INFLUENCE OF FINANCIAL TRANSACTIONS THROUGH MOBILE PHONES ON THE GROWTH OF SAFARICOM AGENTS IN KISUMU COUNTY, KENYA

BY

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DECLARATION

This Research Project Report is my original work and has not been presented for any other award in any University.

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DEDICATION

This research project is dedicated to my immediate family members, my father Celestine Mbithi and my mother Esther Mbithi, my wife Elizabeth Nzilani, my son Brian Musyoka and my daughter Abigael Ngina. Further dedications to my brothers Christopher Makau, Raphael Kyalo and Muoki Mbithi and my sister Veronica Mwende for the support and encouragement they accorded to me, including humble time to organize this document.

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ABBREVIATIONS AND ACRONYMS

MFS	Mobile financial services
MFI	Micro Finance Institutions
NGOs	Non-Governmental Institutions
MMT	Mobile Money Transfer
MNOs	Mobile Network Operators
SIM	Subscriber Identity Module
Plc.	Public Limited Company
USA	United States of America
UK	United Kingdom
AT&T	American Telephone & Telegraph
CIA	Central Intelligence Agency
MTN	Mobile Telephone Network
NITEL	Nigerian Telecommunications Limited
A2P	Application-to-Person
SPSS	Statistical Package for Social Scientist
CGAP	Consultative Group to Assist the Poorest
NTT	Nippon Telephone and Telegraph
KDDI	Kokusai Denshin Denwa-International Telegraph and Telephone
ATMs	Automated Teller Machines
HOs	Head Offices
KYC	Know Your Customer
CEO	Chief Executive Officer
USD	United States Dollar

ABSTRACT

Financial transactions through mobile phones are one of the most recent emerging technologies that have enhanced financial inclusion through creation of decentralized financial service supply chains. This study reviewed the global, regional and the national background of financial transactions through mobile phones and resulting effect to service distributors. The purpose of this study was to determine the influence of financial transactions through mobile phones on the growth of Safaricom agents in Kisumu County in Kenya. The study sought to address the following objectives; determine the extent to which financial transactions through mobile phones influence workers, income, assets and personal wellbeing of Safaricom agents. This research proposal adopted a descriptive survey design, which is an arrangement of conditions for collecting and analyzing data in a way that gives a mix of relevance to the study purpose with the economy of procedure. The study covered Kisumu County which has a target population of 30 Safaricom agents. The study employed a census approach since the target population was small and achievable without compromising on data quality which in the past has been pointed out as a limitation to use of census as a method of data collection. In order to reach the respondents, purposive sampling and snow balling were applied. Both questionnaires (to capture quantitative data) and in-depth interviews (for collection of qualitative data) were used in data collection. Questionnaires were designed to pull out information; mostly leading to numeric results while in-depth interview was designed to answer questions that did not have direct numeric results. To ensure reliability in the research instruments, test and retest approach, commonly referred to as a study within a study was used. The pilot testing was carried out in Kakamega Municipality. Validity of research instruments was done through review by supervisors whilst ensuring clarity in language in order to capture the relevant data. Reliability of the questionnaire was tested using the empirical procedure of split-half by application of correlation coefficient using r-function of spearman Brown Prophesy formula to establish the correlation between the two halves .Data analysis was done twofold; one data from verified questionnaires was analyzed through descriptive statistics while qualitative data was analyzed by use of content analysis. Analysis was done using, frequencies, percentages and mean aided by Statistical Package for Social Sciences and Excel. The findings indicated that Safaricom agents had training programs for staff and the number of workers increased from 166 in 2008 to 641 in 2012. The study also revealed that agents had positive growth in income, assets and personal wellbeing through assessment of health, shelter and leadership in 2008 to 2012, resulting from their participation in the money mobile network agency. These revelations were considered in the study as contributions to body of knowledge. Few gaps came out during the study and hence policy and areas for further study were suggested.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The use of mobile technology has become widespread with astonishing speed all over the world, particularly among the poor (Diniz, Albuquerque & Cernev, 2011). The more mobile phones go to the hands of people who formerly lacked access to financial services, the more the notions of mobile money, mobile payment and mobile banking become pervasive as a means of financial inclusion (Diniz, Albuquerque & Cernev, 2011). Financial transactions through mobile phones is not a standard activity across the globe, Dahlberg, Mallat, Ondrus and Zmijewska (2008) revealed that mobile payment services differ between markets, such as Japan, various European countries, or the USA, since situations greatly differ.

The last five years have seen a dramatic increase in the use of the mobile device for financial transactions, revolutionizing the way people receive financial services across the globe (Gemalto security services, 2012). According to Gemalto, Mobile financial services (MFS) have become a key long-term strategy for banks, financial institutions, mobile network operators (MNOS) and retailers worldwide. All have identified MFS as an opportunity to achieve considerable growth and as an area in which they must keep up with consumer needs. According to Marshal, Narter and Levy (2011) Mobile financial services are conventionally broken into three functional areas: information services, transaction services, and payments. It has become common practice to use agent-based networks to serve customers face-to-face in various financial

services domains, such as mobile money, micro-finance and banking services Mistral Mobile (2013), further Mistral mobile (2013) added that agents act as the physical touch-point for any given financial service and this enables highly cost-efficient expansion of the financial service reach out. On line report by Western union in 2013 indicated that by becoming an Agent in United Kingdom, one stood to benefit from; generating revenue through a commission earned on every transaction, sent or received, from agent's retail location(s), attract new customers, increase the agent's footfall and revenues by leveraging cross-selling opportunities, enhance the agent's customer relationships by offering them more convenience and strengthen the agent's competitive position. According to Weber (2011) the development of mobile financial services depended on the economic circumstances as well as on the suitability of the legal framework regulating the service application.

According to World List Mania (2012), USA currently has a total of 327,577,529 Mobile Phone users'. Marshal, Narter and Levy (2011) revealed that whereas mobile devices had created new access to financial services for unbanked consumers in developing markets, MFS emerged in the United States largely as add-on services for the convenience of existing account holders. There are 40 million American households that are under banked, Francesc Prior Sanz IESE Business School (2011), revealed that the use of server based electronic (e) money based on cards has been the most prominent both in Europe and in the USA; Pay Pal has been the most successful. The preceding past researches thus revealed few agents connected to mobile financial services in USA. In 2010 txtNation Support data, indicated that USA had five mobile network operators; AT&T Mobility (AT&T), Verizon Wireless, T-Mobile (Deutsche Telekom), Cincinnati Bell Wireless and TracFone Wireless (América Móvil).In

December 2010 USA had 899,700 people employed in the industry and earned revenue of 184.4US billion dollars from cellular & other wireless forms of telecommunication (Muñoz, 2012).

In the United Kingdom there were five mobile network operators; 3 UK (Hutchison Whampoa), O2 UK (Telefónica), Orange UK (France Télécom), T-Mobile UK (Deutsche Telekom) and Vodafone UK (Vodafone), txtNation Support (2010). Vodafone was the third largest service provider with 21% market share (UK Mobile Network Operator Subscriber Data 2007-2011). The United Kingdom has 100% ownership in Vodafone (Vodafone Group 2013).

In Japan, the number of people using cell phones grew to almost 100 million during the past decade, and more than 80 percent of the population owns these personal mobile gadgets (Tomida, 2008). The country, according to txtNation Support in 2010 had four mobile operators; NTT DoCoMo (NTT), au by KDDI, SoftBank Mobile and WILLCOM. Peake (2012) revealed that in Japan the underlying infrastructure that supports cash-in and cash-out services, the gateway for digital financial services transactions are agents who are typically located in retail locations (such as pharmacies, small stores and gas stations) and receive a commission for the services performed. Peak in the 2012 report puts that super agents are wholesale third level agents or whole sale distributors, providing customer experience management, training, reporting and, most important, liquidity management. In very large agent networks, up to three levels of super agents can exist, and they earn revenue through fee sharing with their agents on each transaction.

Germany is the largest and most mature mobile market in Western Europe; in 2010 there were 107.102 million mobile subscribers (International Trade Administration 2011). In 2010, txtNation Support revealed that there were four mobile network service providers; T-Mobile (Deutsche Telekom), Vodafone Germany (Vodafone), E-Plus (KPN) and O2 Germany (Telefónica). The market share of major mobile service players in 2010 included Vodafone Deutschland with 33.3%, T-Mobile Deutschland with 32.2%, E-Plus (a mobile unit of KPN) with 18.6% and O2 with 15.5% (U.S. Department of Commerce, 2011).According to Mobile Africa Money (2012),WorldRemit, an award-winning online platform enabling migrants to send remittances to family and friends in more than 100 countries already operates in Germany and has the most extensive services of pay-out options including instant cash pickup, bank deposits, transfers to mobile wallets, door-to-door delivery and airtime top-up.

In South Africa, the cellular market is one of the fastest developing in the world. Report from txtNation Support (2010) indicated that the country had four mobile operators MTN (MTN Group), Vodacom (Vodafone), Cell C (Saudi Oger) and Telkom mobi (Telkom). Kausch in 2012 (as cited by CGAP b. 2011) notes that South Africa has over 100,000 point of sale devices and close to 10,000 ATMs. The South African government has been committed to improving access to financial services, particularly for those who have historically been denied access to financial services and which are evidenced in the country's Financial Charter (Kausch, 2012). Further Kausch in 2012 noted that following the much referenced success of M-Pesa in Kenya, Vodacom launched its South African version of the service in 2010, which was achieved by using the banking license of local partner Nedbank.

In Ghana, the telecom sector is one of the most liberalised markets in Africa. The market has two national fixed-network operators and five operating mobile telephone companies. The fixed-line telephone segment is almost a monopolistic market since Vodafone Ghana controls almost 98% of the market, while Zain, the second network provider, has only 2% market share (Frempong, 2010).Other operators revealed by txtNation Support in 2010 include; OneTouch MTN Ghana (MTN Group) and tiGO (Millicom International Cellular Group). According to an online 2012 copy worldremit.com, Safer Online Money Transfer, Ghana has over 17 pay-out locations for mobile money where money can be transferred through MTN mobile money. Electronic money value transfer in Ghana also takes the form of Airtime top up.

In Nigeria, Tella, Amaghionyeodiwe and Adesoye (2007), noted that the telecommunication sector in Nigeria was established in 1886, while mobile phones emerged in early 90's. Pyramid research (2010) disclosed in a study conducted in 2009 that the number of mobile subscribers had been growing fast from 422,000 subscriptions at the introduction of Global System for Mobile (GSM) networks in 2001 to 73 million at the end of 2009. The country had seven mobile network operators Mtel (Transcorp), Vmobile (Zain Group), Globacom MTN Nigeria (MTN Group), Etiselat, Multilinks and My Country Mobile. In December 2005 Vodacom, expressed interest in acquiring shares from NITEL, which was government owned, but this attempt was unsuccessful; Africa and Middle East telecom week (Copyright c. 1998-2013).To date Vodafone has no presence in Nigeria. According to central bank of Nigeria (2013), the Financial Institutions may enter into a written contract with a third party service provider for the following; technology platform, agent selection, agent network management, agent training and equipment provision and maintenance. According to PUNCH newspaper

article by Oketola (May 21, 2012); Nigeria has 3,000 mobile agents which is quite low compared to the 50,000 estimated agents. Oketola, in the same newspaper indicated that there is need to have more agents supervised by the current 3,000 agents, consequently leading to generation of 250,000 more jobs in the next three years.

In Kenya, according to Kirui, Okello and Nyikal (2012) there are four companies that provide mobile phone services. These include Safaricom, Airtel (formally Zain), YU and Orange (formally Telkom Kenya). Safaricom was the first company to provide Mobile Money Transfer (MMT) services in Kenya. Kirui, Okello and Nyikal (2012) posit that MMT service in Kenya is almost synonymous with M-PESA. Meanwhile, Airtel - the second largest mobile phone company launched its MMT service called Airtel-Money (formally ZAP) in February 2009 while YU mobile phone company introduced its services named YU-CASH in December 2009. Orange (formally Telkom and Posta) is the fourth and latest entrant to introduce its MMT service called Orange Money in November 2010. Mwangi (2012) disclosed that by 2011, there were 35,000 M-PESA Safaricom agents, 8,600 agents for Airtel money, 3,500 agents for Orange money and 5,400 agents for YuCash.

Findings from Oxford Policy Management Ltd (2011) revealed that there was a mix on profits made by mobile money agents in that some stated having made profits while other agents claimed making no profits. The report, through data from CGAP's 2011 Agent Management Toolkit indicates that M-PESA agents' average profit per day had fallen to US$3.86, based on an average of 61 transactions. According to a research carried by CGAP (2009), some agents' stated making profit while others reported loses from M-PESA business, a worst case from Japhet from Musoli, a rural village 15

kilometres from Kakamega, stated that revenue from M-PESA was $1.80 while Cost of M-PESA was $2.20 and above this liquidity management accounted for 50% of his total expenses due to long distance to exchange cash and e-float. Jack, a best case from Kisumu the County capital and the third largest city in Kenya, with over 350,000 people by 2009, said M-PESA was extremely profitable but location was key in order to move large volume of transactions. This indicates a great point of mix and therefore one could not exactly state the position of the agents in line with the agency business.

From Oxford Policy Management Ltd (2011) as cited from CGAP's data, most agents revealed capital requirements and transport costs as some of the factors that affect growth of MPESA agents. The profit margins vary from one research finding to another, according to a study conducted by Enhancing Financial innovations and Access (2010), the average M-PESA agent makes a profit of USD 5.01 per day, further the study revealed that, in Kenya, income from mobile payments is significantly higher than the minimum daily wage.

1.2 Statement of the problem

In the wake of the 21st century, the research field has pointed out on scarce research activities in the Telecommunication mobile industry. Aker and Mbiti (2010) revealed that the available studies necessarily focus on specific sectors, countries, and examples. Mbogo (2011) concedes that most of the studies in mobile technology were conducted in developed countries and may not reflect the impact on the success and growth of different business environments and in particular the micro businesses in a developing country like Kenya. Further MFS in developed countries are largely add-on to account holders, Marshal, Narter and Levy (2011) unlike in developing countries

where they serve millions of unbanked. This view is further amplified by Dahlberg, Mallat, Ondrus and Zmijewska (2008) in their revelation that mobile payment services differ between markets, such as Japan, various European countries, or the USA, since situations greatly differ, he further added that so far there has been no clear insight into the role that micro payments play in the development of micro-business.

Mbogo (2011) revealed that some of the reasons for impact related studies include; developing mechanisms to cope with the increasing developments in the mobile payment service and address challenges of the micro business operating environment. A study conducted by Donner and Tellez (2008), revealed that, scholarly research on the adoption and socioeconomic impacts of m-banking/m-payments systems in the developing world is scarce (as cited by Maurer, 2008).

According to Diniz, Albuquerque and Cernev (2011) although there are more than 120 mobile money projects deployed in about 70 emerging markets (as cited by Beshouri et al. 2010), mobile payment has only taken off in a limited number of countries. This failure to disseminate a service with such a huge potential worldwide, shows that the reasons for the successful cases are not clearly understood, and as a result, are not being easily replicated.

This study, using a combination of existing scholarly findings, identified lack of assessment of influence, negative or positive, behind financial transactions through mobile phones to Mobile money network agents as a huge gap that could inform on level of successes, hence accelerate uptake of mobile money services through adoption or modifying key existing channels. Past revelations are clear that there was need for a study that will inform on the influence that financial services through mobile phones had to the implementers. This study therefore sought to determine the influence of

financial services through mobile phones by assessing workforce, income, assets and personal wellbeing of Safaricom agents.

1.3 Purpose of the study

The purpose of the study was to determine the influence of financial transactions through mobile phones on the growth of Safaricom agents in Kisumu County, Kenya.

1.4 Objectives of the study

This section has outlined the following research objectives which have been used to guide this study.

1. To determine the extent to which financial transactions through mobile phones influence workforce of Safaricom agents.
2. To examine how financial transactions through mobile phones influence income generated by Safaricom agents.
3. To assess the extent to which financial transactions through mobile phones influence assets of Safaricom agents.
4. To examine how financial transactions through mobile phones influence personal wellbeing of Safaricom agents.

1.5 Research questions

This section has highlighted the research questions derived from research objectives which have been used to guide this study.

1. To what extent do financial transactions through mobile phones influence workforce of Safaricom agents?

2. How do financial transactions through mobile phones influence income generated by Safaricom agents?
3. To what extent do financial transactions through mobile influence assets of Safaricom agents?
4. To what extent do financial transactions through mobile phones influence personal wellbeing of Safaricom agents?

1.6 Significance of the study

The study findings may be important in providing knowledge to Safaricom agents, the government, relevant stakeholders for example entrepreneurs and the researcher. Impact studies have long lasting indications on performance and can be used to correct future operations in any given enterprise.

This study may be significant to Safaricom agents and the Safaricom Company in that those areas that may be found to have low influence may be enhanced through initiation of innovative programs. This may lead to better performance by the agents which may lead to improved performance to the Safaricom Company. Entrepreneurs in this study are the most relevant stakeholders. The entrepreneurs may benefit from the study by pulling out the findings and using them to improve their enterprises, for example in management of their workforce and incentivising them through capacity building programs. From the study, the Government of Kenya may use the findings in strengthening policies related to mobile financial transactions. Policies may hinder or open up areas that may be found to be unfavorable for mobile financial transaction players for the example the agents or the mobile network operators. Finally the researcher may benefit from the study by gaining knowledge on influence of financial

transactions to mobile network operators and complete the masters' requirement on proposal development.

1.7 Basic assumptions of the study

The study advanced the following assumptions in order to realize the research objectives; first, Safaricom Kenya limited agents were free to share information on the changes they have experienced over time from revenues generated from their businesses. This assumption would enable comprehensive mobilization of required data that was to be analyzed to assess workforce, income, asset and personal development of the agents. Secondly Safaricom agents in Kisumu were available during data collection period and incase of delegation to outlet managers, they would have sufficient information against the research questions. This was to enable timely collection of required data and completion of the study within the agreed time frame and the allocated resources.

1.8 Limitations of the study

This study sought to determine the influence of mobile phone financial transactions on growth of Safaricom agents, an action which could have been presumed by the Safaricom agents as exposure of business secrets. The study countered this by providing a firm confidential statement to the respondents. The study could also have faced limitation in data sharing, since some agents may not be readily available. This was countered by making appointments to Safaricom agents, the census research design and availability of outlet managers where the owners were not available.

1.9 Delimitations of the study

The study was delimited by the scope as defined in the research topic; the study was undertaken in Kisumu County, which was the selected study region. Kisumu was selected as the study area since there is a strong correlation in Safaricom agents in Kenya, developed and monitored by Safaricom Company and the Central Bank of Kenya which is the regulating body. The research examined four dependent variable; workforce, income, asset and personal development in relation to Safaricom agents. During the study only authorized dealers with contractual obligation with Safaricom were interviewed by use of questionnaires and in depth interviews. Along the mobile financial supply chain, retail outlets exist and serve the bottom of the pyramid in provision of mobile financial services; these retailers were beyond the scope of this study since they act on behalf of the agents with contractual obligation.

1.10 Definition of significant terms as used in the study

For purposes of this study, the following terms were used to express the meaning defined in this section:

Growth of Safaricom Agents; Change over time that can be associated with mobile phone financial transactions as reflected in workforce, income, , assets and personal wellbeing.

Personal wellbeing; according to this study, this refers to personal judgment, positive or negative in oneself including his or her immediate beneficiaries. This study assessed access to health services, shelter, education and leadership.

Workforce; based on this study, this refers to increase or decrease in workforce and level of skills within the agency firms along a given time frame.

Income generated; this term has been taken to refer to change in net income within the business of mobile financial services offered by agents.

Assets; it refers to changes in productive assets arising from agent's provision of mobile phone financial services. According to this study, the assets go beyond direct assets that support their business to assets that support their households or other businesses apart from mobile phone financial services.

Financial transactions through mobile phones; according to this study, this term refers to use of mobile telephones to deliver basic financial services. It also includes services whose interaction with mobile phones leads to generation of revenue to mobile operators.

1.11 Organization of the study

This study is organized in five chapters. The first chapter highlights the introduction to the study which has nine sub themes. Under introduction the paper has discussed the background of the problem and advanced to state the problem and the purpose of the study. The section also includes research objectives, question and significance of carrying out the study. In the last parts of chapter one, the paper discusses limitations and delimitations to the study and finally outlines assumptions and defines key terms used in the research topic. The second chapter highlights review of existing literature. This chapter constitutes introduction which discusses the existing literature /concepts that make up the independent variable and their influence on the

dependent variable. The chapter as well includes the theoretical framework and the conceptual framework. Finally the chapter gives a summary of existing literature and a conclusion. Chapter three discusses the methodology used in the study. The chapter has seven sub themes which include research design, population and sampling, data collection instruments and procedure, quality control in terms of validity and reliability, data analysis, assumptions, limitations and ethical considerations.

Chapter four has covered data analysis, presentations, interpretation and discussion. The chapter has highlighted introduction section, Instruments return rate, demographic characteristics of the respondent and presentation on relationship between financial transactions through mobile phones on workforce, income, assets and personal welfare of Safaricom agents as depicted by quantitative and qualitative results. Chapter five covers summary of the findings, conclusions and recommendations for policy action, suggestions for further studies and contribution to the body of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter has reviewed the past available information related to the research under the following sub themes; workforce, income generated, assets and personal wellbeing in relation to mobile financial services to Safaricom agents. The chapter also presents the conceptual framework showing the relationship between the variables along with the theory that has been used to build the study.

Financial transactions in this study refer to use of mobile telephones to deliver basic financial services. It also includes services whose interaction with mobile phones leads to generation of revenue to mobile operator agents. Financial transactions that apply mobile interface in Safaricom use the M-PESA function and include; cash in' and 'cash out' transactions, person to person (P2P) transfer to any network, airtime top up, personal to business (P2B) bill payment, ATM withdrawals, salary payments, MFI partnerships to handle loan repayments, Social payments through partnerships with Oxfam, Concern Worldwide and other NGOs, International money transfer to the UK and Partnerships with leading Kenyan banks to offer M-Pesa access to bank accounts (Cracknell, 2012). The study aimed at determining how these transactions have contributed to the growth of Safaricom agents who have a contractual agreement with Safaricom Company.

According to Cracknell, 2012 (as cited by Vaughan 2010), Financial transactions through mobile phones by use M-PESA started with a pilot in 2005-2006, with a

functionality for MFI loan repayment, in 2007 a national launch was done with a functionality branded as money transfer service, in 2008-2010, there was an expansion of functionality which included International money transfer, pay bill, bulk payments, M-Kesho, and merchant payments and 2010 to date, further Innovations have been going on which are customer driven.

While discussing agents and the agent business case, Cracknell (2012) revealed that for most agents, M-Pesa is not by itself a complete business opportunity, rather, M-Pesa is an incremental business for Safaricom's agents, alongside airtime, and phone sales, he further revealed that, in addition to facilitating "cash in" and "cash out" transactions M-Pesa agents perform a number of extremely valuable functions, which include; Customer Education, Compliance with Anti Money Laundering (AML), Know Your Customer (KYC), Compliance with Safaricom Business Standards and branding guidelines. These training areas were further revealed in the study findings, but qualitatively analyzed and categorized as; Fraud, customer care, Know Your Customer (KYC), Safaricom products, marketing and Book keeping.

2.2 Mobile phone financial transactions and workforce of Safaricom agents

Lum (2011) revealed that Mobile phones can create more jobs by increasing the demand for mobile-related services. Lum, 2011 (as cited by Klonner & Nolen 2008), for example, found that the introduction of mobile coverage in South Africa was correlated with a 15 percent increase in employment. This indicates that the business spring wells for mobile phone services, like Safaricom agents are part of employment enhancement units. In the study, descriptive analysis revealed that the number of workers for Safaricom agents has been growing steadily since 2008. According to Tubey (2012)

growth of an enterprise can be amongst other parameters that can be measured in terms of the number of jobs created.

Under this objective the study sought to understand whether there was an increase or decrease in number of workers in Safaricom agent stores. Kimenyi and Ndung'u (2009) revealed that financial service, although exhibited by low value and high volume was generating substantial returns and creating job opportunities. Flaming, McKay and Pickens (2011) revealed that personnel growth is determined by the volume of transactions in the outlet. Initial engagement with Safaricom as head office agent require that one is able to employ at least 2 people to handle head office operations on a day to day basis, though not necessarily on a full time basis, Safaricom M-PESA agent requirements (2010).

The change in workforce in any given firm takes into account the capacity enhancement of workers, Mbogo (2011) posits that education is one of the factors that impact positively on growth of firms which was further supported by Tubey 2012 (as cited by Otunga et al.) who revealed that there was a positive relationship between level of education and training, and success in business amongst Eldoret municipality entrepreneurs. The authors argue that education provides basic communication and literacy skills and facilitates socialization and publicity to predict business environments that are crucial in building and maintaining customer loyalty. Those entrepreneurs with larger stocks of human capital, in terms of education and (or) vocational training, are better placed to adapt their enterprises to constantly changing business environments (as cited by King and McGrath, 1998) and Kessy and Temu (2010). Kessy and Temu (2010) studied impact of training on performance of micro and small entrepreneurs in Dar salaam and found that there was positive relationship between profits and revenue

amongst entrepreneurs who had received business and entrepreneurship trainings. Tamkin (2005) found out that emerging evidence indicated that training and development of the existing workforce has benefits for productivity, it increases the capability of the workforce, leading to production of quality goods and services, higher customer satisfaction and contribution to the organization's final outcomes of profit or shareholder value (for private sector companies). In the same findings he noted that employers who raise the skills of their workforce through recruitment activity or through training and development reap benefits of productivity and other gains too.

The study also sought to determine whether the number of workers increased over time, Rauch (2000) revealed that it is unlikely, however, to increase the number of employees without increasing sales at the same time (or even before). Findings by Rauch were similar to Tubey (2012) who revealed that there was a significant change in number of employees amongst Eldoret municipality entrepreneurs which indicated there was potential in job creation by women entrepreneurs supported by NGOs in Eldoret Municipality.

2.3. Mobile phone financial transactions and income of Safaricom agents

According to Tubey (2012) growth of an enterprise can be measured in terms of the profits and sales amongst other parameters. Under this objective the study sought to understand whether there was an increase or decrease in profits earned by Safaricom agents.

Safaricom can earn income from her operations through commissions paid to the stores, Mas and Radcliffe (2010) "using M-PESA customers can deposit and withdraw cash to/from their accounts by exchanging cash for electronic value at a network of

retail stores (often referred to as agents). These stores are paid a fee by Safaricom each time they exchange these two forms of liquidity on behalf of customers. Mas and Radcliffe (2010) pointed out that in order to develop a scalable channel; Safaricom developed an incentivising model by distributing agent commissions "Safaricom pays commissions to agent Head Office (HO) for each cash-in/cash-out transaction conducted by stores under their responsibility. Safaricom does not prescribe the commission split between agent HOs and stores, though most agent HOs pass on 70 percent of commissions to the store". Individual stores may be directly owned by an agent Head Office or may be working for one under contract. This paper will examine agents linked directly to head office, described also as agents with contractual obligation with Safaricom Company or the master agents.

According to International Finance Corporation; *World Bank group* (2009) Revenue on M-PESA transactions is on average 4.3 times greater than that of airtime commission earned by agents. For master agents with a large number of M-PESA outlets this translates into a significant opportunity. In the case of one retail agent in Kisumu, M-PESA is extremely profitable due to his prime location; the agent processes 256 transactions per day and makes on average a profit of USD 27 CGAP (2009). However, when compared to smaller outlets the benefits are not so obvious. Another retail agent in Musoli loses on average USD 0.40 per day in M-PESA transactions since his costs to maintain the float and manage staff exceed the commission he earns on transactions. Cracknell (2012) summarizes that Safaricom compensates for three activities to the agents which include, signing up a new customer, cash deposits and cash withdrawals.

According to Davidson and Leishman (2010), most successful mobile money deployments in the world have leveraged this approach. Both agree that, airtime distribution network has the same characteristics that users and the operator's alike value. They further found that most super dealers find that the economics of distributing mobile money less attractive than those of distributing airtime, and so choose to pass on the opportunity. These findings could indicate better returns from sale of airtime by Safaricom agents hence contributing significantly to their income. International Finance Corporation, World Bank group (2009) revealed that more and more mobile money providers are recognizing that airtime top-up is a critical part of their financial value proposition. This service tends to have cash-in requirements. With the inclusion of airtime services in their mobile money product line, an agent has a repetitive business that can offset cash withdrawal services – thus balancing their cash flow a bit more.

Flaming, McKay and Pickens (2011) in their study highlighted that the overall trend in customer per agent and transactions per agent ratios is still downward since 2008 and several agents report they are considering exiting from the business of being an M-PESA agent if revenues continue to decline, however this contravenes their supply chain analysis that indicated that the agents get sufficient revenue from person to person transfer services and customer transaction fees.

2.4. Mobile phone financial transactions and assets of Safaricom agents

According to Memba, Gakure and Karanja 2012 (as cited by Barmes, 1990) assets are particularly useful indicator of impact because their level does not fluctuate as greatly as others. Their study revealed that there was an increase in assets in enterprises that had utilized venture capital.

Calvez (2010) postulated that business owners are likely to engage in risky assets compared to non - business owners. Thus an examination of business asset growth to Safaricom agents would be appropriate since like other entrepreneurs, they are likely to invest in both risky business and household safe assets than ordinary community members. Initial engagement with Safaricom agents require 1 computer, 1 printer, a land line or mobile phone for contacts and an Electronic Tax Register machine as revealed by Safaricom M-PESA agent requirements (2010). A study carried out by Cracknell (2012) indicated that assets and profits for financial institutions in Kenya continued to grow in the five years from 2006 to 2010. Whilst this growth dipped between 2008 and 2009, mostly as a result of the post-election violence in 2008, and the consequent slow-down in the economy rather than as a result of the international banking crisis. This may be used to compare with Safaricom agents since they are players in nearly the same industry.

According to Tubey (2012) growth of an enterprise can be measured in terms of the number assets. Her findings confirmed that the initial capital invested by women entrepreneurs in Eldoret Municipality tended to be on the lower side while on reinvestment of profits and loan capital into the businesses, the respondents said their businesses had continued to accumulate assets over the intervention period. Finding on the entrepreneurs asset accumulation from1999 to 2002, indicated continuous increase in value and especially from assets with low value to those which had high value. Under this objective the study sought to understand whether there was an increase or decrease in assets owned by Safaricom agents.

The study sought to determine the change from the initial asset investments that Safaricom agents have experienced both in their current agency business, at household or other businesses they could have established thereafter.

2.5. Mobile phone financial transactions and personal wellbeing of Safaricom agents

According to a commission initiated by Nicholas, President of the French Republic on what additional information might be required for the production of more relevant indicators of social progress, in assessment of the feasibility of alternative measurement tools, and to discuss how to present statistical information appropriately ; Stiglitz, Sen, and Fitoussi (2009), in turn recommended that while respecting statistical indicators, there often seems to be a marked distance between standard measures of important socio economic variables like economic growth, inflation, unemployment, etc. and widespread perceptions in terms of material living standards, Health, Education, personal activities including work, political voice and governance. In line with this understanding, this study sought to understand how health, education, shelter and leadership levels of Safaricom agents had been influenced by financial transactions through mobile phones.

A study contacted by Bezruchka (2009) revealed that in poor countries, shared economic growth appears to improve health by providing the means to meet essential needs such as food, clean water shelter and access to basic health care services. This study holds that micro businesses like the Safaricom agents contribute towards the shared economy and thus as the businesses thrive well, the health of the agents as well improves. A study conducted by Tuber (2012) revealed that the informal sector

activities can meet most of the society's basic needs such as food, clothing, shelter and even health.

According to Niaz (n.d.), it is generally accepted that expenditure on habitat by the poor normally follows growth in incomes and fulfillment of higher priority basic needs such as food and livelihoods. In the same findings, Niaz noted growth in income as also being responsible for improved human health and therefore, the ability of the poor to undertake economic activities.

Thus if there was positive growth with the Safaricom agency, most likely there would also be improvement in health and shelter for the agents. This study therefore sought to determine if the respondents' shelter had improved from 2008 to 2012.

According to Googins (1997) Community relations, as one chief executive put it, "is food for the soul of the organization." It is no longer an afterthought or corporate window-dressing, community relations, as more chief executives are acknowledging, is now a serious, strategic aspect of business. Thus as agents experience grow and expand they are likely to get more involved in community leadership.

According to Jack and Suri (2010) there is a substantial increase in wealth index with users of mobile money compared to non-users. This proposal holds to the fact that, due to ripple effect, when users experience significant rise in wealth index, then most likely the agents offering this services are likely to experience the same or a higher level of change. In a study by Maina, Bwisa and Kihoro (2012) it was revealed that M – PESA, was second widely used service with 75% use out of ten manufacturing firms sampled for study, the service had a mean of 3.62. This reveals that the Safaricom agents are part of Safaricom second lucrative venture which further could highly influence their economic wellbeing through ripple effect.

2.6 Theoretical framework

Jovanovic (2000) advanced that growth theory has two explanations, one growth theory stresses on supply of productive ideas and secondly stresses on incentives. The theory was developed in 1950's and 1960's with some of the early proponents being Stilgiz and Uzawa in 1969 (Jovanovic, 2000). According to Jovanovic (2000), economic theory has settled on three categories that explain why our living standards grow. The categories are; progress of science and productive knowledge, growth of individual skills and incentives.

This study builds on growth theory as expounded by Jovanovic in 2000 in his research works to explain the influence of financial transactions through mobile phones on Safaricom agents. Further to the works of Jovanovic, this study would go further to elucidate the significance of assessing influence of financial transactions through the mobile phones which embeds the three factors advanced by Jovanovic.

According to growth theory, science provides the necessary impetus to world's growth of wealth through growth of knowledge. The theory agrees that adding to knowledge brings strength in numbers. Jovanovic in 2000 (as cited by Arrow 1962) argued that we get new ideas by use of old ideas through "learning by doing". This is applicable in this study since Safaricom agents are using old ideas invented by Safaricom Company to run their current stores/shops. During the roll out of agency structures, Safaricom provided six hour training to the agents to enhance their capacity in providing efficient money transfer services. While this was clearly a very short training, the efficiency of the agents should have increased with time through practice and learning from other agents. Jovanovic (2000) says that the learning process operates

at the level of the industry as a whole in that each producer learns from the experience of all other producers.

In his research Jovanovic postulated that science driven models have not been universal, but adds that the constraining force to growth is the adoption of new ideas which require resources and skills. He agrees to the fact that adoption is as costly in a big world just as in a small one. Based on this, individual Safaricom agents may exhibit retarded, stagnating or robust growth since their experience and level of education may significantly differ. However the overall aggregation of their growth levels would averagely indicate the levels of influence since there is no significant regional difference in the study area.

The theory's third factor that influences growth is incentives. According to Jovanovic 2000 (as cited by Baumol 1990 &Mokyr 1992), historically material progress has depended less on science and supply of potential of innovations than on whether people have the incentive to implement them. Jovanovic 2000 (as cited by Parente and Prescott) argues that established monopoly rights, over an old technology can allow it to survive the threat of entry by firms wanting to use a better new technology and this can have a big drag on development. He points out that the challenge is to understand how the policies are chosen. An examination of the Government policies in Kenya by the Communication Commission of Kenya and the regulating body, the Central Bank indicate a supportive policy for mobile money transfer consequently yielding an enabling environment to Safaricom agents. Jovanovic (as cited by Krusell and Rios-Rull, 1996) say that a democracy may choose to erect a barrier to technological change, because majority of the voters may stand to lose from adoption of the new technology if it may devalue their skills. According to Mas and Radcliffe (2010) this was one of

moves by the banking sector as they pressured the government to check the operations of Safaricom Company during M-PESA product roll out; however this barrier was overcome by the tacit approach the government applied in the innovation of M-PESA services. This study thus fits to use the growth theory as advanced by Jovanovic (2000) in explaining the influence of financial transactions by use of mobile phones to Safaricom agents and further add value to the theory by introducing an assessment approach to drivers of mobile service providers by informing on level of change.

2.7 Knowledge gaps

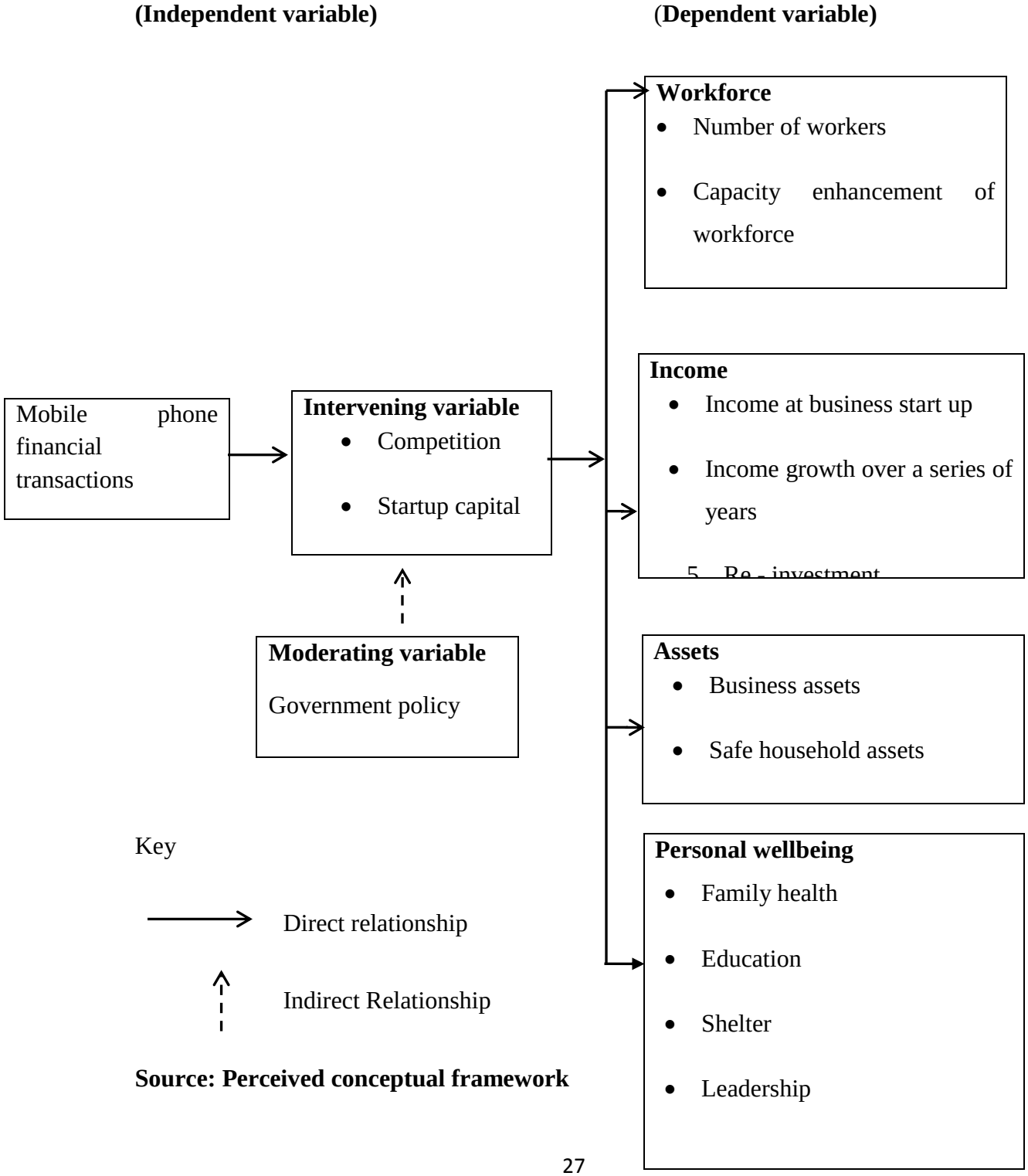
According to Aker and Mbiti (2010), evidence on mobile phones in Africa is quite recent; the available studies necessarily focus on specific sectors, countries, and examples, further they have suggested that mobile phone coverage has been successful in generating employment opportunities, to date, there have not been studies examining the influence of mobile phones on both formal and informal sector (as cited by Klonner & Nolen, 2008), as well no mobile phone service study has attempted to examine influence of mobile financial services to provider agent network, that can be used to provide vital information when making investment decisions and policy formulation.

The study will provide information to agents, stakeholders, the government, scholars and the researcher on influence the service has had to Safaricom agents and assist in providing knowledge, setting up desirable goals and re - planning towards realizing improved growth.

2.8 Perceived Conceptual Framework

The study was guided by the following conceptual framework;

Figure 1; Perceived conceptual framework



Source: Perceived conceptual framework

From the conceptual framework, when Safaricom agents offer financial transaction through mobile phones to customers, for example mobile money, they in turn receive some amount of commission from Safaricom Company limited. Cumulative revenues results to a monthly income that may vary depending on the number of transactions carried out. In order to realize better income, agents would need to have an effective workforce and capacity building programs. From the income earned the agents can either reinvest or acquire assets and use part of the income for personal development.

In the framework, Government regulations can positively or negatively influence the growth of Safaricom agents. A study by Rosenberg (2010) revealed that increasing access to financial services to the world's poor depends in large part on regulatory frameworks that strike the right balance between protecting customers and promoting the innovation required for branchless banking to flourish. Mwangi (2012) noted that one of the factors that have kept Safaricom on top has been an enabling regulatory body. Mwangi in the report highlighted that Safaricom relationship with the regulator (The central Bank of Kenya) has been cordial and not confrontational and that decisions are shared between the two before they are rolled out. Mbogo 2010, (as cited by Omwansa 2009) argues that the benefits associated with M-Pesa are so enormous that those who try to place regulatory pressure on it might feel guilty if they appear to frustrate it.

According to Mas and Radcliffe (2010) the CBK has continued to support M-PESA's development, even in the face of pressure from banks. In late 2008, after a lobbying attack from the banking industry seeking to shut down the service, the Central Bank did an audit of the M-PESA service at the request of the Ministry of Finance and declared it safe and in line with the country's objectives for financial inclusion This

indicates a highly supportive government policy frame work that can moderate the intervening variable.

Cracknell (2012) postulated that Kenya's financial sector has relative giants in the provision of mass market retail financial services in particular Equity Bank and Safaricom. The potential exists for monopolistic behaviour. However, with the regulation and supervision of microfinance institutions and SACCOs - Kenya is developing new levels of financial service provision which has greater capacity and ability to compete. Competition would generally reduce market share and subsequently the income levels of any given firm, this is likely to be the case with Safaricom agents. On policy issues, Cracknell (2000) added that Safaricom's M-PESA shows how the right policy environment, combined with accessibility and affordability combines to provide financial access, this statement indicates that Kenya's policy framework could be moderating undesirable competition and other factors that may inhibit growth of Safaricom agents.

According to Safaricom M-PESA agent requirements (2010), Safaricom M-PESA agents require at least a minimum of one outlet and a minimum float balance of Kshs 200,000 as float deposit. This means that, Agents require a lot of capital because they need to have enough cash on hand and electronic float for customers to withdraw and deposit on demand. Other costs also require upfront investment, for example the initial engagement with Safaricom agents require 1 computer, 1 printer, a land line or mobile phone for contacts and an Electronic Tax Register machine. These requirements points out some of the capital constraints that Mobile Money Operator agents may be facing.

2.9 Summary of Literature Review

This chapter has reviewed both literature on experiences that mobile network operators have shared globally and locally and possible influence on the independent variables on growth of the agents.

The chapter has also revealed literature on mobile network operators and their preferred distribution channels. Reviewed literature indicated Mobile Network Operator's strong choice for agents as distribution channel.

In the review substantial literature on mobile money transfer was readily available, with scarce of literature in other forms of financial transactions. However there were clear links on how mobile money can be related to the airtime purchase. Literature review revealed the strong mobile money MPESA transfer system praised as one of the most successful innovations and the second revenue earner for Safaricom Company.

Under this section it has emerged clear that mobile phone industry is quite new in Kenya, and is experiencing very fast growth. As stated earlier, the mobile telephone industry in Kenya is relatively a new concept and few studies have been undertaken (Okioga, Morumbwa, Onsongo, 2002). This means that little information on mobile phone industry is available. According to Swattman, (2005), Information today is very important in making informed decision that we face, from choosing a car to choosing a career. Further Swattman advances to clear the need by saying, "There are times in the market that there is asymmetric information which is either the buyers or sellers have better and more information on the product than the other. Aker & Mbiti (2010) suggests further research noting that while the proliferation of mobile based services and

projects has the potential to promote economic development, there is a tendency for development agencies and donors to " jump on the information technology bandwagon" without properly assessing its effects. This study closed the identified gaps highlighted in this section and provided an avenue for further research activities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is arranged in seven areas starting with the research design. A descriptive survey design with a mix of both qualitative and quantitative techniques has been chosen for the study. The second area in the study process is the target population which leads to the third section of sample size and sample selection. The fourth to the seventh section comprises of research instruments (with both ways of maintaining instrument validity and reliability), data collection procedure and lastly data analysis techniques.

3.2 Research design

The study adopted a descriptive survey design which is an arrangement of conditions for collecting and analyzing data in a way that gives a mix of relevance to the study purpose with the economy of procedure (Kothari, 2004). The economy of procedure is more appropriate measure of time and since this research was constrained by such, the design it was the most convenient. Kothari (2009) further recommends a descriptive research when the purpose happens to be an accurate description of a situation or of an association between variables, in this case a descriptive design minimises bias and maximizes the reliability of the data collected and analyzed. The design was further more relevant for this study since it is the most widely used technique to gather information which describes the nature and extent for a specified set

of data ranging from physical counts and frequencies. Both qualitative and quantitative approaches were applied in the research design.

3.3 Target population

The study was conducted in Kisumu County which is a host to 30 Safaricom agents, Edwin Nyandwilo, Kisumu Safaricom dealer manager (personal communication May, 2013). The agents were fairly distributed with a larger number within the city center and the bus park due to high human traffic.

3.4 Sample size and Sample selection

This section discusses the sample size and the sample selection procedure.

3.4.1 Sample size

The study used a census approach where all the 30 Safaricom agents were considered as respondents to the research. Kothari (2009) recognizes this method as an effective biased controlled procedure since all items are given equal chance of participating in the study. Although the approach faces challenges of time constraints, the population under study was realistically achievable. Safaricom authorized dealers were not as wide spread and unmapped as the retail outlets, hence the census was suitable in interviewing the target population.

3.4.2 Sample selection

The study employed purposive sampling techniques to identify Safaricom agents in all the locations of Kisumu County. The study selected 30 respondents where each had an equal chance of participating in the study. Most appropriate sampling technique

applied was the use of snow balling where one agent was able to offer direction to the next nearest authorized agent as explained by William (2008).

3.5 Research instruments

The study used questionnaires (to capture quantitative data) and in-depth interviews (for collection of qualitative data) as main tools for collecting data. The selection of the tools was guided by the nature of the study, the available time and objectives of the study. The research findings were interpreted upon analysis, discussed and recommendations were established.

The questionnaire design took both structured and unstructured form and was divided into two main sections. Section 1 captured the agent's background information (age, gender, period the respondent served as Safaricom Company agent, level of education and occupation). Section 2 was sub divided into subsection, each addressing specific research objectives. Category 1, 2, 3 and 4 of questionnaire addressed areas related to workforce, income, Asset and personal wellbeing of Safaricom agents.

In-depth interviews were used to collect data that was diverse and did not necessarily have particular responses. This gave the respondents freedom to express their opinion on how the research objectives related to their growth.

Both the questionnaires and in-depth interviews were conducted to Safaricom agents or to managers of the outlets depending on the availability of the key respondent who was the Safaricom agent/outlet owner.

3.5.1 Pilot testing

This study selected a different geographical area, Kakamega municipality for the pilot which has 12 authorized Safaricom agents, Company Trade Development Representatives, Vinaywa and Musa (Personal communication, June, 2013). Kakamega municipality has been considered for the pilot since it is relatively far from Kisumu making it possible to avoid influence of respondents in the main study area. Ten Safaricom agents were selected randomly to participate after permission from Safaricom regional Manager. The results were reviewed to identify areas in the research instruments that needed to be rectified. After a week a similar pilot was re-conducted with the same participants without notification. Results from the second attempt were reviewed and the instruments improved.

3.5.2 Validity of instruments

The research instruments were subjected to review by supervisors to ensure they captured the relevant data. The tools were subjected to peer review by colleagues. This facilitated revision of research questions which were not clear, hence improving their validity. The researcher developed clear questions guided by research objectives which captured precise and relevant information ensuring research instruments measured what they were intended to measure Tariq (2009).

3.5.3 Reliability of instrument

The study ensured reliability by carrying out a test and retest on the research instruments in Kakamega Municipality. According to Mugenda and Mugenda (2003), a pretest sample equivalent of 10% of the target population is considered appropriate. This study used 10 respondents for the pretest, which is above 10% of the recommended minimum pretest size. According to Trade Development Representatives of Safaricom

Company in Kakamega Municipality Vinaywa and Musa (Personal communication, June, 2013), Kakamega has 12 master agents for Safaricom and is far from Kisumu County hence the pilot controlled influence of respondents selected in the study region. Cooper and Schindler (1998) notes that, reliability is a situation where results are consistent when repeated measures of the same persons using the same instruments are undertaken. In this study reliability of the questionnaire was tested using the empirical procedure of split-half. In computing split-half reliability, the pre-test questionnaire were serialized and divided into two halves (odd and even) each half scoring independently of the other. A correlation coefficient using r-function of spearman Brown Prophesy formula shown below was then done to establish the correlation between the two halves hence ascertaining the internal consistency.

$$\text{Reliability} = \frac{2\times\text{Correlation between the even half}}{1+\text{Correlation between the odd half}}$$

$$R = 2r_e/(1+r_o)$$

Where R is the coefficient of reliability while r_e and r_o is correlation in the even and odd half respectively. For this study a value of 0.76 was obtained which was accepted since it was above the recommended 0.5.

3.6 Data collection procedure

The study sought research permit from the Kenya National Council for Science and Technology upon presentation of two copies of approved research proposal which was granted. . This gave authority to the researcher to go ahead and undertake the study in the stated centers. Both quantitative and qualitative techniques were used during the

study. Trained research assistants were used to collect the data using data collection instruments described in section 3.5, which were collected each day and edited before submission for analysis. Data collection took 7 days.

3.7 Data analysis techniques

According to Kothari (2004), data processing implies editing, coding, classification and tabulation of collected data to enable analysis while analysis refers to the computation of certain measures along with searching for patterns of relationships that exist among data groups. To ease analysis, data coding was done through sorting and editing filled questionnaires to find out any inconsistencies. Verified data from the questionnaires was analyzed through descriptive statistics. The study used both quantitative and qualitative approaches in processing and analyzing the data. Analysis was done using, frequencies, percentages and mean aided by Statistical Package for Social Sciences and Excel. Qualitative data was analyzed by use of content analysis. The SPSS results were then triangulated with analyzed qualitative data which enabled interpretation and discussions on the findings.

3.8 Ethical Considerations

The study acquired authority from the National Council of Science and Technology to conduct research. All the ethical aspects of research, which include getting informed consent of respondents to participate in the research, ensuring anonymity, privacy and confidentiality, were observed.

CHAPTER FOUR

ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study which have been discussed based on questionnaire response rate, demographic characteristics of the respondents, research objective themes which include; influence of financial transactions through mobile phones on workforce, income, assets and personal wellbeing of Safaricom agents and sub-thematic areas covering; training, growth in number of workers, net income, asset investment from personal capital, asset reinvestment from commissions earned, total value of assets, health, education, shelter and leadership position of Safaricom agents.

4.2 Questionnaire response rate

The study administered 30 questionnaires to Safaricom agents/managers in Kisumu County and all the questionnaires were filled thus reaching 100% response rate. According to Rubin and Babbie (2008) a response rate of over 50 % or more is generally considered an acceptable response rate; hence in this study the response rate was acceptable. This rate was reached due to the proper coordination of the study and the guidance of Safaricom staff to the location of the agents in Kisumu County.

4.3 Demographic characteristics of the respondents

This section presents the background information of the respondents who were the target in the study. This included distribution of respondent by; age, gender, period the respondent served as Safaricom Company agent, level of education and occupation.

4.3.1 Distribution of respondent by age

Age was considered an important aspect in assessing growth of Safaricom agents since it would reveal which age bracket was highly influenced by financial transaction through mobile phones hence respondents were asked to state their age. The results for this finding are presented in table 4.1.

Table 4.1

Distribution of respondents by age

Age of the respondent in years	Frequency (f)		Percent (%)	
	Men	**Women**	**Men**	**Women**
20 - 30	10	2	33.3	6.7
31- 40	10	3	33.3	10.0
41 - 50	3	0	10.0	
Above 50	1	1	3.3	3.3
Total	**24**	**6**	**80**	**20**

Source: Safaricom agents (Kisumu County)

Table 4.1 indicates that out of 30 respondents interviewed 10 (33.3%) men, 2 (6.7 %) women were between the age of 20 to 30 years, 10 (33.3%) men, 3 (10%) women were between 31 to 40 years, 3(10%) men were aged 41 to 50 years while 1 (3.3%) men and 1 (3.3%) women were above 50 years. The results revealed that majority of the respondents 25(83.3%), who constituted more men 20(66.6%) were within the productive

age bracket and they were therefore economically empowered to take up business investment challenges. This findings support a case study presented by InterMedia (2010), who in their study on mobile money take up rates revealed that although there was a small gap on age for mobile money uptake, the difference was statistically significant to justify that younger respondents (15 to 44) were more likely to say they had conducted some financial transaction using a mobile phone than those over 45 years.

4.3.2 Distribution of respondents by gender

The study sought to understand the gender that was actively involved as agents with Safaricom since this could inform which gender was likely to have experienced greater influence from financial transactions through mobile phones. Respondents were thus asked to state their gender during the interviews whose results are presented in table 4.2.

Table 4.2

Distribution of respondents by gender

Gender of the respondent	Frequency (f)	Percent (%)
Male	24	80.0
Female	6	20.0
Total	**30**	**100.0**

Source: Safaricom agents (Kisumu County)

Results from table 4.2 indicate that 24(80%) and 6 (20%) were men and women respectively. This implies that men were more involved in enhancing financial transactions through mobile phones, possibly because they were likely to raise the capital required and have enough time to meet the rigorous activities in the stores. Hence men were likely to experience more influence out of being Safaricom agents. These findings

however partly contravenes a case study carried out by InterMedia (2010) in Tanzania on significance of gender role on how Tanzanians communicate and gain information, which found that the margin between men and women using mobile phones for financial transactions was rather small across the entire population, but the margin become more distinct between different income groups, with the wealthiest groups recording more men than women, but this was in contrast with low and middle income groups.

4.3.3 Distribution of respondents by period served as a Safaricom agent

The number of years that respondents served as agents was considered a critical area since effect of financial transactions through mobile phones was likely to be experienced after a considerable period of time due to accumulation of experience. Respondents were thus asked during the interview on how long they had served as Safaricom agents. The responses are presented in table 4.3.

Table 4.3

Distribution of respondents by period served as Safaricom agent

Number of years	Frequency (f)		Percent (%)	
	Men	**Women**	**Men**	**Women**
1 to 3 years	8	3	27	10
4 to 7 years	16	3	53	10
Total	**24**	**6**	**80**	**20**

Source: Safaricom agents (Kisumu County)

Out of 30 respondents interviewed, table 4.3 revealed that, 16(53%) men, 3(10%) women had served as Safaricom agents for 4 to 7 years while 8(27%) men and 3(10%) women had been Safaricom agents between 1 to 3 years. The finding implied that, since majority of the respondents had been in the business for long, they were likely to have

had more experience resulting to better management and success of the stores and higher likelihood in growth. The findings agree with Perez and Canino (2009) in their study; The importance of the entrepreneurs' perception of "success", where they revealed that some studies have put the concept of entrepreneurial success on the same level as the concept of survival (Bosma *et al.,* 2004) since, dynamic models of industrial organization establish that young ventures that obtain profit decide to stay in the market, while those that obtain losses end up abandoning the activity (Harada, 2003) adding that survival is easy to identify and measure.

4.3.4 Distribution of respondent by level of education

In this study, respondent's level of education was important in that a great diversity in education levels may lead to differential growth levels, Jovanovic (2000) theory of growth. Respondents were thus asked their highest level of education in order to assess this aspect and the results are presented in table 4.4.

Table 4.4

Distribution of respondents by level of education

Level of Education	Frequency (f)		Percent (%)	
	Men	**Women**	**Men**	**Women**
Secondary Education	4	2	13.3	6.7
Middle College	13	3	43.3	10.0
University	7	1	23.3	3.3
Total	**24**	**6**	**80**	**20**

Source: Safaricom agents (Kisumu County)

Table 4.4 results indicate that, out of the 30 respondents interviewed 13(43.3%) men, 3(10%) women had middle college education while 7(23.3%) men, 1(3.3%) women, had University education and 4(13.3%) men and 2(6.7%) women had secondary education. The results revealed that majority of the respondents, mostly men 20(86.6%) were well educated implying that they were able to carry out financial transaction through mobile phones more efficiently, leading to a higher customer satisfaction and faster growth for the agents. This findings support revelations by Tamkin, (2005) in their study; *Measuring the contribution of skills to business performance: A summary for employers,* who noted that there is considerable positive evidence linking educational attainment to organizational performance. For example the most productive manufacturing organizations tend to have a more highly educated workforce than the least productive — equivalent on average, to an extra qualification level (as cited by Haskel and Hawkes, 2003). The findings are also consisted with a study on *impact of level of education and business experience on business success among small retail owner managers in Sri lanka,* conducted by Wanigasekara and Surangi, 2010 (as cited by Kim, Meng & Liang, 1996) involving entrepreneurs in Singapore which disclosed that successful entrepreneurs have higher education levels compared to that of unsuccessful entrepreneurs.

4.4.5 Distribution of respondents by occupation

In order to assess the level of commitment that Safaricom agents attached to their business, respondents were asked to state their main occupation. This was important in finding out if respondents were dedicating most of their time in the business. Results for this finding are presented in table 4.5.

Table 4.5

Distribution of respondents by occupation

Profession	Frequency (f)		Percent (%)	
	Men	**Women**	**Men**	**Women**
Accountant	2	0	6.7	0
Business	21	6	70.0	20
Salesman	1	0	3.3	0
Total	**24**	**6**	**80.0**	**20**

Source: Safaricom agents (Kisumu County)

Out of 30 respondents interviewed, results in table 4.5 revealed that, 21(70%) men, 6(20%) women were business person while 2(6.7%) men were accountants and 1(3.3%) man was a salesman by profession. The high number of business person 27(90%) implied that most agents were seasoned in doing business and had high commitment in undertaking activities in their stores, which was likely to result to a higher influence and growth, however, this growth was likely to be associated with men who formed a greater composition of the business person. The findings support Wanigasekara, and Surangi, 2010 (as cited by Goslin and Barge (1986) who revealed that individuals who finance new ventures weigh the owners' experience significantly when making decisions.

4.5 Mobile phone financial transactions and workforce of Safaricom agents

One of the objectives of the study was to establish the growth of workforce of Safaricom agents. In order to establish this, respondents were asked whether they had staff training programs, areas covered in the training program and growth in number of workers.

4.5.1 Distribution of respondents based on staff training programmes

An assessment based on availability of staff training program was important since it would indicate whether training was a crucial part in realizing better performance in the stores. Based on this respondents were asked to state whether they had staff training programs and the results were presented in table 4.6.

Table 4.6

Distribution of respondents based on staff training programmes

Responses	Frequency (f)		Percent (%)	
	Men	**Women**	**Men**	**Women**
Yes	22	5	73	17
No	2	1	7	3
Total	**24**	**6**	**80**	**20**

Source: Safaricom agents (Kisumu County)

Results from table 4.6 indicated that out of the 30 agents interviewed, 22(73%) men, 5(17%) women had staff training programs while 2(7%) men and 1(3%) women respondents did not have staff training programs. Findings on availability of staff training programs indicate that respondents attached a lot of importance to staff training since 90% of the agents had the programs in their businesses. This supports Jenkins (2008), who in his study; developing money ecosystems, quoted chief executive of Vodafone in Afghanistan saying that one of the most important things that Vodafone's MNO partner in Afghanistan had learned from the prior experience of Safaricom in Kenya, was the importance of training. This implied that Safaricom agents were likely to experience positive growth from being agents of mobile network operators, supporting Mbogo

(2011) who revealed that education was one of the factors that impact positively on growth of firms.

4.5.2 Distribution of respondents by training areas

The study sought to understand the training areas covered in the program by the respondents. This was critical in revealing gaps in skills that were being addressed or gaps that required more attention. Respondents were therefore asked training areas that were covered in the program, results on this assessment are presented in table 4.7.

Table 4.7

Distribution of respondents by training areas

Training Area	Frequency for Yes (f)	Percent (%)	Frequency for No (f)	Percent (%)
Handling Fraud	25	83	5	17
Customer relations	21	70	9	30
(KYC)	11	37	19	63
Safaricom products	15	50	15	50
Marketing	5	17	25	83
Book keeping	1	3	29	97

KYC; Know Your Customer. Source: Safaricom agents (Kisumu County)

The study revealed, in table 4.7, that there were six major training areas; handling fraud 25 (83%) confirmed against 5 (17%), customer relations 21 (70%) confirmed against 9 (30%), Safaricom products 15 (50%) confirmed against an equal no response, Know Your Customer (KYC) 11 (37%) confirmed against 19 (63%), while on marketing 5 (17%) confirmed against 25 (83%) and lastly book keeping 1 (3%) confirmed against 29 (97%).The results indicate that fraud could have been the greatest challenge in

realizing better performance, while good customer relations was important in enhancing or sustaining the market share. From the training areas, book keeping reflected the least area of interest probably due to Safaricom structured record system and the mobile e recording after every transaction. Findings from table 4.7, supports Mbogo (2011) revelation that education is an important factor that can influence growth. The analysis as well supports Tubey, 2012 (as cited by Otunga et al.) who in his study; *NGO Intervention measures, performance and trends of women - operated MSEs in Eldoret Municipality, Kenya* revealed that there was a positive relationship between level of education, training, and success in business while Tamkin (2005) in his study; *Measuring the contribution of skills to business performance: A summary for employers*, found out that emerging evidence indicated that training and development of the existing workforce has benefits for productivity, it leads to production of quality goods and services, higher customer satisfaction and contribution to the organization's final outcomes of profit or shareholder value (for private sector companies).

4.5.3 Growth in number of workers

An assessment on number of workers employed by the agents was considered important since increase, decrease or constant number in workforce was an indication of growth by Safaricom agents and as stated by Rauch (2000) it was unlikely to increase workers without increasing sales volumes. Pérez and Canino (2009) noted in their study, *the importance of the entrepreneur's perception of "success"* that indicators referring to the number of employees or the increase in that number ranked second in determining entrepreneurs' perception to success. In regard to this, respondents were asked to state the number of workers they had since they started their business. Results to these findings are presented in table 4.8.

Table 4.8

Growth in number of workers

Years	Frequency with staff (f)	Percent (%)	Number of workers	Mean	Frequency with no staff (f)	Percent (%)
2008	7	23	166.00	24	23	77
2009	16	53	278.00	17	14	47
2010	20	67	417.00	21	10	33
2011	21	70	498.00	24	9	30
2012	25	83	641.00	26	5	17

Source: Safaricom agents (Kisumu County)

Results from table 4.8 revealed that workers increased from 2008 to 2012 with 7(23%) respondents agreeing to have employed 166 workers against non-response of 23 (77%) in 2008, 16 (53%) of respondents confirming to have employed 278 workers against 14 (47%) in 2009, 20 (67%) of respondents confirming to have employed 417 workers against no-response of10 (33%) in 2010, 21 (70%) of respondents agreeing to have employed 498 workers against non-response of 9 (30%) in 2011 and 25 (83%) confirming to have employed 641 workers against a no-response of 5 (17%) in 2012. There was also a mean increase in number of workers 2008 (24), 2009 (17), 2010 (21), 2011 (24), 2012 (26), falling slightly in 2009 by 3.

The findings could imply that Safaricom agents were experiencing an upward growth and that the fall in mean number of workers in 2009 could have been due to poor business performance resulting from post-election violence. These findings are supported by Rauch (2000) who stated that it was unlikely to increase the number of employees without increasing sales at the same time (or even before). The results also indicate that, Safaricom agents were in agreement that financial transactions through mobile phones had contributed a lot in employment and they had a high opinion on its continued

success. The findings are consisted with Lum, 2011 (as cited by Klonner & Nolen 2008), in his study; *Mobile goes global: The effect of cell phones on economic growth and development,* where he revealed that introduction of mobile coverage in South Africa was correlated with a 15 percent increase in employment. The analysis also confirms Tuber (2012), in his study; *Intervention measures, performance and trends of women - operated MSEs in Eldoret Municipality, Kenya* whose findings revealed that there was a significant change in number of employees by women entrepreneurs in Eldoret Municipality upon Non-Governmental Organization's intervention. Responses from qualitative data revealed a strong believe from Safaricom agents on employment creation as noted from one of the respondents during In Depth Interviews.

> *"M-PESA has brought employment to myself and the other people whom I have employed, it has become a way of living, if you discontinue M-PESA now, everything can come at a standstill. I think Safaricom is the largest employer in Kenya, Right now you cannot wish away M-PESA in Kenya" (Josphat Omari – Nyakwara Communications Limited).*

Disclosure by Josphat Omari indicated that financial transactions through mobile phones had created employment for the agents and other people and had such enormous benefits such that life without M-PESA services was unthinkable. However in contrast to this, one of the respondents had a different opinion "*Safaricom has given out so many outlets, many people have lost their jobs because of numerous outlets getting closed" disclosed George Ochido of Obet Holdings Ltd during an in depth interview*. In conclusion to this theme, the study supports that financial transactions through mobile phones has created employment since the agents were enthusiastic and willing to open more outlets but unfortunately enhancing internal competition.

4.6 Mobile phone financial transactions and income of Safaricom agents

An assessment on growth or change in income was considered an important variable in this study as stated in objective two. Under this objective, the study intended to assess influence of financial transactions through mobile phones on net income of Safaricom agents. This was because, if net income of Safaricom agents was confirmed to be increasing, then the agents' wellbeing could be perceived to be improving.

4.6.1 Growth of income of Safaricom agents

Under this sub theme, the study sought to determine the agents' net annual income. This was done through an assessment of annual gross income and expenses. This assessment was considered important because Safaricom agents could only survive in the business if they were making profits. Pérez and Canino (2009) noted that indicators referring to the net profit ranked second in determining entrepreneurs' perception to success. In order to assess these objective, respondents were asked to state their annual gross income and expenses derived from the stores between the years 2008 to 2012 hence enabling determination of the net income. The results on net income are presented in table 4.9.

Table 4.9

Growth in net income (2008 – 2012), in Million Kshs

Year	Frequency disclosing income (f)	Percent (%)	Sum	Mean	Percent increase	Frequency undisclosed income (f)	Percent (%)
2008	10	33.3	29.4	2.9	18	20	66.7
2009	16	53.3	10.3	0.6	6	14	46.7
2010	19	63.3	28.1	1.5	17	11	36.7
2011	22	73.3	49.1	2.2	30	8	26.7
2012	24	80.0	48.2	2.0	29	6	20.0
Total			**165.2**		**100**		

Source: Safaricom agents (Kisumu County)

After analysis, findings from table 4.9 revealed that in 2008, 10 (33.3%) had a mean net income of 2.9 million against 20 (66.7%) who had not started business or were unwilling to disclose their income, in 2009, 16 (53.3%) had mean net income of 0.6 million against 14 (46.7%) who had not started business or were unwilling to disclose income, in 2010, 19 (63.3%) had a mean net income of 1.5 million against 11 (36.7%) who had no income or were not willing to disclose their income, in 2011, 22 (73.3%) had mean net income of 2.2 million against 8 (26.7%) who were unwilling to disclose on income. In 2012, 24(80%) had a mean net income of 2 million against 6 (20%) of those unwilling to disclose income.

The results indicate that the income increased steadily from 2008 to 2012, with a drop in mean net income earned in 2008 to 2009, possibly due post-election violence. This concurs with Cracknell (2012) revelations in his study; *Policy innovations to improve access to financial services in developing countries: Learning from case studies in Kenya* which indicated that profits for financial institutions in Kenya continued to

grow in the five years from 2006 to 2010, whilst this growth dipped between 2008 and 2009, mostly as a result of the post-election violence in 2008, and the consequent slow-down in the economy rather than as a result of the international banking crisis. The small drop in 2012 could further explain election year as an un-conducive period for Safaricom agents due to probably early closure of their businesses.

Competition as highlighted by some of the agents could also have led to such drops. The agents disclosed that fellow Safaricom agents and banks were the biggest competitors. Other barriers to better business performance which were shared by some of the agents in qualitative data included fraud, internet network failures, high capital demands and high council rates. Alongside competition these barriers could have also contributed to the noted drops in net income. *Network failures and competition from other networks for example YU which reduced the call rates and other rates along with insecurity are some of the biggest barriers to my business, said Wario Kosi of AL-HAQ Communications.* While another respondent had this to say; *raising capital, licensing authority, council rates and rent rates are the most inhibiting factors to my success (Paul Otieno of PEP).*

Further the results indicate that Safaricom agents were getting better returns from their businesses which could imply that they experienced good growth out of their participation as agents for Safaricom. On competition the study partly concurred with Flaming, McKay and Pickens (2011) who in their study; *Agent management toolkit; Building a viable network of branchless banking agents*, highlighted that the overall trend in customer per agent and transactions per agent ratios showed downward trend since 2008 and several agents reported they were considering exiting from the business of being an M-PESA agent if revenues continue to decline, while in contradiction, findings

from this study have revealed a positive mean income growth from 2008 to 2012 with an exception of the drop noted in 2009 and 2012.*"Competition has become too stiff, disclosed Shamin Kanji (MobiLink (K) Limited).* These views were shared by other agents like Josphat Omari and Wario Kosi. This indicates that competition was one of the factors contributing to perceived low growth by Safaricom agents.

4.7 Mobile phone financial transactions and assets of Safaricom agents

This was the third objective for the study, under which the study sought to understand how financial transactions through mobile phones had influenced asset growth of Safaricom agents. To establish this, respondents were asked whether they had invested in assets and in what type of assets. They were also asked on amount of capital they injected into the business and finally how much they reinvested from the profits or commissions they earned from the stores.

4.7.1 Distribution of respondents by investment in asset

The study was interested in assessing how much agents invested each year in assets in their stores, other businesses and in the household. This was important since growth can be assessed by accumulation of assets both for businesses and household use. Respondents were asked whether they had invested in assets in their outlets, other businesses or in the household and the results were presented in table 4.10.

Table 4.10

Distribution of respondents by asset investment in outlets, other businesses and Household

Response	Outlets		Other business		Household	
	Frequency (f)	Percent (%)	Frequency (f)	Percent (%)	Frequency (f)	Percent (%)
Yes	20	66.7	17	56.7	10	33
No	8	26.7	11	36.7	18	60
Total	**28**	**93.4**	**28**	**93.4**	**28**	**93**

Source: Safaricom agents (Kisumu County)

Results from table 4.10 revealed that 20 (66.7%) of the respondents had invested assets in enhancing growth of the outlets, 8 (26.7%) had not while 2 (6.7%) did not respond. Under asset investment in other businesses, the results revealed that 17 (56.7%) had invested on assets in other businesses, 11 (36.7%) had not while 2 (6.7%) did not respond. On asset investment in household, only 10 (33.3%) invested in household assets, 18 (60%) did not while 2 (6.7%) did not respond. This indicates that there was declining asset investment in other portfolios. Respondents invested less in other businesses and least in household assets compared to the agency business. This implies that, Safaricom agents were experiencing positive growth from operating the stores hence the motivation of investing more in them and less in assets that may not generate income like the household assets. This supports Calvez (2010) who postulated that business owners are likely to engage in risky assets compared to non - business owners.

4.7.2 Amount of capital invested in assets

The amount of capital invested by Safaricom agents in assets was critical since it could indicate the level at which agents were willing to risk in their stores, an act which could be influenced by performance of the business stores. To determine

investment in assets, respondents were asked to state how much they invested each year since 2008; the results are presented in table 4.11.

Table 4.11

Investment in assets from personal capital (2008 to 2012), Million Kshs,

Year	respondents who invested	Percentage (%) who invested	Sum	Mean	Percentage increase in Assets (%)	respondents who did not respond	Percentage (%) who did not respond
2008	4	13	2.7	0.7	5	26	87
2009	6	20	6.3	1.1	11	24	80
2010	10	33	5.7	0.6	10	20	67
2011	21	70	25.8	1.2	44	9	30
2012	25	83	18.0	0.7	31	5	17
Total			**58.5**		**100**		

Source: Safaricom agents (Kisumu County)

Table 4.11findings revealed that in 2008, 4 (13%) had invested in assets in their stores against 26 (87%) who did not respond, in 2009, 6 (20%) had invested in assets against 24 (80%) who did not respond, in 2010, 10 (33%) agents had invested in assets against 20 (67%), in 2011, 21 (70%) had invested against 9 (30%). Finally, in 2012, 25 (83%) invested in assets against 5 (17%). From the analysis, there was an increase in mean asset investment from 2008 to 2009 with the highest drop between 2009 and 2010 followed by 2011 to 2012. This implies that, there was positive mean growth in assets while the drops could be explained by post-election violence as indicated by Cracknell (2012) in his study; *Policy innovations to improve access to financial services in developing countries: Learning from case studies in Kenya,* and interruption of business activities during the election year respectively. The mean value in assets investments was highest in 2011 an equivalent of 44% of total asset investment in the five years. The

results also confirms Tubey (2012) findings that the initial capital invested by women entrepreneurs in Eldoret Municipality tended to be on the lower side

4.7.3 Re-investment in assets

The study sought to determine the amount of profits or commissions reverted back as investments in assets for their stores between the years 2008 and 2012. This was important since reinvesting in the outlets could indicate the agents' willingness to continue with the business which could imply good growth. The results were presented in table 4.12.

Table 4.12

Re – investment in assets (2008 to 2012), in Million Kshs

Years	Sum	Mean	Percentage (%)
2008	1.0	0.3	1.2
2009	8.7	2.2	10.3
2010	16.3	3.3	19.3
2011	25.1	3.1	29.6
2012	33.5	3.0	39.6
Total	**85**		**100**

Source: Safaricom agents (Kisumu County)

Results from table 4.12 reveal that in 2008, the agents reinvested 1 million (1.2%), 2009, 8.7 million (10.3%), 2010, 16.3 Million (19.3%), 2011, 25.1 Million (29.6%) and in 2012, 33.5 Million (39.6%).The findings indicate that agents had increased reinvestments every year, actions which could imply that agents were benefitting from financial transactions through mobile phones. The results are in line with

Tubey (2012) findings from Eldoret Municipality women entrepreneurs who confirmed that upon reinvestment of profits and loan capital into their businesses, their businesses had continued to accumulate assets over the intervention period. *"I have been able to buy land, construct a house, buy motor vehicles, my financial status has improved and my bargaining power has gone up said Josphat Omari during an in depth interview".* Another respondent said; *"the business has kept me going, I have bought a plot, car and built houses (Lydia Chelimo – of Blue Seals Communications).* This indicates that Safaricom agents had invested in assets through the proceeds they were getting from the stores, implying that they were experiencing positive growth.

4.8 Mobile phone financial transactions and personal wellbeing of Safaricom agents

This was the fourth objective of the study, under which the study sought to understand how personal wellbeing of Safaricom agents had been influenced by financial transactions through mobile phones. In this objective the study assessed the level of improvement of the agents in health, education, shelter and leadership. This was considered important since people's level of satisfaction could greatly differ, implying that with even smaller income, agents could still have attached high or low value judgment on issues which were being determined. A five point Likert scale was used to find out the extent to which respondents agreed with specific indicators in each area.

4.8.1 Health improvement of Safaricom agents and their families

Under this subtheme, four areas were analyzed in determining the level of personal wellbeing of Safaricom agents, which included improvement on personal health and that of the entire family, ability to pay for transport and reach public health facilities,

ability to seek medical attention in high cost health facilities and ability to purchase a health insurance scheme.

4.8.1.1 Improvement on health for self and the entire family

The study sought to understand how the health of the respondents and that of their entire family had improved. This was important because growth in the agents businesses could imply improvement in health due to increased income or improvement in nutrition, which was determined by asking respondents on how their health and that of the entire family had improved since they began their business. The results are presented in table 4.13.

Table 4.13

Improvement on health for self and the entire family

Response	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	0	0	0	0
Disagree	2	6.7	4	0.1
Neither Disagree Nor Agree	1	3.3	3	0.1
Agree	15	50	60	2.0
Strongly Agree	12	40	60	2.0
Total	**30**	**100**	**127**	**4.2**

Source: Safaricom agents (Kisumu County)

From table 4.13, the results indicate that 2 (6.7%) disagreed, 1 (3.3%) neither disagreed nor agreed, 15 (50%) agreed, 12 (40%) strongly agreed while none had strongly disagreed. The mean score on Likert scale was 4.2. This demonstrated that 50%

of Safaricom agents, agreed that their health and that of the entire family had improved, implying that positive growth from financial transactions through mobile phones could have contributed to this. The findings are consistent with Niaz, (n.d.), in his study; *Habitat for the poor: A discussion on the role of technology for poverty reduction,* who revealed that health improvements was a factor of income growth, since this enabled entrepreneurs to undertake economic activities and according to Googins (1997) this could result to economic growth. Further the findings support Bezruchka (2009) who revealed that in poor countries, shared economic growth appeared to improve health. *"The company covers for us the medical bill up to a certain limit" (disclosed Alloys Ngeso of Berricom Communications during an in depth interview).* This indicates that the agents were not only benefitting from the proceeds, but also from a health support scheme.

4.8.1.2 Ability to pay for transport and reach public health facilities

In this subtheme, the study sought to understand the ability of the respondent to pay for transport and reach public health facilities. This was important since, public health facilities are the most affordable and the only constrain could be transport to reach the point of health service. Respondents were thus asked to make a judgment on their ability to pay for transport and reach public health facilities, the findings were presented in table 4.14.

Table 4.14

Ability to pay for transport and reach public health facilities

Reponses	Frequency (f)	Percent (%)	Score	Mean Score
Strongly Disagree	0	0	0	0
Disagree	0	0	0	0
Disagree nor Agree	0	0	0	0
Agree	18	60	72	2.4
Strongly Agree	12	40	60	2
Total	**30**	**100**		**4.4**

Source: Safaricom agents (Kisumu County)

Results from table 4.14 indicate that out of the 30 respondents interviewed, 18 (60%) respondents agreed while 12 (40%) strongly agreed with no respondent responding on the other measures. The agents agreed at 4.4 mean score on Likert scale. The results could imply that Safaricom agents had positive growth from their businesses and therefore could meet the costs from the income generated, which according to Googins (1997) could be as a result of economic growth.

4.8.1.3 Ability to seek medical attention in high cost health facilities

The study sought to assess the respondent's ability to seek medical attention in high cost medical facilities. This was considered important since it could imply a relatively higher level of growth above the average business person. Respondents were thus asked to judge their ability to seek medical attention in high cost health facilities and the results were presented in table 4.15.

Table 4.15

Ability to seek medical attention in high cost health facilities

Response	Frequency (f)	Percent (%)	Score	Mean score
Disagree	11	36.7	22	07
Neither Disagree Nor Agree	3	10	9	0.3
Agree	12	40	48	1.6
Strongly Agree	4	13.3	20	0.7
Total	**30**	**100**	**99**	**3.3**

Source: Safaricom agents (Kisumu County)

From table 4.15, the results indicate that out of the 30 respondents interviewed, 11 (36.7%) disagreed with the statement, 3 (10%) neither agreed nor disagreed, 12 (40%) agreed, 4 (13.3%) strongly agreed while no response was obtained on the measure for strongly disagreed. At a mean score of 3.3 on Likert scale, respondents disagreed, on their ability to seek medical attention in high cost facilities. The results implied that agents were keen not to spend highly on services that they could alternatively access at a cheaper cost.

4.8.1.4 Ability to purchase health insurance scheme

Determining the ability of the respondents' ability to purchase a health insurance scheme was considered critical in this study since it would indicate some deferred payments against mitigating unforeseen health risks, an option that could be taken by business people with very vibrant businesses. To determine this, respondents were asked to judge their ability to purchase a health insurance scheme and the results were presented in table 4.16.

Table 4.16

Ability to purchase health insurance scheme

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	1	3.3	1	0.0
Disagree	8	26.7	16	0.5
Neither Disagree Nor Agree	5	16.7	15	0.5
Agree	11	36.7	44	1.5
Strongly Agree	5	16.7	20	0.7
Total	**30**	**100**	**96**	**3.2**

Source: Safaricom agents (Kisumu County)

Results from table 4.16 reveal that out of 30 respondents interviewed, 1 (3.3%) strongly disagreed with the statement, 8 (26.7%) disagreed with the statement, 5 (16.7%) neither agreed nor disagreed with the statement, 11 (36.7%) agreed while, 5 (16.7) strongly agreed, the mean score on Likert scale was 3.2. Findings could imply that respondents were keen to spend on health only if necessary, and not at exorbitant cost.

4.8.2 Education improvement of Safaricom agents and their families

The study identified four areas under the sub theme for education, which were analyzed to determine the level of personal wellbeing of Safaricom agents. This sub theme was important since access to education could be determined by income growth and increase in self-esteem as a result of accumulation of wealth. In order to assess education, respondents were asked on how their education and that of the entire family had improved since they began their business, their ability to go back for further studies,

ability to educate their children to middle level colleges and their ability to educate their children up to University level.

4.8.2 .1 Education of child and entire family has improved

The study sought to understand how education of the respondents and that of the entire family had improved. This was important since it could indicate how much the agents had invested in education for self and the family from the business. Respondents were thus asked to Judge on whether education for self and entire family had improved since they began the business and the findings were presented in table 4.17.

Table 4.17

Education of child and entire family has improved

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	2	6.7	4	0.1
Neither Disagree Nor Agree	4	13.3	12	0.4
Agree	14	46.7	56	1.9
Strongly Agree	10	33.3	50	1.7
Total	**30**	**100**	**122**	**4.1**

Source: Safaricom agents (Kisumu County)

Findings in table 4.17 indicate that 2 (6.7%) disagreed with the statement, 4 (13.3%) were neutral, 14 (46.7%) agreed while 10 (33.3%) strongly agreed. From the Likert scale's mean score on, respondents agreed that their education and that of their entire family had improved at 4.1. The findings are consisted with Stiglitz, Sen, and Fitoussi (2009) recommendations that education was an appropriate measure of economic success. Based on this it can be concluded that since access to education calls for some

cost, the results implied that Safaricom agents could spend more from their business income to improve on education. Qualitative data from some agents confirmed improvement in education for the children and entire family as well. *"I have been able to pay my school fees and advanced my level of learning to university"* said (Mohamud Mohamed of Real Star Communications). This implied that from the agency businesses Safaricom agents had enhanced the capacity to take their children to school as well as educating their children.

4.8.2 .2 Willingness of respondent to further their studies

The Study sought to understand the respondent willingness to further their studies; this was considered critical since, if respondents were willing to take further studies, this implied that their income was possibly increasing. Respondents were thus asked to judge whether they could take further studies if they wished and the results were presented in table 4.18.

Table 4.18

Willingness of respondent to further their studies

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	4	13.3	8	0.3
Neither Disagree Nor Agree	6	20	18	0.6
Agree	13	43.3	52	1.7
Strongly Agree	7	23.3	35	1.2
Total	**30**	**100**	**113**	**3.8**

Source: Safaricom agents (Kisumu County)

The results from table 4.18 revealed that 4 (13.3%) disagreed with the statement, 6 (20%) were neutral, 13 (43.3%) agreed and 7 (23.3%) strongly agreed with the statement, with no response against strongly disagree. The mean score at Likert scale for this measure was 3.8.This indicate that Safaricom agents believed that further education could lead to more success in their stores and that they could or had taken positive steps in improving their education. These findings relate positively with Wanigasekara and Surangi (2010), who revealed that there was a significant success difference between owner managers who have formal education up to Advance Level compared to owner managers who have formal education up to Ordinary Level education.

4.8.2 .3 Respondents ability to educate own children to middle level colleges

The study was interested in determining the respondent's ability to educate own children to middle college level, this measure was considered critical since attaining college level education called for substantial investment in education which could imply that Safaricom agents had experienced high level of growth. Respondents were hence asked to judge on how they agreed on their ability to support their own children to middle level college and the results were presented in table 4.19.

Table 4.19

Ability to educate children to middle level college

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	2	6.7	4	0.1
Neither Disagree Nor Agree	4	13.3	12	0.4
Agree	17	56.7	68	2.3
Strongly Agree	7	23.3	35	1.2
Total	**30**	**100**	**119**	**4.0**

Source: Safaricom agents (Kisumu County)

Results from table 4.19 revealed that, out of the 30 respondents interviewed, 2 (6.7%) disagreed with the statement, 4 (13.3%) were neutral, 17 (56.7%) agreed and 7 (23.3%) strongly agreed. There was no response on strongly disagreed. From Likert scale the mean score against this measure was 4.0. Findings from the respondents demonstrated that Safaricom agents had the ability to educate their own children to middle level colleges implying that their income levels were positively increasing. This findings support Leodinito, Cañete and Ped (2013), who revealed that there was a positive relationship between nonattendance in school and household income, where the percentage of children who were not attending school decreased as income (of the household to which the children belong) increased.

4.8.2 .4 Respondents Ability to educate children to university level

The study further sought to determine respondent's ability to educate their own children to University level, since this called for a very large investment, the respondents

agreement would indicate desirable growth resulting most likely from the operation of the stores. Respondents were therefore asked on their ability to educate their own children to University level and the results were presented in table 4.20.

Table 4.20

Ability to educate children to University level

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	1	3.3	1	0.0
Disagree	4	13.3	8	0.3
Neither Disagree Nor Agree	2	6.7	6	0.2
Agree	18	60	72	2.4
Strongly Agree	5	16.7	25	0.8
Total	**30**	**100**	**112**	**3.7**

Source: Safaricom agents (Kisumu County)

From table 4.20, out of the 30 respondents interviewed, 1 (3.3%) strongly disagreed, 4 (13.3%) disagreed, 2 (6.7%) were neutral, 18 (60%) agreed while 5 (16.7%) strongly agreed. On Likert scale, the mean score was 3.7. From the findings it can be argued that Safaricom agents were experiencing positive growth in their income resulting into the respondent's willingness to educate their children up to University level. The results are in support of Leodinito, Cañete and Ped (2013), who revealed that there was a positive relationship between nonattendance in school and household income, and that nonattendance to school decreased with increase in household income.

4.8.3 Shelter improvement of Safaricom agents and their families

Under this sub theme, the study sought to determine the extent to which respondents agreed on their shelter improvement. This was important since human shelter called for costs which varied according to the nature of shelter. Respondents were assessed on their value judgment on improvement for their shelter and that of their family, ability to construct a brick/stone walled shelter, ability to construct a modest shelter with lighting system and ability to purchase a modest house where they wished.

4.8.3 .1 Improvement in shelter for self and the entire family

The study sought to determine how well respondent's shelter and that of their family had improved. This was critical because it could inform the degree and nature of growth which Safaricom agents had experienced. Respondents were thus asked to judge on how their shelter and that of the entire family had improved and the results were presented in table 4.21.

Table 4.21

Improvement in shelter for self and the entire family

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	1	3.3	2	0.1
Neither Disagree Nor Agree	7	23.3	21	0.7
Agree	12	40	48	1.6
Strongly Agree	10	33.3	50	1.6
Total	**30**	**100**	**121**	**4.0**

Source: Safaricom agents (Kisumu County)

Results in table 4.21, revealed that out of 30 respondents interviewed, 1 (3.3%) disagreed, 7 (23.3%) were neutral, 12 (40%) agreed while 10 (33.3%) strongly agreed that their shelter and that of the entire family had improved. The mean score on Likert scale indicated that respondents generally agreed at 4.0.The results demonstrated that Safaricom agents had improved in shelter implying that, they most likely experienced positive growth out of participating as Safaricom agents. These findings are in line with Bezruchka (2009) who in his study; *The effect of economic recession on population health,* revealed that in poor countries, shared economic growth appears to improve health by providing the means to meet essential needs such as shelter.

4.8.3 .2 Ability of respondent to construct a brick/stone walled house

The study sought to determine whether respondents had the ability to construct a modest brick/stone walled house. This was considered important since it could indicate how much respondents were able to spend in order to raise their level of shelter standards an option they could go for only if they had significant growth from their businesses. Respondents were therefore asked to state how able they were against the measure and the results were presented in table 4.22.

Table 4.22

Ability to construct a brick/stone walled house

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	7	23.3	14	0.5
Neither Disagree Nor Agree	4	13.3	12	0.4
Agree	15	50	60	2.0
Strongly Agree	4	13.3	20	0.6
Total	**30**	**100**	**106**	**3.5**

Source: Safaricom agents (Kisumu County)

The results as presented in table 4.22, revealed that out of 30 respondents interviewed, 7 (23.3%) disagreed with the statement, 4 (13.3%) were neutral 15 (60%) agreed while 4 (13.3%) strongly agreed with the statement. The mean score on the Likert scale was 3.5. The study findings indicate that Safaricom agents were able to put up modest shelter and therefore most likely they were experiencing positive growth, a change that could be associated with the performance of their stores. The findings are in support of Bezruchka (2009) findings which revealed in his study; *The effect of economic recession on population health,* that in poor countries, shared economic growth appears to improve health by providing the means to meet essential needs such as shelter.

4.8.3 .3 Ability of respondent to install lighting system

Under this sub theme, the study sought to determine the respondent's ability to install lighting system in his shelter. This was deemed important since it would inform on whether at a higher level than just a modest shelter, respondents could be able to achieve a much better shelter, further suggesting that their income level had become much better, hence more enhanced growth. Respondents were asked to respond on their ability to install lighting systems in their shelter and the results were as presented in table 4.23.

Table 4.23

Ability to install lighting system

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	3	10	3	0.1
Disagree	7	23.3	14	0.5
Neither Disagree Nor Agree	5	16.7	15	0.5
Agree	10	33.3	40	1.3
Strongly Agree	5	16.7	20	0.7
Total	**30**	**100**	**92**	**3.1**

Source: Safaricom agents (Kisumu County)

Results in table 4.23 revealed that out of the 30 respondents interviewed, 3 (10%) strongly disagreed with the measure, 7 (23.3%) disagreed, 5 (16.7%) were neutral, 10 (33.3%) agreed while 5 (16.7%) disagreed with installing lighting systems in their shelter. The mean score on Likert scale was 3.1. The findings implied that, respondents were unwilling or unable to spend more towards luxurious lifestyle depicting characteristics of non-spending on ventures that could not generate more income.

4.8.3 .4 Ability of respondent to purchase of modest shelter

The purchase of modest shelter indicated respondent ability to spend more in shelter. This was considered important in this study since only people with substantial income or wealth could opt to purchase already constructed shelter due to their high price. An attempt to get positive results under this measure could suggest very high level of growth commensurate to income levels. In order to assess this, respondents were asked to judge their ability to purchase a modest shelter and the results were as presented in table 4.24.

Table 4.24

Purchase of modest shelter

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	6	20	6	0.2
Disagree	16	53.3	32	1.1
Neither Disagree Nor Agree	4	13.3	12	0.4
Agree	3	10	12	0.4
Strongly Agree	1	3.3	5	0.1
Total	**30**	**100**	**67**	**2.2**

Source: Safaricom agents (Kisumu County)

Findings from table 4.24 revealed that out of 30 respondents interviewed, 6 (20%) strongly disagreed with the measure, 16 (53.3%) disagreed, 4 (13.3%) were neutral, 3 (10%) agreed while 1 (3.3%) strongly agreed. The mean score on Likert scale was 2.2. The findings demonstrated that Safaricom agents were not in agreement with purchase of modest house wherever they wished, an indication that agents were sensitive on costly investments that could not lead to increased earning.

4.8.4 Leadership development of Safaricom agents and their families

Under this sub theme, leadership was considered as a critical aspect of growth since better performing businesses indicated a higher number of customers which could raise the leadership position of the business owners. Four areas under leadership were assessed; level at which respondents had become actively involved in community leadership, willingness to vie for a political office, ability to compete for a public/private company position and level at which respondents were consulted on community development matters.

4.8.4.1 Level of activeness in community leadership

The respondent level of activeness in community leadership was considered important since a higher level would indicate the popularity of the respondent, hence the likelihood that more customers would affiliate with the agent, resulting into a vibrant growth. To assess this respondents were asked to rate themselves in a Likert scale and the findings were presented in table 4.25.

Table 4.25

Level of activeness in community leadership

Response	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	1	3.3	1	0.03
Disagree	3	10	6	0.2
Neither Disagree Nor Agree	5	16.7	15	0.5
Agree	16	53.3	64	2.13
Strongly Agree	5	16.7	25	0.83
Total	**30**	**100**	**111**	**3.7**

Source: Safaricom agents (Kisumu County)

From table 4.25, the results revealed that out of 30 respondents interviewed, 1 (3.3%) strongly disagreed with the measure, 3 (10%) disagreed, 5 (16.7%) were neutral, 16 (53.3%) agreed while 5 (16.7%) agreed with the statement. The mean score on Likert scale was 3.7. The results indicate that majority of the respondents were actively involved in community leadership which partly concurs with Googins (1997) revelation that community relations were serious modern strategic business aspects.

4.8.4.2 Respondent willingness to vie for a political office

The study sought to determine respondents' willingness to vie for a political office as a higher leadership commitment, which could imply a higher social wellbeing level, likely to be achieved when growth was perceived to be highly positive. Hence respondents were asked to judge on their willingness to vie for a political office and the results were presented in table 4.26.

Table 4.26

Willingness to vie for a political office

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	12	40	12	0.4
Disagree	12	40	24	0.8
Neither Disagree Nor Agree	2	6.7	6	0.2
Agree	2	6.7	8	0.3
Strongly Agree	2	6.7	10	0.3
Total	**30**	**100**	**60**	**2.0**

Source: Safaricom agents (Kisumu County)

Findings from Table 4.26 indicate that out of 30 respondents interviewed, 12 (40%) strongly disagreed with the measure, 12 (40%) disagreed, 2 (6.7%) were neutral, 2 (6.7%) agreed with the measure and 2 (6.7%) strongly agreed. The mean score at Likert scale was 2.0. The results demonstrate that political leadership was not in the heart of the agents probably due to the busy schedules agents exhibited to have. Most agents, at least 80% were too busy to find time for engaging in political forums.

4.8.4.3 Respondent willingness to compete for private/public leadership position

Under this sub theme, the study sought to determine the respondent willingness to compete for public/private company position, which was considered critical since such level of leadership could be perceived to indicate a higher level of influence in the business arena. Respondents were thus asked to rate their willingness to compete for such positions in a Likert scale. The findings to this response are presented in table 4.27.

Table 4.27

Willingness to compete for private/public leadership position

Responses	Frequency (f)	Percent (%)	Score	Mean score
Strongly Disagree	2	6.7	2	0.07
Disagree	4	13.3	8	0.27
Neither Disagree Nor Agree	3	10	30	1.00
Agree	17	56.7	68	2.27
Strongly Agree	4	13.3	20	0.67
Total	**30**	**100**	**128**	**4.27**

Source: Safaricom agents (Kisumu County)

From table 4.27, the results indicate that out of the 30 respondents who were interviewed, 2 (6.7%) strongly disagreed with the measure, 4 (13.3%) disagreed, 3 (10%) were neutral, 17 (56.7%) agreed while 4 (13.3%) strongly agreed with the measure. The mean score on Likert scale was 4.27. The findings revealed that majority of the respondents agreed they could compete for company leadership position in both private and public sector indicating that the agents were expressing a higher influence in the business environment which could mean they had grown their businesses to a level where they felt the community recognized their presence.

4.8.4.4 Respondent frequency of consultation on community development

The study sought to determine how often respondents were consulted on community development matters. This was important since it could indicate how fast they were able to establish a business network which was important in improving or sustaining the current business position. In order to assess this, respondents were asked to rate themselves on Likert scale. The results to this finding are presented in table 4.28.

Table 4.28

Frequency of consultation on community development

Responses	Frequency (f)	Percent (%)	Score	Mean score
Disagree	1	3.3	2	0.07
Neither Disagree Nor Agree	1	3.3	3	0.10
Agree	21	70	84	2.80
Strongly Agree	7	23.3	35	1.17
Total	**30**	**100**	**124**	**4.13**

Source: Safaricom agents (Kisumu County)

From table 4.28 the results revealed that out of 30 respondents who were interviewed, 1 (3.3%) disagreed that they were often consulted, 1 (3.3%) were neutral, 21 (70%) agreed with the measure while 7 (23.3%) strongly agreed with the measure. The mean score on Likert scale was 4.13.The findings indicate that Safaricom agents had good relations with their communities and this could further influence their level of growth by opening up new business networks. This finding support Googins (1997) findings which revealed that, community relations was no longer an afterthought but was a serious, business strategy.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides summary of the findings according to the themes derived from research objectives; Influence of mobile phone financial transactions on workforce, income, assets and personal wellbeing of Safaricom agents. The chapter further has conclusions, recommendations for policy action, suggestions for further studies and contribution to the body of knowledge.

5.2 Summary of Findings

This section is organized in line with research objectives. The study had four research objectives; influence of financial transactions through mobile phones on workforce of Safaricom agents, influence of financial transactions through mobile phones on income of Safaricom agents, influence of financial transactions through mobile phones on assets of Safaricom agents and influence of financial transactions through mobile phones on personal wellbeing of Safaricom agents.

5.2.1 Mobile phone financial transactions and workforce of Safaricom agents

Under this objective three areas were assessed against the respondents which included; number of workers trained, areas of training and number of workers from 2008 to 2012.

The study findings revealed that 27 (90%) of the respondents confirmed that they had staff training programs, with male respondents forming the majority at 22(73%)

while 3 (10%) did not have staff training programs. There were six training areas as indicated in the findings, along with the positive response, they included; Handling Fraud 25 (83%), customer relations 21 (70%), Know Your Customer (KYC) (11 (37%), Safaricom products 15 (50%), marketing 5 (17%) and Book keeping 1(3%). The study findings also indicated that training areas were nearly consisted in all the Safaricom agents since the agents nearly had the same training areas without reference to any records and that agents attached a lot of importance to trainings as revealed and supported by Tamkin (2005), Jenkins (2008), Mbogo (2011) and Tubey (2012) findings.

The number of workers rose, as more agents entered into the business across the four years, 2008 (166), 2009 (278), 2010 (417), 2011 (498) and 2012 (641), which was an indication of positive growth according to Rauch (2000), Lum (2011) and Tuber (2012).

5.2.2 Mobile phone financial transactions and income of Safaricom agents

This was the second objective of the study and assessed the net income of Safaricom agents as a function of annual gross income and annual expenses, across the years 2008 to 2012. The findings revealed that net income increased across the five years, drifting negatively in 2009 and slightly in 2012. The drops in income concurred with Cracknell (2012) findings, with a shared opinion on the drop being as a result of 2008/2009 post-election violence. However from the findings, although there was instable mean income growth, the general trend could not be stated to be a continuous drop as was in Flaming, MacKay and Pickens findings (2011) since this was not the case in 2008, 2010 and 2011, where the mean income in Million Kenya shillings was recorded at 2.9, 1.5 and 2.2 respectively.

5.2.3 Mobile phone financial transactions and assets of Safaricom agents

Under this objective, the study assessed capital investment in assets by Safaricom agents within their stores, other businesses and in their households and the amount they had reinvested from the profits or commissions they accumulated in annual basis across 2008 to 2012.

The findings from these areas indicated that out of the interviewed 30 respondents, 20 (66.7%), 17 (56.7%) invested assets in enhancing their outlets and other businesses respectively, while 10 (33.3%) invested in household assets. However an examination of these areas was done autonomously and respondents were free to have multiple responses. There was a close relationship between asset investment and asset re – investment in 2008 to 2012. The percentage annual assets investments remained positive but deviated across the years, 2008 (5%), 2009 (11%), 2010 (10%), 2011 (44%) and 2012 (31%) with the highest mean annual asset reinvestment being recorded in 2010 at 3.3 million Kenya shillings. The percentage increase in annual re – investment in assets increased from 2008 to 2012 as demonstrated by 2008 (1.2%), 2009 (10.3%), 2010 (19.3%), 2011 (29.6%) while 2012 (39.6%). However the mean annual reinvestment in assets reflected a decline since 2010, as Safaricom agents continued to increase.

5.2.4 Personal wellbeing of Safaricom agents and their families

This objective assessed; health, education, shelter and leadership as a function of growth for Safaricom agents.

The findings revealed that financial transactions through mobile phones had positively influenced growth of Safaricom agents as they agreed with the overall statement that they had improved in the four areas using the mean score for Likert scale;

Health (4.2), Education (4.1), Shelter (4.0), and leadership (3.7). Noted under this objective was that respondents desisted from activities which had low economic value or what could be deemed as luxury. This was true with the last two areas in health which scored poorly at 3.3 and 3.2 respectively. The same trend in response was revealed on shelter and leadership, while agents agreed on all indicators for education and which seemed to be a necessity. The summary in this objective suggest that Safaricom agents had improved in the four areas since they started their business, hence depicting positive growth.

5.3 Conclusions

The purpose of this study was to determine the influence of financial transactions through mobile phones on the growth of Safaricom agents in Kisumu County, Kenya. According to the stated research objectives and after data analysis and discussion on the findings, the following emerged:

The findings from the study demonstrated that staff capacity building programs are a good incentive to growth of businesses. There was an increase in the number of training areas between the period 2008 and 2012, some of which addressed agents major barriers to success like fraud.

Under income growth, the results proved that there is need to assess the implicit value of business performance. Through assessment of net income, its behaviour across the years 2008 to 2012 greatly related with the political scenario, with a drop where political environment was highly tensed.

An assessment on growth in assets as displayed by Safaricom agents was an important factor since the level of investment in assets was an indication of willingness by agents to take more risks in carrying out their business activities which could mean owners of the businesses had confidence in getting better proceeds from such investments. The outcomes of this study showed that Safaricom agents continued to invest from their personal capital in their stores year after another since 2008, reducing investment levels only in 2009 and 2010 and 2012. Re – investment from the profits earned continued to increase from 2008 to 2010 with a slight decline in 2011 and 2012 which indicated that the agents were experiencing better returns from their investments.

Analysis on contribution of financial transactions through mobile phones on the personal wellbeing of Safaricom agents on health, education, shelter and leadership indicated that agents agreed that they had improved in all the mentioned areas as displayed by mean score using Likert scale.

These findings indicate that the factors that were being assessed sufficiently satisfied the condition that financial transaction through mobile phones had positively influenced growth of Safaricom agents.

5.4 Recommendations

Upon evaluation of theoretical framework based on Jovanovic (2000) theory on growth, the conceptual framework which defined the variables under study and literature review, this study advances the following recommendations:

Financial transactions through mobile phones should be encouraged since its benefits are widely felt by implementing stakeholders and the workers, as disclosed by some of the Safaricom agents and outlet managers.

Under objective one, the training programme areas were important in addressing some of the risks which were pointed out by agents as major barriers to their success for example fraud. Training programs could add up to better performance if trained staff could be certified by Safaricom Company as suggested by some agents, this could be enhanced by better systems on security checks against job seekers in the outlets to control fraud cases which topped the barriers to desirable performance by Safaricom agents.

In assessment on income growth in objective two, agents seemed to have income growth estimates at hand, while this was highly encouraging, it could mean record keeping was poorly done by agents. Training on book keeping seemed to have started in 2010, and only one respondent mentioned on its training. On this, the study recommends capacity building on business record keeping and development of friendly record keeping software. Observations done during the study indicated that Safaricom agents were quite busy with many issues to go through and therefore friendly record keeping software was an important business tool to manage income and expenses that the agents were going through on daily basis.

The study sought to understand growth in asset portfolio amongst the agents who participated in the study in objective three. The findings indicated that Safaricom agents continued to invest in their stores, though no training was suggested to have been offered on investment and business plans. Findings based on this study recommend that

investments in business could yield better returns if the capacity of implementers is enhanced.

In the last objective, the study sought to understand the level of improvement in regard to agent's welfare. From the findings it emerged that all the assessed areas had improved. However improvement on leadership scored the least at a mean of 3.7. This could have implications on staff management. Based on this, the study would recommend a staff management training program which could lead to a slowdown in high staff turn overs and raise the level of leadership for the agents.

5.4.1 Suggestions for Policy Issues

Financial transactions through mobile phones have greatly enhanced financial inclusion which has positively influenced the agent's lives and even beyond in creation of employment. Currently, financial transactions through mobile phones cannot be wished away as it came out from the study. During the study, it came out that two of the biggest barriers to the success of the agents were fraud, and high municipal levies. From these findings, appropriate government policies that would reduce the effect of the mentioned barriers can improve future prospects in expanding financial inclusion. This may include policies guiding agents on installation of anti-fraud soft wares to detect fake currencies and regulated low county levies for the agents.

5.4.2 Suggestion for Further Research

Based on the scope, limitation in time and resources, the study did not explore effect of financial transactions through mobile phones on growth of the sub agents who can highly contribute to the future success of mobile money at the bottom of the pyramid. As well the study did not explore on the effect of success or lack of success amongst the

agents to formal financial institutions like the banks and Micro Finance institutions. Based on this the study proposes the following areas for further study.

1. A study should be carried out to determine the influence of financial transactions through mobile phones to mobile network sub agents in comparison to mobile network agents.

2. A study should be conducted to determine the effect of financial transactions through mobile phones on the growth of the formal financial institutions. This would inform on the future growth of the banking sector in terms of hard ware and software development.

3. Finally a study can be conducted to assess the influence of financial transactions through mobile phones on crime

5.5 Contribution to Body of Knowledge

The study has identified the following areas based on research objectives and the findings as presented in table 5.1:

Table 5.1

Contribution to body of knowledge

Objectives	Contribution to body of knowledge
1. To determine the extent to which financial transactions through mobile phones influence workforce of Safaricom agents.	Financial transactions through mobile phones have enhanced growth of Safaricom agents through provision of jobs for self and the employed.
2. To examine how financial transactions through mobile phones influence income generated by Safaricom agents.	Financial transactions through mobile phones have contributed positively to Safaricom agents' income growth, with notable negative deviations during election years.
3. To assess the extent to which financial transactions through mobile phones influence assets of Safaricom agents.	Financial transaction through mobile phones have enhanced growth in assets for Safaricom agents, mostly in the outlets/stores or other businesses.
4. To examine how financial transactions through mobile phones influence personal welfare of Safaricom agents.	Financial transactions through mobile phones have positively influenced personal welfare of Safaricom agents in health, education, shelter and leadership.

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APPENDICES

Appendix I: Letter of Transmittal

Bernard Muthiani Mbithi
28th February, 2013
University of Nairobi
Kisumu Campus,
P.O Box 825-40100
Kisumu

Dear respondent

RE DATA SURVEY COLLECTION

My name is Bernard Mbithi, a student from University of Nairobi. I am carrying out a research for my master's project proposal, I am requesting for your kind attention and participation. All the information you submit will be treated with utmost confidence and will only be used for purposes of this research only.

The research focuses on the influence of financial transactions through mobile phones on the growth of Safaricom agents in Kisumu County, Kenya. The areas that have been selected include workforce, income, asset and personal development of Safaricom agents.

This exercise will only take 20 to 30 minutes and the results from this study will be used in partial fulfillment of the requirement for the award of the degree of Master of Arts in Project Planning and Management of The University of Nairobi.

With regards

Bernard Mbithi

Appendix II: Research Questionnaire for Safaricom Agents

Name of the enumerator	
Name of the Supervisor	
Outlet Name	
Outlet location	
Time Interview started	
Time Interview ended	

Introductory remarks

My name is _____ I wish to request for your sincere participation in giving information required in this questionnaire for purposes of academic research. Your input into these questions will be treated with utmost confidence.

The assessment will take approximately 20 -30 minutes of the respondent's time.

SECTION 1; BACKGROUND INFORMATION

1.1 Name of the respondent_____ (Optional)

1.2 Age of the respondent _____Years

1.3 Gender of the responded (*Tick as appropriate*); M ---- F ----

1.4 How long have you been an agent of Safaricom Company? ___year

1.5 What is your highest level of education? Primary education; ------. Secondary education; ---------,College-------- University; ---------- *(Tick as appropriate)*

1.6 Occupation _____

SECTION 2; QUESTIONS RELATED TO RESEARCH OBJECTIVES

2.1: Financial transactions and workforce for Safaricom agents.

2.1.1 Do you have a staff capacity building programme? Yes; ____No; _____

2.1.2 If yes in 2.1.1, how many of your staff have benefitted from the capacity building program, since your became an agent? _____

2.1.3; Workforce Matrix

		Number of workers				
Work force	**Gender**	**2008**	**2009**	**2010**	**2011**	**2012**
Total permanent workforce						
	Men					
	Women					

2.1.4; Matrix for Capacity building programs

Area of training		**Number of trainings**				
	Gender	**2008**	**2009**	**2010**	**2011**	**2012**
1.	Men					
	Women					
2.	Men					
	Women					
3.	Men					
	Women					

2.2 Financial transactions and income for Safaricom agents.

2.2.1 What services do you offer in your store? _____ (*State*)

2.2.2 List down the services you offer in order of revenue returns, starting with one with highest returns.

2. _____

3. _____

4. _____

2.2.3; Income Matrix

Total expenses (Kshs)	**2008**	**2009**	**2010**	**2011**	**2012**
Expenses					
Gross Income					
Net Income					

2.3 Financial transactions and assets for Safaricom agents.

2.3.1 From the income earned, have you been able to invest in acquiring assets? Yes ___No ____ (*Tick where appropriate*)

2.3.2 If the answer in 2.3.1 is yes, what type of assets have you invested in?

1. _____
2. _____
3. _____
4. _____

2.3.3 Has the investment been for enhancing your outlet? _____Other businesses? _____, Household assets? _____ (*Tick where appropriate;- you can tick as many areas as it is applicable*)

2.3.4 Asset Matrix

Total Assets (Kshs)	**2008**	**2009**	**2010**	**2011**	**2012**
Asset investment					
Re-investment					
Value of asset acquired					

2.4 Financial transactions and Personal welfare of Safaricom agents.

2.4.1How would you rate the following personal growth aspects since you started being a Safaricom agent?

Rating scale: 1=Strongly disagree, 2=Disagree, 3=Neither disagree nor agree, 4=Agree, 5=Strongly agree

Statements	**Rating scale**				
	1	**2**	**3**	**4**	**5**
Family Health My health and entire family health has improved since I began this business	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
I can pay transport and reach public health facilities	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
I can seek medical attention in high cost health facilities	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
I can afford an health insurance scheme for self and the	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**

family					
Education Education of my child and entire family has improved since I started this business.	[ ]	[ ]	[ ]	[ ]	[ ]
I can go back for further studies if I wish	[ ]	[ ]	[ ]	[ ]	[ ]
I can educate my children to middle level colleges	[ ]	[ ]	[ ]	[ ]	[ ]
I can educate my children to university level	[ ]	[ ]	[ ]	[ ]	[ ]
Shelter The type of house/shelter where I live with my family has improved since I started this business	[ ]	[ ]	[ ]	[ ]	[ ]
I can construct a stone/block walled house with iron roof	[ ]	[ ]	[ ]	[ ]	[ ]
I can construct a modest stone/block walled house with iron roof and electricity/solar lighting system	[ ]	[ ]	[ ]	[ ]	[ ]
I can purchase a house of my choice whenever I want.	[ ]	[ ]	[ ]	[ ]	[ ]
Leadership Since I started this business, I have become actively involved in community leadership.	[ ]	[ ]	[ ]	[ ]	[ ]
I can vie for a political office	[ ]	[ ]	[ ]	[ ]	[ ]
I can compete for private/public company leadership position.	[ ]	[ ]	[ ]	[ ]	[ ]
I am often consulted on development matters of the community	[ ]	[ ]	[ ]	[ ]	[ ]

Appendix III: In – Depth Interview

Introduction to the discussion:

The focus of this study is to determine the impact of financial transactions through mobile phones on the growth of Safaricom agents in Kisumu town, Kisumu County, Kenya, for purposes of academic research. This discussion seeks to involve the owners/managers of authorized Safaricom agents. Your input into these questions will be treated with utmost confidence.

I. Apart from mobile money transfer and airtime distribution, what other services do offer in your shop?

II. What economic benefits have you had from being a mobile network agent?

III. What two biggest barriers have you experienced as a Safaricom agent?

IV. Who are your major competitors in this kind of a business?

V. What do you think has been the biggest change that you have experienced from participating in this kind of a business?

VI. What are some of the recommendations that you would wish they be put in place to make your business more robust?

Thank you

Appendix IV: Determining the Sample Size from a Given Population.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.

Appendix V: Research Timetable

Number	Activity	Time
1	Visit to Ministry of culture gender and social services and provincial administrators and pilot testing	May, 2013
2	Identification of enumerators for data collection	May 2013
3	Primary data collection	May 2013
4	Analysis of primary data from the field	June 2013
5	Compiling the research report	June 2013
6	Presentation of the research proposal report/dissertation to The University of Nairobi research guidance and faculty team	June 2013

Appendix VI: National Council for Science and Technology Research Authorization

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550
Mobile: 0713 788 787 , 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: NCST/RCD/14/013/1058

Date: 17th June, 2013

Bernard Muthiani
University of Nairobi
P.O.Box 30197-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated *10th June, 2013* for authority to carry out research on "***Influence of financial transactions through mobile phones on the growth of Safaricom Agents in Kisumu County, Kenya,***" I am pleased to inform you that you have been authorized to undertake research in **Kisumu County** for a period ending **31st December, *2013*.**

You are advised to report to **the County Commissioner and the County Director of Education, Kisumu County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

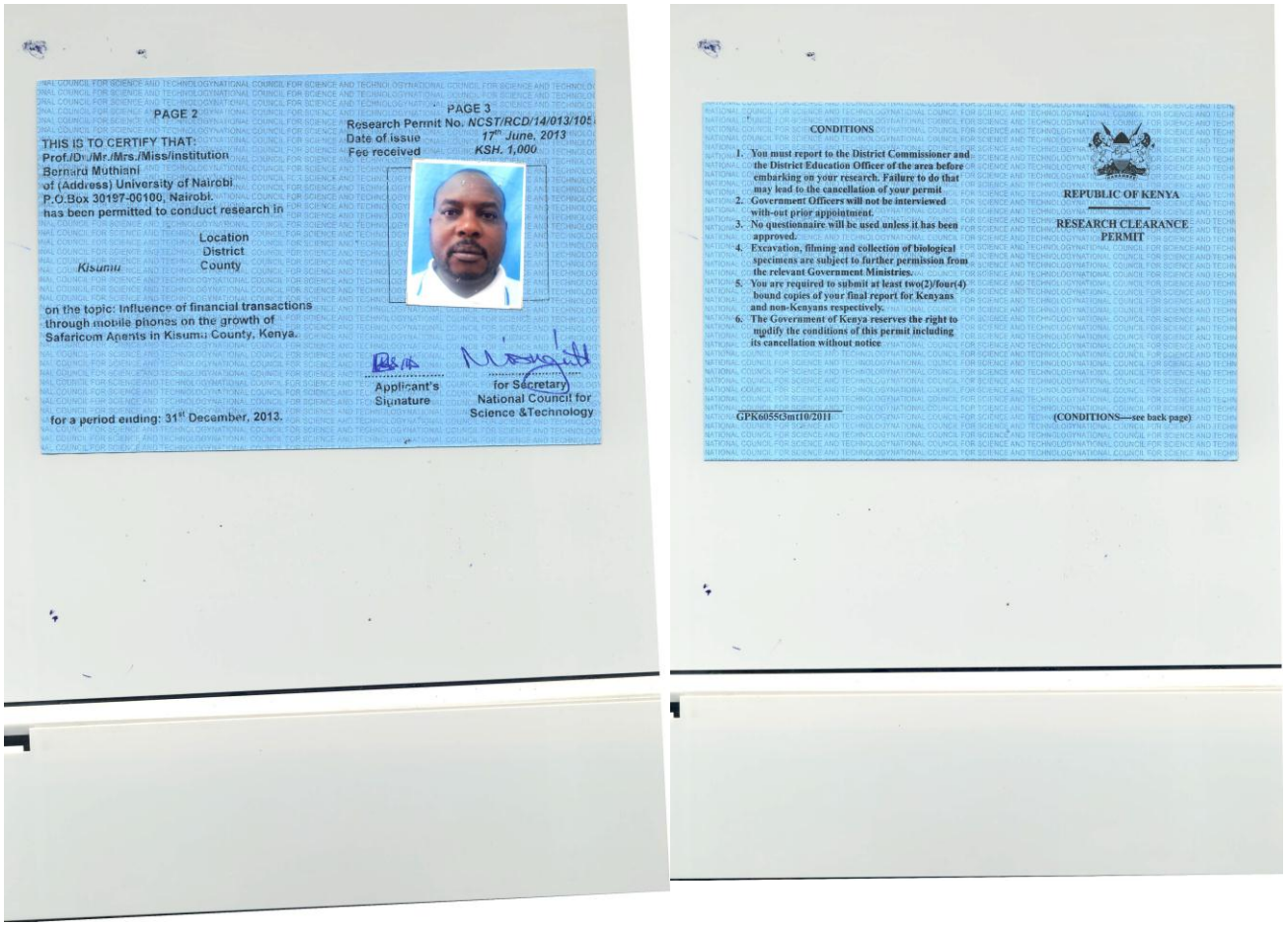
DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY

Copy to:

The County Commissioner
The County Director of Education
Kisumu County.

"The National Council for Science and Technology is Committed to the Promotion of Science and Technology for National Development".

Appendix VII: Research Permit



PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/institution
Bernard Muthiani
of (Address) University of Nairobi
P.O.Box 30197-00100, Nairobi.
has been permitted to conduct research in

Location
District
County
Kisumu

on the topic: Influence of financial transactions through mobile phones on the growth of Safaricom Agents in Kisumu County, Kenya.

for a period ending: 31st December, 2013.

PAGE 3

Research Permit No. NCST/RCD/14/013/105
Date of issue 17th June, 2013
Fee received KSH. 1,000

Applicant's Signature

for Secretary
National Council for Science &Technology

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK6055Cmt10/2011

(CONDITIONS—see back page)