were used in analysing the data. Cronbach alpha was also used to check reliability of the data.



## **1.8 Organization of the Study**

Research conducted has been put into five different chapters. The First Chapter of the research covers the introductory chapter of the research which contains background of the study, problem statement and objectives, research questions set with regards to the study, relevant of the study, scope and organization. The Second Chapter consists of the literature of other scholars with regards to the mobile money operation. Chapter Three focused on the study's methodology. The analysis, interpretation and discussion of data were shown in the fourth part. The Last Chapter of the research talks about the summary of findings, conclusion of the study and recommendations of the research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Mobile Money Operations**

The quick emergence of cell phones with regards to countries that are less developed is largely accoutered for the falling price of this cell phones that is basically use for calls making and other related activities and subsequent emergence of prepaid cards (Orozco et al., 2007). Meanwhile the continual increase and flooding of the market with the mobile phones within the poor citizens has become the major thrust that has led to introduction of the mobile money systems in recent times. It was noted that a huge number of people have moved away from their hometown in search of jobs that can earn them livelihood, By so doing there is the need to send money back to their families home on regular bases.

As usual money transfer to the families turns to be expensive and difficult process. Hence mobile money can act as very conducive and affordable to the poor population (Pope et al., 2011). In another case the user can send the money to another person or family who in turn will receive the money from a different mobile money operator or agent (Aker & Mbiti, 2010). Mobile money can simply be defined as cash stored using SIM cards as a form of identification as it is done in the operation of an account with a given account number in a normal banking system. In more simple terms mobile money is basically financial transactions undertaken largely through the use of mobile phone. And in a more pragmatic sense, mobile money is referring to as the electronic services that are largely performed through the use of mobile money. Mobile money services have been grouped into three

distinct services which include the mobile banking, mobile payments system, and mobile payment transfer system (Lochan et al., 2010).

The mobile money services can also be defined based on its performance and functionalities in that it includes the long distance remittances, micro payments coupled with the informal airtime that targeted at bringing the financial transactions to the door step of the unbanked (Pope et al., 2011).

M-money seems to be the best way to achieve the objective of financial inclusion for people below poverty line. The mobile money is not only meant for the transfer system but also came as means of payment platform where monies can be sent or received by individuals and organizations (Aker & Mbiti, 2010). Although the mobile money services could not have the capacity to offer all the advantages provided by the traditional banks and other financial institutions which include the services such as the interest on savings and loans (Donovan, 2012; Lochan et al., 2010). Moreover, the mobile money services enhance productivity and enhancing efficiency through the avoidance of been in the long queue in the banking halls, and also reducing the transaction cost as a result of reducing leakages and improving security (Donovan, 2012; Lochan et al., 2010).

Meanwhile, studies suggest that mobile money services could become the medium through which the most economies in the African sub-region can effectively witnessed growth across the commerce, health care delivery, agriculture and other sectors in the economy. The services of mobile money that merchants render to their potential subscribers ranges from mobile money accessibility, where the subscribers can easily have access to any mobile

money offices to effect any transaction. Convenience of mobile money usage deals with the state at which the mobile money subscribers can easily transact mobile money services with ease without any difficulties or stress associated with it (Oliver, 1997). MM services rendered include cash withdrawal, cash transfer, purchase of recharge card and payment of bill etc.

### **2.1.1 Cash Withdrawal**

Mobile phones with its technological advancement has brought about a tremendous technological change to the economic life and improving the living standards of the masses in recent time through economic transactions such as transfer of money, cash deposit and withdrawal services in the daily business transaction of the individuals (Oh, 1999). Obviously, the mobile money system has been used by the mobile money operators and other networks to assist individuals that do not have access to the normal banking systems to have equally provided the avenue to also store money electronically.

The mobile financial services allow the customers that do not operate with banks and have account numbers to have used the mobile SIMs as an account numbers as an account to deposit into the mobile wallet with no transaction cost. The transfer mechanisms was originally set working as an informal banking system with account numbers and uses electronic for paying for goods and services (Oh, 1999). As the system provide easy means for people to transfer, pay and receives payment for goods and services, remittances are normally moved from the informal route to well-planned and formal route. With the use of mobile money system, the informal cash economy can effectively have an impact on the

economic development of the region through the local market with the diversification of goods and production (Affla 2012). Meanwhile, customers that patronize the mobile money services becomes satisfied with the services and as customer satisfaction has been achieved, it further leads to the growth and sustainability of the mobile money services (Oliver, 1997). Customers perceived satisfaction to be the total attitude of the customer towards a service provider or the reaction customers exhibited towards what they anticipate and the total satisfaction derived concerning the fulfillment of a particular goals, objectives and desires (Hansemark & Albinson 2004). Hence easy access to cash withdrawal leads to the satisfaction of customers towards the operation of the mobile money services.

### **2.1.2 Cash Transfer**

The mobile money cash transfer basically refers to the money transfer system that allow individuals to send and receives mobile some small amount of money to and from other mobile users across the country, from urban to remote rural areas and even across the international borders (Ivatury & Mas, 2008). There are some organization that constantly utilize the services of mobile money to further enhance their traditional services that to the customers. Comparing with physical cash, there is a minimum or less cost that the recipient pay as well as the senders. The mobile money system become the cheapest means of financial transaction among both the poor and rich population that allow individuals to effectively send and received cash from the friends and relatives (Donovan, 2012).

Moreover, the mobile money services enhance productivity and enhancing efficiency through the avoidance of been in the long queue in the banking halls, and also reducing the

transaction cost as a result of reducing leakages and improving security (Donovan, 2012; Lochan et al., 2010). Meanwhile, studies suggest that mobile money services could become the medium through which the most economies in the African sub-region can effectively witness growth across the commerce, health care delivery, agriculture and other sectors in the economy. It has been established that mobile money does not provide and offer all the advantages and services rendered by the traditional banking system such as the interest on savings, credit and insurance, on the value stored in the mobile account, but it equally provide the services of transferring cash to other individuals from a far place either in the rural areas or urban areas (Aker & Mbiti, 2010).

With the introduction of mobile money system, the internal migrants workers in cities largely send remittances to their far and remote places and rural communities which otherwise may have difficulties in getting transportation and financial assistance in moving from one place to another. Meanwhile studies has revealed that mobile money systems has represent a more safety and secured means of transferring cash than the informal remittances channels that avoid the need to carry large sums of cash especially during the time of expensive and long trips with the risks of this cash that can easily be stolen (Omondi, 2013). With the introduction of the mobile money services, customers found it very easy and convenient in transferring money to friends, relatives and even business partners far and near and this subsequently leads to customers achieving satisfaction through the convenience the mobile money platform has created, hence the services provided through cash transfer eventually leads to customer loyalty (Osei-Assibey, 2009). The idea of any management is to provide a scheme that can lead and ensuring serious improvement in the

quality of product thereby increasing the profit margin of the companies through customer loyalty and repeat purchases of a particular brand of product or services as in the case of the mobile money operation.

### **2.1.3 Cash Deposit**

Most consumers with respect to cash deposit are adhering to depositing their cash in their mobile account to saving in the traditional bank. Meanwhile, other system of businesses models usually received mobile payment and models came about as result of the regulatory climate, the demography of customers, consumers, culture and other related factors. And largely, most business activities or models may be either led by banks, mobile operators, or in most cases through partnership led (Boer & de Boer 2010), coupled with more advanced technological services that allow the operations for payment or services delivery.

Different forms and number of mobile payment systems have been introduced in recent time that give full corporation to other big and major networks as means of funding and payment mechanisms among person to persons. In most cases both the mobile payment and operators have discovered that the consumers residing in less developed countries seeks the ability to finance the operation of other phone account especially within friends and family members of which remittances has been exchange (Beccue 2009). Most often, the recipient of the talk time would prefer to cash out the value as a means of delivering the actual value of the money. Possibly because of their lack of experience in managing credit risk associated with financial services, telecoms in global markets have largely focused on providing prepaid services in order to manage liquidity and mitigate risk, particularly in telecom-led models

that do not rely on a bank partnership. In most countries, nonbank payment service providers are prohibited from accepting consumer deposits or using funds in financing payment activities, which serves to protect the consumer and limits financial system risk (GSMA 2009). Customers having access to means of depositing their income immensely enhance their level of satisfaction and trust that they may have towards the operation of the mobile money services (Naumann et al 2001)

#### **2.1.4 Purchase of recharge card**

Another services rendered by the mobile money operation in recent time is the use of the system to purchase a recharge card from the mobile money service providers. Since the introduction of mobile money service the purchase of the traditional telecom card for making calls in the phone has reduce drastically giving way to the purchase of recharge cards for renewals of calls credit (Mantel, 2000). Yet, unexpected and innovative uses of mobile money services have also emerged, such as paying school fees, public transportation, taxi drives, paying for social events such as funerals and weddings, and making informal loans repayments (Omwansa, 2009).

As a long term achievement, the mobile money operation can effectively enhance and contributed immensely to the improvement of tax collected and utilities that can effectively improve and grow the economy that can strengthen the governance process and infrastructure (Scot et al., 2004). Purchase of recharge cards to activate the mobile phones for calls and text messages are usually done with much ease this days due to the mobile system, where consumers or the subscribers can easily go and purchase the recharge cards



for top ups. Recently purchasing of E.C.G prepayment credit, DSTv recharge, and other utility credit are comfortably receive pay for using the mobile money system thereby reducing the difficulties involve in going to the offices and premises of the utility provider to buy the recharge cards (Oh, 1999). Convenience in accessing product and services enables organizations to have competitive edge over its competitors and as such the mobile money services assist customers in conveniently accessing the recharge cards as and when the need arise (Baker 2002).

## **2.2 Significance of Mobile Money Services**

The mobile money system has its main objective and that is to assist payment transaction between individual customers and payment by the merchant using mobile phones without necessarily having a bank account. Meanwhile, the key motivation that works behind the mobile money operation is for financial inclusion and means of promoting the inexpensive means of financial transaction which is very comfortable to use, much secured and conveniently enable comfortable financial transaction.

At times, keeping money can be very risky and does not guarantee the safety of cash hence the introduction of mobile money has tremendously prevent the hazards of handling too much cash at a point in time. Hence according to Donovan, (2012) m-money is a safer alternative than keeping the cash and m-money helps in maintaining individual privacy due to the fact that this cash are very easy to travel with and further assist the women to save money from any public interference of the male counterpart, hence individuals should be informed about this benefits since it can effectively enhance trust and value propositions.

Subsequently, studies undertaken have revealed that the real use of mobile money services and consumer behavior coupled with the attitude of the deployment of the mobile money operations (Mantel, 2000).

The mobile financial services allow the customers that do not operate with banks and have account numbers to have used the mobile SIMs as an account numbers as an account to deposit into the mobile wallet with no transaction cost. The transfer mechanisms was originally set working as an informal banking system with account numbers and uses electronic for paying for goods and services (Oh, 1999). It is evidently clear that SMS that is usually send to customers in reminding clients on mobile money savings duly encourage the clients to save more using the mobile money services in the long run (Karlan et al., 2012). As this will drastically reduce the transaction cost and proven to be more secured and efficient means to deposit money, and mobile money uptakes is still remain low and there are no clear means of suggesting microfinance institutions and susu operators the users will in fact accept the adoption of the mobile money services (Jack & Suri 2012).

Mobile money offers a new potential mechanism for increasing the financial inclusion of the world's poor. First and foremost, since m-money can reduce the monetary and security costs associated with money transfers, it can allow households to send or receive money when it is needed, thereby improving households' ability to share risk (Eagle & Fafchamps, 2012). Beyond money transfers, mobile money could also be used to create a secure pseudo-savings account, where individuals can deposit smaller savings amounts for more immediate needs. Mobile money system is capable of integrating the poor household with the financial

services and this explain the fact that the section of the individuals that cannot afford to transact business directly with the big financial institutions can now afford to effectively do so with the emergence of mobile money. A substantial figure of the masses in less developed countries face the need to engage in safe and very secured financial operations in case of remittances (Pope et al., 2011).

### **2.3 Mobile Money Usage**

The use of the newly introduce financial transactions services across the globe in recent time is mobile money usage, and this has improve the financial transactions of the majority. One of the emergent services, the mobile services helps in enhancing business transaction such as the transfer of bills and sending remittances and has worked well in developing countries (Aker & Mbiti, 2010). Across the world, a substantial number of mobile phone dealers have drastically exceeded the individuals that use account numbers for transacting services with the banks (Tobbin, 2012). Individuals with poor financial background scarcely transact business with banks but instead resort to save any little amount with mobile money merchant and this was evident in the literature. Hence M-money seems as the prominent way in achieving the set goals of involving people that are found among the poverty line.

The three main telephone companies in Ghana that currently provide MM services: MTN; Airtel; and Tigo, have the following subscriber base in 2012 MTN MM 5 per cent active users of two million accounts); Tigo Cash 13 per cent active users of 1.2 million accounts and Airtel Money This low uptake is despite the excitement around MM in the payments space across many developing countries, which according to anthropologist Maurer (2012)

is due to three convergence factors: interest among financial and telecommunication companies; increasing awareness of MM in global south; and the increasing attention given to microfinance.

#### **2.4 Customer satisfaction**

Customer satisfaction may take the form of accessibility to services, convenience of the services, reliability of services, and charges for the service etc. Consumers' perception regarding products is the major yardstick in measuring products or brands. Albinson (2004) was the view that attribute alone cannot be used in measuring the brand image but equally, the perception of consumers regarding the value and benefits derived from the use of the products should rather be the major concern.

Studies conducted previously truly examine the relationships that actually exist with regards to benefit derived from images which include experiential benefit, functional and symbolic benefits likewise the level of satisfaction that customers derived. Albinson (2004) observed that customers becomes more satisfactory with regards to the banking operation when there is a perceived high level of social benefit enjoy from the service. But such practices have positive effect on satisfaction level of customers. These benefits are derived when a company brands or rebrands, since the focus of rebranding is to provide more value for stakeholders as customers. Wong (2000) was of the view that the satisfaction of consumers largely is an emotional drive and evaluating the reactions of perception which is based upon the consumption of the product or the services rendered. And it is obvious that satisfaction comes as a result of identifying the need of a consumer, therefore knowing the actual need

of a consumer is of paramount important to every service provider. Customer satisfaction is the state of mind emanating from position customers have about a company that their expectations of service meet or exceed by the product or service.

#### **2.4.1 Satisfaction with mobile money accessibility**

As the mobile money subscribers perceived the cost of transferring cash from far away banks to account and sending to families on daily bases is considered to be very high, then has resulted in the use of the mobile money system which is considered to be cost effective and very fast in doing business with (Osei-Assibey, 2009). And with the emergence of the mobile money system, the small and medium scale enterprises including microfinances and savings and loans companies are rapidly adopting the ideas of the mobile money services so as to replace the old and the traditional system of susu savings (Tobbin, 2012).

The mobile money system can be made accessible and available to customers especially where there is the area is been networked and covered with the wireless system to enhance effective delivery of the service. As far as the mobile money system is been linked with the financial inclusion, it is therefore very important to understand how and ways by which mobile money services is of immense benefit and help to the poor in the society (Fornell et al., 2010). Frequent and accessible to mobile phones have necessitated and enhance the use of the mobile money services.

The information available pointed to the fact over a millions of customers or the consumers in the developing countries have their life been transformed and changed as a result of the

introduction of the mobile money systems through the ability of receiving payment and transferring cash to the people through electronic means (Orozco et al., 2007). It is obvious that the mobile system reduce the difficulties involve by searching for a neighbor offices or financial premises to transact any business, since the system duly provide and make it possible for customers to access mobile money with ease.

#### **2.4.2 Satisfaction with Convenience**

There is a fact and evidence which provide the fact SMS text that are been sent to customers on daily or regular bases among the poorest household and individuals duly encourage them to constantly save and transact the mobile money services with their operators (Karlan et al., 2012). As this will effectively and significantly reduce the cost of doing business, and the same time helps in keeping the monies secure and safe and convenience ways of depositing cash, yet the uptake is very low. Hence the susu operators will be willing to use the mobile money services in place of the traditional ways of saving money. Moreover, when mobile operations have been supervised very, it proves to be very safer and more secured including the cash.

With the introduction of mobile money women can comfortably save without necessarily asking permission from their husbands (Morawczynski, 2009), but the fact still remains that such autonomy is available for both parties. The speed and liquidity of mobile money are also key benefits. The limited assets the poor own often take the form of valuable objects (such as livestock or gold), which are relatively illiquid (Krugel, 2007). In times of crisis, such assets can be difficult to realize quickly, and their value may decline. It is strongly

believed that mobile money can be very accessible and convenient method of transacting cash and delivery of financial services and very reliable as compared to the traditional method of cash transactions it is further assist others to received cash as and they need it (Gorton & Winton, 2002). And if the market floods with other families seeking to convert similar assets to cash at the same time, improving on mobile money services will be appropriate means of doing that.

### **2.4.3 Satisfaction with Mobile Money Charges**

The mobile money operation is more successful in recent times because it is considered to very easy and cheaper as compared to the other means of financial inclusion. McKay and Pickens (2010) was of the view that banking system without branches which largely include the mobile money services was far cheaper and more convenient alternatives. At low transaction amounts or for informal money transfer options results in difference more than doubled (Tobbin, 2012). In Kenya M-PESA was routinely one-third to one-half as expensive as alternative systems. Lower costs directly translate into money the poor can keep in Kenya the amount of money remitted increased when transferred using M-PESA compared with traditional forms of remittances (Hu et al., 1999).

Moreover, the mobile money system can effectively prove to be more commercially significant especially for service providers especially when it reaches its maximum. Although the transaction fees that mobile money providers charge are individually quite small, in total, they can represent an important revenue source. In addition, cash agents may also gain commercial benefit from the fees they receive.

#### **2.4.4 Satisfaction with Reliability of Mobile Money Services**

The major advantages that are usually derived from the mobile money services as noted is the speed and the liquidity, Hence the mobile money significantly assist in enhancing the productivity and efficiency of consumers through the avoidance of long queues that characterized the banking halls in recent times, drastically reducing the transaction cost, checking all the necessarily loopholes and ensuring security (Donovan, 2012; Lochan et al., 2010).They can receive more interest and profit on transaction with less cost than the previous method while eliminating the possibility of theft or leakage (Jack & Suri, 2014).

Service reliability implies that there must be reliable network services to enhance service delivery and also to serve customers' needs so as to promote the mobile network services. Service reliability extensively allows the system to work without any failure that subsequently creates discomfort to both the service provider and the customers. With reliable service, gives effective delivery and comfort to the subscribers of mobile money system thereby putting trust in the system which subsequently leads to acceptance of the technology (Chezy & Itamar, 2007). Nevertheless, reliability of services enables customers of a particular organization to remain loyal to the value proposition of organization thereby creating competitive advantage to the service provider. Service reliability involves reliable network, available cash to pay the subscribers as and when the need arise, committed agent that can offer quality service to customers in general. According to Baker (2002) the newly system of payment and receiving cash and that is the mobile receive considerable attention due to the systems readiness to offer service reliability to its customers and target audience as a whole.



## **2.5 Mobile Money Usage and Customer Satisfaction**

Mobile money usage as new innovation in the financial service in one way or the other equally comes with some effect either on the subscriber or the merchant. But whatever the case the effect can either be positive or negative base on its side effect. One becomes effective and reliable when the individual is been able to effectively accurately account for the services that the service providers have been able to render to the subscribers of the mobile money services. Nevertheless this has not been accounted for in most cases.

Technical inefficacies and technological breakdown can largely be accounted for such inefficiencies in the system. And this occurs as the result of major technical inefficiencies at the various stages and this could be network problem since mobile money transaction is largely depend on availability of networks (Maurer 2012). And as there are frequent technological failures which subsequently hinder the smooth running of the mobile money services, loyal customers then become dissatisfied and this can obviously leads to customers switching or look for any available alternatives. Meanwhile there are serious measures and strategies that have been adopted in addressing these challenges. And much effort put in place by the service providers of mobile money services to upgrade the system to 3G network to prevent system failures and hence improve on service delivery. Hence the very approach that seems to be effective and conducive for both the subscribers of mobile money services and the merchant with cost efficient is the frequent system upgrading and maintenance (Hocutt, 2011).

Innovative services like mobile money can have effect on customer satisfaction. Obviously, in a situation where the spending level of customers falls, the economy equally experience a slow growth as a result of a decline in the consumption level of consumers, hence the economy will witnessed a serious contraction as well.

Hence marketers are to quickly try as much as possible to identify customers want and satisfy them profitably and anything contrary to this will lead to dissatisfaction of customers thereby leading to massive defection (Chezy & Itamar, 2007). The satisfactions of customers are most often than not a mindset emanating from whether the customers are satisfied with the company's product or not. And for companies to either meet or exceed customers' wants, innovation then becomes necessary and vital. And innovation can be introducing either gradually or rapidly, and rapid innovation is usually driven by the desire of customers for an improvement on the product or services and that can enhance the performance with convenience (Vercauteren, 2008).

The development of innovation should aim at providing a very positive views and perception being seen as the incremental new ways of doing things which drive the perception of customers rather than the radical innovation which largely based on the drive by a technology (Wijmans, 2001, O'Connor, 2001). A major prominent level of satisfaction that the customers enjoy from the adoption of mobile money operation is the instant cash that the subscriber receives or deposited cash for effective business transaction. The introduction of mobile money system as they fill empowered by been part of the financial management system and enjoy much convenience as they can easily receive and send money

to their relatives with less effort. With the introduction of mobile money system, the consumers or subscribers of mobile money have it very easy to monitor and also have easy accessibility of financial transactions among business partners, families and friends (Tewari, 2003).

The uses of mobile money substantially helps the individuals household as a result of the interest received on savings practices with the mobile money operations and also cutting down on cost on the service provider or individuals when mostly saving with the traditional susu or micro-finances or personal savings under mattresses or susu boxes. According to Miyogo, et al (2013), argued that in real sense, if the change process is so huge or incremental, then there is the likelihood of resistance since majority of the consumers are still comfortable with the old systems of life and doing things. It is obvious that some level of resistance will remain underground and will not surface at the early stage because they need to gather momentum.

## **2.6 Trust in Mobile Money Services**

There are a number of studies employing trust in the technological acceptance model and trust has been defined differently in various studies. A highly cited study give definition to customers trust as what customers expect and is been delivered to them (Zucker, 1986). Trust lets the trusting party believe that the trusted party will not act opportunistically (Teo et al., 2008). The people using m-money represent the trusting party and m-money service provider is the trusted party. If the trusted party breaks or seems to break the trust of m-money users, it can put a negative impact on its acceptance. The lack of trust and uneasiness

of parting with own money may prevent someone from accepting such service (Donovan, 2012). Reliable service enables customers to have trust in the mobile money services and as customers trust increases, then there is the likelihood of customers becoming very loyal to the services rendered.

People believe that the use of mobile money will keep their hard-earned money safe and help them in using it whenever required will drive their acceptance for the mobile money. Hence, the users' perception of trust can impact the adoption of mobile money transfer (Tobbin & Kuwornu, 2011). The effective control and regulatory system and mechanisms put in place will lead to elimination of fraud in the system, hence contributing immensely to the trust that customers have with the operation of the mobile money system. Lee and Chung (2009) are the view that companies or the mobile money operators can equally achieve success and effectively retain their profitable customers even including the poor customers in the society with the help of trust. Hence during the process of manufacturing mobile these issues must be taken care of to allay fears and avoid subsequent distrust of the system.

In Africa, the expansion in mobile services, including m-money, has been the major contributor to the growth of the telecommunication sector (Pope et al., 2011). It is reliably known that trust play a pivotal role in successful implementation of policies and ideas and any instituted policies and programs that lack the backing of trust will certainly bound to fail.

### **2.6.1 Technology Acceptance Model (TAM)**

As m-money is getting popular in developing countries, gaining an understanding on its hitherto sparsely studied acceptance among customers as it involves the use of technology in its operation. Technology Acceptance Model (TAM) has over the years gained recognition for evaluating the acceptance of any information system (King & He, 2006). Along with utilizing the core constructs of TAM, it will be prudent to integrate trust as a potential determinant for the acceptance especially on m-money service. TAM is one of the most extensively used models in information systems research, partly because of its simplicity and understandability (King & He, 2006). It examines the impact of technology on human behavior. It was adapted from a psychological theory, a theory of reasoned action that explains human behavior in accepting an information system. The Technology Acceptance Model that was adopted as a conceptual framework for the study posits that the extent of knowledge regarding a particular technology influences the rate at which it is adopted for use. Mobile money challenges further include low network services especially during the time of service delivery, and it turns to be very frustrating to potential customers when experiencing and going through such frustration. The high cost and limited trust in formal financial systems have been cited as the most common reasons for limited initial usage (Dzokoto & Mensah 2011)

### **2.7 Behavioral Intension of Customers to Save**

The readiness and willingness of a person or individuals to accept and perform a certain action or task constitute the behavioral action. Mostly the innovative of new ideas should be seen by customers or perceived by the individuals as been having greater advantages and

impact on the life of consumers in general (Rogers, 2002). However, a number of studies have shown that only relative advantage, complexity, and compatibility have a significant effect on the adoption rate of innovatory products.

Customers with high experienced will recognized the innovation quickly and know it relevant in the society. In the context of mobile money or m-banking, some consumers are more mobile phone literate than others and, consequently, would be expected to have fewer problems utilizing mobile money banking and getting accustomed to it quickly. Furthermore, these innovative customers are likely to place greater trust in the channel/competence underlying the technology. Perceived usefulness and perceived ease of use will lead to higher behavioral intention to use m-banking and perceived ease of use positively affects perceived usefulness. Behavioral intention is influenced by a user's attitudes towards a product which in turn is affected by the perceived usefulness of the product and its perceived ease of use.

Due to divergent views and opinion concerning the adoption and emergence of new technologies and its acceptance that usually characterize the full acceptance of new product, it is rather clear that subscribers rather shows positive attitude towards the mobile money operation. Lin (2011) was of the view that customers will have positive behavior towards a product or mobile money operation when they for see some relevant advantages from it. The lack of trust and uneasiness of parting with own money may prevent someone from accepting such services (Donovan, 2012).

Further, m-money is a safer alternative than keeping the cash and M-Pesa studies have found reduction in the cases of mugging because of less availability of cash. Thus, m-money helps in maintaining the freedom of the customers and autonomy because of invisibility of cash (Donovan, 2012). It also enables women to save cash without letting their husband getting to know of it and People should be made aware of such benefits, as it can create a trustworthy value proposition for the m-money. Similar success of m-money services can be achieved in India provided it has been welcomed by the individuals the refusals to accept the system may leads the system to be useless.

Anytime consumers realize the quality status of a particular services or systems, then there is the likelihood of customers having trust and believe in the product of been meeting their needs and there will be readiness of the customers to accept the services as in the case of the mobile money system. Then, it is expected that the system quality of mobile money services could have an impact on consumer's trust. Trust affects positively consumers' attitudes which influence behavioral intentions by decreasing fears about opportunistic behavior. This later covers unfair pricing, conveying inaccurate information, violations of privacy, unauthorized use of credit card information and unauthorized tracking of transaction (Gefen et al., 2003). Consequently, there is a positive link between trusting mobile money services and the intention of using their mobile financial services

## **2.8 Risks in Mobile Money Services Usage**

It is obvious that the use and operation of the mobile money services can be seriously affected and customers may also begin to lost trust and confidence in the system if the

perception of the risk that are associated with its usage is high. Hence the trust of the consumers need to be built and maintained in the long run, and the understanding of consumers perception of risk level is mostly high is very helpful in the financial institutions and the mobile money services in pointing out risks and its adverse effect on the performance of the mobile money services.

With regards to the mobile money services and the mobile banking, studies have indicated that the lack of trust and credibility in the system has been phenomenon or significant concern to the services providers of the mobile money services, the customers are also of the view that personal information can be easily made available to third parties either through transferring cash to unknown numbers without the knowledge of the user are issues that have some impact on the patronage of the services (Luarn & Lin, 2005). There is a perception that mobile money is been seen as the more riskier than the non-mobile banking services or mobile money operation and the first trust of customers in the service is the most important factor in achieving success of the service operation. Meanwhile from a customer's opinion it usually difficult to assess and bring out the difference on the various risk level very meaningfully (Zhao et al., 2008),

And as it is customers may find very tedious to realize and identify potential risks that are related to the online banking and the network use in operating the mobile money services. Due to the intangibility of the mobile money operation, it is therefore difficult for customers to evaluate and weight the services in advance to identify and shortfalls in the services. Research has shown that in the context of internet banking and mobile moneys, consumers are often anxious about security issues and their privacy (Gerrard et al., 2006).



The fear by potential customers of losing their investment or monies put in their mobile money wallet can equally discourage the subscribers from saving with the mobile money merchant or can adversely affect the smooth implementation and operation of the operations. Certainly fraud is what occurred or risk that cause the some stakeholders or have exposed them to have loss money that are held in the system due to a deliberate deception, cheating by other individuals to deprived them of their rightful belongings or cash in the system. Meanwhile legal risk has to do with the kind of risk which occurred as result of unexpected lawsuit or judgment or business that could easily disrupt or cause or have some negative impact on the mobile money operation or business operation practices. Again the liquidity issues are the associated risk that reduced the ability of the merchant and the mobile money operators to effectively provide the agents in meeting the cash obligation of the customers upon demand or meeting their request on timely manner.

As the emergence of mobile money has brought about tremendous benefit to both the customers and the mobile money merchant, there exists some associated level of risk especially the merchant most often than not encounter. However, one other issue that has been notice to be crucial in consumer decision making is the extent of perception that customers have towards a particular products or services with respect to its purchasing and the subsequent use (Luarn & Lin, 2005). The following are the risks involved in mobile money operation. Merchant in most cases face risk such as financial loss during service delivery process and this risk seriously pose a risk to and further hinder the effectively mobile money operation among merchant. The buying situation of customers is critically checked based on the level of risk perceived and subscribers of mobile money are of no

exception and therefore encounter similar risk. Culnan (1999) are of the view that risk perception by the consumer is the basic predicament or obstacle that hinders the future growth and prosperity of the mobile money operation in recent time. Likewise the growth and effective operation of the 3G network would adversely be affected if the risk perception continually increases overtime as well as the mobile banking due to the analogue characteristics.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Research Design**

Research design refers to general map of how the study questions were answered. Saunders et al, (2008), propose meanwhile there exist three main types of research design; exploratory, explanatory and descriptive. An exploratory study is a valuable means of finding out ‘what is happening; to seek new insights; to ask questions and to assess phenomena in a new light’ (Robson 2002). Descriptive research seeks to portray an accurate profile of persons, events or situations’ (Robson, 2002). Explanatory research seeks to establish causal relationships between variables (Saunders et al., 2009). With regards to this study, the bases or the emphasis is largely on trying to give explanation to events and situations or some problems so as to explain or give meaning to the relationship that exists between some variables. The design for this study is descriptive and explanatory aimed at establishing the relationship between MM services and behavioural intention to save

#### **3.2 Sources of Data**

Data is defined as facts, opinion, and statistics that have been collected together and recorded for reference or for analysis (Saunders et al. 2009). The source of data is from primary source that is the use of questionnaires.

##### **3.1.1 Questionnaires**

The study used questionnaires as the main instrument for data collection in eliciting responses from the customers. The questionnaires were close ended on likert scale on a scale

of 1 to 5. The respondents responded to question by ticking strongly agreed (scale 5) to strongly disagree (scale 1). Questionnaires were considered as very important means use in collecting data as far as the field survey is considered. Due to lack of time, the study adopted the use of questionnaire for conducting the research. This is done by collecting data from the field from users of mobile money service. Questionnaires were used as the main instrument for collecting primary data. The questionnaires were designed for mobile money users within the Kumasi metropolis.

### **3.1.2 Secondary Data**

The study did not make use of secondary data as the study looked at savings intention as a result of MM usage from the customers perspective. However, literature was reviewed from journals, publications, internet sources, scholarly articles

In a multi case study is preferable to just a single case study and that where the researcher choose to use a single case study, there is a need to strongly justify it (Yin, 2003).

### **3.3 Unit of Analysis**

The study focused on evaluating the perception of mobile money services and how it affects savings intention of customers In a multi case study is preferable to just a single case study and that where the researcher choose to use a single case study, there is a need to strongly justify it (Yin, 2003). The study was carried out within the Kumasi metropolis by seeking views of users of mobile money services. Samples of mobile money users were been used to represent mobile money users in the metropolis.

### **3.4 Population**

The population of a study is basically the total number of items or units that are under investigation of which all the all other possible observation are made (Kumekpor, 2002). The population with regards to this research consist of customers using mobile money services within the Kumasi metropolis which is estimated to run into millions of customers. For the 1st quarter of 2016, active mobile money customers in Ghana have increased to about 8.5 million (Bank of Ghana, 2016). The number of mobile money users within Kumasi metropolis is estimated to over 1 million users (Bank of Ghana, 2016).

### **3.5 Sample size**

Sample shows the number the particular number of respondents that has been chosen among a population to serves as representative of the population to be sampled from. Saunders et al (2009), pointed out that with regards to the confident level and the, margin of error is largely considered in the selection of samples size. The sample size of chosen for the study was 350 users of mobile money users within the Kumasi metropolis. Stutule (2003) also believed that, for a statistical data, a minimum of 30 respondents is more than enough as a representation of the population hence a sample size of 350 was more than enough to be a representative of mobile money users in Kumasi metropolis.

### **3.6 Sampling Techniques**

With regards to the selection of respondents for the conduct of the survey, the study employed purposive and convenient sampling techniques. Convenient sampling which is also called the judgement sampling includes the selection of the samples haphazardly the

respondents that are very easy to obtain for your sample since the process of the sample selection continues up to the time the your required sample size selected has been realized (Saunders et al 2009). This method was adopted with regards to the selection of respondent who can actually provide the correct data for the study. Purposively, the researcher knows most of the customers who use mobile money services.

### **3.7 Data Analysis**

The analysis done was quantitative in nature. The study made use of Statistical Package for Social Science (SPSS) software in conducting the analysis. Frequency distributions, as well as tables were used to present the data. Cronbach alpha was used is assessing reliability of data used. Discussion of findings and analysis were given through the use of means and standard deviation, percentages, correlation and regression analysis tools.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION**

#### **4.1 Introduction**

Chapter four presented information on data collected from customers on the effect of mobile money services on behavioral intention of customers to save within Kumasi metropolis. The study discusses demography of respondents, trust customers have in mobile money services, customers satisfaction with mobile money services and the extent to which the use of mobile money services affects behavioral intention of customers to save with banks. The data was presented by use of multiple regression, Pearson correlation matrix, cronbach alpha to test the reliability of data, mean, standards deviation and percentages. The study was done using an overall sample size of 350 customers out of which 294 responses were received which constitute a total percentage rate of 84% of the response rate.

## 4.2 Demographic Profile of Respondents

Demographic information about respondents are presented on table 4.1 below

**Table 4.1 Demographic information**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
Gender		
Male	150	51.0%
Female	144	49.0%
Age Distribution		
Under 20 years	47	16.0%
21-30 years	126	42.9%
31-40 years	82	27.9%
41-50 years	25	8.5%
51 years and above	14	4.8%
Educational level		
Masters	36	12.2%
First Degree	70	23.8%
Diploma	72	24.5%
SSSCE/MSLC	95	32.3%
Basic education	21	7.1%
Time of usage		
Under a year	52	17.7%
1-2 years	198	67.3%
3 years and above	44	15.0%
Service provider		
MTN	246	83.7%
Vodafone	29	9.9%
Tigo	14	4.8%
Airtel	5	1.7%

Researchers field survey, 2016

With respect to gender distribution, findings revealed that 150 of the respondents which constitute the highest percentage figure of 51% of the respondents are males. The implication is that, males have adopted and feel very comfortable using the mobile money services as compared to their females' counterpart. And 144 of the respondents that patronize the mobile money services are females.



The study further seeks to find out the age of the respondents, findings revealed that 47 of the respondents are under 47 years, 126 of the respondents with the highest percentage figure of 42.9% are between the ages 21-30 years, 82 of the them falls in the range of 31-40 years, 25 of the respondents are also between the ages 41-50 years, while the remaining 14 of the respondents are 51 years and above.

The study further seeks to find out the educational qualification of respondents, findings revealed that 36 of the respondents are had master's degree, 70 of them had first degree, 72 of the respondents also had diploma qualification, 95 of the customers that represent the biggest percent which is 32.3% had SSSCE/MSLC qualification, while the remaining 21 of the respondents had basic education.

The study further seeks to find out the time of usage of the mobile money services, and findings revealed that 52 of the respondents patronize the mobile money services just under a year, 198 of the respondents with the highest percentage figure of 67.3% of the respondents patronize the mobile money services for between 1-2 years signifying that mobile money services get full recognition and acceptance from the general public and the majority of the customers within this particular range of years, while the remaining 44 of the respondents started using mobile money from 3 years and above.

With respect to service provider that the respondents largely patronize, findings revealed that 246 of the respondents which constitute the highest percentage figure of 83.7% of the respondents uses mobile telecommunication network (MTN) as their service provider. The

implication is that mobile telecommunication network (MTN) has dominated mobile money services and the greater part of the respondents prefers using the network. 29 of the respondents uses Vodafone as their service provider, 14 of them also uses Tigo, while the remaining 5 of the respondents prefer Airtel network as their service provider.

#### **4.3 Reliability of variable using Cronbach Alpha**

The confidence that readers will have in the information that are been communicated depend to a large extent depend on how reliable the data is. In order to test for the reliability of the scale used for the analysis, the Cronbach's alpha coefficient was performed on the data collected. This was to test and know-how correct the data is with its consistency of the scales used in the questionnaires and also addresses the extent of the items that make up the scale 'hang together. That is to detect if the items used are measuring same underlying construct. Ideally, the Cronbach alpha coefficient of a scale should be above 0.7 (DeVellis 2003). Values above 0.7 are acceptable and values above 0.8 are preferable. All the reliability test run showed a Cronbach alpha above 0.7 implying reliability, preferable and accuracy of work. Reliability statistics was shown in table 4.2 below.

**Table 4.2 Reliability Data using Cronbach's Alpha**

<b>Variable</b>	<b>Cronbach Alpha</b>	<b>Number of Items</b>
Trust with MM service	.818	7
Withdrawal	.708	3
Cash transfer	.709	3
Purchase of recharge card	.768	3
Cash deposit	.866	5
Convenience	.723	5
Accessibility	.745	4
Charges	.759	3
Reliable Service	.784	3
Saving Behaviour	.745	7

Researchers field survey, 2016

#### 4.4 Correlation Matrix

To check whether the strength of the association between the variables will affect the further statistical analysis; a multicollinearity test was performed using Pearson correlation statistics. For robustness, it is recommended that the Variance Inflation Factor (VIF) should be below the value 10 whereas the correlation statistics should not exceed 0.7. Table 4.3 below shows the correlation matrix

**Table 4.3 Pearson Correlation Matrix**

	Savings Intention	Cash Transfer	Withdrawal	Deposit	Purchase Recharge
Savings Intention					
Cash Transfer	.540**				
Withdrawal	.579**	.609**			
Deposit	.625**	.626**	.678**		
Purchase Recharge	.477**	.532**	.669**	.679**	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Author Field work, 2016

The correlation between behavioral intention to save and cash transfer is .540\*\* and it is statistically significant at 000. Again, the Pearson correlation between behavioral intension to save and cash withdrawal is .579 and it is statistically significant at .000.

The correlation result between the behavioral intention to save with mobile money and cash deposit is .625\*\* with a significant value of .000. Meanwhile, the result for the correlation with respect to purchase of recharge cards and the behavioral intention to save is .477 with a significant value of .000. Likewise, the result for the correlation between the variable withdrawal and deposit is .678 with a significant value of .000 and between withdrawal and purchase of recharge cards is .669\*\* with a significant value of .000, while the correlation result between the variable deposit and purchase of recharge cards is .679\*\* with a significant value of .000. Therefore it can be concluded that constructs are valid and the problem of multicollinearity is not a serious threat in this analysis

#### **4.5 Trust customers have in mobile money services**

Trust plays an important role in the life of every customer and the influence the extent to which customers will continue to patronize the offerings of the service providers. Table 4.4 below shows the variables measuring trust customers have with mobile money services with their corresponding statistics.

**Table 4.4 Trust with mobile money services**

Variables	%	Mean	Std. Deviation	N
I believe that the use of m-money will keep my hard-earned money safe	82.6%	4.13	.917	294
I will encourage others to use mobile money	84.6%	4.23	.878	294
I intend to use mobile money as often as possible	82.0%	4.10	.964	294
Mobile money is a trustworthy service	78.0%	3.86	1.331	294
I can count on mobile money to protect my cash	76.6%	3.83	1.336	294
I can count on mobile money to transfer my money safely	84.0%	4.19	1.250	294
The mobile money can be relied on to keep its promises	80.0%	4.00	1.214	294

Researchers field survey, 2016

#### **4.5.1 Keeping hard earned money safe**

Customers using particular services at a point in time needs to have or develop certain level of trust on side of the service provider so as to strengthen the relationship and lasting business partnership with the customers. Customers are of firm believe that utilizing the service will safely and securely check their cash and this contributed to a total percentage rate of 82.6% of the response rate of customers. Reasons attributed to this include the fact that mobile money serves as the fastest and easiest means by which customers or subscribers of the mobile money services can conveniently save any income generated without consuming all at point in time but rather saves a portion for any economic activities. This corresponds to a study that believed that, trusting party believe that the trusted party will not act opportunistically (Teo et al., 2008).

Further, the respondents are of the view that operating mobile money services through either deposit or withdrawing does not necessarily require any personal document or which may

render the service very rigid and cumbersome to the customers, hence provide easy access and safety. Meanwhile, the remaining percentage of the respondents are of firm believe that the mobile money services, through its easy accessibility make it very easy for customers or the subscribers to withdraw frequently from their account thereby making very difficult for them to save towards the future. Again, the respondents are of the view that any least mistake committed can leads to a financial loss most especially the money has been transfer to someone else account.

#### **4.5.2 Encouraging others to use mobile money**

Word of mouth from customers or other individual effectively promote or influence the behavior, attitude and purchasing behavior of consumers toward a particular products or services. And in assessing behavioral intentions of customers to save with banks due to mobile money usage, the issue of customers encouraging others to use mobile money which gives a total percentage of 84.6% of the response rate was considered. Paramount among the reasons for this include the fact that first time mobile subscribers upon realizing the immense benefit enjoy in using mobile money, equally advice friends to also subscribes to mobile money services. Subscribers perceived the cost of transferring cash from far away banks to account and sending to families on daily bases is considered to be very high, and then has resulted in the use of the mobile money system which is considered to be cost effective and very fast in doing business with (Osei-Assibey, 2009).

Once again, the services enables the subscribers to easily travel with their cash loaded on mobile money wallet which prevent the difficulties in travelling with a huge sums of money

on them. Moreover, in some places, the service providers' close very late thereby making it very comfortable for businesses that close late to easily deposit the cash on them without necessarily taking the money on them which is usually risky. Subscribers or the customers usually encourage others to use the mobile services since individuals with no educational background can also operate the services with ease. Meanwhile the remaining percentage of the respondents argued that the system largely depends on the availability of the network and failure of the network render the operation of the services with much difficulty.

#### **4.5.3 Customers intend to use mobile money often**

Desire and willingness allow or serves as driving or motivating factors that triggered people to take action or do things they intend to do at some point in time. And in assessing behavioral intentions of customers to save with banks due to mobile money usage, the notion of customers wish to use mobile money frequently as possible which constitute a total percentage of 82.0%. As a result of the immense benefit that other customers or subscribers enjoyed from the use of the mobile money services, this has serves as a motivating factor in inducing others to subscribe to the newly technological innovation.

Again, individuals who through the age limit can operate personal bank account can equally use the mobile money services as means of saving cash from their daily transactions. The use of mobile money enhance effective transaction of businesses most especially during busy days, and as such customers or individuals find it very hectic and time consuming travelling to the nearby banks to do either deposit of cash or withdrawal of cash, hence mobile money has serves as fastest and surest ways to overcome such challenges. However,

the remaining percentage of the respondents are of the view that most at times they rather feel reluctant in subscribing to the mobile money services due to the risk involve such as the possible loss of cash during the transaction or the adverse network challenges.

#### **4.5.4 Mobile money is trustworthy service**

Developing trust and confidence for a particular brands or services is the surest way in developing long lasting relationship with customers and businesses at large. Hence customers perceiving the use of mobile money as trustworthy are a very significant and as such, enhance a significant growth of the mobile money services. And in assessing behavioral intentions of customers to save with banks due to mobile money usage in relation to the assertion that mobile money is trustworthy service constitute an overall percentage of 78.0% of the response rate of customers that use mobile money services. Hence, the users' perception of trust can impact the adoption of mobile money transfer (Tobbin & Kuwornu, 2011).

This implies that customers that use mobile money do not suffer any undue charges or deductions from their services or transactions from the use of the mobile money services, hence leads to consolidate their belief for the mobile money services. Moreover, respondents are of the view that, since customers own phone numbers are used as the account numbers for the mobile money transactions, it leads to openness and transparency hence the trust that customers have with the services. This is in line with studies that believed that, mobile money can act as very conducive and affordable to the poor population (Pope et al., 2011). Last but not the least, individual subscribers often use or have personal pin code which



serves as the means of security features and protect the account of the subscribers. However, there are other respondents or customers that hold a different view and thinks the merchants and the subscribers in most cases suffers a financial loss in one way or the other, hence lack confidence and trust for the mobile money services.

#### **4.5.5 Counting on mobile money to protect my cash**

There is no denial of the fact those customers or the subscribers that patronize the mobile money services are having hope and trust in the system to effectively protect their cash or savings. And in assessing behavioral intentions of customers to save with banks due to mobile money usage in relation to the fact that subscribers of the mobile money services count on mobile money to protect their cash, and this has given a total percentage rate of 76.6% of the response rate of customers that patronize the mobile money services. Reasons attributed to this include the fact that mobile money services are wide spread and closer to the people; hence encourage savings of cash from any transaction undertaken by the customers. This emanate from the fact that most of the customers usually feels reluctant going to banks to open an account in order to save money, at as such the mobile money comes at time to assist the individuals in cultivating the culture of savings.

Mobile money services have significantly proved to the customers of securely protecting their cash. Moreover, customers of the mobile money services readily get their cash back through withdrawal as and when the need arise. Meanwhile the remaining respondents are of the view that such savings in most cases did not yield any meaningful interest on depositing with the mobile money services.

#### **4.5.6 Counting on mobile money to transfer cash safely**

Cash transfer to either business partners or relatives is very crucial in every daily economic activity so as to enhance effective business transactions within the economic. And in assessing behavioral intentions of customers to save with banks due to mobile money usage with regards to how customers are counting on mobile money services to transfer cash safely to relatives or the business partners. This has contributed to a percentage rate of 84.0% of the response rate. Reasons backing this include the fact that, subscribers of the mobile money services safely and successfully have their cash transfer to any destination that it intends to go without any difficulties. Hence promote easy and fastest transaction of businesses in the economy.

Again, cash transfer through other medium or means attract high charges either during or after the transactions, but with the cash transfer through the mobile money services, it realized that the charges are very moderate and affordable to consumers. However, the remaining percentages of the respondents are of the view that cash transfer in most cases becomes hectic and difficult especially in a situation where cash transfer are mistakenly done or transfer to other customers account. And retrieving this cash leads to passing through challenges and frustrations hence make the services unattractive to majority of the customers.

#### **4.5.7 Mobile money is reliable in keeping promises**

Meeting customers or business partners request or needs is a prerequisite for enhancing long lasting fruitful and business relationship with customers. And in assessing behavioral

intentions of customers to save with banks due to mobile money usage with respect to the fact that mobile money can be depend on to keep promises and deliver to customers effectively. This has constituted a total percentage of 80.0% of the response rate of customers that patronize the mobile money services. Subscribers of the mobile money services can in diverse ways gives promises to individuals' customers, and in fulfilling this promises, which can be financial promises or purchasing of a particular item.

In view of this, mobile money services which are one of the fastest and surest ways of getting money at any point in time will be of immense help in keeping to the promises made. Again, the use of mobile money services can effectively enhance our business fortunes thereby assisting corporate institutions achieving their set organizational goals and objectives, and in these instances the organizations need to heavy rely on the services of the mobile money services in either transferring or withdrawing cash for the daily transactions. However, the other cross sections of the respondents hold a different view and thinks that due to technological failures relying too much on the mobile money services can be very catastrophic and disastrous in that it can leads to a total disappointment.

#### **4.6 Customer satisfaction with Mobile money services within the Kumasi Metropolis**

Satisfaction with services received from provider to a large extent determines customer loyalty. Variables used to assess customer satisfaction with mobile money services include satisfaction with convenience, accessibility, charges and reliable services. Table 4.5 shows the variables used and their corresponding statistics.

**Table 4.5 Customer satisfaction with Mobile money Services**

Variables	Percentage (%)	Mean	Std. Deviation	N
Convenience	79.8%	3.9959	.82099	294
Accessibility	80.0%	4.0000	.81031	294
Charges	78.0%	3.8595	.95954	294
Reliable Service	80.0%	4.0201	.80862	294

Researchers field survey, 2016

#### **4.6.1 Convenience**

Convenience is a critical dimension through which the satisfaction level of customers can be effectively be measured and ascertain. In view of this, customer satisfaction with mobile money services within the Kumasi metropolis in relation to its convenience use which include factors such as the customers conveniently enjoy mobile money service with their service provider, customers believing that mobile money is very useful and assist business transaction, mobile money makes transfer of money very easy and convenient, the service is simple and understandable for performing transaction and the fact mobile money services are easy to use and its customer friendly. Convenience is in line with statements that believed that the mobile money system is considered to be cost effective and very fast in doing business with (Osei-Assibey, 2009).

These factors constitute a percentage rate of 79.8% of the response rate of customers that patronize the mobile money services in the metropolis. Reasons contributing to this include the fact that the services does not necessarily required any special knowledge or skills before operating instead it's just works just like how customers use their mobile phones for text messaging and calls making, hence enable majority of the customers to patronize the service

effectively. Moreover, its location and opening hours also contributed immensely to large patronize of the service by the subscribers and non-subscribers. However, there are sections of respondents that complain about the limited coverage of the service, whereby individuals in the remote areas find it very difficult to assess the service hence making the mobile money services unattractive to these groups of respondents.

#### **4.6.2 Accessibility**

Easy location of products and services largely encourage its patronage and its adoption by the consumers of such goods and services at any point in time. And in assessing customers satisfaction with mobile money services with regards to the accessibility of the services, which includes the issues such as the mobile money makes financial services more accessible to even the poor, the services reduce the difficulties involve by searching for a financial premises to transact any business, mobile money enables transactions to be done at any time of the day and the services enables more customers to subscribes to mobile money services. These factors constitute a total percentage of 80.0% of the response rate of customers that patronize the services of the mobile money. It is strongly believed that mobile money can be very accessible and convenient method of transacting cash and delivery of financial services and very reliable as compared to the traditional method of cash transactions it is further assist others to received cash as and they need it (Gorton & Winton, 2002).

Reasons given to buttress this point include the facts that there are widespread of mobile money merchant in almost every part of the metropolis where customers can easily find one

and transact business with. Again, there other networks that is easily accessible to customers who mean that subscribers are not limited to only one particular network but instead there are many of them that you can easily choose from. Meanwhile there are percentages of respondents that are of strong believed that even though there a lot of networks available to choose from, strong and effective and reliable network system become the major problems. Asides the reliable network system, there is also the issue of risk in terms of financial loss whereby monies are usually send to wrong individuals, tracing and retrieving them becomes a difficult problems.

#### **4.6.3 Charges**

Services charges that individual customers usually paid for services received can either be an incentive packages to motivate them and also serves as a disincentive packages that can also discourage them from having long lasting relationship with a service provider. In assessing customers satisfaction with mobile money services in relation to the service charges, which constitute factors such as the customers receiving low charges from my service provider as compare to the normal banking charges, customers paying moderate service charges on both withdrawal and transfer, paying low service charges on any form of bill payment and usually customers receives discount on transacting with my mobile network are factors worth considering. In all, this salient issue gives an overall percentage of 78.0% of the response rate of customers that uses the mobile money services in their daily transactions.

One prominent reasons assigned to this include the fact that, there are relatively high charges when transferring cash through banks most especially when the banks differ, but with mobile money services the charges are relatively low as compare to the banks. Further, the respondents are of the views that discount are usually given especially when transacting business with the same network. However, the other respondents are of the view that there are no charges on depositing of cash but most of the merchant ignored this and take service charges for depositing into your account. The mobile money operation is more successful in recent times because it is considered to very easy and cheaper as compared to the other means of financial inclusion (McKay & Pickens 2010).

#### **4.6.4 Reliable Services**

Reliable services from service providers to customers enhance effective business relationship and subsequently ensure growth, sustainability and profitability of businesses through enduring loyalty from customers. And as such, in assessing customers satisfaction with mobile money services in relation to the service charges, which comprise the issue of mobile money services are reliable hence encourage enrolment, the services improve and enhance the efficiency by avoiding long queue at the premises, and that the mobile money services enhance security and safety of users, the mobile money services provide reliable network services to enhance service delivery processes and the fact that the mobile money provides available cash to pay the subscribers as and when the need arise are very salient issues that has incredible team up to give reliable services to the customers in the metropolis. With reliable service, gives effective delivery and comfort to the subscribers of

mobile money system thereby putting trust in the system which subsequently leads to acceptance of the technology (Chezy & Itamar, 2007).

These factors have given a total percentage of 80.0% of the response rate of customers who usually patronize the services of mobile money services. Paramount among the reasons attributed to this include the fact that the merchant always make cash available to either pay for withdrawal or transfer to subscribers. This according to the subscribers has made the system more robust and reliable. Again, the mobile money services provide a very reliable network services that has effectively enhance service delivery processes. Moreover, security and safety is highly assured and guaranteed to customers in order to get rid of any fears and misconception that the public may have regarding the mobile money services.

However, besides the positive appraisal from a portion of respondents, there are other sections that hold a different view and think that the major problem hindering the smooth running of the services is largely due to unreliable network services which frequently disrupt the smooth operation of the services, and thereby making customers very frustrated most especially in a very crucial time that the services are needed the most.

#### **4.7 Extent to which the mobile money usage affects saving intention of customers to save with banks**

In evaluating the extent to which mobile money services affects savings intention of customers, regression analysis was conducted. The independent variables used were



withdrawal, cash transfer, cash deposit and purchase of recharge units whilst savings intention was used as dependent variable. Table 4.6 below shows the regression result

**Table 4.6 Regression analysis showing the effect of mobile money services on savings intention**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.744	.189		9.211	.000		
Withdrawal	.243	.066	.267	3.692	.000	.373	2.681
Cash Transfer	.059	.069	.061	.855	.394	.381	2.621
Purchase Recharge cards	-.007	.053	-.009	-.135	.892	.454	2.205
Deposit	.301	.056	.405	5.418	.000	.348	2.872
Fit indices							
R	.661 <sup>a</sup>						
R <sup>2</sup>	.437						
Adjusted R <sup>2</sup>	.429						
F statistics	55.998**						
Dependent Variable	Saving Intention						

Researchers field survey, 2016

The result for the regression shows that there is a moderate relationship that exists between the mobile money usage and savings intentions of customers to save with banks within Kumasi metropolis with a value of .661. The R Square value indicates that 43.7% (.437) of savings intention of customers could be explaining using mobile money services enjoyed by customers. From the ANOVA table presented above, shows that, the combined effect of the independent variables (Deposit, Withdrawal, Purchase recharge cards, cash transfer) on the dependent variable (savings intention) was statistically significant at (F=55.99; p=.000) implying that the model is fit.

#### **4.7.1 Withdrawal**

The regression result shows that, the coefficient value for withdrawal as result of mobile money services is .243 showing a positive impact on behavioural intension to save. All things being equal, when the other independent variables (cash transfer, purchase recharge cards and deposit) are held constant, savings intention of customers will increase. Service withdrawal actually is making a unique contribution to the prediction of customer behavioural intension to save with a significant value of .000 and a T statistics of 3.692.

The implication is that, withdrawal from mobile money by means of financial transactions has an impact on customer intention to save and customers care when it comes to withdrawal of money from mobile money. Again, withdrawal assist customers of meeting daily financial obligation with regards to any transaction, hence have greater effect on transaction of the mobile money services. Even the transaction using the mobile money services for withdrawal purpose, customers will still have the desire to save with the traditional bank.

#### **4.7.2 Cash transfer**

Transfer of cash is one important variable when it comes to mobile money services, as such; cash transfer has a coefficient value of .059 showing a positive impact on savings intension. It is obvious that the use of mobile money technologies is changing and enhancing the life of many especially in the developing world where customers usually have difficult time accessing financial transaction through the traditional banks in the form of withdrawal, cash transfer and deposit (Oh, 1999). All things being equal, when the other independent

variables purchase recharge cards, withdrawal and deposit) are held constant, savings intention will increase if effort are been made to give customers memorable experience through the cash transfer services they received by mobile money.

Cash transfer is therefore not adding or not making any relevant input to the savings intention of customers with mobile money with a significant value of .892 and a T statistics of .855. The implication is that customer can easily transfer their cash through other means which can either through banks; hence customer's savings intention with mobile money through cash transfer is of minimal value to customers. Thus, with the patronage of the mobile money operations which involve cash transfer and other related services, savings intention will still go up.

#### **4.7.3 Purchase recharge cards**

The result for the regression shows that the coefficient value for purchase of recharge cards as result of mobile money services is  $-.007$  showing an inverse relationship to savings intentions. All things being equal, when there is an increase in purchase of recharge card, savings intention will fall and when there is a fall in the purchase of recharge card, savings intention will increase. Purchase of recharge cards is not significant recording P value of  $.394$  ( $T=-.135$ ). Here the implication is that the purchase of recharge cards by customers does not have any significant value or effects toward their behavioral intention to save since customers are of believe that they can equally acquire recharge through other means but not necessarily through mobile money alone.

#### **4.7.4 Deposit**

Cash deposit is crucial in enhancing customers saving behaviour so as to enhance the growth of businesses. The value for the coefficient as far as the regression result is concern proves that cash deposit as result of mobile money services is .301 showing a positive impact on savings intention. All things being equal, when the other independent variables (purchase recharge cards, withdrawal and cash transfer) are held constant, savings intention will increase when there is an increase cash deposit by customers. Cash deposit is statistically significant and is making a unique contribution to explaining of customer behavioral intension to save with a significant value of .000 and a T statistics of 5.418. The implication is that customers have delight in saving cash through deposit so as to increase their capital investment. The more customers deposit their cash in mobile money, the higher their desire to save with the traditional banks.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Summary of Findings**

The summary of findings were captured under the objectives set for the study

#### **5.1 Trust customers have in mobile money services**

Customers are of firm believe as a result of the fact that the patronage of the services immensely protect the income of the subscribers in that mobile money serves as the fastest and easiest means by which customers or subscribers of the mobile money services can conveniently save, any income generated without consuming all at point in time but rather save a portion for any economic activities. Further, the respondents are of the view that operating mobile money services through either deposit or withdrawing does not necessarily require any personal document or which may render the service very rigid and cumbersome to the customers, hence provide easy access and safety. Once again, the services enables the subscribers to easily travel with their cash loaded on mobile money wallet which prevent the difficulties in travelling with a huge sums of money on them. Moreover, in some places, the service providers' close very late thereby making it very comfortable for businesses that close late to easily deposit the cash on them without necessarily taking the money on them which is usually risky. Again, individuals who through the age limit can operate personal bank account can equally use the mobile money services as means of saving cash from their daily transactions. However, there are other respondents or customers that hold a different view and thinks the merchants and the subscribers in most cases suffers a financial loss in one way or the other, hence the lack confidence and trust for the mobile money services.

## **5.2 Customer satisfaction with Mobile money services within the Kumasi Metropolis**

Findings from the research revealed that the services does not necessarily required any special knowledge or skills before operating instead it works just like how customers use their mobile phones for text messaging and call making, hence enable majority of the customers to patronize the service effectively. Moreover, its location and opening hours also contributed immensely to large patronize of the service by the subscribers and non-subscribers. However, there are sections of respondents that complain about the limited coverage of the service, whereby individuals in the remote areas find it very difficult to assess the service hence making the mobile money services unattractive to these groups of respondents. Again, there are other networks that are easily accessible to customers implying subscribers are not limited to only one particular network but instead there are many of them that you can easily choose from. Meanwhile there are percentages of respondents that are of strong believed that even though there a lot of networks available to choose from, strong and effective and reliable network system become the major problems. Asides the reliable network system, there is also the issue of risk in terms of financial loss whereby monies are usually sent to wrong individuals, tracing and retrieving them becomes a difficult problems. Further, the respondents are of the views that discount are usually given especially when transacting business with the same network. However, the other respondents are of the view that there are no charges on depositing of cash but most of the merchant ignored this and take service charges for depositing into your account. Again, the mobile money services provide a very reliable network service that has effectively enhanced service delivery processes. Moreover, security and safety is highly assured and guaranteed to customers in order to get rid of any fears and misconception that the public may have

regarding the mobile money services. There are relatively high charges when transferring cash through banks most especially when the banks differ, but with mobile money services the charges are relatively low as compare to the banks. Further, the respondents are of the views that discount are usually given especially when transacting business with the same network.

### **5.2.1 Extent to which the use of mobile money services affects behavioral intentions of customers to save with banks**

Service withdrawal positively affects intention to save and is statistically significant. The implication is that, withdrawal from mobile money by means of financial transactions has an impact on customer intention to save and customers care when it comes to withdrawal of money from mobile money. Cash deposit is statistically relevant and has positive impact on behavioural intention to save. Cash transfer has a positive impact on consumer intention to save however not statistically significant. Thus, with the use of mobile banking coupled with the mobile money services of cash transfer, behavioral intention to save will still go up. The use of recharge card however inversely affect behavioral intention to sale and not statistically significant.

### **5.3 Conclusion**

The results generally show that mobile money usage has played a very critical and significantly role in assisting customers or subscribers of the mobile money services to effectively enjoy the mobile money services such as the cash withdrawal, cash deposit and purchase of recharge cards and transfer of cash among various subscribers. The mobile

money services has served as a means through which the customers and the subscribers of mobile money have turned to look for alternative ways and means for either engaging in any form of financial transactions ranging from cash deposit to transfer of cash to relatives and business partners. The mobile money usage has tremendously affected the behavioral intention of customers to save with banks, in that the services have greatly provided an alternative means of transferring, depositing cash, purchasing of recharge cards and above all enhanced easy and comfortable means through which the subscribers or customers can effectively withdraw cash as and when the need arises. The implication is that, withdrawal from mobile money by means of financial transactions has an impact on customer intention to save and customers care when it comes to withdrawal of money from mobile money. Again, withdrawal assist customers of meeting daily financial obligation with regards to any transaction, hence have much impact on the mobile money services. Briefly, cash withdrawal and cash deposit is specifically relevant and largely making a significant contribution to the prediction of customer behavioral intension to save.

#### **5.4 Recommendations**

- Both the subscribers and the mobile money merchant should intensify the use of cash deposit and cash withdrawal as it is making a unique contribution to behavioral intention to save.
- Service charges including both withdrawal and transfer of cash should be made equal across all the networks.
- It is worth recommending that the fluctuation in the network system should be urgently looked at in order to enhance and promote sustainability of the services.



- There should be system in place to encourage the patronage of the service through elimination of both withdrawal and transfer charges.
- Merchant should equally train mobile money service providers so as to avoid petty mistake in transferring money to wrong lines.
- It is further recommended that the government should pass law and legalize the mobile money operation in the country.
- The service providers should constantly bring the services to the door step of the people so as to encourage mass patronage.
- The services should be constantly reliable so as to enhance customer satisfaction and delight.
- The trust customers have towards the mobile money usage should be enhance and intensified in order to encourage others to use the service.
- There should be increase of accessibility to cover other rural areas so as to encourage the patronage of the service.

### **5.5 Recommendations for further Research**

Future research should evaluate relationships between mobile money services and savings intention in other emerging or developing economies. Future studies using mobile money services and savings intention should be looked at from the service providers perspectives so as to deepen understanding on how the emergence of Mobile Money services affect savings intention.

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## APPENDIX I

### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### QUESTIONNAIRES FOR MOBILE MONEY USERS

This questionnaire seeks to collect data on assessment of mobile money services and its impact on savings behaviour. The data collected will be used for academic purpose only and confidentiality is assured. Please answer the question by ticking the appropriate boxes or providing your answers where necessary. Thank you.

#### PART A: PERSONAL DATA

1. Gender:            Male [    ]            Female [    ]
  
2. Age:            Under 20 years [    ]            21-30 years [    ]            31-40 years [    ]  
                         41-50 years [    ]            51years and above [    ]
  
3. Highest Educational Level:    PhD [    ]            Masters Degree [    ]            First Degree [    ]  
   HND [    ]            SSCE/MSLC [    ]            Basic Education [    ]            No formal  
   education [    ]            Others Specify .....
  
4. How long have you been using Mobile Money Services?  
    Under 1 year [    ]            1-2 years [    ]            3 years and above [    ]
  
5. Which Mobile money Services do you use most?  
    MTN mobile Money [    ]            Vodafone Cash [    ]            Tigo Cash [    ]            Airtel Money [    ]
  
6. How much do use in Mobile money within a month?  
    Less than GHc 500 [    ]            GHc 500 to 1000 [    ]            GHc 1000 to 2000 [    ]  
    GHc 2000 and above [    ]

PART B: Please assess the level of trust you have with Mobile Money usage. Please use the scale below 1=Deceitful 2=Not trustworthy 3=Neutral 4=Trustworthy 5=Very trustworthy

	Trust with mobile money services	1	2	3	4	5
1	I believe that the use of m-money will keep my hard-earned money safe					
2	I will encourage others to use mobile money when the need be					
3	I intend to use mobile money as often as possible					
4	Mobile money is a trustworthy service					
5	I can count on mobile money to protect my cash					
6	I can count on mobile money to transfer my money safely					
7	The mobile money can be relied on to keep its promises					
8	I believe that the use of m-money will keep my hard-earned money safe					

PART C: Assessing Mobile money Services among customers

From the statement below, please indicate your level of agreement or disagreement to the following statements. Please use the scale below

1=Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree

	Mobile money service usage among customers	1	2	3	4	5
	Withdrawal from mobile money					
1	I withdraw frequently from the mobile money services					
2	I do withdrawal from any mobile vendor					
3	I withdraw from mobile money services without any difficulties					
	Cash Transfer					
1	I transfer cash easily to people through mobile money					
2	Mobile Money is a secure method of transferring funds					
3	Mobile Money is a cheaper alternative for transferring money quickly					
	Cash Deposit					
1	I deposit my money on the mobile money to going to bank					
2	I pay my creditors through mobile money					
3	I deposit money to friends through mobile money					
4	I have it convenience depositing into my mobile money account					
5	Mobile money provides a cashless method for facilitating businesses					
	Purchase of Recharge Card					
1	I use Mobile Money to make purchase of recharge cards frequently					
2	I use Mobile Money to make makes purchase of utility credit more convenient					
3	Mobile money reduces financial pains and difficulties in making payment.					

PART D: Assessing customers satisfaction with Mobile Money Services

From the statement below, please indicate your level of satisfaction or dissatisfaction to the following statements. Please use the scale below

1=Highly dissatisfied 2=Dissatisfied 3=Neutral 4=Satisfied 5=Highly satisfied

	Customer Satisfaction with Mobile money Service	1	2	3	4	5
	Convenience					
1	I conveniently enjoy mobile money services with my service provider					
2	I believe mobile money is very useful and assist business transaction					
3	Mobile money makes transfer of money very easy and convenient					
4	Mobile money is simple and understandable for performing transaction					
5	Mobile money is easy to use and customer friendly					
	Accessibility					
1	Mobile Money makes financial services more accessible to even the poor					
2	Mobile Money provides access to financial services everywhere					
3	Mobile money reduce the difficulties involve in searching for a financial premises to transact any business					
4	Mobile money enables transactions to be done at any time of the day					
	Charges					
1	I believe it is cheaper to use mobile money than normal banking					
2	I pay moderate service charges on withdrawal or transfer					
3	Charges are cheaper with mobile money to normal banking					
	Service reliability					
1	Mobile money services are reliable anytime					
2	Mobile Money provide reliable network services to enhance service delivery processes					
3	Mobile Money provides available cash to pay the subscribers as and when the need arise,					

PART E: Assessing Behavioral intentions of customers to save with banks due to Mobile

Money usage. Please use the scale below

1=Strongly disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly agree

	Behavioral intentions of customers to save with banks	1	2	3	4	5
1	I prefer mobile money usage to saving in bank if the transaction is not above mobile money					
2	I will certainly use mobile money in my daily transactions than going to bank					
3	If I were asked about my opinion on mobile money, I will say something favorable than going to the banking hall to save					
4	I intend to use mobile money as often as possible rather than saving with banks					
5	I wish mobile money remain forever as a means of payment and withdrawal					
6	I prefer to save on my mobile money to going to save with a bank					

What is your opinion on mobile money operation in Ghana?

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What recommendations do you suggest to improvement in mobile money services?

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