

**ASSESSING THE IMPACT OF MOBILE MONEY TRANSFER SERVICE ON  
THE SOCIOECONOMIC STATUS OF THE MOBILE MONEY VENDORS:**

**CASE OF KUMASI METROPOLIS.**

**By**

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## **DECLARATION**

I, Issaka Saliu, hereby declare that this submission is my own work towards Masters of Business Administration in Finance and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the paper.

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## **DEDICATION**

This research is dedicated to Almighty Allah, the Most Gracious, and the Most Merciful.

I further dedicate it to my lovely wife and child, Faiza and Mawhibah respectively for being part of my success.

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All Praise belongs to Allah alone.

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May the Almighty Allah bless you all

## **ABSTRACT**

The number of Mobile Money subscribers is on ascendency in Ghana even though the service is a new phenomenon. This has provided opportunities for all manner of people to act as mobile money vendors within the sector for various economic reasons. The study therefore sought to assess the impact of Mobile Money Transfer (MMT) service on the socioeconomic impact of Mobile Money (MM) vendors in Ghana. The variables used to assess the socioeconomic impact on vendors include: income levels, employment characteristics and the standard of living. The study also assessed some of the relevant challenges facing MMT service within Kumasi Metropolis that are likely to affect their activities. The research approach was a quantitative (through questionnaire) where a descriptive research design was adopted for the study. The population of the study was MM vendors in Kumasi Metropolis of which a sample size of one hundred and four respondents was chosen for the analysis with the aid of SPSS software. The responses revealed that there is a significant effects of income levels, employment characteristics and standards of living on the socio economic status of the MM vendors in the study area. The results also show that network and system challenges as well user unfriendliness negatively affect the service delivery within Kumasi Metropolis. Although MMT service is relatively a new field in Ghana, it has unlimited exploration potentials within which one can study for further research for academic, government agencies, corporate bodies, NGOs and other fields of interest. The study therefore recommend that Bank of Ghana, Ministry of Communication and National Communication Authority and other policy makers take critical measures to ensure that MM operators address these challenges to improve upon the quality of service delivery in the sector since that significantly affect the activities of MM vendors in Ghana.

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## **ABBREVIATIONS AND ACRONYMS**

ADP	Accelerated Development Program
ATM's	Automated Teller Machines
B&FT	Business & Financial Times
BoG	Bank of Ghana
EMI	Electronic Money Issuer
FDI	Foreign Direct Investment
MFS	Mobile Financial Service
GDP	Gross Domestic Product
GhIPSS	Ghana Interbank Payment Settlement System
GLSS	Ghana Living Standard Survey
GPTT	Ghana Post Telecommunication Telegraph
GSM	Global System for Mobile
GSS	Ghana Statistical Service
ICT	Information Communication Technology
KYC	Know Your Customer
LDC	Less Developed Countries
M2M	Mobile to Mobile
MDG's	Millennium Development Goals
MMT	Mobile Money Transfer
MMTS	Mobile Money Transfer Service
MMV	Mobile Money Vendors
MNO	Mobile Network Operators
MoMo	MTN Mobile Money
MPS	Mobile Payment System

MTN	Mobile Telecommunication Network
NCA	National Communication Authority
NFC	Near Field Communication
P2P	Person to Person
PDA	Personal Digital Assistant
PIN	Personal Identification Number
POS	Point of Sale
SE	Small Enterprise
SES	Socio Economic Status
SIM	Subscriber Identification Model
SME's	Small and Medium Entrepreneurs
SMS	Short Messages Services
SPSS	Statistical Package for Social Sciences
Telecos	Telecommunication Companies
TV	Television
WAP	Web Payment

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 BACKGROUND OF THE STUDY**

The telecommunication (telecos) industry is rapidly experiencing growth in several areas which include connections, upwards subscribers and massive data traffic across the globe and most especially in the developing countries including Ghana, and as such playing a pivotal role in unlocking the socioeconomic progress across the world. Many industries across the length and breadth of the globe are moving away from old process of doing business and are adopting digital and mobiles via internet to trade and market their products and services to catch up the ever increasingly globalisation to reduce cost by providing compelling, innovative and irresistible experiences for their customers.

The growth has enable people to keep in touch with their love once, business partners, friends via email, voice call, WhatsApp, Facebook, twitter just to mentioned few for increasing significance of mobile telephony. Due to technically advanced of today, cell phones are not only designed to receiving and placing calls, but are capable of storing data, taking pictures, transfer money and receiving real-time information by a click of a button.

In this regards, many pundits consider mobile telephony as a substitute for travel, which allow rapid and access to information, enable business associates to reach global markets, boost entrepreneurship and makes expansion and doing business easier, faster and cheaper. In recently, most of the telecommunication operators across the globe have enabled some mobile phones users easier to use the devices for paying

merchants, receiving time sensitive information such as stock quotes which are driving critical business processes in the economy of several countries.

Globally, the adoption rate of mobile financial transfer services varies across the world as a results of variety of indicators including the regulatory through legal instruments, availability of supporting technologies, and economic limitations, and skills with antecedent products and services. It is estimates by the World Bank that mobile broadband has a greater progressive economic impact as compared to fixed line broadband especially in developing global markets. It also discovered that almost ten percent (10%) growth in mobile broadband penetration drives a 1.4% growth in Gross Domestic Product for low-to-middle income countries such as Ghana.

It is reported that almost over 2.5 billion matured populace or an estimated 72% of the growing people who are predominantly developing countries are unbanked, this indicate lack of access to traditional financial services available. Also, the report implies that, almost 2.5 billion population within developing countries owned phones device. Statistically, the number of mobile phones users who are excluded from formal financial services could rise to 2 billion and this provide several opportunities to operators with mobile financial services (BCG, April 2011).

In Ghana, the payments system commonly used for financial transactions by majority of the population for decades is a cash payment system. According Gyamfi (2011) the Ghanaian business environment is still predominantly cash based such that most retail points depend on cash payments at the point of sale. According to information by bank of Ghana, in December 2012, only 29% of Ghanaians had bank accounts, out of which 37% had saving accounts, and 35% had access to credit. This huge untapped market create opportunities for telecommunications in Ghana who have little over

99.7% mobile phone penetration and over 24.4 million subscribers to drive the country to a cashless economy through the use of mobile money technology.

The Mobile Money Transfer services have contributed greatly towards the economic growth of the several countries as the enterprises are sources of revenue, employment and innovation in the society. The scope of the impact in the lives of the entrepreneurs has greatly been noted as their livelihood has improved; they can now invest in other areas, afford basic amenities and even create opportunities for others (Kraft, 2006).

(Pickens, 2009) accessed that, 9 out of 10 peoples in several developing countries neither have access to basic financial services nor a bank account. According to (EMI, 2001), formal financial sector mostly do not consider poor people as a viable customers since their transaction sizes are largely small. In (EMI, 2001) view, many poor people are considers to be living in remote areas where informal financial services like savings and loan associations as well as microfinance services remain limited to their reach.

With the emergence of electronic commerce (e-commence), electronic payment systems have grown steadily in order to burgeon both offline and online trade transactions for mobile transfer service and payments. Business around the world has seen an advancement of electronic payment instruments purposely to facilitate trade and simplify payment.

Cash transfer has often been considered a cumbersome process especially when it is between banks and requires elaborate paperwork. To add to the discomfort, a transfer could take hours or even days but same cannot be said of Mobile Money Transfer



(MMT) services which are done with just clicks of buttons on the mobile handset and it appears this is creating jobs for many.

Currently, the telecommunication operators in Ghana are MTN, Vodafone, Airtel Ghana, Millicom (operators of Tigo), Expresso and Globacom (operators of Glo). These operators provide various telephony services such as mobile money transfer, voice services, data, Short Messages Services (SMS) and the likes. These services enable subscribers communicate with one another and transact business through enabled mobile phones device to have money transfer services (McCusker, 2000).

Mobile Money Transfer (MMT) has now become another wheel of competition in the non-financial sector attracting the attention of all the financial sectors in the country. Out of the six telecommunications in Ghana, MTN was the first company to introduce the service into the country followed by Tigo, Airtel and Vodafone in order. Glo Ghana and Expresso are yet to introduce the service in the industry.

Even though, various operators in Ghana have ascribed different nomenclature for the service. MTN refers to it as MTN Mobile Money (or MoMo) whiles Tigo calls it Tigo Cash, Airtel refers to it as Airtel Money and Voda Cash by Vodafone Ghana. However, Mobile Money Transfer (MMT) services is used as a generic name for all kinds of mobile money transfer services in Ghana.

Beside the mobile money operators, a lot of people in Ghana have signed on as merchants to provide almost the same services as the operators. These category of the people are classified as Mobile Money Vendors (MMV) by the researcher.

This chapter introduces the idea of organizational transformation taking place in telecommunication industries that continue to improve the life of several partners in the mobile money business. The researcher has observed that, there hasn't been a lot of research works conducted in Ghana in assessing the impact of mobile money transfer services on the socioeconomic status of MMT vendors as well as challenges that vendors encounter while discharging this service. In this regards, the study seeks to assess the impact of MMT service on the socioeconomic status of the MM vendors in Kumasi Metropolis, Ghana.

### **1.1 STATEMENT OF THE PROBLEM**

The growth of mobile money subscribers is on ascendancy in several countries including South Africa, Tanzania, Kenya, Pakistan and Ghana just to mention few. Even though, there are several Mobile Money Vendors (MMV) within Ghana be it businesses (both financial and non-financial), associations and individuals; several others as well have applied for merchant SIM to venture into the service. This study aimed at assessing the impact of Mobile Money Transfer service on the socioeconomic status of the Mobile Money vendors in Ghana by analysing the effect of income level, employment characteristics and the living standard of MMV within Kumasi Metropolis, Ghana. In addition, the study will explore the challenges facing the services which currently affect the activities of these MMV within the study area.

### **1.2 OBJECTIVES OF THE STUDY**

The main objective of the study is to assess the impact of the MMT services on the socioeconomic status of the Mobile Money Vendors (MMV) in Kumasi Metropolis.

To achieve these, the following four specific objectives were formulated:

### **1.2.1 Specific objectives**

1. To assess the effect of MMT on the income levels of MMVs in Kumasi Metropolis.
2. To evaluate the effect of MMT on the employment characteristics of MMVs in Kumasi Metropolis.
3. To assess the effect of MMT on the standard of living of MMVs in Kumasi Metropolis.
4. To investigate the challenges facing MMT services in Kumasi Metropolis.

### **1.3 RESEARCH QUESTIONS**

To enable the researcher to fulfill the research objectives above, the researcher aims at providing answers to the following questions;

1. What is the effect of MMT on the income levels of Mobile Money Vendors in Kumasi Metropolis?
2. What is the effect of MMT on the employment characteristics of Mobile Money Vendors in Kumasi Metropolis?
3. What is the effect of MMT on the standard of living of Mobile Money Vendors in Kumasi Metropolis?
4. What are the challenges facing Mobile Money Vendors in Kumasi Metropolis?

### **1.4 THE SIGNIFICANT OF THE STUDY**

Preliminary investigation revealed that several people have applied for various merchant SIMs from operators to either start or add additional already prepared outlet within the study area. Certainly, when people are gainfully employed, it can have

some positive impact in the society by reducing crime rate (Ajiboye et al., 2007), increase access to quality and regular healthcare, increases tax revenue to improve the nation's GDP, and offers people some form of financial sense of security and stability.

Several developing countries especially African countries is implementing key policies to enhance electronic payment system that will go a long way to bridge the gap between the rich and the poor, the rural and urban towns to improve upon the socioeconomic and developmental agenda for growth.

The accessibility and availability of jobs in the mobile money sector can place both skilled and unskilled professionals at work thus promoting economic development required for a better standard of living in a country (Batchelor, Scott, & Woolnough, 2005). Weaker economy and higher jobless rates will lead inevitably increase in demands for security (Chu, Benzing, & McGee, 2007).

MMT services can enable the unbanked population overcome obstacles and enjoy the benefits of financial services. MMT services can be accessed by anyone from anywhere within legal boundary either night or day, removing issues of accessibility mostly presented by traditional banking sector.

The informal sector is being supported in ways that will raise productivity and distribution and increase jobs, owner's incomes and public revenues. It is against this background the government of Ghana consistently advocate several institutional reforms essential to accelerate economic growth. According to the Boston Consulting Group (April 2011), research has shown that financial inclusion can improve country's Gross Domestic Product.

The need for ancillary services to support economic activities in the Metropolis has attracted other relevant service providers which include banking and insurance sector. The emergence of MMVs in the metropolis has shown a positive impact on the socioeconomic status as many could improve the living standard of many within Kumasi.

The study will therefore help the various stakeholder: BoG, MoC, NCA, MNOs and other policy makers in Ghana and elsewhere understand the impact of MMT services on the socioeconomic status of the MMT vendors in Kumasi Metropolis.

This study will enable the various stakeholder to address the key challenges affecting the MMT service in Ghana.

Finally, this study will serve as a reference material for lecturers, students and researchers who wish to gain insight into research area for future studies.

## **1.5 SCOPE AND LIMITATIONS OF THE STUDY**

The study will focus on Mobile Money Vendors of various Mobile Money Operators in Kumasi Metropolis, Ghana. The study may not be able to capture all the significant variables to assess the impact of MMT service on the socioeconomic status of MMV in Ghana. However, the analysis of the income levels, employment characteristics and standard of living can be valuable for interested people. The MMVs will be limited to MTN Mobile Money, Tigo Cash and Airtel Money alone since Vodafone Cash yet to penetrate the market after a few days of launching the service in Ghana.

The major limitation encountered in this study was that employees were ignorant about the subject matter whereas others were busy which slow the rate of responses for analysis.

Moreover, the respondents were not willing to participate in the study in fear of their competitors spying on them or exposing their financial performance to strangers where some of them would suspect that the researcher is a thief trying to identify some potential areas. This was overcome by explaining to their superiors the intent of the study and issuing the transmittal letter for verification purposes.

Finally, erratic power outage impeded typing, research, analysis and editing the work where in several case have to roam in search of light.

## **1.6 ORGANISATION OF THE STUDY**

The study is organised into five chapters. Chapter one consists of the background of the study, statement of problem, objectives and research question, the significance of the study, the organisation of the study as well as the scope of the study. Chapter two is devoted to the relevant literature reviews on the impact of MMT services on the socioeconomic status of the mobile money transfer vendors. Secondary data like books and theories, which serve as guidelines to the topic. Chapter three is dedicated to the discussion of the research methods used in collecting data. Chapter four is the presentation of result, analysis and discussion while chapter five dealt with summarizing of finding, conclusion and recommendations of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

The chapter two is dedicated to literature review that is relevant to this study with a rationale of exploring research works as well as useful secondary data related to the study. The chapter explores what other researchers and scholars have outline regarding the identified factors that influence the socioeconomic status of the mobile money transfer vendors.

#### **2.1 GLOBAL MOBILE MONEY TRANSFER SERVICES**

Desai (2012:5) is of the view that the mobile money sector is increasingly growing across the globe and there were 150 available mobile money services for the unbanked in seventy-two countries, 41 of which were launched in 2012. This growth has been driven largely by Mobile Network Operators (MNOs), which operationally run 72.0% of live deployments and 72.5% deployments launched in 2012, where most deployments centered in Sub-Saharan Africa.

The mobile money industry, as measured by the number of deployments around the world has grown rapidly. According to Davidson and Pénicaud (2012:5-6) based on the global survey conducted, at the beginning of 2009, there were 17 mobile money services for the unbanked around the world; as of April 2012, there were 123, with another 93 that were being planned for launch. Based on mobile money transfer, it was found in the same survey that 52 operators who participated in the survey reported having registered a total of 60 million customers as of 30 June 2011. Eleven services were reportedly having more than one million registered customers in June

2011; together, these eleven services accounted for 85% of the registered customers identified in the survey, with the long tail of 40 services reporting the other 15%.

Further, from the survey undertaken by Davidson and Pénicaud (2011:7-8) “it was also found out that, in June 2011, mobile money service providers processed 141.8 million transactions. Of these, 29.8 million were payments: transfers, bill payments, and bulk payments. The rest were cash in, cash out, and airtime top ups. During the first half of 2011, the volume of transactions and payments processed on a monthly basis by mobile money service providers increased at annualized rates of 59% and 36% respectively”.

## **2.2 BACKGROUND OF MMT SERVICES IN GHANA**

Mobile money services as compared to other countries like South Africa is a relatively new development in Ghana. MTN was the first telecom company to introduce it in July 2009 in Ghana, followed by Zain (Airtel) in March 2010, Tigo in October 2010 and Vodafone Cash in July 2015. Currently, almost 5 million subscribers in Ghana are registered as active users. Moreover, various Mobile Money Transfer Operators expects exponential growth in the industry as more and more resources are been channel to educate subscribers to adopt electronic payment instead of traditional mode of cash transaction. The growing interest in the sector has generated a keen competition among the telecommunication organisations in the country with other telecoms in Ghana yet to join the fold.

Even though mobile money is relatively new in Ghanaian economy, the patronage of mobile money is on ascendancy. The value of transactions has seen an astronomical



jump; from GH¢2.4billion as at 2013 to about GH¢11.6billion in 2014, according to industry data seen by the B&FT.

The value of mobile money transactions when put into perspective is more than a third of the total deposit liabilities of the 28 banks as at the end of last year, 2014 and shows the vital role telecom companies are playing to advance the central bank's cashless economy agenda and also ensure that the push for more financial inclusion is brought into the hands of millions of Ghanaians.

Currently six (6) mobile operators provide mobile phone services in Ghana – Airtel, Kasapa, MTN, Tigo, Vodafone and GLO. Four (4) out of these operators namely: MTN, Tigo, Airtel and Vodafone, have all introduced various Mobile payments services with the aim of providing financial access to people in the country. Approximately, service has witness a growth from a transaction value of about GH¢171million in 2012 to the multi-billion cedi sector in 2015.

The growth of the transactions' value over the years corresponds with a similar trend in the volume of transactions. So far, the number of transactions has almost quadrupled since 2012; from about 30 million to about 106.4 million in 2014 (NCA, Ghana)

Industry watchers are of the view that mobile money growth will allow millions of Ghanaian otherwise excluded from the formal financial system to undertake financial transactions comparatively securely, fast, reliable, cheaply and convenient.

Already, network operators are ready to implement a new regulation by Bank of Ghana on mobile money payment systems that will grow the sector and increase payment transaction via mobile phones in Ghana.

Telecom companies have welcome the intent of Bank of Ghana to amend its regulation regarding branchless banking with that of MFS in which will grant them autonomy to operate through subsidiaries which would be supervised and regulated by the Bank of Ghana.

Mobile telephony service subscription has surpassed 30 million subscribers, indicating that the mobile penetration has long breached 100% of the country's population of 26 million (Population & Housing Census, 2010).

According to the ITU Telecommunication Standardisation Sector (ITU-T) report on mobile money, the service has realised the widest achievement in sub-Saharan Africa, where 16% of adults have being using mobile medium for more than 12 months to receive or send money or pay bills in 2011.

Despite the seemingly strong performance of mobile money in Ghana, it is still far less the value of transactions recorded in Kenya -- where the popularity of M-PESA has led it to record more than US\$375million on a monthly basis.

An information on Kenya's M-PESA indicates that from 2007 to 2009 the growth of M-PESA users otherwise referred to as unbanked has increase rapidly from 25% to 50% whiles the M-PESA users in the rural areas as well adjusted from 29% to 41%. This clearly show a growth that would take the financial services by surprise in coming years as more and more people would prefer mobile payment system to

formal financial services since it not used for only send and receive money but savings as well.

The momentum of the Ghanaian market, some industry analysts told B&FT, will be further enhanced when interoperability between service providers is concluded. Currently, mobile money users are restricted from sending or receiving funds from any provider other than the one they belong to.

The central bank's strategic payments roadmap, tailored to promote a cashlite society, is expected to address the issue of interoperability while enhancing existing payment systems in the country by building on the current payment systems infrastructure engineered by the Ghana Interbank Payment and Settlement Systems (GhIPSS) to reduce the dependence on cash for transactions.

The operations of operators in Ghana meet the agenda of central bank of Ghana to advocate cashlite and cashless transactions, which will eventually make it easy to promote cashless payment and electronic payment system in the country.

### **2.2.1 Mobile Money Payment System**

Mobile (Phone) banking entails the use of portable mobile devices like mobile phone, tablets, PDA and other devices connected to telecom companies' network, where the operators enable the users to initiate financial transaction and complete the transactions by the users or through authorised payment in exchange of goods and services as well as bank transfer/transaction and other financial services connected users (bank) accounts (Diniz, Porto de Albuquerque & Cernev, 2011, p. 5). This makes MPS a form of electronic payment, with the exception that the transactions are carried out on the mobile phone. Instead of paying using cash, cheques or credit/debit

cards, a person can use his/her mobile phone to make payments. “Cell phones with Mobile Payment technology were first introduced in Singapore in 2001 and in Japan in 2004 with over 5 million wallet phones sold the first year on the market”. The goal of mobile payment system is to digitalise the mobile phone into a “future wallet” holding credit card, debit account information and mobile “cash” for transactions. MPS mode of operation can be described in five models, namely: SMS, Direct Mobile Billing, Mobile Web Payment (WAP), and Contactless Near Field Communication (NFC) [26].

A mobile payment, “...paying for a product or service using mobile technology” (International Telecommunications Union, 2011). It is important to note that many scholars separate the activities customers perform while mobile banking from payments made by customers via mobile phone. Without the enabling framework of an m-banking system, however, mobile payment services would not exist, as they rely on the same banking instruments and value accounts that mobile banking systems operate on. Thus, for the purposes of this study, the term “mobile banking” will be used to describe the activities of both mobile banking and mobile payment users.

According to Zika (2005), “a mobile payment is an electronic payment made through a mobile device (e.g., a cell phone or a Personal Digital Assistant, PDA). This uses a mobile device to initiate and confirm electronic payment. In the field of payments, mobile phones opportunity is seen in the embedded SIM (smart) card used to store information of users”. The advantage of not needing to use other devices such as modems, point of sale terminals, and card readers for mobile payments is also quite clear (Zika, 2005). Costello (2003) envisaged that further developments in the mobile payments content were inevitable in the near future. Mobile devices might be used in

micro-payments such as parking, tickets, and re-charging mobile phones. Currently, most Banks provides active mobile banking services known as SMS Banking. This allows customers to do some banking enquires on their mobile phones. Customers do not need to go to their branch to do the following transactions: balance enquiry, transaction enquiry, cheque book request, statement request, and payment of utility bills. With this product, customers can easily check their account balance. Among the mobile money transfers in Ghana are the tiGO cash from tiGO, the MTN Mobile Money transfer from MTN, (Airtel Money) zap from Airtel and recently new entrant Vodafone with Vodafone Cash.

### **2.2.2 Regulatory Requirements**

A supportive regulatory regime is a vital first step in developing a thriving MMTS ecosystem. Such a framework would be based on three tiers of branchless banking regulation, which would address a wide variety of domains. *Vital*, the first tier of regulations, addresses agents and controls anti-money laundering, countering of terrorism financing, and know-your-customer. The second, *necessary*, regulates consumer protection, payment systems, and more. And the third tier, *supporting*, includes the underlying framework, such as data privacy, e-commerce and e-security, general banking, taxation, and general telecommunications.

## **2.3 MOBILE MONEY TRANSFER TYPES IN GHANA**

In Ghana today, there are various mobile money transfer services being embraced by the various providers as a way of business and sustainability used to reach the customer. The Mobile network operators and banking institutions have devised various services to meet the customer needs and enhance the socio economic status of the providers of the service. The Mobile money transfer types offered by four out of

six Mobile Network Operators are: MTN Mobile Money by Scancom Ghana, Airtel Money by Airtel Ghana, Tigo Cash by Milicom Ghana and Vodafone Cash by Vodafone.

The service is available to both mobile and non-mobile users. The Mobile Money Transfer services is provided by MFSOs in partnership with bank and operate through authorized Merchants who facilitate the service on behalf of the partner banks. Amongst some of the partner banks are Ecobank, Fidelity Bank, Guaranteed Thrust Bank, Car Bank, Stanbic Bank, Zenith Bank, Universal Bank of Africa, Universal Merchant Bank, Access Bank etc.

## **2.4 ECONOMIC AND SOCIAL BENEFITS OF MMT SERVICES**

The unbanked live with the reality of two main challenges that can be addressed by financial services: “high income volatility and severe expense shocks. Obtaining financial services can smooth out cash flow by building a buffer through savings, increase inflows through remittances, and accumulate lump sums of money for major expenses through credit and savings products” (B&FT). Financial inclusion will also defend against severe expense shocks by helping to provide funds when an unexpected negative event occurs. Temporary shortfalls can be addressed through credit, remittances, and insurance products.

Mobile financial services’ (MFS) basic qualities can help the unbanked overcome barriers and reap the benefits of financial services. MFS can be used by nearly everyone at any time of day or night and from anywhere, eliminating the accessibility issues presented by traditional banking. In addition, MFS provides secure services at a low cost.

Telecommunications companies (telcos) bring five unique advantages over traditional banks. “They have traditionally focused on all customers, not just the most profitable among them. They already have a secure device—the mobile phone—in customers’ hands. Unlike banks, telcos have existing relationships with these customers and have already established trust. And telcos have the added benefit of a large distribution network” (B&FT).

## **2.5 SOCIOECONOMIC IMPACT OF MMT SERVICES**

In terms of general macroeconomic impacts, there are only a couple key studies that have demonstrated the positive influence of mobile money penetration in developing countries. One well-known study found that while mobile money in less developed countries are playing the same crucial role that the sector played in richer countries in the 1970s and 1980s, the growth impact of the service is around twice as important in developing countries, where there is also a critical mass effect, and that a rise of the mobile money among several people boosts GDP growth by 0.6% (Waverman, Meschi and Fussm, 2005). Another reported that the impact of the penetration is positively linked to Foreign Direct Investment (FDI) (where interpolation , and that this impact has grown more significant in recent years, with a 1% increase in mobile penetration rates associated with 0.5 - 0.6% higher rates of FDI and GDP (Williams 2005).

One aspect of mobile phones in the developing world that is being looked at with some anticipation is the introduction of mobile financial services and transactions. Many if not most rural users in less developed countries have no access to financial services of any kind, and getting these “unbanked” citizens linked somehow into the formal banking sector is a priority for many governments. However, the evidence to

date of initial efforts in this regard is mixed. While users are employing the mobile banking systems to make payments for things such as airtime and pre-paid electricity, and many are using them for sending remittances back to friends and relatives in their rural villages, there is little evidence to date of an increase in the number of users registering for more formal banking services via mobile phone, such as savings and credit services (Morawczynski, 2008). Initial analysis seems to indicate that while today's mobile banking systems are providing good money transfer and payment services to early users, there will need to be better marketing and training involved to help consumers understand what the systems are capable of, as well as improved policy measures to ensure that the benefits of mobile banking are evenly distributed across all banking and consumer sectors (Ivatury and Pickens, 2006).

Mobile money present greater opportunity to billions of people to connect to the informal and formal economy, banked and the unbanked community of the world today. Recently, majority of delegates who attended mobile money conference in South Africa agreed that MMT is transforming several African economy like Kenya, South Africa, Ghana, Uganda and others by enhancing the lives of many people as well as creating alternative financial services for unbanked communities.

Beside financial services inclusivity, the service provide opportunity to stimulate economic growth. Several people who have taken up the business opportunity as registered MMVs (Merchants) earn variety of benefit including commissions, record keeping and financial accounting training and others.

MMT simply enable users pay and receive payment for goods and services. School fees, electricity bills, transport fares, air tickets, buy and sell airtime among others.



These facilitates trade by reducing traveling distance and avoiding long queue characterized by the formal financial sector.

Moreover, MMT provide safe storage mechanism for households and businesses for future use. Improving savings culture among majority poor could improve their economic status by given them opportunity to meet their financial needs in times of emergency.

In Kenya for instance, the operators has provided the users the opportunity to save and borrow e-money via their wallet while earning interest as well. Other customers who are eligible too can secure emergency credit facility (loan). MTN Mobile

Aker (2009) rightfully argues in her research that “Mobile Money are transforming lives in low-income countries faster than ever imagined. The effect is particularly dramatic in rural areas of Africa, where traditional financial services are excluded. The MMT in Ghana continue to make significant financial contributions in hopes of promoting the economic development in the country by providing alternative source of revenue and employment.

## **2.6 POTENTIAL CHALLENGES FACING MMT SERVICES**

Mobile money transfer is experiencing rapid growth in recent times across the globe. However, upon all the success story of MMT service, there are some potential challenges facing the sector which is affecting the adoption and penetration rate as expected. According to InterMedia (2013:9) research on MMT show that mobile Money has several barriers which inhibit its growth.

Poor and unreliable network connectivity is one factor affecting the MMT service (TCRA, 2013). Mostly, due to network connectivity failures, the service is characterised by a messages stating that ‘service is not available please keep trying or try again later’ and affect the operation of MMVs in the industries.

Another challenges facing the MMT sector is security issues. According to (IJRMT, 2013), agents or vendors do not have adequate PIN protection which subject them to frequent fraudsters by way of swapping the SIM cards or replacing the SIM, and then withdraw their e-money without traces. Sometimes they are made to believe that they have won ‘illusive awards” from network operators by defrauding them to huge sum of money.

Inadequate education is also another factor affecting the services. According to Kennickkell and Kwast (1997), education play a significant role in achieving successful electronic money product and assessed that high specialized education in US market has improve the electronic financial assets. Majority of the MMV in South Sahara African in particular are not highly educated to efficiently manage and implement fact moving technological innovation.

Challenges in technological advancement and the high cost of adoption to both consumers and service providers, are other challenges facing Mobile Payment System as well. Acceptance is another challenge facing Mobile Payment System. Despite the unique features of Mobile Payment System it is not widely accepted in Ghana. There are no guarantees that Mobile Payment System technology will catch on in Ghana, as it has in places such Japan, Korea, Malaysia, Kenya, South Africa and the rest. Thus, the survey to be conducted as part of this project to find out the challenges facing

MMT service in Ghana and will evaluate these challenge in more in-depth where recommendation would be provide for appropriate redress.

Other issues are that of compliance procedures between the banks, operators and regulatory authorities, and interoperability of the system potential problem to Internet access on mobile is “data traffic jams”, inadequate infrastructure and user unfriendliness. While there is no such a technology that is without some negatives, the benefits of the mobile money technology far outweigh its demerits.

## **2.7 FACTORS INFLUENCING THE SOCIOECONOMIC STATUS OF THE MM VENDORS IN GHANA.**

In this section, the researcher will discuss socioeconomic factors that MMT impact on the socio economic status of the Mobile Money Financial Vendors. Even though there are several factors, this research only focused on the income groups, employment characteristics and the standard of living of the respondents.

### **2.7.1 Effect of MMT on Income Level of vendors`**

In this study, the individual household income consist of cash income earned or received by the Mobile Money Vendors engaged in MMT services within Kumasi Respondents considered in the study are of different monthly income groups in the study area. An analysis of per capita expenditure figures in GLSS round 6, households in Ghana could be categorised into three main income groups (low, Middle and high). Low income households have an average of GHC58.00 as per capita monthly income. The middle income group has average per capita income of about GHC200.00 per month (GLSS 6, 2013). However, according to Ghana Statistical Service (GSS), majority of Ghanaians are estimated to be within lower-to-middle income bracket

with average annual expenditure estimated at 9,317 Ghana cedi and per capital mean annual expenditure of 6,337 Ghana cedi. The table 2.1 below shows the various income groups.

### **2.7.2 Effect of MMT on employment characteristics of vendors**

Employment characteristics either affect the socioeconomic status of peoples positively or negatively. In this study, employment is the proportion of the country's population that is employed at the time of this survey. Invariably, the productive capacity of a country is directly linked with the size of its productive workforce and in Ghana, the legal working age according the Ghana children's Act 1998 Labour regulation (regulation 7), 2007 and 1992 Constitution is eighteen years and above. Averagely, Ghana's employment characteristics is around 36% of the total population working force. It is in this regards the researcher want to find the impact of MMT on the employment characteristics of the Mobile Money Financial Vendors in Ghana, Kumasi Metropolis as a case study.

### **2.7.3 Effect of MMT on Standard of living of Vendors**

According to the Ghana Living Standards Survey round 6 released in August 2014, the indication show that Ghana is making massive progress in addressing the standards of living in the country through education, healthcare, employment and infrastructure. However, there are several key indicator the country is lagging behind targets (international & national). The study will evaluate the effect of MMT services on the living standards of MMT vendors in the areas of health, food, entertainment, clothing etc. This will enable the researcher to conclude on either the MMT services has indeed improved their socioeconomic status or not.

## **2.8 DEFINITION OF KEY TERMINOLOGIES**

The forgoing literature review has revealed the emergence and trend of mobile money transfer with the need for small and medium enterprises adopting the business to improve the socioeconomic status of the working force in Ghana. However there is need to further study the field and develop literature for policy makers. This will go a long way improve the socioeconomic status many other Ghanaian. In this regards, major terms used in this study are defined in this section and this is based on how these terms were used in the study.

### **2.8.1 Mobile Money**

This may be related to mobile wallet, which refers to a digital repository of electronic money developed and implemented on mobile devices, allowing person-to-person transactions (P2P) between mobile devices (M2M) from users of the same service. It is similar to a normal physical wallet and is able to store money and credit and debit card

### **2.8.2 Mobile Money Transfer Service**

This is the transferring of money from one person to another through use of mobile phone. There are various MMT services available in Ghana such as MTN Mobile Money, Tigo Cash, Airtel Money and Vodafone

### **2.8.3 Mobile Money Vendors (also known as vendors)**

These are the small business or individuals who have incorporate the Mobile Money Transfer service to their business and act as agents for the mobile network operators and act as intermediary between the operators and subscriber (customers).

#### **2.8.4 Mobile banking**

This is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). It is also known as M-Banking, m-banking, SMS Banking.

#### **2.8.5 Mobile Payments**

This include payments done using digital mobility technologies, via handheld devices, with or without the use of mobile telecommunications networks. These payments are digital financial transactions which may not necessarily linked to financial institutions or banks.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 INTRODUCTION**

The purpose of this chapter is to outline the method used for this study, and the following structures were adopted: research design, target population, sampling techniques, sample size, data collection methods and procedures which include types of data, questionnaire development, pilot study and the full administration of instrument. Finally, the method of data analysis as well as validity and reliability of the data.

#### **3.1 RESEARCH DESIGN**

Research method involves a number of investigative instruments employed by researchers in arriving at the results. This usually calls first for a specific research design. According to (Jackson, 2001) descriptive research includes case study methods, Archival method, interviews and focus group interviews, action research and qualitative data analysis.

There are numerous types of research designs that are appropriate for the different types of research projects. The choice of which design to apply depends on the nature of the problems posed by the research aims. Each type of research design has a range of research methods that are commonly used to collect and analyze the type of data that is generated by the investigations. Generally, there are three types of research designs, namely descriptive, explanatory and exploratory, although some researchers have proposed the historical, cultural, action, ethnological feminist and experimental (Walliman, 2011).

The descriptive method of research design attempts to examine situations in order to establish what is the norm, that is, what can be predicted to happen again under the same circumstances. Depending on the type of information sought, people can be interviewed, questionnaires distributed, visual records made, even sounds and smells recorded. This method is best suited for when the rationale is not to find cause and effect relationship with the research problem but rather to provide a descriptive view of the event, social phenomenon or research problem (Molhotra, 1996)

In the context of this study, the researcher has undertaken to apply the descriptive research design in assessing the impact of MMT services on the socioeconomic status of the mobile money vendor in Ghana. It is important to note that the researcher does not have intentions of providing causal relationships nor experimental effects in this study and for that reason, finds the descriptive research design the most appropriate tool to use. The study will focus on MMT vendor within Kumasi Metropolis, Ghana.

### **3.2 POPULATION OF THE STUDY**

The population under study is mobile money transfer vendors (MTN Mobile Money, Airtel Money and Tigo Cash only) within the Kumasi Metropolis, Ghana. Even though there has not been any published report on the number of MMV within the Kumasi metropolis, an estimated number of 200 were used for this study.

Setting up this business does not require any cumbersome administrative procedure to start. They are not located in any defined area and mostly found where economic activities are viable. Most of the population under study engage in all the three mobile money services in Kumasi Metropolis, Ghana. Even though Vodafone Ghana has launched Vodafone Cash, however, it is yet to penetrate into the market.



### **3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE**

In the course of chosen appropriate sample for the study, estimated population was considered as (Obeng & Loria, 2003) proposed to have a target population in mind. The group should possess information relevant to the researcher (Malhotra 1996) but due to limitation factors like time contains and budget, the researcher could not cover the whole population. The sampled population was first based on stratified random sampling where the population was divided into four strata namely; self-owners, managers, supervisor and attendants.

The respondents were chosen based on convenience sampled to enable the researcher use judgemental and accessibility to choose people that best meet the objective of the study. The reason for using this method is because the study aims at capturing information from all the diverse groups of people involved with mobile money transfer services as a business of different age groups, different business ventures, different income, gender, different employment characteristics and the standards of living. The study was cross related the differences to see if there is an impact of mobile money transfer services on the mobile money vendors' socioeconomic status within the study area. Items in each stratum constitute a sample.

The sample size was determined using the geographical locations of the firms in order to have almost all streets within the metropolis represented. The respondents were workers knowledgeable with the questions at hand.

In all 104 people were selected to represent an estimated population of 200 vendors with 95% confident level and 6.67 confident interval. This is due to geographical location and time constraint; the accessible sampled population consist of ten self-

owners, fifteen managers, twenty supervisors and fifty-nine respondents. The method will be time consuming hence the reason for taking a minimum sample size.

**Table: 3 .1 Sample Procedure Matrix**

Target Group	Sample Population
Owners	10
Managers	15
Supervisors	20
Attendants	59
Total	104

Source: Author's field work, 2015

### **3.4 DATA COLLECTION**

In conducting this research, the researcher recognizes that qualitative study of this nature cannot be carried out without first looking into data sources. According to (Saunders, Lewis et al. 2009) data is a fact, opinion and statistics that have been collected and recorded together for reference or for analysis.

The data collection instrument mainly used by the researcher was a structured questionnaires. The information was collected from the sampled population by means of a structured questionnaire administered on respondents where appropriate boxes were/was ticked base on unbiased judgement. The questionnaires had both open and closed questions to allow for varied responses. The purposed of the chosen method was due to time constraints as well as cost. The questionnaire aimed at obtaining relevant and supplementary information through further probing of the respondents and by evaluating relevant research publications of related firms in the sector.

Moreover, in the view of (Saunders, Lewis et al 2009) data may be collected as either primary or secondary. Primary data refer to information gathered for a precise purpose at hand. For this study primary data were used to get information from the self-owners, managers, supervisors and attendants through questionnaire. The benefits of using primary data are that, a more reliable and exact information needed is obtained. Secondary data on the other hand is information that already exist somewhere, having been collected for another purpose (Kotler, Armstrong et al 1999). The secondary data that were employed in this study were obtained from magazines, journals, newspapers textbooks and relevant websites. These were mostly gathered from National Communication Authority and Kwame Nkrumah University of Science and Technology, main library.

In order to meet the objectives, interviews and self-administered questionnaires were employed to collect data. This is in agreement with (Saunders et al 2009) that questionnaire is the most suitable in dealing with a study with case survey.

Also, the questionnaires contained both open and close ended question. Questionnaire for all the four strata sought to find the effect of MMT on the income levels, employment characteristics and their standards of living of the MM vendors. In addition to that, the researcher also investigate the challenges facing the MMT services in the study area (Kumasi metropolis).

The questionnaires were self-administered to the targeted population after the necessary vetting and editing. Respondents were assured that all information given shall be accorded the necessary confidentiality it deserves.

In order to ascertain the suitability in obtaining the required result, the questionnaire was pilot tested by asking people to do vetting and editing to ensure that it is free from ambiguities. The post pilot adjusted data collection instruments were used to collect data for analysis.

### **3.5 METHOD OF DATA ANALYSIS**

In order to assessed the impact of mobile money transfer services on the socioeconomic status of mobile money transfer vendors within Kumasi Metropolis, primary data in the form of questionnaire are subjected to detailed analysis. Data gathered by the questionnaire were quantitative in nature where Likert Scale was predominantly used. The data was subjected to statistical analysis and where necessarily; graphs, tables and pie charts were used with the aid of SPSS in the analysis.

### **3.6 VALIDITY AND RELIABILITY OF DATA**

Measurement tools of validity and reliability are used to determine how stable, trustworthy, dependable and consistent the information gathered from respondents is. The validity of the information is measured to determine whether information gathered from the respondents actually bring out clearly the rationale of the study based on the responsiveness of the sample. Inferences about responses from all the respondents are dependent upon the responsiveness of information gathered from the mobile money vendors. Soliciting information input from of my supervisor, choosing knowledgeable participant, information from NCA, Airtel, Tigo and MTN added to the validity of the work.

The reliability of the data gathered is measured by comparing responses from all the respondents as they are consistent for conclusions to be drawn. Respondents were chosen from the population sample based on convenience sampling techniques due to accessibility. They were of different backgrounds and had knowledge of the research topic which proved a true representation of the population of the study. This is also a measure of reliability of the information provided in responding to questions of the study for analysis and conclusions. As a way of increasing the reliability, information was collected from National Communication Authority (NCA) about the sector prior to the research. The information provided by the respondents in the questionnaire were what was used for analysis, recommendations and conclusions.

## **CHAPTER FOUR**

### **DATA ANALYSIS, INTERPRETATION AND PRESENTATION**

#### **4.0 INTRODUCTION**

The chapter examines information collected from the respondents to enable the researcher draw relevant conclusions and recommendations. The objectives of the study outlined in 1.2 (chapter one) was the principal guiding factors used. The data was interpreted according to research objectives and research questions. Appropriate data analysis and presentation techniques are used. The primary objective of the study was to assess the impact of mobile money transfer services on the socioeconomic status of MMVs within Kumasi Metropolis.

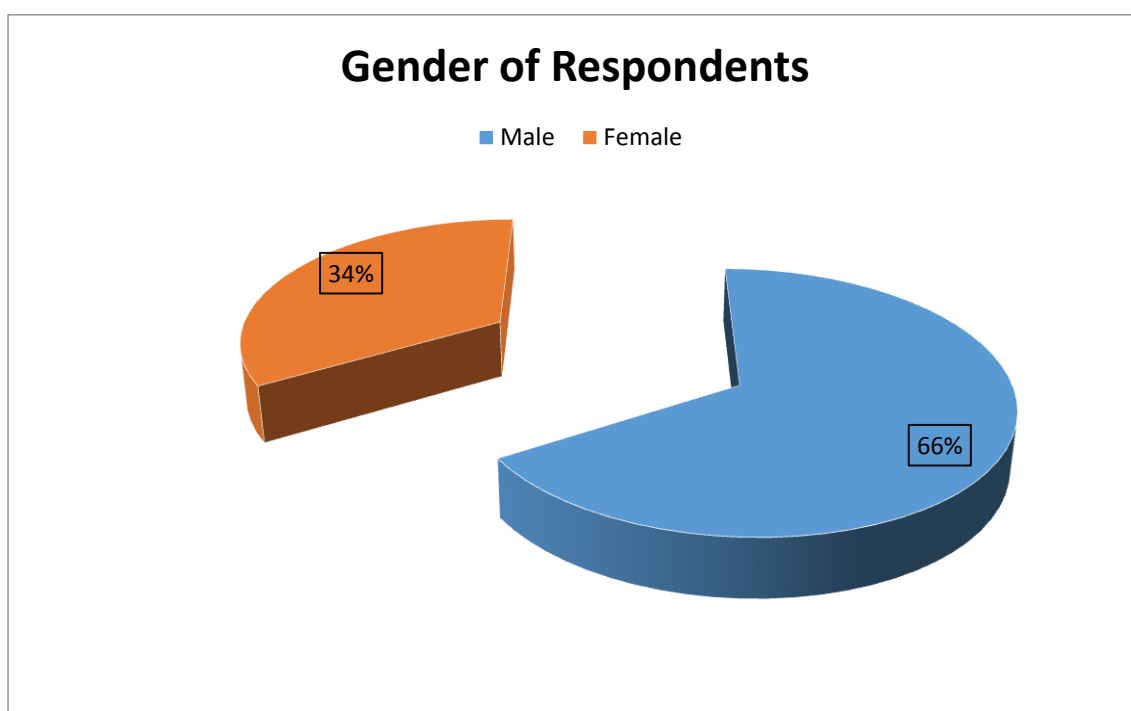
#### **4.1 SOCIO-DEMOGRAPHIC BACKGROUND OF RESPONDENTS**

This section focused on statistics on personal information of individuals within Kumasi Metropolis who operate MMT. The variables about the respondents that were examined here include; gender, age, marital status, MMT services/network used by respondents, pre-occupation, respondents' ownership types, number of years respondents has spent in the MMT services and respondents' daily income. These variables were enquired to provide background information about the respondents based on which better conclusion could be drawn on the impact of MMT on vendors.

##### **4.1.1 Gender of Respondents**

The result in figure 4.1 provides details information on the respondents' gender. This help provide information on the sex group of individuals who are into MMT business within Kumasi Metropolis and possible which gender group is likely to engage in this kind of business.

**Figure 4.1 Gender of Respondents**



Source: Field Data, 2015

The study conducted on a total of 104 respondents out of which 69 respondents representing 66% were males and 35 respondents representing 34% were females. The field results illustrate that male engage in Mobile Money Transfer (MMT) than female within Kumasi Metropolis. This explained the male dominance in monetary center as indicated by Costello (2003). This study further showed that male were more likely to enter into MMT business as majority of the respondents contacted for the study within the period of the research were male. It also implied that female should start considering the MMT business as business opportunity and should not allow male to dominate within the MMT services.

#### **4.1.2 Age group of respondents**

The data in table 4.1 showed that majority of the respondents within the study area (Kumasi Metropolis) who engage in MMT business were within the ages of 30-39

years, this was followed by those in the age group of 20-29 years. This showed that MMT business was more attractive to individual within the youthful age.

**Table 4.1 Age group of respondents**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
20-29 years	35	33.7
30-39 years	42	40.4
40-49 years	25	24.0
50 and above years	2	1.9
<b>Total</b>	<b>104</b>	<b>100.0</b>

Source: Field Data, 2015

From the field data presented in table 4.1, the study established that out of the total sampled population of 104 respondents, 33.7% (35) of them were within the age group of 20-29 years, 40.4% (42) of the respondents were within the age group of 30-39 years, 24% (25) of the respondents were within the age group of 40-49 years and 1.9% (2) of the respondents were within the age of 50 years and above.

From the results obtained from the respondents, it was clear that few people within the old adult age (50 years and above) were less interested in MMT business. The study results showed clearly that MMT business was a recent monetary service which was more of interest to the young generation than the older generation. The results further indicate that young ones and middle aged are more likely to enter into MMT than older adult (age-50 years and above) as more people within the age of 20-29 years and 30-39 years exceed the group within the age of 40-49 years as well. This confirmed that views of Diniz, Porto de Albuquerque & Cernev (2011) that MMT is a recent monetary service and will benefit the future generation in terms of their finances.



### 4.1.3 Marital status of respondents

The study further looked at the marital status of individuals within the MMT business. This was examined so as to provide data on MMT services owners and operators marital status.

**Table 4.2 Marital status of the respondents**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Single	56	53.8
Married	25	24.1
Separated	20	19.2
Widow	3	2.9
Total	104	100.0

Source: Field Data, 2015

Investigating on the respondents' marital status, the studies found that majority of the respondents (53.8%) were single. This was followed by respondents who were married (24.1%) whiles 19.2% respondents represent those who were separated. Few individuals who were widow were in the MMT business within the Kumasi Metropolis. This study results showed that single were more engaging in the MMT business. This confirmed the early finding that most individuals within the MMT business were youth. It also showed that MMT business is start business and might be financially viable enough to support family life of individual within the sector. The fact that individuals within the MMT being single explained the fact the services is recent one and is of more interest to the younger generation who are yet to establish their life.

#### 4.1.4 Type of MMT services vendors operate

The data in table 4.3 showed that type of MMT services that most vendor engage in within the Kumasi Metropolis. From the field data, it was established that most of the vendor engage in all the three major MMT services providers; MTN Mobile Money, Airtel Money and Tigo Cash.

**Table 4.3 Type of MMT services vendors operate**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
MTN Mobile Money, Airtel Money, Tigo Cash	41	39.4
Only MTN Mobile Money	25	24.2
MTN and Airtel money	5	4.8
Only Airtel Money	18	17.2
MTN and Tigo cash	4	3.8
Only Tigo Cash	11	10.6
<b>Total</b>	<b>104</b>	<b>100.0</b>

Source: Field Data, 2015

The data in table 4.3, showed that 39.4% (41), 24.2% (25), 4.8% (5), 17.2% (18), 3.8% (4), 10.6% (11) of the respondents contacted during the study engage in MTN Mobile Money, Airtel Money, Tigo Cash;, Only MTN Mobile Money, MTN and Airtel money, Only Airtel Money, MTN and Tigo cash, and Only Tigo Cash respectively within the Kumasi Metropolis.

The study established that MMT vendor deal in more than one MMT services providers. From the field survey, it was discovered that vendors who engage in all the three MMT services providers were dominant follow by those who deal with MTN only. The study results showed that MTN MMT was popular among MMT vendors followed by Airtel Money and Tigo Cash. The data study showed that most vendor transact all the three MMT services providers. This confirmed that views of Davidson

and Pénicaud (2012) that in order for MMT vendors to make maximum profit it was good to trade in all MMT services available at any given time.

#### **4.1.5 Pre-occupation of MMT Vendors**

Pertaining to the pre-occupation of MMT vendors, the study results discovered that the vendors within the MMT business were mostly self-employed. Very few vendors within the MMT services in Kumasi Metropolis were teachers, unemployed, company employees, young school leavers and civil servants.

**Table 4.4 Pre-occupation of MMT Vendors**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Company employee	6	5.8
Civil servant	10	9.6
Young school leaver	22	21.2
Teaching	2	1.9
Self-employees	51	49.0
Unemployed	7	6.7
Others	6	5.8
Total	104	100.0

Source: Field Data, 2015

The data in table 4.4 showed that 5.8% (6) of the respondents conducted during the study who were in MMT service were company employee, 9.6% (10) of the respondent were civil servant, 21.2% (22) of the respondents were young school leavers, 1.9% (2) of the respondents were in the teaching sector, 49.0% (51) of the respondents self-employees, 6.7% (7) of the respondents were unemployed and 5.8% (6) of the respondents were those who were engaged in other occupations within the study area.

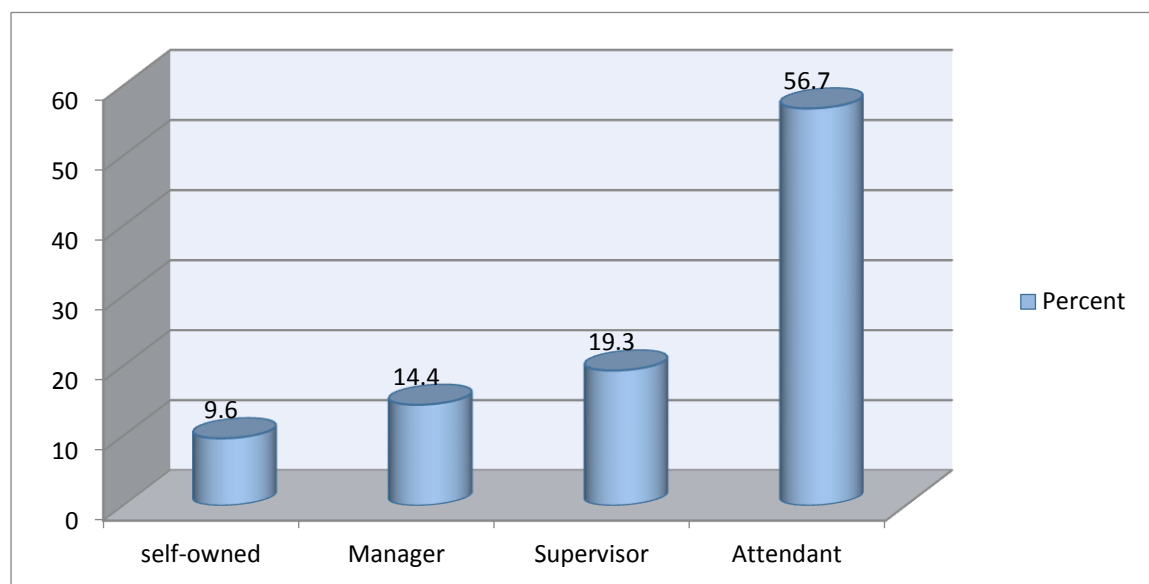
From the field data, it was established that most of the MMT vendors were self-employed. This implied that most self-employed within the study area are more likely

to enter into the MMT vendor business. This implied that MMT business is mostly attracted to self-employed within Kumasi Metropolis who are ready to take opportunity in the MMT sector within the study area.

#### 4.1.6 Ownership type of MMT Vendor

The study looked at the respondents' ownership type of MMT services. This was done to ascertain the views of all the categories workers within the MMT sector. The data in figure 4.2 gives the respondents ownership type.

**Figure 4.2 Ownership type of MMT Vendor**



Source: Field Data, 2015

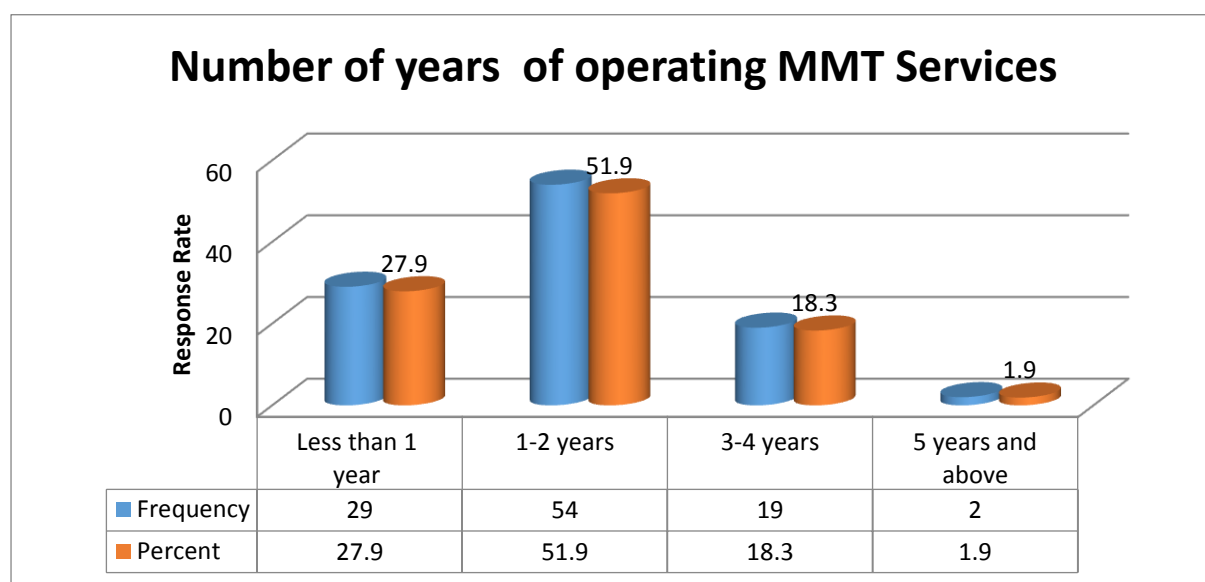
From figure 4.1, the study found that most of MMT vendors who were sampled for the study were the attendants. The high percentage of attendant within the study population indicated that fact that most MMT vendors are employees who work for those who employ them in the services. From the field study, 56.7% of the respondents were attendants. This study results have a lot to demonstrate to Ghanaians. The study results clearly showed that the MMT sector can be a source of employment for both the individual MMT owner and the employee (attendant). It was

showed that MMT sector has expanded to include managers and supervisors as well, which means that MMT is a great employment sector for many Ghanaians. This implied that individuals who are unemployed should start considering the MMT as employment opportunity.

#### 4.1.7 Number of years of operation

Investigating into the period under which most MMT vendors have been under operation, the study found that, majority of the respondents had been in the MMT service for only 1- 2 years. The study results in figure 4.3 gives details on how long most respondents had been in the MMT service sector.

**Figure 4.3 Number of years of operating MMT services**



Source: Field Data, 2015

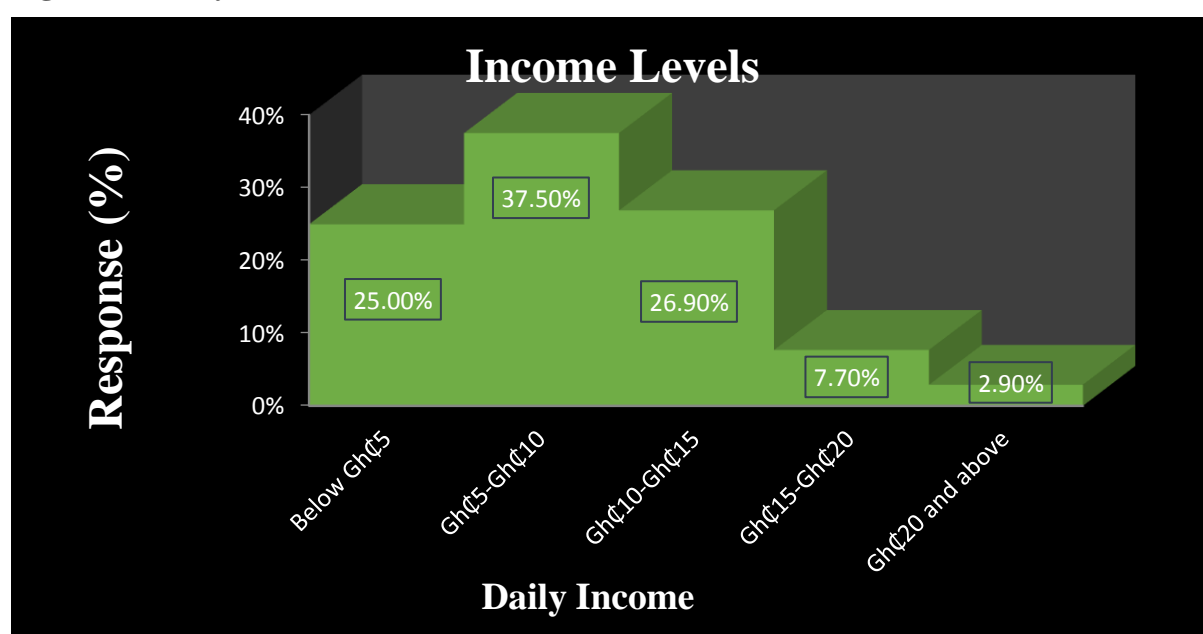
The data in figure 4.3 showed that 27.9% (29), 51.9% (54), 18.3%(19) and 1.9% (2) of the respondents had been in the MMT service for less than 1 year, 1-2 years, 3-4 years, and 5 years and above respectively. The study results showed that the MMT has indeed been a recent phenomenon as it was revealed that most respondents had

been in the study for only 1-2 years. Very few respondents had been in the services for five years and above. This showed that for the past five years the MMT service was not common within the Kumasi Metropolis but in recent times, it is becoming a noticeable business venture for many people within Kumasi Metropolis. The high number of people entering into the MMT service sector showed the rate at which the service is expanding faster within the Kumasi Metropolis. The study results therefore implied that more people are likely to enter the MMT than leave the sector as the number of people in the MMT in recent times are high than the past 3-5 years and more.

#### 4.1.8 Daily household income of MMT vendors

The data in figure 4.4 gives the details of the respondents' daily household income.

**Figure 4.4 Daily household income of MMT vendors**



Source: Field Results, 2015

The study revealed that 26 respondents out of 104 representing 25% of MMT vendors' household income was below Gh¢5.00 a day, 39 respondents representing

37.5% was between GhC5 - GhC10, 28 respondents representing 26.9% was between GhC10 - GhC15 and 8 respondents representing 7.7% was between GhC15 - GhC20. The study results showed that majority of MMT vendors' household income within Kumasi Metropolis was between GhC5 - GhC10. This indicates that majority of the respondents engaged in the MMT vendor within the study area was between 5-10 Ghana cedi followed by those between 10-15 Ghana cedi.

## 4.2 Effects of MMT on income level of MM vendors

One major objective of the study was to examine the effect of MMT service on MMT vendors' income level. In this regards, table 4.5 depicts the effect of MMT on vendors' income level

**Table 4.5 Effects of MMT on income level of MM vendors**

Statement	SD	D	N	A	SA
Mobile money transfer business has greatly improve my saving ability	-	1(0.9)	8(7.7)	53(51)	42(40.4)
MMT has improved my disposable income	-	3(2.9)	38(36.5)	51(49.0)	12(11.5)

Source: Field Data, 2015

### 4.2.1 Effect of MMT services on MM vendors' saving ability

Investigating into the effects of MMT on vendors' income level, the study found that most of the respondents agreed that MMT has greatly improved their saving ability. The study results has showed that none of the respondents strongly disagreed (SD) that MMT business has greatly improved their saving ability, 0.9% (n=1) of the respondents disagreed (D), 7.7% (n=8) of the respondents neither agreed nor disagreed (N), 51% (n=53) of the respondents agreed (A) and lastly, 40.4% (n=42) of

the respondents strongly agreed (SA). Few respondents felt that MMT has not impacted on their saving among. This high percentage of respondents agreeing that MMT has improved their saving ability means that one positive effects of MMT business for vendors is that it has help improved their saving ability. This findings also implied that MMT vendors saving ability had improved since the join the MMT business.

This confirmed the views of Haggarty, Shirley, & Wallsten, (2003), Mobile Money service was introduced to help low income earners who wish not to saving with the traditional banking institutions to improve their savings. This study finding therefore implied that people within the Kumasi Metropolis could improve upon their saving ability through MMT as vendors as the sector has improved the saving ability of the vendors over the years of the respondents.

#### **4.2.2 Effect of MMT services on MM vendors' disposable income**

Further investigating on the MMT services and vendors disposable income, the study found that majority of the respondents agreed that MMT services had impacted positively on their disposable income. Out of the total population, 40% and 11.5% of the respondents agreed and strongly agreed respectively that MMT has help improved vendors disposable income over the years.

This study result inveterate the findings of Mobile Industry report (2010) that MMT has improved vendors and individuals who use MMT services disposable income. This implied that MMT service had improved people who utilized MMT services disposable income. This therefore means that individual who want to improve their disposable income should join the MMT services.



### 4.3 EFFECTS OF MMT ON EMPLOYMENT CHARACTERISTICS OF MM VENDORS

The study further looked at the effects of MMT on employment characteristics of MM vendors. The data in table 4.6 illustrates the effects of MMT on vendors' employment characteristics of vendors within Kumasi Metropolis.

**Table 4.6 Effects of MMT on employment characteristics of MM vendors**

Statement	SD	D	N	A	SA
MMT has provided me with improved and sustainable job	6(5.8)	-	37(35.6)	49(47.1)	12(11.5)
MMT has granted me better job satisfaction	-	1(.9)	48(46.2)	50(48.1)	4(3.8)
MMT has granted me greater job benefits	-	3(2.9)	36(34.6)	52(50.0)	13(12.5)
MMT has provided me with maximum job security	1(.9)	2(1.9)	41(39.4)	58(55.8)	2(1.9)
MMT has granted me satisfied working environment	-	6(5.8)	25(24.0)	63(60.6)	10(9.6)

Source: Field Data, 2015

#### 4.3.1 Effect of MMT on job improvement and job sustainability

The study found that majority of respondents agreed that MMT has provided them with an improved and sustainable job. From the table 4.6 above, 5.8% (n=6) strongly disagreed (SD) that to extent that MMT has provided them with improved and sustainable job, none of the respondents disagreed (D), 35.6% (n=37) of the respondents neither agreed nor disagreed (N), however, 47.1% (n=49) of the respondents agreed (A) that MMT has to some extent given vendors' improved and job sustainability whiles 11.5% (n=12) of the respondents strongly agreed (SA). The higher number of respondents arguing that MMT has strongly improved and sustained

their job means that most people can to extent rely solely on MMT as their present and future job with certainty that MMT has impacted on their job sustainability.

#### **4.3.2 Effect of MMT on job satisfaction**

From the field data presented in table 4.6, the study established that MMT has given vendors better job satisfactory. Out of the total respondents, 50% of the respondents felt that MMT has given them better job satisfaction. Very few respondents (1.9%) disagreed that MMT has given them better job satisfaction. The study results confirmed the views of Nimako, Azumah, Donkor & Veronica (2010) that the introduction of MMT was to provide vendors within the sector job satisfaction and users with financial security and easy access to mobile at all times in times of necessity in places where formal banking institutions do not exist.

The study findings implied that individual within the Kumasi Metropolis who seek for job satisfaction and financial security should consider the MMT sector as a best solve to the dreams.

#### **4.3.3 Effect of MMT on job benefits**

The study again found that majority of the respondents (50%; n=52) indicated that MMT has offered them with greater job benefits. 2.9% (n=3) of the respondents felt that MMT has not granted them with greater job benefits. A fair proportion of the respondents (0.35) thus; 34.6% felt that MMT has not granted them better job benefits. This study finding confirmed the views of Davidson and Pénicaud (2012) that based on the global survey conducted on MMT service, 75% of the respondents indicated that MMT has provided vendors greater job benefits and has yield great dividend to vendors and individuals within the sector.

This study discovered that vendors within the MMT had greater job benefits. This study finding showed that individuals who aspire to enter into the MMT would have better fortune as those within the sector had better job benefits.

#### **4.3.4 Effect of MMT on job security**

In relations to whether MMT provides vendors with maximum job security or not, the study found that only one respondents (0.9%) strongly disagreed that MMT provides vendors with maximum job security, two respondents representing 1.9% felt disagreed that MMT provides vendors with maximum job security, 41 respondents representing 39.4% neither felt that MMT provides maximum job security, 58 respondents representing 55.8% agreed that MMT provides vendors with maximum job security and two respondents representing 1.9% strongly agreed that MMT provides vendors with maximum job security.

Majority of the respondents (55.8%) agreed that MMT provides vendors with maximum job security. This study finding confirmed the views of Aker (2009) that “Mobile phones are transforming lives in low-income countries faster than ever imagined. The effect is particularly dramatic in rural areas of Sub-Saharan Africa with the introduction of MMT system where people can now transfer and receive money from family and love ones without necessary going through formal banking institution. The study finding indicated that individuals who are unemployed and are looking out for jobs that provide them with maximum job security could do so by entering into the MMT business.

#### **4.3.5 Effect of MMT on working environment**

Investigating into MMT and vendor satisfaction of their work environment, the study found that majority of the respondents (60.6%) agreed that MMT had provided vendors with satisfactory working environment. Very few respondents think otherwise. The study revealed that workers (vendors) in MMT services were more satisfied with their working environment. This was attributed to the fact that vendors with this sector were not be under strict regulations, practices and rules as applied in formal financial institutions. The vendors within the MMT sector were therefore more satisfied within the working environment in Kumasi Metropolis.

#### **4.4 EFFECTS OF MMT ON MM VENDORS' STANDARD OF LIVING**

One main objective of study was to investigate into the standard of living among MMT vendors within the Kumasi metropolis. This was to further ascertain the effects MMT business has impacted on MM vendors. This data that follows dealt much into the standard of living of MMT vendors by examining critical on some key variables concerning the vendors' standard of living.

##### **4.4.1 Effect of MMT on MM Vendors' Food**

The study sought to find out the effects of MMT on the standard of living of the merchants of MMT. Food as an indicator of standard of living was considered. The respondents were asked if their operation of MMT had any effect on the food they consume in terms of quality and quantity. From the field results, all the respondents agreed that MMT has had positive effect on their food they consume. Twenty six representing 25% said it somewhat did have effect on their food. As much as 54 representing 51.9% said it did have some effects to some extent which was noticeable.

Twenty four representing 23.1% said they totally agree to a larger extent that their operation of MMT had effect on their feeding. This is shown in table 4.7 below.

**Table 4.7: Effect of MMT on Food**

Responses	Frequency	Percent
Not at all	-	0
Somewhat	26	25.0
To some extent	54	51.9
To a larger extent	24	23.1
Total	104	100.0

Source: Field Data, 2015

#### **4.4.2 Effect of MMT on Clothing**

Upon asking the respondents the effects of MMT on their clothing, seven representing 6.7% said it had very little effect which was minimal to be noticed. Thirty six representing 34.6% said the operation of the MMT somewhat affected their outfit that they put on. This was followed by 46 who said that the operation of MMT affected their clothing that they wear to some extent. Only 15 representing 14.4% agreed to a larger extent that it did affect their clothing that they put on. This implies that all the respondents agreed to extent that MMT business has had effect on their clothing positively as shown in table 4.8.

**Table 4.8: Effect of MMT on Clothing**

Responses	Frequency	Percent
Not at all	-	0
Very Little	7	6.7
Somewhat	36	34.6
To some extent	46	44.2
To a larger extent	15	14.4
Total	104	100.0

Source: Field Data, 2015

#### **4.4.3 Effect of MMT on Shelter**

It can be seen from table 4.9 that only two representing 1.9% said the operation of MMT did not at all affect their shelter in any way. This was followed by six representing 5.8% who said it did affect their shelter very little and 29 representing 27.9% said it somewhat affected their shelter. To some extent it did affect 43 respondents representing 41.3% of the total of 104 respondents. Twenty four representing 23.1% agreed to a larger extent that MMT did affect their shelter in which they lived in.

**Table 4.9: Effect of MMT on Shelter**

Responses	Frequency	Percent
Not at All	2	1.9
Very Little	6	5.8
Somewhat	29	27.9
To some Extent	43	41.3
To a larger extent	24	23.1
Total	104	100.0

**Source: Field Data, 2015**

#### **4.4.4 Effect of MMT on Travels**

On the effect of MMT on enhancing the travel standing of the MMT merchants, 15 representing 14.4% said it did not affect them in their travels at all. Twenty five representing 24% said it did very little in affecting their travels which was followed by 30 representing 28.8% who said it did somewhat affect their travels. To some extent, it did affect the travels of 20 respondents representing 19.2% and 14 representing 13.5% agreed to a larger extent that it did affect their travels as shown in table 4.10 below.

**Table 4.10: Effect of MMT on Travels**

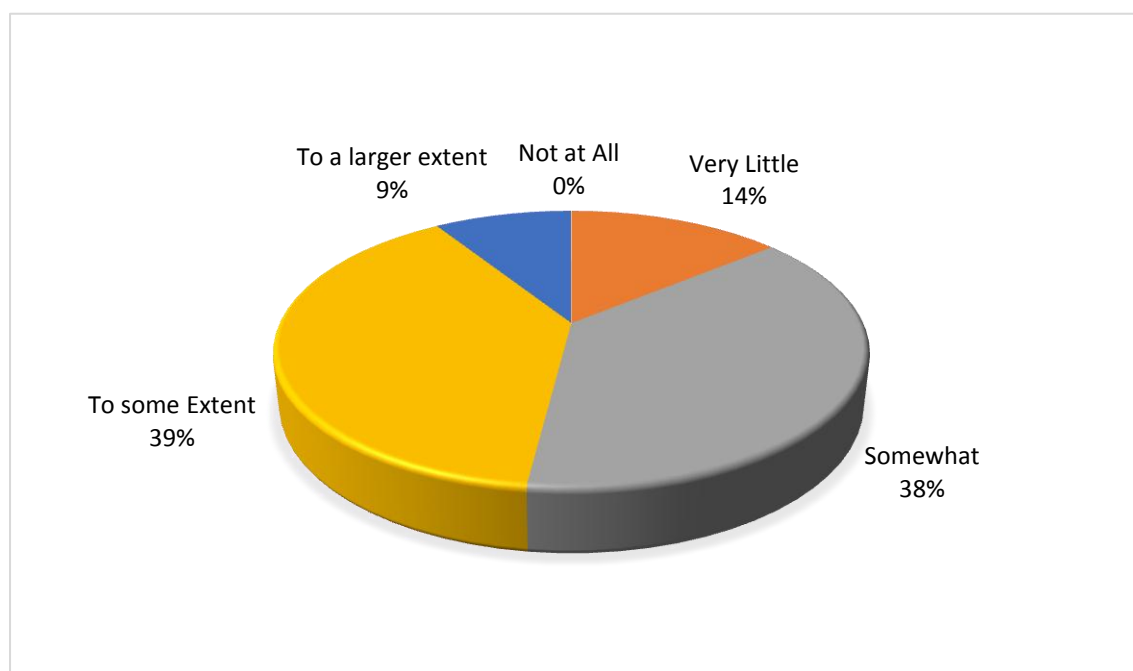
Responses	Frequency	Percent
Not at All	15	14.4
Very Little	25	24.0
Somewhat	30	28.8
To some Extent	20	19.2
To a larger extent	14	13.5
Total	104	100.0

**Source: Field Data, 2015**

#### **4.4.5 Effect of MMT on Electricity Bills**

From figure 4.5 it can be seen that 14% said there was little effect in the payment of their electricity bills. The study further found that 38% said the operation of MMT did somewhat affect their electricity bill payment. As much as 39% said it did affect their payment of electricity bills to some extent. Only 9% agreed to a larger extent that it did affect their payment of electricity bills.

**Figure 4.5 Effect of MMT on vendors ability to pay Electricity Bills**



**Source: Field Data, 2015**

#### **4.4.6 Effect of MMT on Entertainment**

Entertainment is a vital part of human living. As much as 30 respondents representing 28.8% out of the total of 104 to some extent were having their entertainment affected by the operation of the MMT. This was followed by 27 representing 26% who had little effect on entertainment as a result of operating as MMT merchants. Seventeen each representing 16.3% respectively were somewhat affected in line with entertainment and agreed to a larger extent respectively. Thirteen representing 12.5% did not have their entertainment life affected at all. This is shown in table 4.11.

**Table 4.11 Effect of MMT on Entertainment**

Responses	Frequency	Percent
Not at All	13	12.5
Very Little	27	26.0
Somewhat	17	16.3
To some Extent	30	28.8
To a larger extent	17	16.3
Total	104	100.0

Source: Field Data, 2015

#### **4.4.7 Effect of MMT on Drinks (Beverage) consumption**

From table 4.12 it can be seen that 36 of the respondents representing 34.6% somewhat were affected by the MMT in terms of the drinks or beverages they took. This was closely followed by 35 representing 33.7% who said they were affected to some extent. Twenty three representing 22.1% were affected very little in terms of the drinks that they take by the MMT operation they engaged in. Six representing 5.8% were not affected at all in terms of their beverage intake. Only four representing 3.8% agreed to a larger extent that their beverage intake had been affected.



**Table 4.12 Effect of MMT on Beverage Intake**

Responses	Frequency	Percent
Not at All	6	5.8
Very Little	23	22.1
Somewhat	36	34.6
To some Extent	35	33.7
To a larger extent	4	3.8
Total	104	100.0

Source: Field Data, 2015

#### **4.4.8 Effect of MMT on Access to Health Care**

On the effect of MMT on the Vendors' access to health care, as much as 52 representing 50% were somewhat affected and was followed by 34 representing 32.7% who experienced the effect of MMT on access to health to some extent. Nine each representing 8.7 each also agreed to a larger extent that their access to healthcare affected and very little respectively. This is an indication that MMT business has enable vendors to have access to healthcare. This is shown in table 4.13 below.

**Table 4.13 Effect of MMT on Access to Health Care**

Responses	Frequency	Percent
Very Little	9	8.7
Somewhat	52	50.0
To some Extent	34	32.7
To a larger extent	9	8.7
Total	104	100.0

Source: Field Data, 2015

#### **4.5 CHALLENGES OF FACING MMT IN GHANA**

MMT service just like any other financial institution is embedded with institutional, formal structural and networks challenges. To better improve upon the services to both vendors and user of MMT there is an eager need to seek vendors views on the

challenges within the MMT business and how vendors could guide against such challenges. For these reasons, the study further looked at vendors' views on the challenges they face within the MMT sector in Kumasi Metropolis. The views of the respondents were presented below.

#### **4.5.1 User Unfriendliness**

From table 4.14 it can be seen that 72 representing 69.2% very often considered the MMT service as not use friendly. Ten representing 9.6 considered the MMT service as not user friendly often times. Eight representing 7.7% always considered it as not user friendly and six representing 5.8% had never considered it as user friendly. Another eight representing 7.7 also sometimes considered the service as not user friendly. This is shown below.

**Table 4.14: User Unfriendliness**

Responses	Frequency	Percent
Never	6	5.8
Sometimes	8	7.7
Often	10	9.6
Very Often	72	69.2
Always	8	7.7
Total	104	100.0

Source: Field Data, 2015

#### **4.5.2 Security threats**

The issue of security was also questioned from the vendors who participated in this study. Only one said there were security issues sometimes that is prone to fraudsters. Forty nine representing 47.1% said there is often security threats which are prone to fraudsters. Forty four representing 42.3% said there is very often the issue of security which was prone to fraudsters. Only 10 representing 9.6% said there is always the

issue of security threat that opens up to fraudsters to operate. This is shown in table 4.15 below.

**Table 4.15: Security threats**

Responses	Frequency	Percent
Sometimes	1	1.0
Often	49	47.1
Very Often	44	42.3
Always	10	9.6
Total	104	100.0

Source: Field Data, 2015

### 4.5.3 Network Challenges

Since the MMT was a network base money transaction, it is a common occurrence of facing transaction issues if the network poses a challenge. Thirteen respondents representing 12.5% said there were sometimes network challenges that lead to transaction problems. Those who said there were often network challenges that impeded the transactions were 27 representing 26%. Forty nine representing 47.1% said there was very often the issue of network challenges. Fifteen representing 14.4% said there were always network challenges which affected transactions of MMT. This is shown in table 4.16.

**Table 4.16: Network Challenges**

Responses	Frequency	Percent
Sometimes	13	12.5
Often	27	26.0
Very Often	49	47.1
Always	15	14.4
Total	104	100.0

Source: Field Data, 2015

#### 4.5.4 System Challenges

From table 4.17 below, it can be seen that six representing 5.8% of the respondents there were never system challenges that affected MMT services. One respondent said there were sometimes system challenges that affected MMT services while 17 representing 16.3% said there were often times system challenges. Fifty four representing 51.9% of the total number of respondents said there were very often system challenges and 26 representing 25% said there were always system challenges which posed threat to the MMT service.

**Table 4.17: System Challenges**

Responses	Frequency	Percent
Never	6	5.8
Sometimes	1	1.0
Often	17	16.3
Very Often	54	51.9
Always	26	25.0
Total	104	100.0

Source: Field Data, 2015

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.0 INTRODUCTION**

The chapter provides brief presentation on the study summary of finding, conclusions and recommendations based on the study results. The entire study targeted MMT vendors including MMT managers, supervisors, owners and attendants. The data was analysed descriptively with the use of frequency tables, percentage and charts. Questionnaires were the main instructions used in the data collection. The study focused on the effect of MMT on the income levels of Mobile Money Vendors in Kumasi Metropolis, the effect of MMT on the employment characteristics of Mobile Money Vendors in Kumasi Metropolis, the effect of MMT on the standard of living of Mobile Money Vendors in Kumasi Metropolis as well as challenges facing MMT services in Kumasi Metropolis. In all, 104 respondents were contacted for the study with a 100% response rate. The summary of findings is captured under objectives which are stated below.

#### **5.1 SUMMARY OF FINDINGS**

Investigating on the respondents' socio-demographic profile, the study found that most MMT vendors were male. The study results illustrate that male engage in Mobile Money Transfer (MMT) than female. From the results obtained from the respondents, it was clear that few people within the old adult age (50 years and above) were less interested in MMT business but rather the young generation within the age range of 20 to 39 years were more interested in MMT business. This study results showed that single were more engaging in the MMT business. It was also established most Vendors engage in MTN MM than Tigo cash and Airtel Money transfers. On the

MMT vendors' pre-occupation, it was established that most of the MMT vendors were self-employed. The study revealed that majority of young school leavers were likely to enter into the MMT vendor business aside the self-employed people who dominate the business in Kumasi Metropolis. The study results showed that the MMT has indeed been a recent phenomenon as it was revealed that most respondents had been in operation for only 1-2 years whereas very few respondents had been in the services for five years and above. The study discovered that for the past five years the MMT service was not common within the Kumasi Metropolis but in recent times, it is becoming a noticeable business venture for many people within Kumasi Metropolis.

The research revealed that MMT services have improved the income status of the vendor within the study area. This is due to the fact that the 37.5% and 26.9% of the respondents' household daily income was between Gh¢5-Gh¢10 and Gh¢10-Gh¢15 respectively. Moreover, the study found that most of the respondents strongly agreed that MMT has greatly improved their saving ability. However, few respondents felt that MMT has not impacted on their saving among. Finally, the responses indicate that MMT services have also impacted and improved the MMT vendors' disposable income as 40% out of 104 agreed that MMT has helped improved vendors disposable income over the years.

The study further observed that MMT has affected vendors' employment characteristics positively. The study found that majority of respondents considered MMT as an avenue which has improved and sustained their job. It was also established that MMT services has provided vendors better job satisfactory. Out of the total respondents of 104, 50% of the respondents felt that MMT service has given them better job satisfaction. Very few respondents (1.9%) disagreed that MMT has

given them better job satisfaction. The study findings implied that individual within the Kumasi Metropolis who seek for job satisfaction and financial security should consider the MMT sector as a best solve to the dreams. The study again found that majority of the respondents (50%; n=52) indicated that MMT has offered them with greater job benefits. 2.9% (n=3) of the respondents felt that MMT has not granted them with greater job benefits. A fair proportion of the respondents (0.35) thus; 34.6% felt that MMT has not granted them better job benefits. This study revealed that vendors within the MMT had greater job benefits. This study finding showed that individuals who aspire to enter into the MMT would have better fortune as those within the sector had better job benefits. In relations to whether MMT provides vendors with maximum job security or not, the study found that majority of the respondents (55.8%) agreed that MMT provides vendors with maximum job security. Probing into MMT vendors' satisfaction of their work environment, the study found that majority of the respondents (60.6%) agreed that MMT had provided vendors with satisfactory working environment.

With the issue relating to the standard of living, it can be explained that the standard of living of MMT vendors within the Kumasi metropolis has improved as most of the vendors in terms of their food, clothing, shelter and health needs. Concerning the respondents' clothing needs, the study found that most respondents agreed that MMT has helped improved their clothing need as they could buy new clothing from their profits and commissions from MMT services. The study also revealed that MMT has to some extent help vendors to improve their living standards through shelter as most could afford better accommodation. On travels, MMT has very little impact on respondents' travel as respondents indicated that travels were less experienced within the framework of operation and that they were mostly at their point of services each

day for business. The study again revealed most MMT vendors had used their earning from MMT for payment of electricity bills and to provide better entertainment at their homes. However few MMT vendors use their earning on beverages. On the effect of MMT on the vendors' access to health care, as much as 52 representing 50% were somewhat agreed that MMT has improved their access to health care delivery which was followed by 34 representing 32.7% who experienced the effect of MMT on access to health to some extent. Hence, the study can affirmed that MMT has positively impacted on the health needs of vendors over the years.

Finally, the study further looked the challenges faced by MMT vendors within the Kumasi Metropolis. The study found that are security issues sometimes that is prone to fraudsters. Concerning the system challenges in the MMT most vendors agreed that there were high system challenges and network failure in the MM services.

## **5.2 CONCLUSION**

The study finding had adequately satisfied it objectives. In the first place, the study concluded that MMT services had impacted positively on vendors' income level, and saving ability. The study again concluded that MMT has improved vendors disposable income. Pertaining to the job situation of MMT vendors, the study concluded that vendor had had improved and sustained job and better job satisfaction.

The study again concluded that MMT vendors within Kumasi Metropolis had had better job benefits and maximum job security. Concerning MMT vendors' job satisfaction regarding their working environment, the study concluded that most vendors in the Kumasi Metropolis had better working environment. It was also



concluded that MMT has impacted positive on vendors, food needs, clothing, shelter and health needs.

Dealing on the challenges, the study concluded that the main challenges with the MMT services were; user unfriendliness, security threats which is prone to fraudsters which pose as risk to users of MMT services as well as network and system challenges.

### **5.3 RECOMMENDATIONS**

Based on the study finding, the researcher suggested the following recommendations;

Firstly, the researcher recommended that MMT services providers like the Telecommunication should improve upon their network and system to solve the problem of network and system challenges.

Secondly the researcher recommended that MMT services providers should improve upon the security situation of the MM system so as to protect users against fraudsters. Users should be educated on guideline to protect them from fraudsters.

The researcher again recommended that individuals whoever want to improve their saving ability should consider the use of MMT as the study found that MMT had help improved vendors saving ability. The services providers should education the public on the importance of benefit of MMT as the study revealed that MMT had impacted positively on vendor standard of living in area such as food, shelter, clothing, entertainment as well as health care.

The researcher again recommended that MMT should be made to be user friendly and users should be given notice of any system failure and network challenges at all times.

Last but not the least, the researcher recommended that MMT providers should educate users on the benefits attached to MMT so as to enable users to enjoy maximum benefits from MMT services.

### **5.3.1 Recommendation for future studies**

Mobile Money industry is a new phenomenon in Ghanaian economy. Unfortunately, there are less studies in this field for academic references to improve upon the sector. It has greater propensity to stimulate economic growth and improve the lives of billions of people across the world, more especially, the developing countries. In this regard, the researcher recommends that future research should find out the effect of network stability in improving MMT services in Ghana. However, other areas could be explored to help improve the mobile money industry.

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## APPENDIX I. QUESTIONNAIRE

Dear Respondents,

This research is an academic exercise and it intends to ‘assess the impact of Mobile Money Transfer Service on the socioeconomic status of the Mobile Money Vendors in Ghana’ in partial fulfillment of a Master of Business Administration at KNUST School of Business. Your responses are valuable to the success of this study and are based on your experience with engagement in Mobile Money Transfer Services. Kindly be reminded that your responses will be guarded with outmost confidentiality and will be used **ONLY** for the purposes of this study. This study relies on your response. Thank you for anticipated interest to partake in this research.

### Section A: Personal Details.

1. Gender of respondent

a. Male ☐ b. Female ☐

2. Age of the respondent

a. Below 20 years ☐ b. 20- 29 ☐ c. 30-39 ☐ d. 40- 49 ☐

b. e. above 50 years ☐

3. Marital status

a. Single ☐ b. Married ☐ c. Separated ☐ d. Widow ☐

4. Which Mobile Money Transfer service do you offer?

a. MTN Mobile Money ☐ b. Airtel Money ☐ c. Tigo Cash ☐

5. Pre-occupation

a. Company employee ☐ b. Civil Servant ☐ c. Teaching ☐

d. Young School leaver ☐ e. Self-employees ☐ f. Unemployed ☐

e. g. Others ☐

6. Ownership type

a. Self-owned ☐ b. Manager ☐ c. Supervisor ☐ d. Attendant ☐

7. How long have you been operating MMTS?



- a. Less than 1 year ☐ b. 1 – 2 years ☐ c. 2 – 3 years ☐
- e. 3 – 4 years ☐ f. Above 4 years ☐
8. What is your daily household income, net income after taxes and fringe benefits deductions (Ghana cedi)?
- e. Below 5 ☐ b. 5 – 10 ☐ c. 10 – 15 ☐ d. 15 – 20 ☐
- d. Above 300 ☐

### Section B: The effect of MMT on Income levels of MM Vendors

This section has statements regarding the effect of MMT on income levels of MM Vendors in Kumasi Metropolis. Please indicate the extent to which you agree or disagree to the following statements;

NO	Statement	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
9	Mobile Money Transfer business has greatly improved my savings ability?					
10	MMT has improved my disposable income					

### Section C: The effect of MMT on employment characteristics of MM Vendors

This section has statements regarding the effect of MMT on employment characteristics of MM Vendors in Kumasi Metropolis. Please indicate the extent to which you agree or disagree to the following statements;

NO	Statement	Strongly Disagree	Disagree	Neither agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
11	MMT have provided me with improved and sustainable job.					
12	MMT have granted me better job satisfaction.					
13	MMT have granted me greater job benefits					
14	MMT has provided me with maximum job security.					
15	MMT have granted me satisfied working environment.					

### Section C: The effect of MMT on the standard of living of MM Vendors

This section has statements regarding the effect of MMT on the standard of living of MM Vendors in Kumasi Metropolis. Please indicate the extent to which you agree or disagree to the positive effect on the following statements;

17.

No	Factors	Not at all	Very little	Somewhat	To some extent	To a larger extent
		1	2	3	4	5
i	Food					
ii	Clothing					
iii	Shelter					
iv	Travel					
v	Electricity Bill					
vi	Entertainment					
vii	Drinks (beverages)					
viii	Access to Health care					

### Section D: Challenges facing MMT services in Kumasi Metropolis.

This section has statements regarding the challenges facing MMT services in Kumasi Metropolis. Please indicate the extent to which you agree or disagree to the following statements;

NO	Statement	Never	Sometimes	Often	Very Often	Always
		1	2	3	4	5
18	MMT Service is not user friendly?					
19	MMT Service has a lot of security threat which is prone to fraudsters					
20	MMT Service has a lot of network challenges which affect transaction					
21	MMT Service experiences a lot of system challenges					

22. Other, please specify

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