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Influence of mobile money transfer business on the economic welfare of their operators in Takoradi

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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 examine the impact of Mobile Money Transfer (MMT) business 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 Takoradi 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 Takoradi 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 effect of income levels, employment characteristic 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 Takoradi. 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 operators in Ghana.

Keywords: Mobile Money, Communication, economic, welfare, operators, business, transfer, payment

Introduction

Background of the Study: Mobile money, also referred to as mobile payment, mobile money transfer, and mobile wallet, generally refers to services operated and performed from a mobile device such as mobile phone, Credit or debit cards. It is further clarified as the intersection of both banking and telecommunications services (World Bank, 2010). It involves a diverse set of stakeholders from both mobile phone operators and financial service institutions. Mobile money services have been defined as electronic money accounts that can be accessed via mobile phone (Zutt, 2010). Mobile money services offers secure and convenient means for banked and unbanked people to send and receive money With mobile phones at home and abroad; anywhere at any time. It contains features such as mobile wallet, mobile transfer, airtime transfers and mob banking. Mobile wallet enables the subscriber to receive, store, send or pay money anywhere anytime. The telecommunication industry is fast achieving growth in many areas which include connections, upwards subscribers and massive data traffic across the world and most especially in the developing countries including Ghana, and as such playing an important role in unlocking the socio-economic progress across the world. Several industries across the length and breadth of the world are moving away from out-dated 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 globalization 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, Messenger, WhatsApp, Facebook, twitter just to mentioned few for increasing significance of mobile telephony. Due to technology advanced ot today, cell phones are not only designed to receiving and placing calls, but are capable of storing data,

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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.

Recently, most of the telecommunication operators across the globe have enabled some mobile phones users' access 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 business varies across the world as a result of variety of indicators including the regulatory through legal instruments, availability of supporting technologies, and economic limitations, and skills with antecedent products and services.

The World Bank estimates that mobile broadband has a greater progressive economic impact as compared to fixed line broadband especially in developing world 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 (BCG, April 2011) 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 informal financial services could raise 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 business has contributed greatly towards the economic growth of many 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 amenities and create opportunities for others (Kraft, 2006). (Pickens, 2009) assessed that, 9 out of 10 peoples in many 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 (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 difficult 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) business which is 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), Espresso and Globacom (operators of Glo). These operators provide various telephony services such as mobile money transfer, T voice services, data, Short Messages Services (SMS) and the likes. This services enable subscribers communicate with one another and transact business through enabled mobile phones devise to have money transfer business (McCusker, 2000) ^[29].

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 mobile telecommunication companies in Ghana, MIN was the first company to introduce the Service into the country followed by Tigo, Airtel and Vodafone in order. Glo Ghana and Espresso are yet to introduce the service in the industry. Even though, various operators in Ghana have ascribed different nomenclature for the business. MTN refers to it as MTN Mobile Money (or MoMo) whiles Tigo calls it Tigo Cash, Airtel refers to it as Airtel Money and VodaCash by Vodafone Ghana. However, Mobile Money Transfer (MMI) business is used as a generic name for all kinds of mobile money transfer business 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 categories of the people are classified as Mobile Money Operators (MMO) 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 examining the impact of mobile money transfer business on the socio-economic well-being of MMT Operators as well as challenges that Operators faces while discharging this service. In this way, the study seeks to examine the impact of MMT business on the socio-economic well-being of the MM Operators in Takoradi Metropolis, Ghana.

Statement of the problem

The growth of mobile money subscribers is on ascendancy in many countries including Tanzania, Kenya, Pakistan and Ghana just to mention few. Although, there 'are many Mobile Money Operators (MMO) 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 business. This study aimed at examining the impact of Mobile money Transfer Business on the socio-economic well-being of the Mobile

Money Operators in Ghana by analyzing the effect of income level, employment characteristics and the living standard of MMO within Takoradi, Ghana. In addition, the study will explore the challenges facing the business which currently affect the activities of these MMO within the study area.

Objectives of the study

The main objective of the study is to examine the impact of the MMT business on the socio-economic well-being of the Mobile Money Operators (MMO) in Takoradi, Specifically the study seeks to;

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

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 Operators in Takoradi?
2. What is the effect of MMT on the employment characteristics of Mobile Money Operators in Takoradi?
3. What is the effect of MMT on the standard of living of Mobile Money Operators in Takoradi?
4. What are the challenges facing Mobile Money Operators in Takoradi?

The significance 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, (Ajiwoye *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 socio-economic and developmental agenda for growth. The accessibility and availability of jobs in the mobile money sector can place both skilled and unskilled labour 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 business can enable the unbanked population overcome obstacles and enjoy the benefits of financial services. MMT business 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's against this background the government of Ghana consistently advocates several institutional reforms essential to accelerate economic growth. According to the Boston Consulting Group (April 201), research has shown that financial inclusion can improve the 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 MMOs in the metropolis has shown a positive impact on the socio-economic status as many could improve the living standard of many within Takoradi. The study will therefore help the various stakeholders: BoG, MoC, NCA, MNOs and other policy makers in Ghana and elsewhere understand the impact of MMT business on the socio-economic well-being of the MMT Operators in Takoradi. This study will enable the various stakeholders to address the key challenges affecting the MMT business 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.

Methodology

The collection of data was restricted to the Mobile Money Transfer operators (vendors) within Takoradi, Ghana. This section provides information on the research methodology and techniques use to conduct the study. It defines the population from which the sample was selected and describes the sampling procedures used to select the sample size. The sampled population was first based on stratified random sampling where the population was divided into four strata namely; self-owners, managers, supervisors and attendant. The respondents were chosen based on convenience sampled to enable there searcher use judgmental 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 Service as a business of different age group, different business ventures, different income, gender, different employment characteristics and the standards of living. In all T04 people were selected to represent an estimated population of 200 operators with 95% confidence level and 6.67% confidence interval. This is due to geographical location and time constraint, the accessible sampled population consists of ten self-owners, fifteen managers, twenty supervisors and fifty nine respondents. It also discusses the research design and the method of data collection which mainly involved in questionnaires. For this study primary data were used to get information from self-owners, managers, supervisors, attendants through questionnaire. The secondary data that were employed in this study were obtained from textbooks, magazines, journals, newspapers and relevant websites. Data gathered by questionnaire were quantitative in nature where Likert Scale was predominantly used. The data was subjected to statistical analysis and where necessarily; graphs, tables, pie charts were used with the aid of SPSS in the analysis.

Scope and limitations of the study

The study will focus on Mobile Money Vendors of various Mobile Money Operators in Takoradi, Ghana. The study may not able to capture the entire significant variable to examine the impact of MMT operators on the socio-

economic well-being of MMO in Ghana. However, the analysis of the income levels, employment characteristics and standard of living can be valuable for interested people. The MMOs will be limited to MTN Mobile Money, Tigo Cash and Airtel Money alone since Vodafone Cash yet to penetrate the market after few day 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 solved 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.

Organisation of the study

The study is organized 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 organization 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 business on the socio-economic well-being of the mobile money transfer operators. 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 summarising of finding, conclusion and recommendations of the study.

Literature review

Introduction

This chapter 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.

World mobile money transfer business

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 Pénicau (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 Pénicau (2011:7-8) it was also found out that, in June 2011, mobile money servicers 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 processes on a monthly basis by mobile money service providers increased at annualized rates of 59% and 36% respectively.

Background of MMT business 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 telecos 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 2016, 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, 2016 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 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¢171 million in 2012 to the multi-billion cedi sector in 2017.

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 2016 (NCA, Ghana) Industry watchers are of the view that mobile money growth will allow millions of Ghanaians 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 to be supervised and regulated by the Bank of Ghana.

Mobile telephony services subscription has surpassed 30 million subscribers, indicated that the mobile penetration has long breached 100% of the country's population of 20million (Population & Housing Census, 2010).

According to the ITU Telecommunication Standardization Sector (ITU-T) report on mobile money, the service has realized 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 into record more than US\$375million on a monthly basis. A study 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% while 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.

According to some industry analysts as told to B&FT the momentum of the Ghanaian mobile money market 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 cash lite society, is expected to address the issue of interoperability while enhancing existing payment Systems in the country by building on ne current payment systems infrastructure engineered by the Ghana interbank Payment and Settlement Systems (GhIPSS) to reduce the dependence on cash tor transactions.

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

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 authorized 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, cheque 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 digitalize 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 live models, namely: SMS, Direct Mobile Billing, Mobile Web Payment (WAP), and Contactless Near Field Communication (NFC) .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 form payments made by customers via mobile phone. Without enabling framework OI an m-banking system, however, mobile payment services would not exist, as they rely on the same banking instruments and value accounts that mo0banking 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 provide 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.

Regulatory Requirements

A supportive regulatory regime is a vital first step in developing a thriving MMID ecosystem. Such a framework would be based on three tiers of branchless banking regulation, which would address a wide variety of domains. Vital to 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.

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 well-being 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 business is provided by MFSOS in partnership with bank and operates 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, CalBank, Stanbic Bank, Zenith Bank, Universal Bank of Africa, Universal Merchant Bank, Access Bank etc.

Research Methodology

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 or data analysis as well as validity and reliability of the data were discussed in this section.

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 examining the impact of MMT business on the socioeconomic well-being of the mobile money operator 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 operator within Takoradi, Ghana.

Area of study

The study was conducted in catchment area, where mobile money transfer business operators are located, which is

licensed and registered under the control of Takoradi Metropolitan Assembly. The study shows all major trading activities in the metropolis including the study area, is trading in provisions, cosmetics boutique, and food stuffs and fish etc. Other business which provide employment to the residents include carpentry, mechanics, hair-dressing, tailoring, bar and restaurant, and communication service. Some of these people constitute the number of people who operate mobile money transfer business, managers, supervisors, owners, and attendants. Also these people in the study area usually involve deposit and cash out of money from the mobile money transfers operators.

Areas like Adientem and Race Course, where the largest populations are centered in Takoradi was the main centered area of study. The study shows that 10 people were the owners of the MMI business constitute 10%, 15 people (14%) were the managers, 20 people (19%) were the supervisors and 59 people (57%) were also the attendants. In these study areas the major trading activities of those who patronized the MMI business are, food stuffs sellers, fish sellers, store keepers, hair-dressers, cobblers, and carpentry etc.

The study also shows the number of network engaged by the vendors with the MMI service, 41(39.4%) engaged in MTN Mobile Money, Airtel Money, Tigo Cash, 25 (24.2%) engaged in only MTN Mobile Money, 18(17.2%) engaged in only Airtel Money, 11(10.6%) engaged in only Tigo Cash, 4(3.8%) engaged in MTN and Tigo cash and 5(4.85%) engaged in MTN and Airtel Money within the area of study. These shows that MMT operators deal in more than one MMI services providers, and also the study results showed that MTN MMT was popular among MMT operators followed by Airtel Money and Tigo Cash.

The study involves examining the impact of Mobile Money transfer business on the socio-economic well-being of the MMT operators within Adientem and Race Course

Population of the study

The population under study is mobile money transfer operators (MTN Mobile Money, Airtel Money and Tigo Cash only) within the Takoradi, Ghana. Even though there has not been any published report on the number of MMO within the Takoradi, 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 engages in all the three mobile money services in Takoradi, Ghana. Even though Vodafone Ghana has launched Vodafone Cash, however, it is yet to penetrate into the market.

Sample size and sampling technique

In the course of choosing 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 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 stratified random sampling to enable the researcher use judgmental 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 service 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 to find out if there is an impact of mobile money transfer business on the mobile money operators' socioeconomic well-being 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 operators with 95% confident level and 6.67 confident intervals. This is due to geographical location and time constraint; the accessible sampled population consists 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 1: Sample Procedure Matrix

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

Source: Field Work, December 2021

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, an 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 questionnaire. The information was collected from the sampled population by means of structured questionnaire administered on respondents where appropriate boxes were/was ticked base on unbiased judgment. 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 exists 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 Takoradi Technical University, Borsah library complex.

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. Questionnaires to all the four strata sought to find the effect of MMT on the income levels, employment characteristics and their standards of living of the mobile money operators. In addition to that, the researcher also investigates the challenges facing the MMT services in the study area (Takoradi).

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.

Method of data analysis

In order to examine the impact of mobile money transfer business on the socioeconomic well-being of mobile money transfer operators within Takoradi, 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.

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 operators. 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 stratified 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 was what was used for analysis, recommendations and conclusions.

Data analysis, interpretation and presentation
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 the introductory section of this study were the principal guiding factors used.

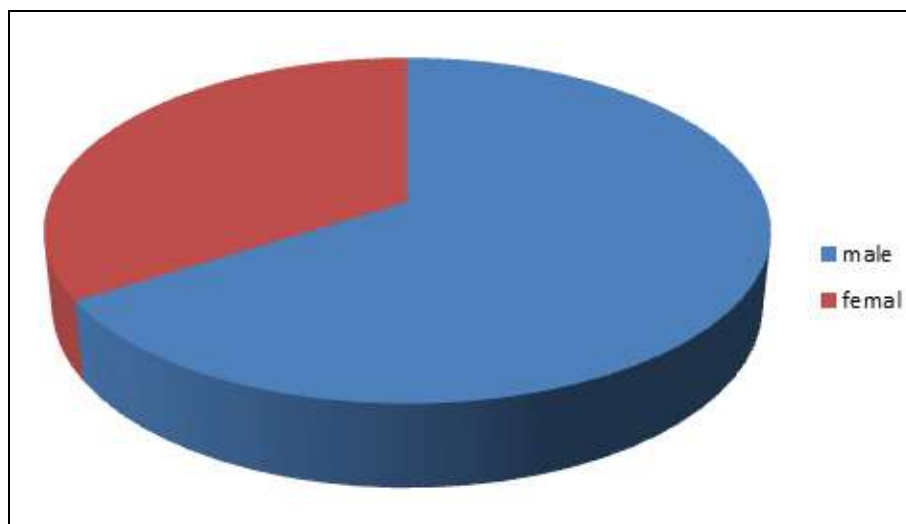
The data was interpreted according to research objectives and research questions. Appropriate data analysis and presentation techniques are used. The primary objective of the study was to examine the impact of mobile money transfer business on the socioeconomic well-being of MMOs within Takoradi.

Socio-demographic background of respondents

This section focused on statistics on personal information of individuals within Takoradi who operate MMT. The variables about the respondents that were examined here include; gender, age, marital status, MMI services/network used by respondents, pre-occupation, respondents Ownership types, number of years respondents has spent in the MMT business 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 operators

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 Takoradi and possible which gender group is likely to engage in this kind of business.



Source: Field work, December 2021

Fig 1: Gender of Respondents

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 as shown in figure 4.1 above. The field results illustrate that male engage in Mobile Money Transfer (MMT) than female within Takoradi. 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.

Age group of respondents.

The data in table 4.1 showed that majority of the respondents within the study area (Takoradi) 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 2: xxxxx

Respondents	Frequency	Percent
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
TOTAL	104	100.0

Source: Field work, December 2021

From the field work 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 50-59 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 30-39years 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.

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 MMI Services owners and operators marital status.

Table 3: Marital status of the respondents

Responses	Frequency	Percentage
Single	56	53.8
Married	25	24.1
Separated	20	19.2
Widowed	3	2.9
Total	104	100.0

Source: Field survey, December 2021

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%) while 19.2% respondents represent those who were separated as shown in table 4.2 above. Few individuals who were widow were in the MMT business within the Takoradi. 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.

Type of MMT Business Operators operate

Table 4.3 showed that type of MMI business that most vendors engage in within the Takoradi. From the field data, it was established that most of the operators engage in all the three major MMI services providers; MTN Mobile Money, Airtel Money and Tigo Cash.

Table 4: Type of MMT services Operators operates

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

Source: Field Work, December 2021

From table 4.3 above 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 Takoradi.

The study established that MMT operators deal in more than one MMT services providers. From the field survey, it was discovered that operators who engage in all the three MMT services providers were dominant follow by those who deal with MIN only. The study results showed that MIN MMT was popular among MMT operators 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 operators to make maximum profit it was good to trade in all MMT services available at any given time.

Pre-occupation of MMT Operators

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

Table 5: Pre-occupation of MMT Operators

Respondents	Frequency	Percentage
Company employee	6	5.8
Civil Servants	10	9.6
Young school leaver	22	21.2
Teaching	2	1.9
Self-employed	51	49.0
Unemployed	7	6.7
Others	6	5.8
Total	104	100.0

Source: Field data, December 2021

From table 4.4 5.8% (6) of the respondents conducted during the study who were in MMT business 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 MMT1dors were self-employed. This implied that most self-employed within the study area are more likely to enter into the MMT operator business. This implied that MMT business is mostly attracted to self-employed within Takoradi who are ready to take opportunity in the MMT sector within the study area.

Ownership type of MMT Operator

The study looked at the respondents 'ownership type of MMT business. 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.



Fig 2: Ownership type of MMT Operator

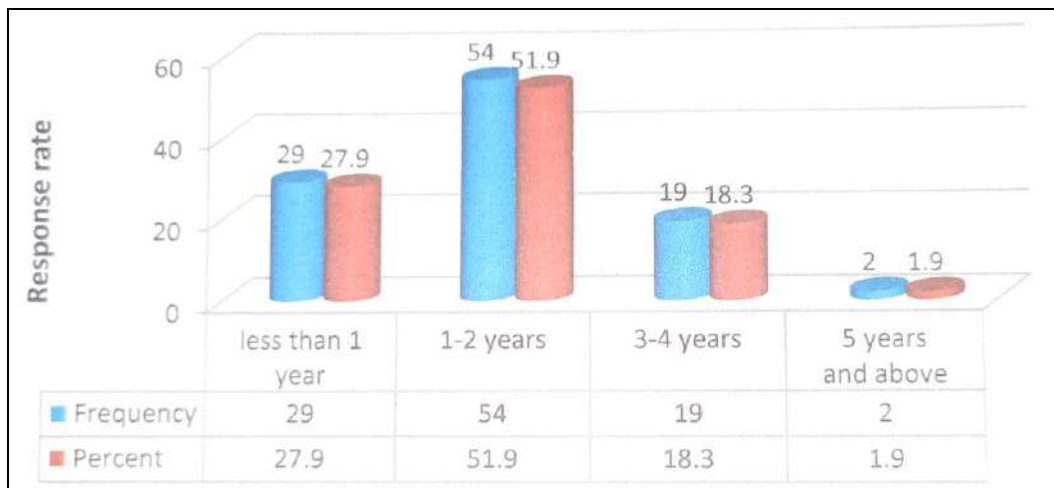
Source: Field work, December 2021

From figure 4.2, the study found that most of MMT operators who were sampled for the study were the attendants. The high percentage of attendant within the study population indicated that fact that most MMT operators are employees who work for those who employ them in the business, from the field study, 56.7% of the respondents were attendants, 1 his 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.

Number or years of operation

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



Source: Field data, December 2021

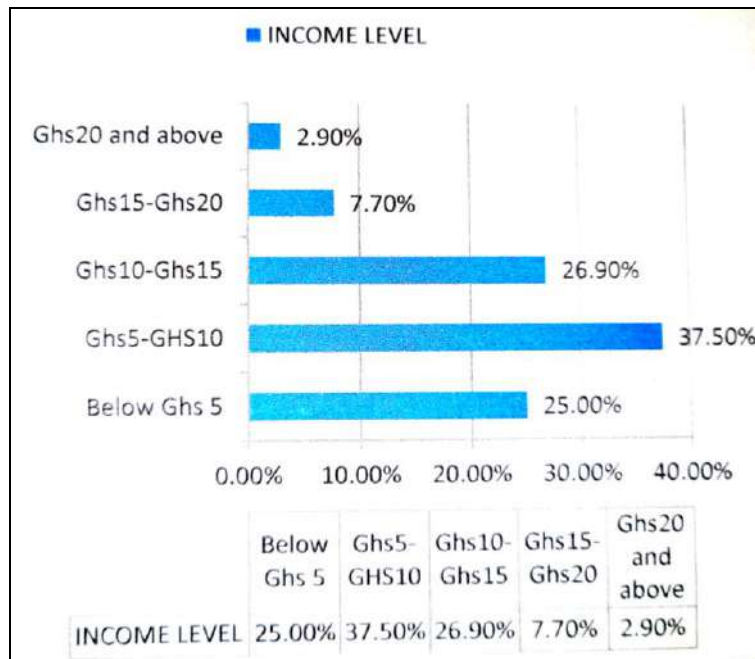
Fig 3: Number of years of operating MMT business

From figure 4.3 27.9% (29), 51.9% (54), 18.3%(19) and 1.9% (2) of the respondents had been in the MMT business for less than I year, I-2 years, 3-4 years, and 5 years and above respectively. The study results showed that the MMT has indeed been are cent 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 business for five years and above. This showed that for the past five years the MMI business was not common within the Takoradi but in recent times, it Is becoming a noticeable business venture for many people within Takoradi. The high number of

people entering into the MMT business sector showed the rate at which the service is expanding faster within the Takoradi. The study results therefore implied that more people are likely to enter the MMI than leave the sector as the number of people in the MMI in recent times are high than the past 3-5 years and more.

Daily household income of MMT operators

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



Source, Field data, December 2021

Fig 4: Daily household incomes of MMT operators

The study revealed that 26 respondents out of 104 representing 25% of MMT operators' household income was below GhUS.00 a day, 39 respondents representing 37.5% was between GhU5 - GhD10, 28 respondents representing 26.9% was between GhO10- GhO15 and 8 respondents representing 7.7% was between Gh015 - Gh020. The study results showed that majority of MMT operators "household income within Takoradi was between GhI5 - GhO10. This indicates that majority of the respondents engaged in the MMT operators within the study area was between 5-10 Ghana cedi followed by those between 10-15 Ghana cedi.

Summary, conclusion and recommendation

Introduction

The chapter provides brief presentation on the study summary of finding, conclusions and recommendations based on the study results. The entire study targeted MMI operators including MMT managers, supervisors, owners and attendants. The data was analyze a 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 Operators in Takoradi, the effect of MMT on the employment characteristics of Mobile Money Operators' in Takoradi, the effect of MMT on the standard, of living of Mobile Money Operators in Takoradi as well as challenges facing MMT business in Takoradi. 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.

Summary of findings

Investigating on the respondents' socio-demographic profile, the study found that most MMT Operators 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 MMI business. It was also established most Operators engage in MIN MM than Tigo cash and Airtel Money transfers. On the MMI operators' pre occupation, t was established that most of the MMT operators were self-employed. The study revealed that majority of young school leavers were likely to enter into the MMI operator business aside the self-employed people who dominate the business in Takoradi. 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 1-2years 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 business was not common within the Takoradi but in recent times, it is becoming a noticeable business venture for many people within Takoradi. The research revealed that MMT business has improved the income level of the operators 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 GhC5-GhC10 and GhC10-GhC15 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 MMI services have also impacted and improved the MMT operators "disposable income as 40% out of 104 agreed that MMT has helped improved operators disposable income over the years. The study further observed that MMT has affected operators' 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 business has provided operators better Job satisfactory. Out of the total respondents of 104, 50% of the respondents felt that MMT business 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 Takoradi who seek 1or Jo 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 MM 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 operators 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 operators with maximum job security or not, the study found that majority of the respondents (55.8%) agreed that MMT provides operators with maximum job security. Probing into MMT operators 'satisfaction of their work environment, the study found that majority of the respondents (60.6%) agreed that MMT had provided operators with satisfactory working environment. With the issue relating to the standard of living, it can be explained that the standard of living of MMT operators within the Takoradi has improved as most of the operators 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 business. The study also revealed that MMT has to some extent help operators 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 operators had used their earning from MMT for payment of electricity bills and to provide Better entertainment at their homes However, few MMT operators use their earning on beverages. On the effect of MMT on the operators access to health care, as much as 52 representing 50% somewhat agreed that MMT has improved their access to health care delivery which was Iolloweuby 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 operators over the years. Finally, the study further looked the challenges faced by MMT operators within the Takoradi. The study found that are security issues sometimes that is prone to fraudsters. Concerning the system challenges in the MMT most operators agreed that there were high system challenges and network failure in the MM services.

Conclusion

The study finding had adequately satisfied it objectives. In the first place, the study concluded that MMT business had impacted positively on operators' income level, and saving ability. The study again concluded that MMI has improved operators disposable income. Pertaining to the job situation of MMI operators, the study concluded that operator had improved and sustained Job and better Job satisfaction. The study again concluded that MMT operators within Takoradi had had better job benefits and maximum job Security. Concerning MMI operators Job satisfaction regarding their

working environment, the study conclude that most operators in the Takoradi Metropolis had better working environment. It was also concluded that MMI has impacted positive on operators, food needs, clothing, shelter and health needs. Dealing on the challenges, the study concluded that the main challenges with the MMT business were; user unfriendliness, security threats which are prone to fraudsters who pose as risk to users of MMT business as well as network and system challenges.

Recommendations

Based on the study finding, the researcher suggested the following recommendations; Firstly, the researcher recommended that MMT service 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 operators saving ability. The services providers should educate the public on the important benefit of MMT as the study revealed that MMT had impacted positively on operator's standard of living in area such as food, shelter, clothing, entertainment as well as health care. The researcher again recommended that MIMI 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 attach to MMI so as to able users to enjoy maximum benefits from MMT services.

Recommendation for future studies

Mobile Money industry is 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. It is in this regards, the researcher recommend 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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