



KWAME NKUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,  
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INSTITUTE OF DISTANCE LEARNING (IDL)

ASSESSING THE CONTRIBUTIONS OF MOBILE MONEY TRANSFER  
SERVICES ON SOCIO-ECONOMIC LIFE OF THE AGENTS IN  
TAKORADI

By

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A thesis submitted to the Institute of Distance Learning, Kwame Nkrumah  
University of Science and Technology in partial Fulfillment of the  
Requirements for the Award of Master of Business Administration (Finance)

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### DECLARATION

I hereby declare that this submission is my own work towards the Masters of Business Administration (Finance) and that, to the best of my knowledge, it contains no materials previously published by another person nor materials 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**

I dedicate this work to the Lord Almighty. Amen

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My deepest gratitude goes to the Lord Almighty whose grace and mercies has brought me this far. Research of this nature could never have been carried out without the immense contributions of individuals and institutions and it is therefore prudent to acknowledge them.

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## ABSTRACT

The important role of Mobile Money Transfer (MMT)) have been increasingly recognised in the creation of employment and poverty reduction in many developing countries. Mobile Money transfer has helped in creation of employment thereby, bettering the life of the agents. The main aim of the study was to assess the contributions of MMT services to the socioeconomic life of the agents. This study contributes to the ongoing debate on the subject by examining the positive impact of mobile money transfer to the agents. The analysis was conducted with 110 respondents, randomly selected from the population of MMT agents in Takoradi Central in Western Region of Ghana using questionnaires. This study indicates that Mobile Money Transfer business create employment, help agents to access better health care for their children, helps in prompt payment of their wards school fees and has also improved their income level. It was also revealed that M-Money transfer is convenient thereby, improving profit by luring customers to continually use the system and also highly populated area has more customers, leading to cash flow and improving profit. Again highly populated area also affects the amount of investment in the MMT business. Governments of today need to adopt policies to develop strategies to encourage the M-Money transaction which is faster and convenient in terms of transfer of money, either from person-to-person or from government-to-person. It can be opted by the government as a means of payment of salaries to the employees to cut down the expenses involved in using the formal banks. Agents who may not easily get access to finance must be assisted by the government so they can realise their dreams. M-Money has been identified as a tool for poverty reduction.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Background of the study**

Today, mobile phones are seen as a good tool for executing professional as well as personal activities to help improve the lives of people (Masamila, Mtenzi, Said, & Tinabo, 2010). M-money is one of the emergent activities facilitating transactions of cash to pay bills or as remittances. It has currently evolved successfully in the developing countries. It has aid the expansion of mobile usage in the developing countries and has affected the mobile money transfer services (Aker and Mbiti, 2010). Mobile Money services have great influence in integrating the poor in the society into the financial system. It has been found that a greater number of the population in Africa and India live under the poverty line and these poor people encounter the need to conduct safe and secure financial transaction such as remittance (Pope, Pantages, Enachescu,, Dinshaw, Joshlin, Stone, Austria & Seal 2011). Across the world, the number of mobile phone users have exceeded the number of people with bank accounts (Tobbin, 2012).

A Greater number of mobile phone users are poor and have the potential to influence other people for mobile money services (Pope et al, 2011). M-money is seen as a tool to help realize the objective of financial inclusion for poor people or the people below the poverty line. M-Money can be defined as financial transaction services available to anyone using mobile phone because the electronic money application is made available on the SIM card (World

Bank, 2006). Anyone with a phone and purchases a SIM card from a Network Operator automatically gets the set-up of electronic money account with the mobile money services provider, making available the identification documents enabling them to deposits cash, in exchange for electronic cash. The e-money can be transferred from one-person-to-another, or withdrawn as cash or transferred to a receiver with a coded text message without necessarily having a bank account (World Bank, 2006).

Mobile Money transfer services are business organizations that have been seen to be family firms, a partnership or limited companies that have been formed with the aim of fulfilling a certain objectives. Some do not only do the mobile money transfer but rather sell credit and SIM cards. Mobile money services have been helping in the expansion of employment and reducing unemployment (Dichter, 2007). Mobile Money services have contributed to the economic development in the developing countries. The Mobile money businesses have been seen as enterprises for raising money, creating employment and improving lives. The mobile money services have impacted positively, the lives of the agents. They have been able to raise capitals to invest in other areas, afford the payment of basic amenities and creating opportunities for others (Kraft, 2006).

In Sub-Saharan African, mobile phones are already been used by many to make payments, send money to family members and store monetary value safely (Donner, 2005). He explained that mobile money have achieved a great success in Sub-Saharan Africa, where 16% of adults compared with less than

5% in all the regions reported that the use mobile money transfer services has been on the continent barely a decade ago. Mobile Money system was first introduced in Africa, specifically in Kenya. It was an experiment the department for international development initiated for payment of loans through mobile phones with Vodafone Kenya (Pilat, 2009). M-money is globally becoming a juicy way of transferring money with a little or no challenge at all. The poor have embraced this system of payment and withdrawing cash as a suitable and best way of doing business in terms of speed and convenience. In order to stay abreast with customer demands and market evolutions through technology, providers have tremendously changed their operations as they have set out to have partnerships with similar business organizations geared towards meeting the demand (McCusker, 2000).

The banks have to view the poor in the society as potential customers and thereby identifying a new way to serve them financially has to be searched for. Opening new branches have been seen to be too expensive and costly. Identifying and developing new technologies can help resolve this problem and that could be one answer to the problem. Serving the viable customers banking product through mobile phones is one way of reaching the poor customers. Poor people have access to mobile phones and this has helped in reaching the poor people in the remote areas at a very low cost (Reid, Factor, Freeman & Sherman 2005).

### **1.1 Statement of the problem**

The contributions these Mobile Money Transfer operators provide to the public, cannot be underestimated. They play a critical role in the socio-economic life of the Mobile Money vendors, thereby, helping the growth of the Ghanaian economy (Vodafone Ghana, Takoradi 2017 Personal conversation). This calls for expansion in their activities and operations to augment their contribution. Paving and improving access to financial services in areas like savings, deposit, withdrawals or remittances and insurances propel economic expansion and growth of a country. In Ghana for example those with bank account are less than those without bank account and this is alarming. It can be said that in every ten people, nine of them may not have bank account. In the international banks, poor people are not considered as viable customers because most of them are located in places beyond their area of operation and these poor people have a small transaction sizes.

In the rural setting, what is basically known as “horse racing” or village savings and loans are common. All these are in line of stimulating economic growth in every country. Using mobile phones to offer banking product is a great potential instrument for reaching the unreached poor. The introduction of mobile money has brought a lot of changes in the financial services. In Ghana it shook most of the banks and has empowered the financial institutions to rebrand their product and services through the use of the mobile phones. There have been other individuals, who have adopted the strategy in the financial industry as mobile phone service agents to provide financial services to the public. According to (Kigen, 2011), mobile phone banking has reduced the



cost of transaction in microfinance institutions and has made it possible for more microfinance institutions to thrive. Again Wambari (2009) in his mobile banking studies, found that mobile banking has a positive impact on payment, transfer of money and withdrawals. This study aims at investigating the contributions of mobile money transfer services on socioeconomic life of the agents for economic development Ghana.

## **1.2 Objectives of the Study**

The main objective of the study is to investigate the contributions of Mobile Money Service on the socioeconomic life of the agents. It focuses on the Mobile Money services agents in Takoradi Central.

### **1.2.1 Specific Objectives**

In order to achieve the general objectives, the following specific objectives were formulated to guide the study:

- a) To assess the contributions of MMS to socio-economic life of the agents in Takoradi
- b) To assess the factors that determine amount of investment in MMS in Takoradi
- c) To determine the factors influencing profitability of MMS in Takoradi

### **1.3 Research Questions**

The following Research Questions were prepared to help realize the objective of the study:

- a) What are the contributions of MMS to socio-economic life of the agents in Takoradi?
- b) What factors determine amount of investment in MMS in Takoradi?
- c) What factors influence profitability of MMS in Takoradi?

### **1.4 Significance of the study**

Firstly, since the literature on mobile money transfer services in Ghana is still scanty, probably that the findings of this research will add to the limited literature. The study would serve as a basis for academia and others who seek to advance in knowledge by conducting similar or further studies into the subject of Mobile Money Transfer services in Ghana. Secondly, since the study intends to offer recommendations on how the Mobile Money services contribute to the socioeconomic life of the agents of the country, it is going to serve as a material to create a boost for competitive advantage. The findings of the study will be a source of knowledge to Mobile Money Service Providers (MMSP) on how to provide good service to boost their profitability.

This study will also be of great significance to policy analysts since it will assist in analyzing the effectiveness and success of the work of the MMSP set-up with the prime objective of providing fast and quick transfer and withdrawal of money.

Finally, the study would provide an understanding of the concept of Mobile Money Transfer services (MMT) and ensure sufficient clarifications as well as reveal the extent to which the location of MMT providers affect their income and expectations in our contemporary context. These important findings will ultimately serve as a wakeup call for MMTP, to ensure successful formulation and implementation of the laws and conventions governing Mobile Money Transfer Services.

### **1.5 Scope of the study**

The study seeks to investigate the contributions of Mobile Money Transfer Service providers on socio economic growth within Takoradi. In terms of geographical location, this study is based on MMTSP operating in Takoradi and the analysis was based solely on data collected from this area.

In terms of generalisations, although the findings of the study may be applicable to other MMTSP operating elsewhere, the researcher does not intend to make such generalisations but to ensure proper delimitation of the scope of its findings.

MMTS encompasses so many activities including planning, control and decisions in relation to financial resources; capital structure, investing, dividend decisions and ethical business practices. However, the content of this research is limited in terms of purpose.

## **1.6 Limitation**

Some of the challenges that were encountered during the study have been highlighted as follows:

Firstly, the unwillingness of service providers to provide correct responses are a challenge and also for fear of revealing their financial status to people, who are strangers. There could also be a suspect that the researcher is a thief, making effort to identify an area that may be strong for success. This can be overcome by explaining to them the intent of the study, together with the introductory letter from the institution for verification purposes.

Secondly, the research may also be constrained with financial difficulties. This is because in designing the questionnaire for the study, typesetting, stationery, transportation for administering the questionnaire, among others; may involve money aside the normal financial needs for the study.

Lastly, due to lack of documented information of Mobile Money Transfer, the researcher will be forced to cover a vast area when trying to carry out Literature Review.

## **1.7 Organization of the study**

The complete thesis was composed of five main chapters. The chapter one is the introductory chapter, which covers a general insight into the background of the research. It further discusses the problem statement, research questions and objectives, the significance of study and the scope as well as limitations of the research process. Chapter two focuses on a critical review of existing literature on the subject. It helps to make analysis and effective organization and also reveal the contributions made by other researchers in this area of study. The

different methods used in gathering data, the sampling techniques, data type(s) and the relevant operational variables are discussed under this chapter. It also includes discussion of the tools employed for analysis of the data gathered. Chapter four presents the findings of the primary data collected, in relation to the objectives of this research. It also presents data for discussion and analysis. Chapter five covers the summary, conclusions and recommendations. The findings and analysis in chapter four will form the basis for recommendations and conclusions of the study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This is the second chapter of the study. It reviews existing literature on the topic under investigation. It analyses, organises and brings to bear the contributions made by other researchers. It has been designed to focus on the areas such as definition of Mobile Money Transfer, their contribution to economic growth, the importance of mobile money transfer, and the challenges encountered in ensuring proper mobile money transfer procedures from one person to another and from company to company. This evaluation of previous studies relevant to the research is of paramount importance (Mouton, 2001). It aims at consolidating the theoretical foundation of the study into the existing body of knowledge. On the other hand the existing literatures help to confirm and approve whether the study makes a significant contribution to the existing literature (Hofstee, 2006).

#### **2.1 Definition of Mobile Money Transfer (MMT)**

##### **2.1.1 A Global Dimension of MMT**

Mobile banking is defined as the use of mobile phone to access your bank account at the website of the bank or an application you have downloaded that make it easy for you to quickly access those data from the bank in question (US Federal Reserve's Annual Survey of Consumers and Mobile Financial Services (US Federal Reserve , 2014). Bassel (2001), defined Electronic Banking (E-Banking) as a retail and a small value banking products and services electronically. It may include deposit taking, lending, provision of

financial advice, payment of electronic bill and other electronic payment products and services.

According to Di Castri (2013), there is no single definition for mobile money and electronic money though in some jurisdiction mobile money is defined by regulations and legislations. Mobile money (M-Money) is a form of electronic money allowing the conduct of transaction through the use of mobile phone. The transaction is electronically recorded on the mobile phone as a form of message though the agent may also record it manually. The electronic value is redeemable for cash, and the electronic value may be accepted as a means of payment by parties other than the issuer (for example, for person-to-person transfers (P2P), retail payments and payment for services; government-to-person (G2P) transfers (and receipts); donor-to-person cash transfers; and business transfers (and receipts). The electronic value is backed up by storage of equivalent funds in one or more banks depending on central banking or other regulations.

Mobile Money transfer is a technology introduced to assist the Microfinance institutions to help the microfinance borrowers to conveniently receive and repay loans through their mobile phones, without any serious challenge. This would enable microfinance institutions (MFIs) to offer more competitive loan rates to their users, as there is a reduced cost of dealing in cash. Additionally the users will be in the position to track their finances more successfully (Hughes & Lonie, 2007). Globally, mobile phones have become a vital tool for undertaking both personal and professional activities. It has achieved global

recognition by which people, government, companies and financial services, tapping it usefulness, to bring innovation in their businesses, to retain customers and expand their market share (Maasmila et al. 2010).

Across the globe mobile phone users have exceeded the number of people with bank account and such should be a sign that the use of mobile phone for financial transaction could go a long way to integrate the poor into the financial system without necessarily having a bank account (Tobbin, 2012). Mobile Money services have the great influence in integrating the poor in the society into the financial system. It has been found that a greater number of the population in Africa and India live under the poverty line and these poor people encounter the need to conduct safe and secure financial transaction such as remittance (Pope et al, 2011).

In India, there are more than 900 million mobile phone subscribers (Telecom Regulatory Authority of India, 2014). M-money seems to be the best way to achieve the objective of financial inclusion for people below poverty line. Mobile money accounts are used for storage, and although they do not pay an interest rate, provide a safer (and more private) means of holding money than “cash under the mattress”. Depositors must also bear the risk of loss of value through inflation. However, the situation has recently evolved on the payment of “interest” in some countries (US Federal Reserve, 2014).

The mass production of mobile phones that have been directed to the developing countries have been attributed to the price of these phones. The mobile phones have become cheap as a result of its price on the market and the prepaids cards introduced currently (Jacob & Tescher, 2007). The



penetration of mobile phones among poor population to the developing countries is as a result of the mobile money transfer services. A large number of poor people in the developing countries move to other places for greener pastures to better their livelihood. In this, case they will need to transfer money to their family members on terminal basis. Money transfer through the banks can be very expensive and difficult to come by but with the introduction of the m-money this can be a thing of the past and could be used as suitable channel for financial services (Must & Ludewig, 2010).

The main objective of the introduction of m-money is to help in transferring of money from one person to another or from an organization to individuals through the use of the mobile phones, without any bank account or any costly equipment. It has been identified that the motivation behind the introduction of m-money are financial inclusion and also to provide a safe and inexpensive means of financial transaction, which is easy and convenient to use (Kumar, Martin & O'Neill, 2011). Typically, a mobile user who has mobile money account can purchase electronic money from mobile money agent and send the electronic money to someone, who can get the money from an agent closer to him or her (Aker & Mbiti, 2010).

Mas & Morawczynski (2009), in their study, found that the usability of the interface of m-money should be kept very simple so that it could be easy to understand and use. They also articulated that m-money is used by the people to store the money safely; however, the shortcoming is that, unlike banks, it does not earn the users any interest. Pope *et al.* (2011) conducted a study to

find out m-money's current state in various countries such as India, USA, Hong Kong and Singapore. For India, they found that m-money will be of immense benefits for the poor population. However, India's diverse demographic nature will require individualized market implementation strategies. In a country, where more than 70 per cent people pay digitally, there can be over 85 per cent financial inclusion (Bill & Melinda Gates Foundation, 2013). A study by McKinsey that was commissioned by Bill and Melinda Gates Foundation, discovered the issues in payment system of the Government of India. The study found that if all the government payments flow electronically in India, the government can save US\$22.4 billion every year which is approximately 8 per cent of the total flow of the payment between government and citizens (Lochan, Mas, Radcliffe, Sinha & Tahilyani 2010).

### **2.1.2 Definition of MMT in Africa**

It was discovered that in the year 1999 only 10% of the African population had coverage of mobile phone. Most of these people were seen in the northern part of Africa including, Morocco, Algeria, Egypt, Libya and Tunisia). In 2008 over 65% of the African population had mobile phone coverage with greater part coming from the North Africa (93%) and Sub-Saharan Africa having 60% of the entire population (GSMA data, 2013). Though the mobile phone coverage expansion was increasing in Africa, there were still some part of Africa, where the coverage was at its lowest side, among these countries were Ethiopia and Somalia. In Canada, USA, and Europe the telecommunication industries invested in the landlines before the introduction

of the mobile phone networks but this has taken a twist form in Africa, where mobile phones has successfully leapfrogged the landline in the African continent. The installation of landlines would require some wiring on some street and from one community to another which is quiet expensive (GSMA data, 2013).

Mas & Radcliffe (2010), in their article mobile money transfer has gone go viral and explained the contributions of M-PESA; where M is Mobile and PESA is Money in Swahili. MPESA pioneered mobile money transfer services in Africa. M-PESA was launched by Vodafone by its Kenyan affiliate Safaricom in March 2007. M-PESA is an electronic payments and store of money that is accessible at any time on the mobile phone. One has to register as MPESA retailer before he or she can get access to the service. They are given electronic money account after registration which is connected to their phone numbers on their SIM cards. After this, the customers can deposit or withdraw money from their electronic account by exchanging electronic cash for physical one at MPESA outlet often called agents. These agents are paid a fee by the Safaricom, each time such exchange of these two forms of liquidity is carried. Customers with mobile money account, and have e-money in their accounts can transfer cash to mobile money subscribers or merchants or even to non-registered mobile money user through the merchants or the agents. These transactions are being written down and recorded in accurate time and secured with SMS.

### **2.1.3 Definition of MMT in Ghanaian Context**

The success of the mobile money in Kenya popularly called in Swahili as MPESA has engineered the birth of similar schemes in the developing countries such as Ghana, where the trend of mobile brand globally is no different. There has been an increase in mobile subscription and market share of the mobile Network Operators in Ghana over the past few years. In Ghana there are six main networks that can be accessed in almost all the regions and the districts across the country (Ghana National communication Authority, 2017). Again it was revealed that MTN is the network with the largest market share of about 47.3%, Vodafone, Airtel and Tigo have 13.9%, 19.75% and 15.89% respectively. Though Expresso with 0.42% and Glo with 2.86% market share are also gaining increase day after day but then, this has not been easy since the major networks are battling for more customers to expand their market share.

This has accelerated the business of mobile money transaction in the economy. This has increased the use of mobile phones there by, encouraging the mobile money transfer services in the entire Ghanaian economy. This system allows people to transfer money through short messages. It is fast, convenient, low cost and does not need bank account to operate. This has led to the rapid growth of mobile money transfer system in Ghana. The mobile money transfer has transformed over the years, from person to person and from money transfer to services such as deposit, savings and withdrawing of cash just as it is being done at the bank. Initially, the people used the mobile money just to transfer money to be received with a code but now it has gone beyond that.

To send e-money through the mobile phone the subscriber must have loaded his/her mobile money wallet with electronic cash. Before the wallet is credited with electronic money the customer would need to visit Mobile Money authorized/registered merchant and hand over a physical cash to the merchant, then the merchant load the number of the customer into his system, the number is repeated, the amount to be deposited is entered, as well as the merchant user ID and the mobile PIN. When this is done the Mobile Network Operator will debit the merchant's mobile money wallet or account and credit the customer. The customer receives message from the Mobile Network Operator confirming that such, an amount has been credited to his account or wallet from the Merchant he was dealing with. The mobile money in Ghana is still at the nursery stage of development and growth.

Adei (2001) found out that males use financial services more than females because more males are employed in the formal sector than females. The study found out that more males were found to transact businesses with the company's than females. This could be attributed to the fact that more males are salary workers than females which is supported by the findings of the Ghana Statistical Service (2012). In the results of the Population and Housing Census findings indicated that over 60% of salary workers are males. It is also consistent with the findings of the Human Development Index (2011), that males in Ghana transact businesses with financial institutions than their female counterpart.

## **2.2 Contributions of Mobile Money Transfer to Agents**

There have been several studies in the field of Mobile Money and economic growth by several scholars and researchers. Waverman, Meschi & Fuss (2005) in their study found a positive effect of mobile money on economic growth and comparably in the developing countries where the effect will be twice more than that of the advanced world where civilization is at its highest side. In the case of M-PESA in Kenya, the adoption and the use of mobile phone for money transfer launched in 2007 has seen a phenomenal growth in Kenya. It was identified that over 34% of the adult population have registered with the MPESA and businesses have boomed in terms of money transfer with speed and fastness.

Payment of bills, deposit and withdrawals of cash have been so flexible as compared to the banks where you will need to queue for a very long time before you are served (Morawczynski 2009). As a result of dedicated team members, MPESA grew drastically in Kenya. These individuals took several strategies to sustain and maintain the stability of the system and to put confidence in the customers. The team worked extraneously to engineer the social, economic, legal and political environment of the system of technology. The entire mobile money industry grew rapidly as a result of the MPESA's success in Kenya. The mobile phones in the developing countries are currently playing the role as the fixed lines played in the developed countries in the early 1970's and 1980's. The growth impact of the mobile phones in the developing countries has been positive. It was also found that in every 100,

people 10 mobile phones can be counted among them and help boost the GDP growth by 0.6% (Waverman et al, 19991).

According to (Williams, 1991), it worth important to note that mobile money transfer or mobile phones penetration has a great impact on foreign direct investment. With every 1% increase of mobile penetration rate Foreign Direct Investment (FDI) and GDP go as high as 0.5-0.6%. The mobile phone in the developing countries has to do with mobile financial services and transactions. Majority of the rural folks have not access to financial services in any kind and getting these people to roll them into the formal financial sector is a priority of many developing countries. The introduction of the mobile money transfer may aid the process to get more rural folks into the formal banking sector. Many banks have introduced the mobile money system as one of their product to get the poor onto the formal banking sector (Morawcynski, 2009).

Though little has been done in this area with respect to the number of users registering for formal banking system, yet the mobile money system were used for services such as buying airtime, prepaid of electricity bills and water bills and payments of cash to friends and family members in areas outside their jurisdiction (Morawcynski 2009). Mobile money transfer helps in providing sending money and payment services to customers with or without few challenges. There should be advertising and marketing to help update the consumers understand the mobile money system. This will help improve policy measures to ensure the benefits derived from operating the mobile

money transfer are distributed evenly base on the policy implementation (Ivatury, 2008).

Erickson (2010) established that mobile money transfer services improve access to financial services. Financial institutions can benefits from the use of the mobile phones. Financial institutions such as microfinances and rural banks can tap into it. Regulatory and investment policies can hinder the expansion of mobile money. He demonstrated that mobile money helps in reducing poverty, create employment, and increase access to financial services. Government and other regulatory institutions must assist and subsidize the development of mobile money system and come out with policies that help formation of trusted mobile money transfer agents.

Aker (2010), found the introduction of mobile money transfer as a tool for price reduction. The introduction of MMT drastically brought the price of fish in the fish market down. This has increased free flow of information which has facilitated the reduction of prices generally on the market. Morawczynski (2009), the increased in the popularity and known of the MPESA has been so as a result of reliability, speed and safety of network outlet. Before the MPESA was introduced (Kabucho, Kamau, Cerstin Sander and Mukwana 2003), documented that the cost of instantly sending US\$100 though the expenses of money gram were higher as compared to the banks raging from US\$ 12 and US\$ 20. It cost US\$3 to US\$6 to transfer money through the postal order. Comparably the MPESA has been a better alternative offering a cheaper method of sending money within or outside the country of operation. It was observed that transferring US\$ 100 will cost US\$ 2.5 through MPESA



to non-registered customer, while cost of sending to a registered customer is less than that (Safaricom, 2013).

The financial statement of the MPESA can be retrieved for comparison of the competitors to determine the dominance. Gikunju (2009) examined the financial statement and the income statement of the Kenya Postal corporation for the past three years and found that the profit of the company has fallen drastically after the MPESA was introduced. It was again revealed that Western Union's and Money Gram's profits were also reducing at the same time. As a result of that Western Union and Money Gram have also cut their prices down but was not enough to meet the superiority of MPESA.

Morawski and Pickens (2009) & Mas and Morawczynski (2009) did a study on social and economic impact of MPESA in Kenya. It was found that MPESA has brought a change on the savings behaviour of the customers as well as the remittance pattern. It has improved the rural livelihood. The studies suggested that the MPESA has impacted on the lives of the individuals but this could not quantify its effect and were limited by the sample size used.

According to Jack and Suri (2010), MPESA improves the ability of the households to avoid and also minimize risk in savings. This empirical studies carried by Jack and Suri contributes to the available literature by providing quantitative estimates of the impact of the MPESA in Kenya on the Households of the populace in terms of financial access and usage.

Since the emergence of the mobile money and mobile banking in developing countries somewhere in 2005, it has grown in terms of size and coverage areas. The application of mobile money enables financial transactions in several forms to be carried through the mobile phone. These financial transactions includes transmitting airtime, paying electricity band other bills and transferring money to other people either user or non-registered mobile money user. These systems have enabled international transfer of money. Financial institutions such as the banks and other telecommunication providers provide these financial services using the mobile phone. It is sometimes a partnership between the banks and a mobile phone service provider like Vodafone (Aker and Mbiti, 2010).

M-money is a system that allows the customers or the users to store value of money in their account and convert cash in and out of their account. The transfer of money is done and confirmed with simple text messages. The account can be established by buying the electronic money from an agent using the physical cash you want to convert it into that e-money. The customer can then send or transfer the money to the recipient with a phone who then withdraws the cash transferred into his or her account from the local Mobile money agent.

### **2.3 Factor that determine amount of Investment in MMT**

The mobile money conceptualization is established inside the phone in which the MNO's and MMT providers adopt to facilitate payment and transfer of money (Erickson, 2010). The investment cost of mobile money transfer business is part of the transaction to be carried. What the MMT provider has to do is to ensure that there is enough electronic money available for the transaction purposes. There is this cost that little has been said about that is the rebranding and marketing strategies of the outlet for the provision of mobile money transfer services that has to be considered as part of the investment cost (AMA 2011).

Brand has been defined as a name, term, sign symbol or combination of both to determine the goods and services of a seller to differentiate their goods and the services they deliver from their competitors in the same industry. It makes wisdom to say that branding is not all about making your customers choose your product over your immediate or keen competitors but also to help them identify you as the only source to their problem (American Marketing Association, 2011).

There are a lot of factors to be considered in choosing a site for a business such as MMT outlet. The market share is of importance to every businessman so as the cost of investment. The following are some of the factors to be considered when ready to put a small scale enterprise. The place of business must be important to the provider, the customer and the employee as well. To the provider where you choose is where you work so the place must be the one you cherish most and help you generate income as expected.

The customers must be the central idea of choosing a location since there when there are no customers no business can also thrive. Again the employees must also be considered in decisions like this since the location can attract and maintain good employees. The cost of maintaining and obtaining the place is a key for successful and continuous operations. Being able to continue where you have chosen is a sign of maintaining your customers. This is another area one has to consider choosing a location. There should be a parking space for the customers and also a relaxed area where they can easily feel comfortable in doing business with you. The place must be as safe as the rules require (Entrepreneurs, 2017).

#### **2.4 Factors that Determine Profitability**

Profitability means the ability to make profit from business activities of an organization based upon the systems they have in place of achieving the said profit (Cleland, 2004). The ability of an investment to yield a return from its use is what we called profitability. Profitability is seen as a measure of efficiency but it is not synonymous to profitability. It is an import and tool for measuring the efficiency, the extent of profitability cannot be taken as a final decision of efficiency (Maylor,Dawe,& Makin 2006). In order time there can be efficiency without necessary making profit and there are times an organization can make profit without efficiency. The change in operational efficiency is one way on which profitability depends. Besides this there are a lot of factors which affect profitability (Cleland, 2004).

Zeithaml, Pasuraman& Berry (1990) indicated that training and communication is an important tool to help the customer-contact personnel (Agents or employees) to respond to pressure of customers and meeting their

needs as required. When the mobile agents are given proper training on areas like performance management, team building, coaching, communication skills and empowerment, they will excel and maintain and retain customers they serve. Reichheld and Kenny (1990) found that enterprises that exhibit these kind of attitude not only do they get and retain more customer but also increase employee loyalty and help reduce unemployment in the short run. Zeithaml et al (1990), a situation where employees fail to meet the expectation of the customers show some gap in terms of service performance delivery. This is normally common in the service industry as a result of conflicting roles, ambiguity of roles, employee job fit, supervisory control system, and teamwork among others.

Zeithaml et. al, (1990) explained ambiguity of roles as a situation in which employees are uncertain about what the leaders or supervisors are expected from them and how to meet them as employees, again when employees lacks the necessary skills to perform can contribute to role ambiguity which hinder the needed skills to customer satisfaction, not knowing how their performance would be appraised also contribute to role ambiguity. The following tools; communication feedback confidence and competence can help in bringing clarity of roles. They pointed out that the correct information needed to be provided to the employees to distinguish their roles from others. This specifies their roles and channel of communication become easier. This helps employees to know about the current product, services and sell the product or the services to potential customers without a challenge.

Zeithaml et. al, (1990), conclude their study by saying that training and feedback together with knowledge and interpersonal skills improve employees confidence and competence and this provide more clarity with respect to their roles they ought to play to ensure the improvement of the entire business. The interpersonal skills were described as the SERVQUAL dimensions of assurance, responsiveness and empathy. Bitran and Hoech came out with the need to give feedback on performance. They concluded that it is always necessary to provide feedback on the interpersonal relationship of the interactive skills of employees. M-Money system has come to help convert cash to electronic value in the accounts of individuals. The mobile money transaction can happen between government and businesses or individuals and government. Mobile money agents try to get money in their accounts for transactions such as cash in and cash out for several times before they exit the transaction system.

According to (Maurer, 2008), the mobile money transfer payment is designed to help facilitate secure, convenient and low cost money transfer from person to person or from business to consumer and vice versa. When discussing the factors that influence mobile money transfer and Mobile banking there are four main factors that have to be considered. These are affordability, security, accessibility and convenience. There is flexibility which is connected to convenience Porteous (2008). According to (Bachelor, 2007), the success of mobile transaction is based on its ease of use, the low cost involve, the high level of security. All these improve the users and agents' quality life.

Porteous (2008) organized a study and found that financial services are found to be a critical tool for economic development. In order to increase profit there is the need to provide financial services for those without bank accounts. Mobile phones were identified as a tool capable of providing such financial services through mobile transaction without necessarily going to the bank. Mobile transactions can offer an answer to the lack of financial-service access prevalent in many emerging markets (Batchelor, 2007). M-money payment services have been adopted by financial institutions. The financial institutions provide these services in the banking hall in collaboration and cooperation with the mobile money network operators. The introduction of the mobile money service by the banks are to capture people without bank account, credit card and debit cards and are normally found at bottom of the pyramid in terms statistics and data presentations. These are normally found in the rural areas or hard to find areas.

The benefits received by the mobile money transfer agents are sort of interest they earn for the transaction they carry and is dependable on the number of cash that pass in and out of their system for being able to pay money in a cost-efficient and secured way (Furuholt and Kristiansen, 2007). The structural constraints on the existing banks in providing low-cost services across wide geographic areas have led to innovative new business models exploiting the transformational impact of mobile telecommunications. Mobile financial transaction platforms are rapidly emerging; which has been identified as one of the ways of identifying the lowest cost of transferring and paying money as compared to the formal banking system. The availability of phones has made

it simple for this new system to get to people in the unreached areas (CGAP, 2008). Obviously the innovation in Mobile transaction is occurring in the developing world where the need for financial service is at its peak.

Security was an integral part of the introduction of GSM technology. This was the foundation of the standards of GSM technology (CGAP, 2008). The SIM cards have an encryption mechanism and in some countries the air interface is also encrypted. The WAP provides the platform for advanced solution building and help securing end to end technological environment (CGAP, 2008). Services such as GPRS, SMS, WAP, 3G and 4G are provided by the Network operators. The Network Operators play a major role to ensure that these services function well to meet the customer specification. The necessary documentations that has to be kept on the subscribers are done by the network operators and also offer other services like over-the-air. This is done so that the subscribers can be easily verified together with the transaction performed (Maurer, 2008).

It was noticed that with the introduction of the Mobile money services the network operators provide the facilitation role but the banks plays a major role of helping the unbanked get banked. The rate at which the mobile telecommunication is expanding, leading to more customers enrolling on the mobile money service cannot be compare to the mobile banking situation. The two are developing at different pace but m-money is developing at faster rate (Porteous, 2008). Vaughan (2007) did a study in Kenya and noted in his findings are that risks including M-money fraud, instability of Service and loss



of privacy must be guarded against to help put confidence in the customers that the m-money system can be trusted. With the M-banking the newly received customers may be at a risk of financial literacy but with the M-money where little education is required to operate the system the risk of financial literacy can be mitigated against through some selected regulatory players.

Policy guidelines governing privacy protection, network security and complaints needs to be developed to protect the customers and the service providers as well. Adam (2010) defines convenience as a position where someone is able to proceed with an action with ease and little difficult. Porteous (2008) in his study in Kenya found that Mobile money payment service users are many because it's easy to use. MPESA which is mobile money helps in quick payment of school fees, payment of goods and services delivered to you. Other commercial firms are using the mobile money to pay salaries to contract and casual workers located in the outskirts of towns. It has minimized the burden of carrying physical cash from one town to the other for business transaction. Now money can be sent quickly and easily without struggles. In other countries the m-money help customers to quickly top up their prepaid credit using their mobile money wallet.

Money can be sent or received quickly and easily without the hassle of lengthy post office queues. Electricity meters can be topped up at the user's convenience and funds can be transferred to allow the needy to pay doctors' fees or purchase medicines and others (Anyenze, 2010). The idea that mobile money transfer services helps to transfer cash and remit cash was the initial

basis of the use of the system but other users have seen the sense of keeping money on their mobile phone account so that they can access it at anytime, anywhere when the need of cash arises.

The customers that may carry an amount that may be above the deposit or the withdrawal limit within the country may visit the banks and even that some may come to deposit it bit by bit (Vaughan, 2007; Njenga, 2010). According to Njenga (2010) though the users may use the m-money account as saving yet the interest associated with it is very insignificant. This is true in the sense that the customers do not pay user fee apart from the transaction fee. So since no user fee is sanctioned on the customer the network operator too neither pays any significant interest. However, the study raised some pertinent concerns, for instance the study found out that the mobile banking used in payment of electricity bills among other still remains at a lower cost and its influence on SME profitability is not known.

Porteous (2008) still stands that the use of electronic banking helps the banks to deliver any information to the customers at any time and customers get the opportunity to access their account as well. In this case customer sits at their comfort zone to access their bank details. Customers access their financial statement, transferring money to other accounts and payment of bills at their homes and offices without moving an inch to queue for such transactions to be carried for them. Acquiring a personal computer connected with the internet has been a major challenge for internet banking in the developing countries

like Tanzania, Kenya and Ghana. But in the developed countries like US and the European countries this cannot be an obstacle (Gamos, 2003).

Mobile Money transfer has come to solve the problem posed by internet banking. M-money has come to reduce customers requirement if they were to use the internet banking have rather seen as relaxed, flexible and easy way of transferring and payment of cash. It is a system that enables transaction to be carried anywhere anytime without needing the assistance of anybody (Porteous, 2008). The customers do not need to be connected to the internet before they access their account, no need for computer terminals to access an account but can quickly do so in the transport, in the market, at work to be honest with you such transaction can be carried anywhere and has no time boundaries.

Njenga (2010) in his study done in the Kenyan financial services context found out that Mobile money payment service provides the solution in transferring funds and access to finance. This is true as a result of the low cost involve in transferring cash. This makes access to finance very simple and improves businesses. Where there are more mobile money outlets the implication is that, there will be more contact with customers as against the traditional banking hall (Vaughan, 2007). Again, the flexibility nature of the mobile money transfer services with regards to their operating hours helps the SMEs to meet payment requirement at any time. On the contrary, it was noted that Kenyan banks operate within 7 hours in a day. Since the Automated Teller Machines (ATM) do not have sufficient outreaches where customers can

easily get access to, this has made Mobile money conquering access in terms of finance and has moved more customers to the mobile money system, hence mobile money payment is actualizing its dream (Vaughan, 2007).

## **2.5 Conclusion**

As a matter of urgency the developed world has taken measures to rebuild the collapsed international financial crisis. This involves financial planning to help the developing world transform financially. The fallen prices of mobile phones and adaptation of the mobile phone for financial services, mobile banking and mobile money has begun to spread across the globe specifically in the poor countries. Mobile money system is a potential system to help meet the financial services needs of the poor by reaching out to those in the remote area of the socioeconomic and geographical spectrum. This appears to be realised in Ghana through MTN, Vodafone, Tigo and Airtel Ghana. This has become possible through the expansion of the various networks.

In every ten Ghanaians you count out of the ten nine are counted as mobile users. The available statistics mainly descriptive in nature suggest that the mobile money transfer system has been adopted by a wide range of populace. It has been adopted and frequently used by people lower socioeconomic means. The introduction of the mobile money system has expanded into areas where these poor can be identified to help enroll them into this system to help increase the access to financial services. It is currently used by households with a wide range of socioeconomic, demographics and educational characteristic. In Ghana people of different demographics have adopted the

mobile money system to facilitate transfer of money to their family members outside their place of work even the people who work in the banks.

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## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

Chapter three outlines how the study is conducted. It provides justification for the study and details regarding sampling size, sampling technique, method for data collection and analysis. The chapter outlines the procedure adopted for the study and also describes the study area.

#### **3.1 Research Design**

The design of research covered the planning, formulation of the problem and questions, collection of data and the analysis of the data collected and taking into account measurement of the variables. According to Gay (1992) stated that research design indicates the basic structure of a study, the nature of the hypothesis or research questions and the variables involved in the study. The research used a descriptive study.

#### **3.2 Population of the Study**

The study population for this research is the owners and employees of MMT service providers in the Takoradi Metropolis. This became possible in order to enable the coverage of the entire MMT service providers, to help establish reliability, accuracy and validity of the data collection. The total population was 1,710. This was made up of 900 Mobile Money Merchants of MTN-Ghana, Takoradi Central (MTN-Ghana Office, Takoradi, 2017), 130 Mobile Money Agents of Tigo-Ghana, Takoradi Central (Tigo-Ghana Office, Takoradi, 2017), 450 Mobile Money Agents of Vodafone Ghana, Takoradi

Central (Vodafone Ghana Office, Takoradi, 2017) and 230 Airtel Money Agents of Airtel Ghana, Takoradi, (Airtel Office, Takoradi, 2017).

### **3.3 Sampling and Sampling Technique**

#### **3.3.1 Sample Technique**

It is therefore the process of choosing some units from the entire population, with the view of obtaining generalized information about the population (Twumasi, 1986). The sample design used in this work was the simple random sampling design. This helps in creating a sample size, that will be a representative of the entire population of which they were selected. The unit had the same and equal opportunity of being selected and therefore biasness was eliminated (Saunders, Lewis and Thornhill2007). The study adopted this method to help capture information the diverse mobile money agents use (MTN, Vodafone, Airtel and Tigo), with different age group, different income levels, different level of education, gender differences. The study involving these agents operating mobile money transfer, aims at finding out the contributions of Mobile money transfer services to the socioeconomic growth of the agents.

#### **3.3.2 Sample Size**

The researcher's discretion in selecting those areas hinged on the fact that such areas were noted for the concentration of various MMT service providers. A sample size of the study was 100. Yamane (1967) provided simplified formula for calculating sample size. Below is the formula  $n = \frac{N}{1 + N(e)^2}$

$n$ =sample size,  $N$ =Population (1,710), and  $e$ =margin of error (0.10) or 90% confidence level;

$$n = 1710 / (1 + 1710 * (0.10)^2)$$

$$n = 99.94155456$$

The sample size for the study was one hundred and ten (110). The breakdown of the sample size has been tabulated below.

**Table 3.1: The Breakdown of the Sample size**

<b>SAMPLE SIZE TABLE</b>			
<b>S/N</b>	<b>CATEGORY OF NETWORK</b>	<b>NUMBER OF REPONDENTS</b>	<b>PERCENTAGE OF RESPONDENTS</b>
1	MTN	47	42.70%
2	VODAFONE	31	28.20%
3	TIGO	15	13.60%
4	AIRTEL	17	15.50%
<b>TOTAL</b>		<b>110</b>	<b>100.00%</b>

Source: Field work (May, 2017)

### 3.4 Data Collection Instrumentation

The study considered both primary and secondary data. Primary data was collected through questionnaires designed by the researcher with guidance from the supervisor. The data collection was through questionnaire, where answers were sorted and interpreted as to maintaining the meaning as possible. Thus, data was collected to test the set hypothesis and address the research questions and objectives. To ensure validity the researcher personally administered the questionnaires with the help of two field assistants. The questionnaires were given out to the respondents, who could read and understand to complete. Self-administered method was used in the case of



those respondents who were not able to read and understand. Those were assisted by explaining in their local language with the help of two field assistants.

The questionnaire captured mainly close-ended questions. This type of questionnaire was easy to help the analysis. The instrument was developed based on the issues raised in the literature and the research questions set to guide the study. The questionnaire was divided into six sections headed A, B, C, D and E. Section A was to collect demographical data (gender, age and educational qualification) from the respondents and the remaining sections (B, C, D and E) covered areas relating to the research questions (see Appendix A and B for details of questionnaire). Secondary data on the other hand were collected from text books, publications on the field, and internet. The secondary data was employed to confirm the validity and reliability of the primary data.

### **3.5 Data Presentation and Analysis**

For the purpose of the study and for easy understanding of all readers, a descriptive analysis was done. This was done by first cross checking the result from the questionnaires to ensure quality of result. For ease of analysis, the result from the administered questionnaire was first coded and tabulated. The descriptive analysis was supported by the use of statistical tools such as Statistical Package for Social Science (SPSS) version six and Microsoft excel 2007 when necessary. For easy of illustration, tables, frequencies, figures and percentages were used in the analysis and were shown in chapter four.

### **3.6 Ethical Issues**

The researcher made it known to the customers, specifically those who were randomly selected for the study their responses to the questions would be kept confidential and would not be used for any other reasons other than the purpose for which it was collected. The questionnaires were designed to capture not the names of the respondents and their house numbers so that they remain untraceable. This helped to follow the principle of anonymity.

The respondents were made to provide only the position they hold in order not to disclose their identity. The researcher was able to acquire the needed information for the work because the respondents were adequately educated on the purpose of the data collection.

## CHAPTER FOUR

### DATA PRESENTATION ANALYSIS AND DISSCUSSION

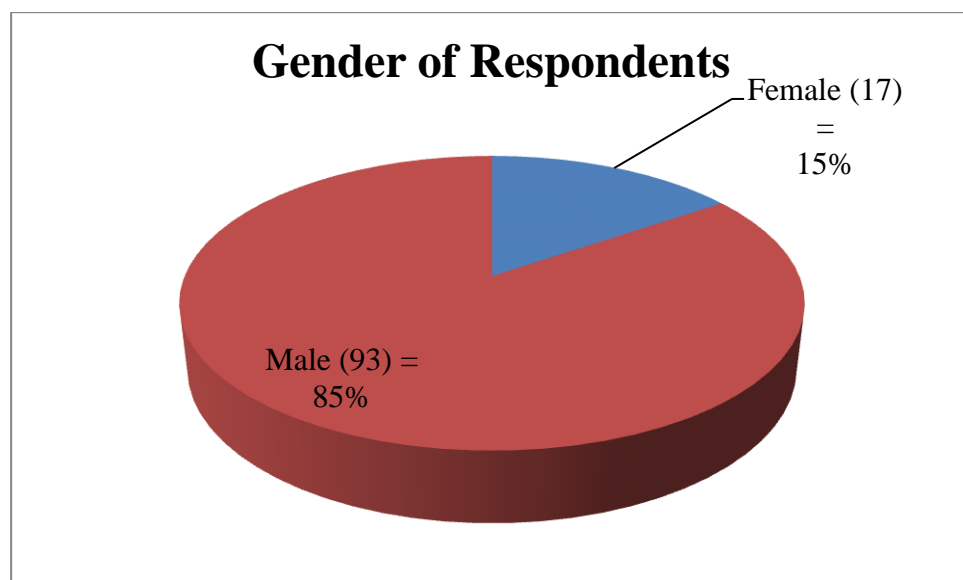
#### 4.0 Introduction

Chapter four deals with analysis and discussion of data collected for the purposes of the study. It throws light on of responses of the respondents' base on the questionnaire given to them on the topic assessing the contributions of MMT Services on the socio-economic life of the agents in Takoradi central in the Western Region of Ghana. These responses were analyzed through the use of tables and percentages, pie charts and bar graphs. In all a total of 100 questionnaire were administered and so 100 were used in the analysis.

#### 4.1 Demographics

##### Gender

Figure 4.1. Gender of Respondents

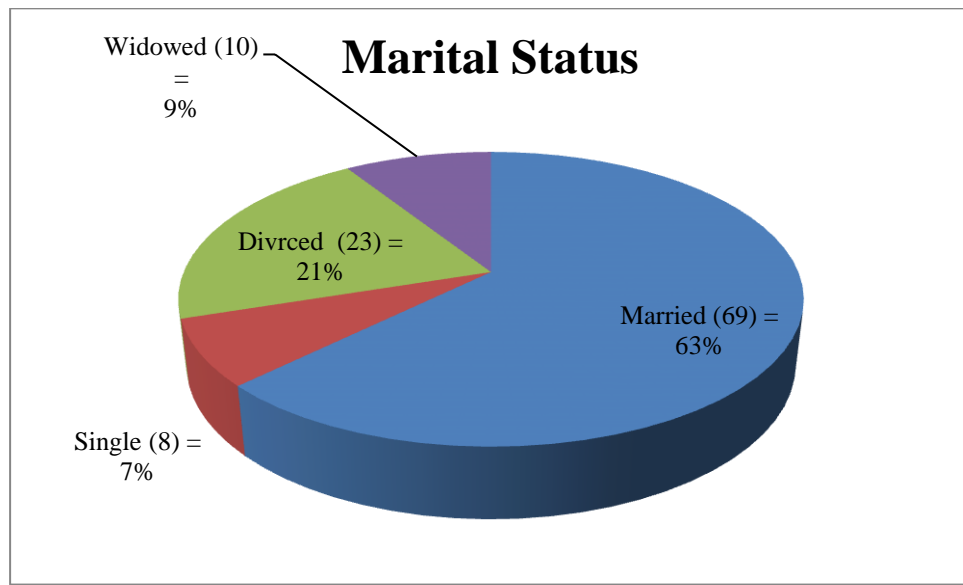


Source: Field work (May, 2017)

Figure 4.1 above shows that, out 110 respondents, 93 (84.5%) of the respondents were male while 17 (15.5%) were female.

### Marital status of the respondents

**Figure 4.2 Marital Status of Respondents**

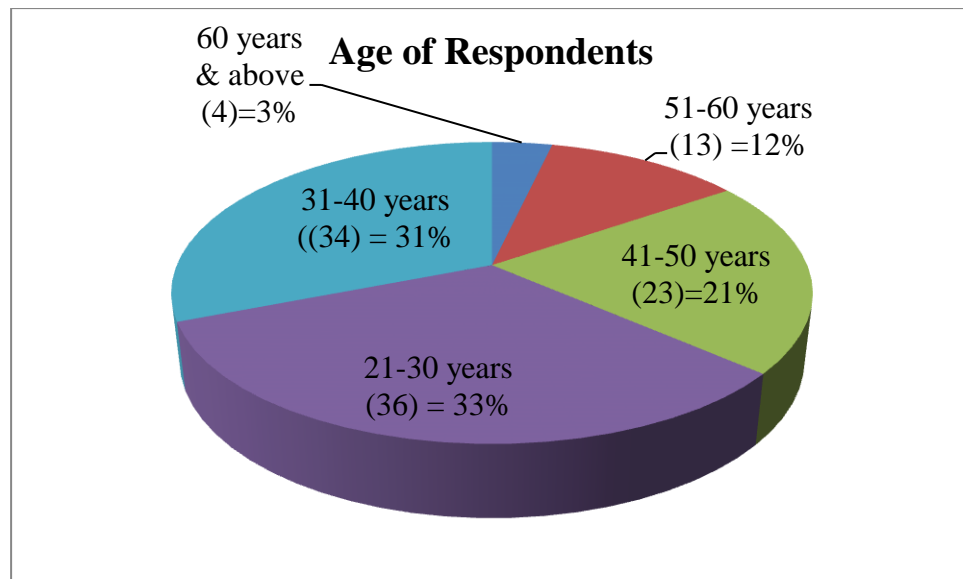


**Source: Field work (May, 2017)**

The study sorts to find out the marital status of respondents, as a result the following information were obtained. The Table 4.2 helps to identify the marital status of the respondents and their responsibility to make each other happy. The study recorded that 69(63%) of the respondents were married, 8(7%) were single, 23(21%) had encountered divorce and 10(9%) of them were widowed.

## Age

**Figure 4.3 Age of Respondents**

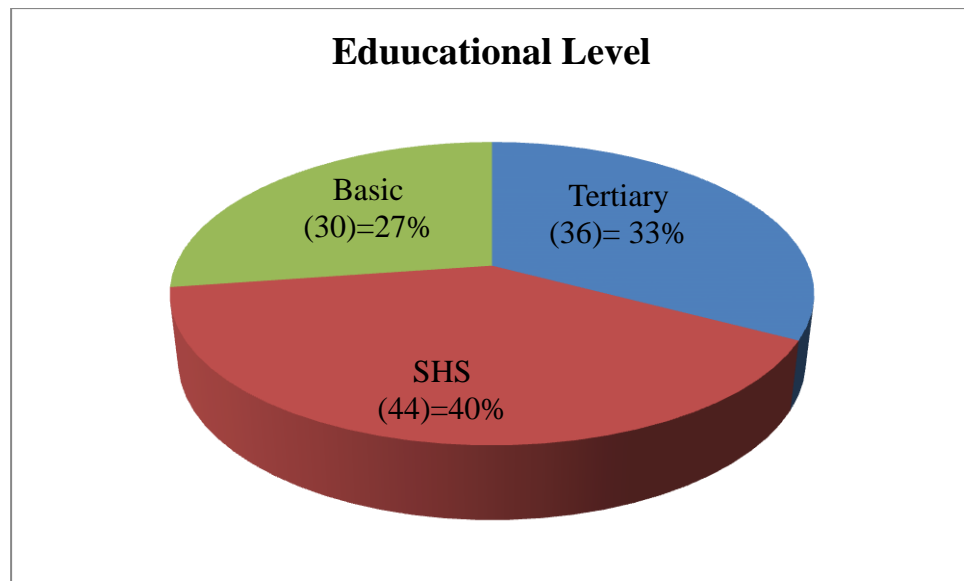


**Source: Field work (May, 2017)**

Figure 4.3 shows the age profile of the respondents in years. 34 respondents representing 31% were aged from 31-40 years and 36 respondents representing 33% were aged 21-30 years. It shows clearly that majority of the MMT Agents sampled for the study, were in their youthful age. 23 respondents representing 21% were within the years 41-50, 13 respondents representing 12% were within the age bracket 51-60 and 4 respondents representing 3% were 60 years and above.

### Education Level

**Figure 4.4 Education Level of Respondents**



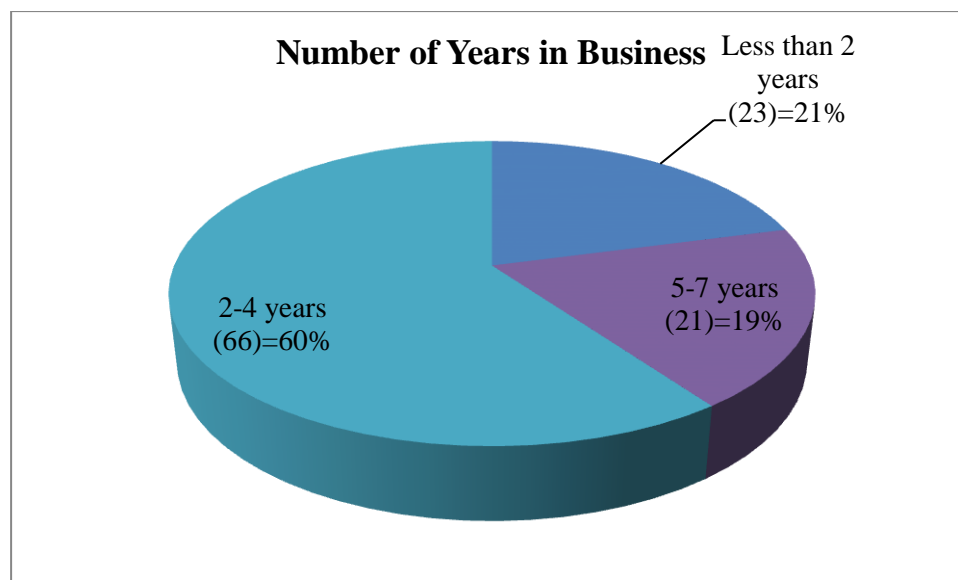
**Source: Field work (May, 2017)**

It is perceived that higher education is a tool for making informed and better decisions. The pie chart above (figure 4.4) shows that 30 respondents representing 27% attended Basic Education, 44 respondents representing 40% attained Senior Secondary School Certificate Examination and 36 respondents representing 33% attained University Education or Equivalent. From Figure 4.4 above, 77% of the total respondents had had secondary and tertiary education which may greatly influence their decision to invest in mobile money transfer services.

## 4.2 Business Information

### Number of years in Business Operation

**Figure 4.5** Number of years in MMT services

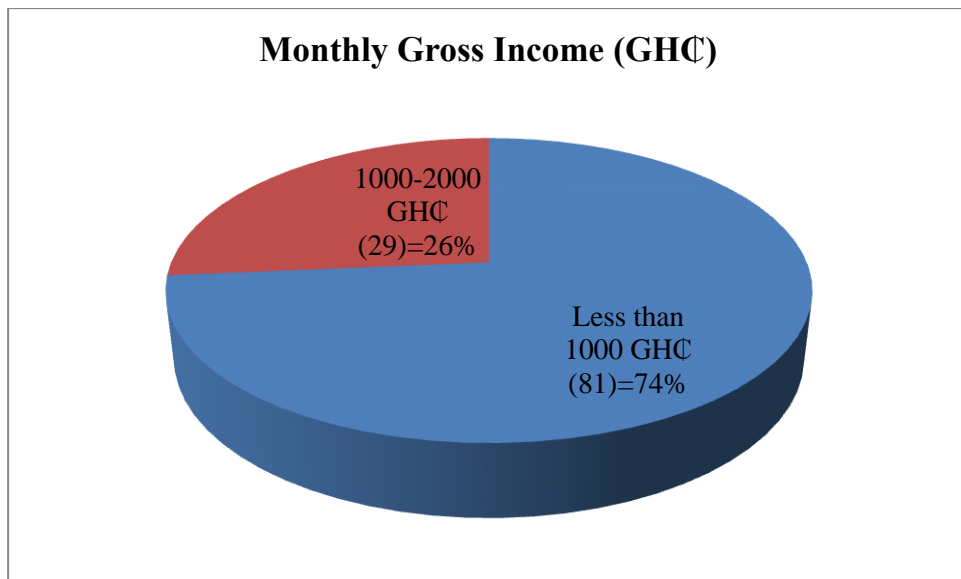


**Source: Field work (May, 2017)**

Figure 4.5 is a presentation of the number of years respondents have been in Mobile Money business. According to the figure, 66 respondents representing 60% have been in business for 2-4 years, 21 respondents representing 19% have been in business for 5-7 years and 23 representing 21% had been operating their businesses for 2 years or less. The question did not seek to determine whether they have done the same business for years or they have been operating different businesses for 5 years. It is only giving information about how many years respondents have been in business. Having at least 2 years' experience is an indication that the respondents possess some experience and know what they are about and would be able to ensure that the right things are done to promote the business.

## Monthly Gross Income

**Figure 4.6 Monthly Gross Income before Joining MMT**



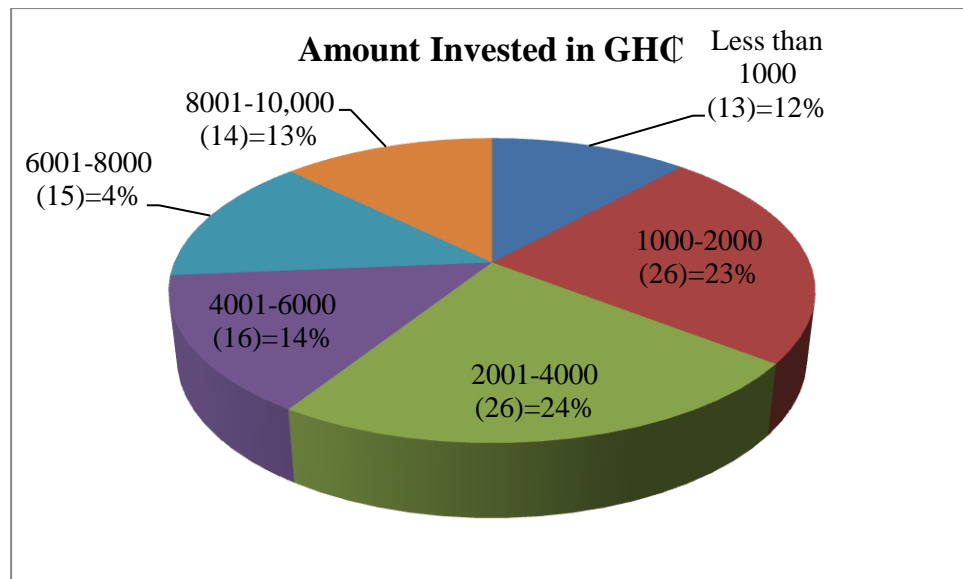
**Source: Field work (May, 2017)**

Another question that respondents were asked to provide answer to was their monthly gross income before joining MMT. In all, 81(74%) respondents indicated that their gross monthly income was less than 1,000 Ghana Cedis whereas 24(24%) had between 1,000 and 2,000. No agents had a gross monthly income more than 2,000 Ghana Cedis as it can be seen on the Figure 4.6 above.



### Amount invested in MMT

**Figure 4.7 Amount invested in MMT Services**



**Source: Field work (May, 2017)**

Again there was a question that respondents were asked to provide answers to and this was on amount invested. This is the total amount of money they have invested in the Mobile Money Transfer business. In all, 13(12%) respondents indicated that they had invested less than 1,000 Ghana Cedis whereas 26(23%) had invested between 1,000 and 2,000 Ghana Cedis. The remaining 71(65%) had invested more than 2000 Ghana Cedis in the MMT Business as the Figure 4.7 depict.

<b>Table 4.1 AMOUNT INVESTED * GENDER OF RESPONDENTS</b>					
<b>CROSSTABULATION</b>			<b>Gender of respondents</b>		<b>Total</b>
			<b>Male</b>	<b>Female</b>	
<b>Amount invested</b>	<b>Less than 1000</b>	<b>Count</b>	0	13	13
		<b>% within Amount invested</b>	.0%	100.0%	100.0%
		<b>% within gender of respondents</b>	.0%	76.5%	11.8%
	<b>1001-2000</b>	<b>Count</b>	22	4	26
		<b>% within Amount invested</b>	84.6%	15.4%	100.0%
		<b>% within gender of respondents</b>	23.7%	23.5%	23.6%
	<b>2001-4000</b>	<b>Count</b>	26	0	26
		<b>% within Amount invested</b>	100.0%	.0%	100.0%
		<b>% within gender of respondents</b>	28.0%	.0%	23.6%
	<b>4001-6000</b>	<b>Count</b>	16	0	16
		<b>% within Amount invested</b>	100.0%	.0%	100.0%
		<b>% within gender of respondents</b>	17.2%	.0%	14.5%
	<b>6001-8000</b>	<b>Count</b>	16	0	16
		<b>% within Amount invested</b>	100.0%	.0%	100.0%
		<b>% within gender of respondents</b>	17.2%	.0%	14.5%
<b>8001-10000</b>	<b>Count</b>	13	0	13	
	<b>% within Amount invested</b>	100.0%	.0%	100.0%	
	<b>% within gender of respondents</b>	14.0%	.0%	11.8%	
<b>Total</b>		<b>Count</b>	93	17	110
		<b>% within Amount invested</b>	84.5%	15.5%	100.0%
		<b>% within gender of respondents</b>	100.0%	100.0%	100.0%

**Source: Field work (May, 2017)**

Table 4.1 was comparing the amount of investment relating to the gender of the respondents. 13(76.5%) of the total females invested GHC 1000 or less and 4 (15.4%) of females invested an amount within GHC 1001-2000. Comparatively, even though no male invested an amount GHC 1000 yet 22 (23.7%) invested between GHC 1001-2000. 42 (45.2%) of the total males invested between GHC 2001-6000 and 29(31.2%) of the male invested more than GHC 6000. This indicated that more females have invested in the mobile money business than the females. As it can be seen in overall, 93 (84.5%) were males and the remaining 17 (15.5%) were females.

Adei (2001), found out that males use financial services more than females because more males are employed in the formal sector than females. The study found out that more males were found to transact businesses with the company's than females. This could be attributed to the fact more males are salaried workers than females which is supported by the findings of the Ghana Statistical Service (2012), in the results of the Population and Housing Census findings that over 60% of salaried workers are males. It is also consistent with the findings of the Human Development Index (2011), that males in Ghana transact businesses with financial institutions than their female counterpart. In this analysis, there is no basis to conclude that those with the highest frequency are more important than those with the lower frequency. For instance, having more males than females, would not in any way suggest that male MMT agents are better than their female counterparts. This composition is as a result of the consumers sampled for the study.

Pearson Chi square coefficients run from -1 to +1. Coefficients close to -1 show a strong inverse relation whilst a coefficient close to +1 denotes a strong direct relation.

**Table 4.2 Pearson Chi square computation**

<b>Chi-Square Tests</b>			
	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	84.096 <sup>a</sup>	5	0
Likelihood Ratio	72.388	5	0
Linear-by-Linear Association	36.036	1	0
N of Valid Cases	110		

**Source: Field work (May, 2017)**

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 2.01.

The table 4.2 depicts that there is strong positive correlation between the variables thus amount invested and gender of the respondents. It has a significant relation of 0.84. This indicates a strong positive correlation between the variables.

### Profit level for the Past three Years

**Table 4.3 Profit level of agents**

<b>PROFIT LEVEL FOR THE PAST THREE YEARS</b>						
<b>Amount</b>	<b>2014</b>	<b>Percent</b>	<b>2015</b>	<b>Percent</b>	<b>2016</b>	<b>Percent</b>
Less than 2000	57	51.80%	23	20.90%	10	9.10%
2001-4000	23	20.90%	12	10.90%	13	11.80%
4001-6000	19	17.30%	12	10.90%	15	13.60%
6001-8000	8	7.30%	3	2.70%	25	22.70%
8001-10000	3	2.70%	52	47.30%	15	13.60%
10001-12000	0	0.00%	8	7.30%	16	14.50%
12001-14000	0	0.00%	0	0.00%	16	14.50%
<b>TOTAL</b>	<b>110</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>110</b>	<b>100%</b>

Source: Field work (May, 2017)

As it can be seen from the Table 4.2 above, in 2014 no agent recorded a profit level higher than 10,000 Ghana Cedis. But majority of the respondents representing 80 (72.7%) recorded a profit level of 4,000 Ghana Cedis or less whereas 30(27.3%) of the respondents recorded a profit between 4000 to 10,000 Ghana Cedis. In 2015 no agent recorded a profit level higher than 12,000 Ghana Cedis. But majority of the respondents 75(68.2%) recorded a profit level more than 4,000 Ghana Cedis whereas the remaining 35(31.8%) of the respondents recorded a profit level 4000 Ghana Cedis or less. In 2016 majority of the respondents 87 (78.9%) recorded a profit level more than 4,000 Ghana Cedis whereas the remaining 33(21.1%) of the respondents recorded a

profit 4000 Ghana Cedis or less. The 2016 year showed that the profit level increased and was better than the previous years.

### Number of Employees

**Table 4.4 Number of People Employed**

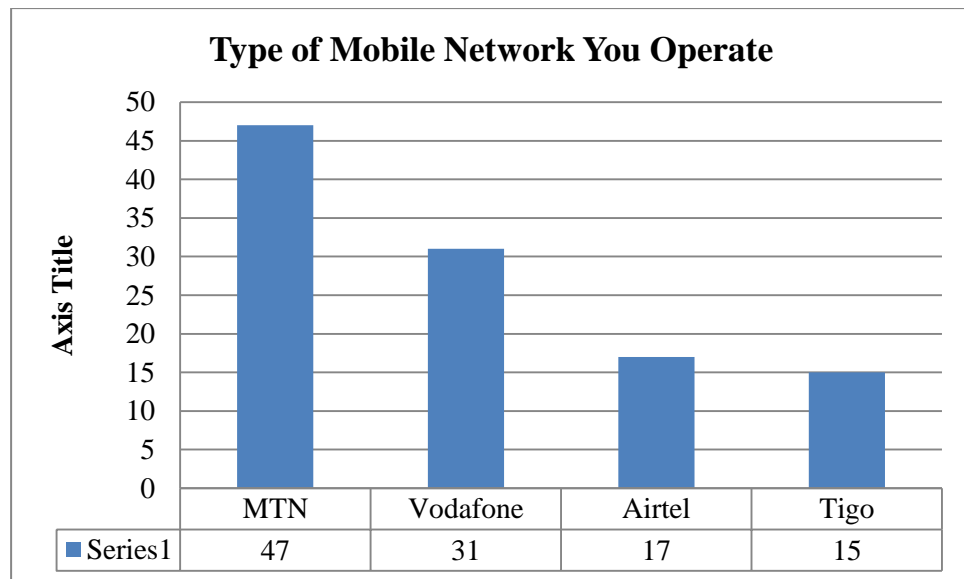
Number of employees	Number	Percent
No employee	15	13.60%
1	27	24.50%
2	33	30.00%
3	19	17.30%
4	11	10.00%
5	1	0.90%
6	4	3.60%
7	0	0.00%
Above 7	0	0.00%
<b>TOTAL</b>	<b>110</b>	<b>100.00%</b>

Source: Field work (May, 2017)

Table 4.2 presents the number of employees of the Mobile Money Transfer under consideration. 15 (13.6%) respondents managed their own business alone. They had no employees while 79(71.8%) employed 1-3 employees. The remaining 16 (14.6%) employed 4-6 employees. Although it makes sense to suggest that some MMT Agents do not make enough profit to enable them engage more hands. Those who employed more than 4 employees operate or do business with more than one mobile network. They have a shift plan where employees are rotated for morning and evening sessions.

### Type of Mobile Money Transfer

**Figure 4.8 Type of mobile money transfer you operate**



**Source: Field work (May, 2017)**

The type of mobile money transfer business indicated that majority of the businesses surveyed were involved in MTN MMSs as indicated in figure 4.8. This segment as shown in the figure 4.8 above MTN recorded 47 (42.7%) of the agents, Vodafone recorded 31(28.2%), Airtel recorded 17(15.5%) and Tigo recorded 15 (13.6%) of the agents of Mbile Money Transfer in Takoradi central.

**4.3 Research Question One (1):** What are contributions of MMTSs to socioeconomic life of the Agents?

**Table 4.5 Contributions of MMT Services (Raw Data)**

<b>Contributions of MMT SERVICES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
1. Increase savings rate	3	3	25	51	28	<b>110</b>
2. Create jobs	0	0	20	55	35	<b>110</b>
3. Access to financial services	5	5	15	47	38	<b>110</b>
4. Instant cash transfer and payment	0	7	10	37	56	<b>110</b>
5. Aid in payment of ward’s school fees	0	0	29	45	36	<b>110</b>
6. Poverty reduction tool	0	0	25	38	47	<b>110</b>
7. Flexible Payments of bills	5	4	15	42	44	<b>110</b>
8. Aids in business transactions	3	4	18	46	39	<b>110</b>
9. Increase access to quality health care	2	2	18	51	37	<b>110</b>
10. Cheaper in terms of rates	5	5	23	42	35	<b>110</b>
11. Increased use of mobile phones	0	0	12	54	44	<b>110</b>
12. Feeding the family three times daily	4	5	32	39	30	<b>110</b>

**Source: Field work (May, 2017)**

In this section, the study identified the contributions of MMT Services to the providers or the agents. Respondents were asked to indicate the extent to which they agree with a list relating to the contributions of MMT Services to their life the likert scale 5- Very High, 4-High, 3-Average, 2-Low, 1-Very Low. Table 4.3 is the raw scores given by respondents. From the responses, a high percentage of the respondents (that is 70% and above) ticked very high or high with most of the likely the contributions of MMT Services to them.



Erickson (2010) demonstrated that mobile money helps in reducing poverty, create employment, and increase access to financial services. Government and other regulatory institutions must assist and subsidize the development of mobile money system and come out with policies that help formation of trusted mobile money transfer agents.

**Table 4.4 Contributions of MMT Services (Percentages of the Data)**

<b>Contributions of MMT SERVICES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
1. Increase savings rate	2.7%	2.7%	22.7%	46.4%	25.5%	100%
2. Create jobs	0.0%	0.0%	18.2%	50.0%	31.8%	100%
3. Access to financial services	4.5%	4.5%	13.6%	42.7%	34.5%	100%
4. Instant cash transfer and payment	0.0%	6.4%	9.1%	33.6%	50.9%	100%
5. Aid in payment of Ward's school fees	0.0%	0.0%	26.4%	40.9%	32.7%	100%
6. Poverty reduction tool	0.0%	0.0%	22.7%	34.5%	42.7%	100%
7. Flexible payments of bills	4.5%	3.6%	13.6%	38.2%	40.0%	100%
8. Aids in business transactions	2.7%	3.6%	16.4%	41.8%	35.5%	100%
9. Increase access to quality health care	1.8%	1.8%	16.4%	46.4%	33.6%	100%
10. Cheaper in terms of rates	4.5%	4.5%	20.9%	38.2%	31.8%	100%
11. Increased use of mobile phones	0.0%	0.0%	10.9%	49.1%	40.0%	100%
12. Feeding the family three times daily	3.6%	4.5%	29.1%	35.5%	27.3%	100%

**Source: Field work (May, 2017)**

In table 4.4 90(81.8%) ticked very high or high that MMT Services create employment and 81(73.6%) ticked very high or high that MMT Services helps in payment of their children's schools fees. Though little has been done in this

area with respect to number of users registering for formal banking system, yet the mobile money system were used for services such as buying airtime, prepaid of electricity bills and water bills and payments of cash to friends and family members in areas outside their jurisdiction (Morawcynski 2009). It has helped them pay children's school fees from the profit they make. MMT is one of the tools that help in poverty reduction by helping the unreached to have access to financial services through the use of the mobile phone. The MMT services as the table depict has helped increase the use of the mobile phone 98(89.1%) ticked very high or high) because people have seen it as a cheaper way of getting access to finance compare to the banks. 85(77.2%) respondents ticked very high or high that mobile money transfer services increases access to financial services. Looking at the percentages it clearly shows that mobile money transfer services contribute a lot in the life of the agents.

### **Calculation of Central Tendency**

The table deals with calculation of Mean, Standard Deviation (SD), Coefficient of Variation (CV) (Standard Deviation/Mean) and Mean rank of the responses to contributions of MMT Services. The researcher calculated mean and standard deviation the responses of the statement presented to them under this objective.

The mean is a statistical measure of average or central tendency. It is calculated as the sum of all the responses divided by the number of responses given. In this analysis, the mean is used to indicate the extent of agreement, ranging from Very High (5) to Very low (1). A mean score of 0 – 1.99, 2.00 –

2.99, 3.00 – 3.99, 4.00–4.99 and 5.00 represent Very low, Low, Average, High and very high respectively. Standard Deviation presents information on the responses and how the response varies from the average mean. SD tells how spread out the responses is. Are they concentrated around the mean, or scattered far and wide? Basically, a small standard deviation means that the values are close to the mean of the data set, and a large standard deviation means that the values are farther away from the mean.

**Table 4.5 Summary Statistics (Contributions of MMT Services)**

<b>Contributions of MMT Services</b>	<b>Mean</b>	<b>Std.</b>	<b>N</b>
Increase savings rate	4.01	1.03	110
Create jobs	3.8	0.89	110
Access to financial services	3.89	0.91	110
Instant cash transfer and payment	4.14	0.7	110
Aid in payment of Ward's school fees	3.98	1.04	110
Poverty reduction tool	4.29	0.88	110
Flexible payments of bills	4.06	0.77	110
Aids in business transactions	4.2	0.79	110
Increase access to quality health care	4.05	1.05	110
Cheaper in terms of rates	4.12	0.99	110
Increased use of mobile phones	4.21	0.91	110
Feeding the family three times daily	3.88	1.06	110

**Source: Field work (May, 2017)**

Table 4.4 above presents all the contributions put together and compared by using mean and standard deviation depending on the ranking supplied by the respondents to determine the relative contribution. On the basis of mean score, the results indicated that the respondents ticked very high or high that MMT Services contributed positively to the life of the agents or the merchants in the area. On the statement of MMT Services helping in creation of jobs (4.14), helping in instant cash transfer and payment (4.29), serve as a poverty reduction tool (4.20), aid in payment of children's school fees (4.06) and has increased the use of mobile phones (4.29).

It is cheaper in terms of rate compared to the banks (3.88). Before the MPESA was introduced (Kabucho, Kamau, Cerstin Sander and Mukwana 2003), documented that the cost of instantly sending US\$100 through the expenses of money gram were higher as compared to the banks ranging from US\$ 12 and US\$ 20. It cost US\$3 to US\$6 to transfer money through the postal order. Comparably the MPESA has been a better alternative offering a cheaper method of sending money within or outside the country of operation. It was observed that transferring US\$ 100 will cost US\$ 2.5 through MPESA to non-registered customer, while cost of sending to a registered customer is less than that (Safaricom, 2013). It shows that the respondents are aware of the contributions Mobile Money Transfer services on their lives in the area even though the standard deviation varies slightly. The standard deviation is either 1.07 or 0.8.

**4.4 Research Question Two (2):** What factors determine amount of investment in MMTs?

**Table 4.6 Amount of investment**

<b>Factors that determine the amount of investment</b>	<b>YES</b>	<b>NO</b>	<b>TOTAL</b>
Income determines investment	82	28	<b>110</b>
Numbers of MNO affect investment	98	12	<b>110</b>
Customers availability affect investment	96	14	<b>110</b>
Profit influence investment	83	27	<b>110</b>
Regulations affect your investment	61	49	<b>110</b>
Access to finance affect investment	92	18	<b>110</b>
The size of Business affect investment	94	16	<b>110</b>
The location of MMT affect investment	100	10	<b>110</b>

**Source: Field work (May, 2017)**

**Table 4.7 Amount of investment (Percentages)**

<b>Factors that determine the amount of investment</b>	<b>YES</b>	<b>NO</b>	<b>TOTAL</b>
Income determines investment	74.5%	25.5%	<b>100%</b>
Numbers of MNO affect investment	89.1%	10.9%	<b>100%</b>
Customers availability affect investment	87.3%	12.7%	<b>100%</b>
Profit influence investment	75.5%	24.5%	<b>100%</b>
Regulations affect your investment	55.5%	44.5%	<b>100%</b>
Access to finance affect investment	83.6%	16.4%	<b>100%</b>
The size of Business affect investment	85.5%	14.5%	<b>100%</b>
The location of MMT affect investment	90.9%	9.1%	<b>100%</b>

**Source: Field work (May, 2017)**

The purpose of this section is to assess the factors that determine amount of investment. As it can be seen in Table 4.6 respondents were asked to answer

“yes” or “no” to a list of eight items supposed to be factors that affect investment in MMT services. According to the results, 82 (representing 74.5%) of the respondents indicated that their income level affects the amount to be invested in the sense that when you have more money you can invest more and get more profit. 28(25.5%) responded “no” because they can invest any amount and reinvest the proceeds to help the initial amount to grow. The mobile money conceptualization is established inside the phone in which the MNO’s and MMT providers adopt to facilitate payment and transfer of money (Erickson, 2010). The investment cost of mobile money transfer business is part of the transaction to be carried. What the MMT provider has to do is to ensure that there is enough electronic money available for the transaction purposes.

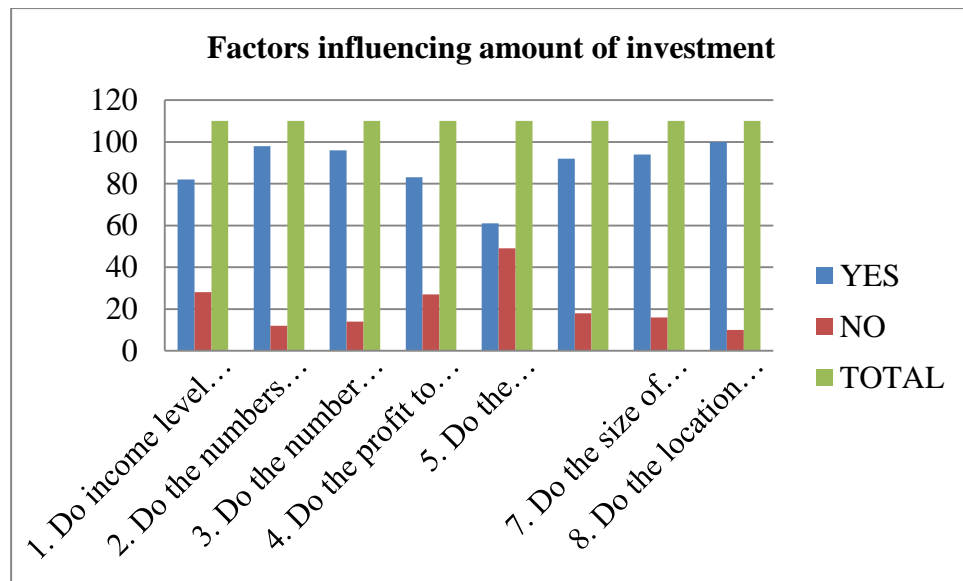
The respondents were asked if the number of MNOs they work with affects the level of investment 98(89.1%) answered yes whereas 12(10.9%) answered no. This shows that the agents with more than one Network may need more money to do the business. Your investment in MMTs may be affected by the number of customers in the area of operation; in this case the respondents 96(87.3%) answered yes and 14(12.7%) answered no because customers can move to any area to do business in terms of transfer or payment using the Mobile phone. On the statement, profit to attain influence amount to be invested, 83(75.5%) of the respondents answered yes because to get more profit you have to invest more and reinvest the same amount for more profit whereas 27(24.5%) answered no because profit level does not matter to them. Regulation on mobile money affects amount to be invested, in this dimension

61(55.5%) responded yes and 49(44.5%) answered no because there is no strict regulation on the amount to invest. Again there is no specification as how much should be invested because the agents decide themselves. 92(83.6%) of the respondents responded yes that access to finance affect their investment level in MMTS but 18(16.4%) answered no. It was observed that people borrow money for investment and the access to finance affect the amount to be invested in the MMT Business. 94(85.5%) of the respondents responded yes that the size of the business affect the amount to be invested but 16(14.5%) answered no. Being able to continue where you have chosen is a sign of maintaining your customers. This is another area one has to consider choosing a location. There should be a parking space for the customers and also a relaxed area where they can easily feel comfortable in doing business with you. The place must be as safe as the rules require (Entrepreneurs, 2017).

Location of MMT Business affects the investment to be made in the business, this was confirmed 100(90.9%) respondents but 10(9.1%) differed from the statement that location affects the investment to be made. There are a lot of factors to be considered in choosing a site for a business such as MMT outlet. The market share is of importance to every businessman so as the cost of investment. The following are some of the factors to be considered when ready to put a small scale enterprise. The place of business must be important to the provider, the customer and the employee as well (Entrepreneurs, 2017).

This finding does not give any indication of who has a bank account or who does not have.

**Figure 4.9 Factors determining amount of investment**



**Source: Field work (May, 2017)**

Again with the figures presented in the bar graph above with the least number of 61 indicate the confirmation that the listed factors are indeed some of the factors that faces the agents in their bid to invest in the MMT business.



**4.5 Research Question Three (3):** What factors influence profitability of MMTSs?

**Table 4.8 Factors Influencing Profitability (Raw Data)**

<b>FACTORS INFLUENCING PROFITABILITY</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Improves profit through access	15	10	5	50	30	110
Convenient and positively affect profit	10	5	0	55	40	110
Availability of cash for transaction improves profit	1	0	20	45	44	110
Densely area lead to cash flow	5	0	15	69	21	110
Status of people affect profit	3	4	10	68	25	110
Number of agents in the area influence profitability	10	15	5	45	35	110
Risky mode not good for measuring profit	57	40	7	3	3	110
Savvy technology can decrease profit	35	45	20	5	5	110
Strict technology and affecting profit	5	5	5	35	60	110
Simple to operate leading to increase in profit	0	0	20	45	45	110
Flexible increasing profitable	0	0	10	45	55	110
Good customer care improves profit	4	6	15	45	40	110
Employees skills improves profit	0	5	43	32	30	110

**Source: Field work (May, 2017)**

**Table 4.9 Factors Influencing Profitability (Percentages)**

<b>FACTORS INFLUENCING PROFITABILITY</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Improves profit through access	13.6%	9.1%	4.5%	45.5%	27.3%	100%
Convenient and positively affect profit	9.1%	4.5%	0.0%	50.0%	36.4%	100%
Availability of cash improves profit	0.9%	0.0%	18.2%	40.9%	40.0%	100%
Densely area affects cash flow	4.5%	0.0%	13.6%	62.7%	19.1%	100%
Status of people affect profit	2.7%	3.6%	9.1%	61.8%	22.7%	100%
Number of agents influence profitability	9.1%	13.6%	4.5%	40.9%	31.8%	100%
Risky mode of service not good for measuring profit	51.8%	36.4%	6.4%	2.7%	2.7%	100%
Savvy technology can decrease profit	31.8%	40.9%	18.2%	4.5%	4.5%	100%
Strict technology and affecting profit	4.5%	4.5%	4.5%	31.8%	54.5%	100%
Simple to operate increasing profit	0.0%	0.0%	18.2%	40.9%	40.9%	100%
Flexible increasing profitable	0.0%	0.0%	9.1%	40.9%	50.0%	100%
Good customer care improves profit	3.6%	5.5%	13.6%	40.9%	36.4%	100%
Employees skills retain customers and improve profit	0.0%	4.5%	39.1%	29.1%	27.3%	100%

**Source: Fieldwork (May, 2017)**

Table 4.8 is the raw data of the factors that influences profitability and the table 4.9 shows the percentages of these responses. These two tables were used in the analysis. Mobile money makes timely access to finance and thus improves profit, majority of the respondents 80(72.8%) ticked very high or high, 5(4.5%) of the respondents ticked average whereas 25(22.7%) ticked very low or low. This is an indication that timely access of money improves profit because customers want fast and quick access of money so patronage will be high leading increase in profit. Mobile money payment services is convenient and positively affect my profit, majority of the respondents 95(86.4%) ticked very high or high whereas 15(13.6%) ticked very low or low. This shows that as a result of convenience in transferring money using mobile phone attracted more people leading to increase in profit. According to (Maurer, 2008), the mobile money transfer payment is designed to help facilitate secure, convenient and low cost money transfer from person to person or from business to consumer and vice versa.

When discussing the factors that influence mobile money transfer and Mobile banking there are four main factors that have to be considered. These are affordability, security, accessibility and convenience. Having enough cash for transaction increases profit, on this statement the 89(80.9%) of the respondents responded very high or high, 1(0.9%) of the respondents ticked very low whereas 20(18.2%) of the respondents ticked average. On the statement that high density population area has more customers leading to cash flow and increasing profit, 90(81.8%) respondents ticked very high or high, 15(13.6%)

ticked average and 5(4.5%) ticked very low. This is an indication that populated area lead to more transaction and profit as well.

Socioeconomic status of the people in the area of operation affect profitability, majority of the respondents 93(84.5%) ticked very high or high, 10(9.1%) of the respondents ticked average whereas 7(6.3%) ticked very low or low. This is an indication that where the people have good income level they may want to do business through M-money leading to increase in profit. Registered Mobile money Agents in area of operation affect profitability, majority of the respondents 80(72.7%) ticked very high or high, 25(22.8%) ticked very low and low whereas 5(4.5%) ticked average. This shows that in areas where there are many agents profitability suffers because the agents will be competing with the same profit.

M-money services is risky and not good for measuring profit, on this statement 97(88.2%) of the respondents responded very low or low, 6(5.4%) of the respondents ticked very high or high whereas 7(6.4%) of the respondents ticked average. This indicates that most of the respondents disagree to the statement that m-money is risky. They believe that it is convenient and good for transaction. On the statement Savvy technology expert can temper m-banking accounts and affects profitability, 80(72.7%) ticked very low or low, 20(18.2%) average and 10(9%) ticked very high and high. It was added that since the introduction of mobile money in Ghana no network has experienced any savvy technology temper, though they are there, they are yet to experience savvy technology temper of m-money accounts.

Mobile money is a strict technology which consequently affects profit positively, majority of the respondents 95(86.3%) ticked very high or high, 5(4.5%) ticked average whereas 10(9%) ticked very low or low. This shows that as a result of strictness in transferring money using mobile phone attracted more people leading to increase in profit. MMTS is simple to operate which catches the attention of the public leading to more profit, 90(81.8%) of the respondents responded very high or high and 20(18.2%) of the respondents ticked average. The simplicity of MMT has lured more people on board leading to increase in profit. The flexibility of MMTS affect profitability positively leading to more profit, 100(90.9%) of the respondents responded very high or high and 10(9.1%) of the respondents ticked average. According to (Gamos, 2007), the success of mobile transaction is based on its ease of use, the low cost involve, the high level of security. All these improve the users and agents' quality of life.

Good customer care increase higher retention and profit, on this statement 85(77.3%) ticked very high or high, 15(13.6%) ticked average whereas 10(9.1%) ticked very low or low. Zeithaml, Pasuraman& Berry (1990) indicated that training and communication is an important tool to help the customer-contact personnel (Agents or employees) to respond to pressure of customers and meeting their needs as required. When the mobile agents are given proper training on areas like performance management, team building, coaching, communication skills and empowerment, they will excel and maintain and retain customers they serve. Reichheld and Kenny (1990) found that enterprises that exhibit these kind of attitude not only do they get and

retain more customer but also increase employee loyalty and help reduce unemployment in the short run.

Employee skills needed for customer satisfaction improves profit, over here 62(56.4%) ticked very high or high 43(39.1%) ticked average and 5(4.5%) ticked low. Customer satisfaction is important in every business and therefore the necessary skills needed to meet this have to be provided for the employees.

**Table 4.10 Summary Statistics (Factors influencing Profitability)**

Factors that influence Profitability in MMTS	N	Mean	Std.	Mean Rank
Improves profit through access	110	3.64	1.3	11th
Convenient and positively affect profit	110	4	1.2	6th
Availability of cash improves profit	110	4.19	0.8	4th
Densely area affects cash flow	110	3.92	0.9	8th
Status of people affect profit	110	3.98	0.8	7th
Number of agents influence profitability	110	3.45	1.2	12th
Risky mode of service not good for measuring profit	110	1.63	0.9	13thh
Savvy technology can and decrease profit	110	2.11	1.1	13th
Strict technology and affecting profit	110	4.21	1.1	3rd
Simple to operate leading to increase in profit	110	4.23	0.7	2nd
Flexible increasing profitable	110	4.41	0.7	1st
Good customer care improves profit	110	4.01	1	5th
Employees skills retain customers and improve profit	110	3.8	0.9	9th

**Source: Field work (May, 2017)**

Table 4.9 above presents all the contributions put together and compared by using mean and standard deviation depending on the ranking supplied by the

respondents to determine the relative factors that influence profitability in MMTS. On the basis of mean score, the results indicated that the respondents ticked very high or high that the statements are indeed some of the factors that influence profitability in MMT Services. On the statement of MMT Services flexibility affects profit positively (4.41), MMT is convenient and improves profit (4.0), having enough cash for transaction improves profit (4.19), M-Money is simple to operate thus increasing profit (4.23) and MMT being a strict technology boost confidence thereby increasing profit (4.21). It shows that the respondents are aware of the factors that influences profit level of their businesses though the standard deviation varies slightly. The standard deviation varies slightly ranging from 1.3 to 1.0.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This is the last chapter of the study and it summarizes the findings of the study by addressing the research questions based on the responses of the respondents, on current state of their livelihood. It is in this dimension that conclusions and recommendations were made.

#### 5.1 Summary of Research Findings and Conclusions

##### Demographics

This dealt with the gender, marital status, age and educational background of the respondents. The results indicated that 87% of the respondents were male while 13% were female. In this analysis, there is no basis to conclude that those with the highest percentage were more important than those with the lower percentage. It would not in any way suggest that male MMT agents are better than their female counterparts. The study again revealed 69% of the respondents were married, whereas the rest were divorced, single or widow. The study further revealed that 83% of the respondents were in their youthful age between 21-50 years. The study again showed that 68% attained SHS certificate or above which may greatly influence their decision to invest in mobile money transfer services.

##### Business Information

Under this the study considered areas like the number of years in business, gross monthly income before joining MMT Services, amount invested in MMT Business, profit level from 2014-2016, number of employees and the



type of MMT Business. The study revealed that 77% have been in business for 2years or Having at least 2 years' experience is an indication that the respondents possess some experience and know what they are about and would be able to ensure that the right things are done to promote the business.

It was also identified that 76% of the respondents earned gross monthly income less than 1,000 Ghana Cedis. The study revealed that 61% had invested more than 2000 Ghana Cedis in the MMT Business. Profit level for the past three years the study revealed that in 2014 majority of the respondents 80% recorded a profit level not more than 4,000 Ghana Cedis, in 2015 majority of the respondents 65% recorded a profit level more than 4,000 Ghana Cedis and in 2016 majority of the respondents 77% recorded a profit level more than 4,000 Ghana Cedis. This shows that more people have been attracted by the MMT leading to cash flow and improving profit. The 2016 year showed that the profit level increased and was better than the previous years. On the number of employees, majority of the agents representing 79% revealed that they have employed 1-3 people. The study again found that majority of the agents 45% operates MTN mobile money.

### **Research Question One (1)**

The results indicated that MMS contribute to socioeconomic life of the agents in many ways. MMT Services create employment (85%), MMT Services helps in payment of their children's schools fees (76%). MMT services increased the use of the mobile phones because people have seen it as a cheaper way of getting access to finance as compared to the banks (98%). Erickson (2010)

demonstrated that mobile money helps in reducing poverty, create employment, and increase access to financial services. Government and other regulatory institutions must assist and subsidize the development of mobile money system and come out with policies that help formation of trusted mobile money transfer agents.

The contributions of MMS on the life of the agents, using the mean, the study found that, MMTS helps instant cash transfer and payment (4.42). It serves as a poverty reduction tool (4.27) and it is cheaper in terms of rate compared to the banks (3.81).

### **Research Question Two (2)**

The respondents indicated in their responses that they do a lot of thinking before investing in the MMTS business. There are factors which influences the amount of investment they make in the MMTS ranging from their income level, number of MNO they operate, number of customers in the area, the level of profit they want to attain, access to finance for investment, the size of the business and the location of the MMTS. It was revealed that their income level affect the amount to be invested by (77%), the number of MNOs they work with affect the level of investment by (88%), the number of customers in the area of operation affect investment by (91%), location of MMT Business affects the investment to be made in the business by (95%), and the size of the business affect the amount to be invested by (89%) and being able to continue with where you have chosen is a sign of maintaining your customers. This is another area one has to consider choosing a location. There should be a

parking space for the customers and also a relaxed area where they can easily feel comfortable in doing business with you. The place must be as safe as the rules require (Entrepreneurs, 2017).

### **Research Question Three (3)**

The following reveals the factors that influence profitability in MMTs. M-money payment services is convenient and improves profit by (90%). According to (Maurer, 2008), the mobile money transfer payment is designed to help facilitate secure, convenient and low cost money transfer from person to person or from business to consumer and vice versa. When discussing the factors that influence mobile money transfer and Mobile banking, there are four main factors that have to be considered. These are affordability, security, accessibility and convenience.

Having enough cash for transaction increases profit by (84%). High density population area has more customers leading to cash flow and increases profit by (80%). M-money services is not risky and therefore good for measuring profit by (90%), The flexibility of MMTS affect profitability positively leading to more profit by (90%). According to (Batchelor, 2007), the success of mobile transaction is based on its ease of use, the low cost involve, the high level of security. All these improve the users and agents' quality of life through profit. Good customer care increase higher retention and profit by (85%). MMT Services flexibility affects profit positively as indicated by a mean of (4.45), helping in instant cash transfer and payment (4.42) and having enough cash for transaction improves profit (4.26), M-Money is simple to

operate, thus increasing profit (4.20). MMT being a strict technology boost confidence, thereby increasing profit (4.20).

## **5.2 Conclusions**

The important role played by mobile money transfer services cannot be underestimated. M-money has obvious effects on the life of the agents. It contributes to the total life of the agents or the merchants since the profit in the business is very lucrative. It greatly contributes to the profit margin of the operators. Considering the objectives and questions of the research, the findings threw light on M-money services in descriptive perspectives of agents in Takoradi.

Investment level was also determined by how much you have. The study showed that people's life become better depending on the amount of investment they make. The reason being that the amount you invest determines the profit you get thereby affecting their life positively. If you make more investment you get more profit and vice versa.

To emphasize the contributions of the MMTS on the life of the agents, relevant findings have emerged. This result is an evidence to show that operating a mobile money transfer business as an agent, helps reduce poverty and better the life of the agents.

Owners and managers of MMTS believe that MMT Services play an important role in bettering the life of the agents. The study shows that proper management of the MMTS in terms of how to sustain your profitability level

by running the right modules, pave way for high performance and profitability.

### **5.3 Recommendations**

It is necessary that policies are developed to help protect the agents in executing their business plans. It is always seen that in formulation of policies the top-down-approach is used instead of bottom-up-approach, which always brings challenges in the implementation because of failure to involve the people who are the beneficiaries in the formulation stage.

Governments of today need to adopt policies to develop strategies to encourage the M-Money transaction, which is faster and convenient in terms of transfer of money either from person-to-person or from government-to-person. It can be opted by the government as a means of payment of salaries to employees to cut down the expenses involved using the formal banks.

Proper coordination and collaboration between the government and the Mobile Network Operators, could provide a way for training packages for Agents of Mobile Money transfer. This will equip their managerial competencies and improve their productivity. The ability of Agents to keep customers will adequately improve their profit and help better their lives.

Agents who may not easily get access to finance must be assisted by the government so that they can realise their dreams. M-Money has been identified as a way to reduce poverty in the country by reaching the unreached so government has to devise a plan to identify them.

Managers and owners of MMTS should avail themselves with the various training programmes, organized by institutions such as the National Board for Small Scale Industries, Ghana National Chamber of Commerce as well as the Ministry of Trade and Industry, to polish their knowledge in the MMTS and equip them with other management expertise. This in the long run will boost their trading activities and improve their profit levels.

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## APPENDIX A

### QUESTIONNAIRE TO MOBILE MONEY AGENTS

A. PERSONAL INFORMATION					
Gender	Tick (√)	Age (Year)	Tick (√)	Highest Level of Education	Tick (√)
Male		Below 18 years		Basic Education	
Female		21-30		SHS/SSS	
<b>Marital Status</b>		31-40		Training College/Polytechnic	
Married		41-50		University	
Single		51-60			
Widowed		60 and Above			
Divorced					
CATEGORY OF RESPONDENTS					
Owner (Agents)		MNO's Staff			
B. BUSINESS INFORMATION					
Number of years in Business					
Less than 2years		6-8years			
2-4 years		8-10years			
4-6years		10years & above			
What was your monthly gross income before Provision of Mobile Money Transfer in Ghana					
Less than 1000		4001-6000			
1001-2000		6001-8000			
2001-4000		8001-10000			
How much have you invested (GH¢)					
Less than 1000		4001-6000			
1001-2000		6001-8000			
2001-4000		8001-10000			
		Above 10,000			
Indicate your Profit Level (GH¢)					
Amount	2015	2016	2017		
Less than 2000					
2001-4000					
4001-6000					
6001-8000					
8001-10000					
10001-12000					
12001-14000					
Number of People Employed					
No employee		4			
1		5			
2		6			
3		7			
Which Mobile Money Transfer do you offer?					
MTN Mobile Money		Tigo Cash			
Vodafone Cash		Airtel Cash			

<b>SECTION C: CONTRIBUTIONS OF MOBILE MONEY TRANSFER TO SOCIO-ECONOMIC LIFE OF AGENTS</b>					
Please indicate which of the following best reflects your argument with the following as the contribution of Mobile Money Transfer towards economic Growth{ 1-Very Low, 2-Low, 3- Average, 4 - High, 5- Very High					
<b>Contributions of MMT SERVICES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Helps in increasing savings rate					
2. Helps in creating jobs					
3. It increases access to financial services					
4. It helps in instant cash transfer and payment					
5. Aid in payment of Children’s school fees					
6. It serves as poverty reduction tool					
7. Payments of bills have been so flexible					
8. Aids in business transactions					
9. Helps in accessing quality health care for your family					
10. It is cheaper in terms of rates compare to the banks					
11. It has increased the use of mobile phones					
12. Helps in feeding the family three times daily					

<b>SECTION D: FACTORS THAT DETERMINE AMOUNT OF INVESTMENT IN MMT SERVICES</b>		
Please answer "Yes" or "No" to the following questions		
<b>Factors</b>	<b>YES</b>	<b>NO</b>
1. Do income level determines amount to be invested?		
2. Do the numbers of MNO you work with affect your investment?		
3. Do the number of customers in the area of operation affect the amount to invest?		
4. Do the profit to attain influence amount to be invested?		
5. Do the regulations that govern mobile money affect your investment?		
6. Do access to finance affect your investment in Mobile Money services?		
7. Do the size of the MMT Business affect the amount of investment?		
8. Do the locations of the MMT business affect the amount to be invested?		



<b>SECTION E: FACTORS INFLUENCING PROFITABILITY OF MMS</b>					
Please indicate which of the following best reflects your opinion of factors influencing profitability of MMS					
Profitability{ 1-Very Low, 2-Low, 3- Average, 4- High and 5- Very High					
FACTORS INFLUENCING PROFITABILITY	1	2	3	4	5
1. M-Money makes access to financial service timely thus enabling improvemet of profit					
2. M-Money payments service is convenient and has positively affected my profit					
3. Having enough cash for transaction improves profit					
4. High Population Density have more customers leading to cash flow					
5. Social economic status of the people in the area affect profitability					
6. Registered Mobile Money Agents in the area influences profitability					
7. M-Money payment service is a risky mode of service thus not good for measuring profit					
8. Savvy technology expert can temper m-banking accounts and affect profitability					
9. MMS is a strict technology which consequently affect profitability					
10. MMS are simple to operate catching the attention of the public thereby increasing profit					
11. MMT services' flexibility has a positive effect on business profitability					
12. Good customer care increase higher customer retention and profit					
13. Employees skills needed for customer satisfaction					

improves income and profit					
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