THE ROLE OF INFORMATION COMMUNICATION AND TECHNOLOGY IN
EMPOWERING LOCAL COMMUNITY THROUGH PROJECT
IMPLEMENTATION: A CASE OF PROJECTS FUNDED BY MUSONI
MICROFINANCE KENYA LTD.

BY

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FOR THE REQUIREMENTS OF THE AWARD OF MASTER OF ARTS
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UNIVERSITY OF NAIROBI

2012
DECLARATION

I hereby declare that this research project report is my original work and has not been presented to any other University or institution of higher learning for a degree or any other award.

Signed .................................................. Date........August 2017

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The research project report has been submitted to the University of Nairobi for examination purposes with my approval as the University Supervisor.

Signed .................................................. Date...08/08/2012

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DEDICATION

This research project is dedicated to my Mother Alice Waikwa who has spent all her energy and resources ensuring I receive the best education. She tirelessly supported and encouraged me throughout this journey. I also dedicate this project to my Late sister Mercy Wairimu Miano for the beautiful times we spent together guiding me and encouraging me as well.
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I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

First and foremost to God Almighty for giving me the strength to keep going even when the road was a little bit tough.

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Lastly I would like to express my sincere gratitude to my mother for her encouragement and understanding which has helped me in completing this project.
ABBREVIATIONS AND ACRONYMS

ICT- Information Communication and Technology

ICTD- Information and Communications Technology for Development

M4D-Mobile for development

MFI-Microfinance Institution

MMT-Mobile Money Transfer

UNDP- United Nations Development Program

UNESCO-United Nations Educational, Scientific and Cultural Organization

UNCTAD-United Nations Conference on Trade and Development
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ABSTRACT

Historically it has proved difficult to provide sustainable micro-financial services to clients especially in remote rural areas. As formal financial institutions seem to look seriously at this market, the microfinance industry faces significant challenges in maturing and scaling to sustainability. Today the exchange of information with remote clients, management and processing of data at the institutional level and the collection and delivery of money to remote rural areas are some of the major challenges the microfinance are struggling with. Hence this study aimed at examining the role of information technology in empowering the local community through project implementation the case of projects funded by Musoni Kenya Limited, the study sought to analyze the progress and achievement by the local community, their constraints, recommendations and possible solutions to improve their weaknesses. Several literatures have been identified which have indicated the impediments to the success of microfinance institutions in developing countries as scalability, sustainability, outreach, and the impact of the various microfinance initiatives. These impediments can only be overcome through the usage of ICT to maximize outreach and. ICT is an enabler of affordable solutions to MFIs. It can enable MFIs to reach remote rural based clients in an effective low cost manner. It is evident from the literatures reviewed that many questions in the role of ICT in empowering the local community remain unanswered. The contextual experiences of Local community with ICTs, especially mobile, although beginning to be researched remain largely unarticulated. Hence this led to the need to do a study on how ICT can empower the local community to help them live sustainable lives. The study used descriptive survey design; the research instrument used were questionnaire and interviews schedules. Descriptive statistics were used to data analysis and the results presented in percentage and frequencies. Findings revealed that efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community, the respondents agreed that lack of proper ICT equipments has led to poor service quality. The study also found that the mobile money transfer has enhanced communication within the Rural Area, the ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information and greatly impacted on group communication. On increased outreach, the respondents agreed that ICT has led to increased Outreach in the community and had assisted in facilitating easier group payments, especially for members who might live away from their groups. The findings on how improved security and reduced fraud through use of ICT enhances project implementation within local community were neutral that the current use of automated systems to transact has led to reduced fraud, therefore the study recommends that the community groups involved in the implementation of various projects should be focused in terms of their needs and using the right technology to achieve goals, rather, than acquiring technology because other organizations have it. They should carry out a awareness campaigns to allay fears of security/safety issues like complications of the mobile money transfer technology procedures and lack of awareness security limits of the mobile money transfer technology. From the study findings and conclusions, cost of service delivery in mobile money transfer affects its applicability. From the study findings and conclusions, cost of service delivery in mobile money transfer affects its applicability. The study also recommends that the community groups should focus on aspects of costs of serving low-income customers, reliability and simplicity of conducting business through transfers, payments, deposits and withdrawals in financial transactions of small businesses and value for customers' transactions. Finally the study recommends that, since ICT is an important tool to the service providers, the customers and the government, the relevant policy makers should improve the policies governing the industry and use of ICT in project implementation for community empowerment. Interest should be aimed towards improving services that ensure that the customer get details in time and with the least cost possible. This would enhance implementation of community projects.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

World over, there has been a remarkable significance in using Information and Communication Technologies in facilitating and accelerating the process of empowerment and development and as a way of reducing poverty across the globe. In fact, as a common adage today without the usage of ICTs, a society will fall behind in the path of development (Mulira 2006). This has prompted Governments, donors, NGOs and other stakeholders alike, to further the impact of different ICTs given their ability to be used for policy advocacy, local governance and educational development, civic studies, and in Kenya: several of such initiatives have cropped up both in urban, semi-urban and in rural settings.

Information technology is the modern delivery system for communication of information. Shiffer (1996) writes. Information is only powerful when it is effectively comprehended by those who use it. IT Information Technology can help people to comprehend information, thereby delivering knowledge. In an analysis of the technological adaptation process of the Maori of New Zealand, Schaniel (1988) explains that new technology may create change in society, and that the direction of change is determined by the nature and function of that technology in the adopting culture IT together with communication has brought about unprecedented changes in the way people communicate; conduct business, pleasure and social interactions. The evolution of new forms of technologies and imaginative forms of applications of new and older technologies makes the lives of the people better and more comfortable in several ways.

Some researchers have also indicated the need for the new ITs to address problems of human needs. For instance, while highlighting the significance of telecommunications technology for some new means of bringing people together Stevenson (1991) wonders if the new telecommunications technologies, monopolised by the privileged industrialized world, will be "enough to address the world's most serious problems of poverty, hunger and alienation." The implication is that new communication technologies which do not address immediate human needs are not quite useful to human society no matter how effective they may be in increasing communication among people.

With particular reference to the Philippines, de Ayala (1996) foresees changes to large and small scale business processes brought about by the new technologies. Not only will consumers be in closer contact with suppliers and producers, the new technologies will also eventually lead to better educated, more knowledgeable, and more critical but less loyal customers. The downside of this development, in a developing economy such as the Philippines, is that the fledgling domestic national markets may be stifled
by regional trading blocs and international markets which promote intense competition. On a similar note, Chin (1995) believes that the development of information technology infrastructure in the Philippines rests on the national plan (NITP 2000 program), the objective of which is to create a well-informed computer literate society capable of using information technology as an everyday tool to enhance work and living.

In a world in which the developed and developing countries pursue different goals and priorities based on the different levels of their technological endowments, the new communication technologies are bound to be viewed with both optimism and suspicion. Indeed, it was former president Julius Nyerere of Tanzania who painted a grim picture of the African scene when he reportedly said that while the industrialised world may be travelling to the moon with ease as a result of their technological advancement, African leaders are still grappling with the problem of how to reach their people in the villages.

The last decade has been marked by the increasing influence of Information Technology in all walks of life. Its impact on developing countries, particularly in Africa and Asia, has been tremendous (Dias & Brewer, 2009; Heeks, 2009). The microfinance industry is no exception to this trend. Indeed, it has often been opined that the true potential of microfinance may only be realized by combining it with technology (Attali, 2000). While microfinance institutions have been tremendously successful (Dichter, 1996; Robinson, 1996), the social dimension of their success is quite often limited because of their reach. MFI's still fail to reach a big proportion of the rural poor (Kota, 2007). In order to meet set goals (such as the UN millennium development goals), Microfinance Institutions will have to increase their outreach exponentially (Hartarska & Nadolnyak, 2007) if they are to economically empower the local community in remote areas.

In Kenya many microfinance Institutions seeking growth have had difficulty in even doubling their operation and economically empowering the local community. As a result, new business practices and innovative solutions by harnessing the benefits of technology are preeminent to achieve the breakthrough in scale. Microfinance Institutions will succeed only by reducing transaction costs dramatically (Bhatt & Tang, 1998). The solution to this is integrating microfinance with Information technology based management information systems (MIS). While some have rejected the silver bullet hypotheses that IT can be used in all contexts to achieve efficiencies, IT based systems do have the potential to have a positive impact in economic empowerment De & Ratan, (2009).

Technology penetration into microfinance market in Kenya has been slow, while in the development sector it has been considerably more. Hence, at present, microfinance sector is operating in the development sector which has accepted IT, so microfinance is surrounded by IT, but its adoption of IT is constrained by its very constituency which is building up people’s networks and capacities.
My study was based on Musoni Kenya Ltd a Microfinance Institution which aims at improving both the quality and accessibility of financial services available to poor Kenyans. Musoni is at the cutting edge of microfinance in more ways than one. Responding to the fact that many MFIs struggle with the maintenance and handling of their MIS. It is simply aiming at taking the traditional microfinance experience to the next level. It recognizes that despite the success of microfinance, the majority of people in the developing world still do not have access to formal financial services. Microfinance faces a number of challenges. Costs are too high and a large proportion of MFIs have struggled to reach out into the rural areas, instead focusing on the major towns.

1.2 Statement of the Problem

Only 36% of African microfinance institutions have computerized MIS. Only 34% of African microfinance managers are happy with their MIS systems. It takes an average of 13.5 days after month’s end for African microfinance institutions to get full reporting back to headquarters.

Historically it has proved difficult to provide sustainable micro-financial services to clients especially in remote rural areas. As formal financial institutions seem to look seriously at this market, the microfinance industry faces significant challenges in maturing and scaling to sustainability. Today the exchange of information with remote clients, management and processing of data at the institutional level and the collection and delivery of money to remote rural areas are some of the major challenges the microfinance are struggling with. Each of these has proved to be a difficult problem to solve for microfinance institutions worldwide, and may offer opportunities for information technology-based solutions. IT together with communication has brought about unprecedented changes in the way people communicate; conduct business, pleasure and social interactions. The evolution of new forms of technologies and imaginative forms of applications of new and older technologies can make the lives of the local community even better and more comfortable in several ways, given the inconveniences of lots of paper works, long queues, and money security.

If microfinance is to scale up and reach the hundreds of millions of poor people we want it to reach, the solution is to set up alternative delivery channels and this can only be achieved through empowering the local community with information technology. Hence the study aimed at examining the role of information technology in empowering the local community through project implementation the case of projects funded by Musoni Kenya Limited.
1.3 Purpose of the Study

The main purpose of the study was to understand the value that information technology deployment by the microfinance institutions through project implementation can bring to the local community as well as the microfinance institutions.

This study documented the experience of the empowerment local community in project implementation using information technology at microfinance institutions.

1.4 Objectives of the Study

The objectives of the study were:

1. To determine how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community.

2. To determine how improved security and reduced fraud through use of ICT enhances project implementation within local community.

3. To determine how increased outreach through use of ICT can greatly impact on project implementation within local community.

4. To determine how improved access to information and communication dynamics through use of ICT in enhancing project implementation within local community.

1.5 Research Questions

The study answered the following research questions:

1. How has efficiency and service quality been enhanced through improved service delivery by use of ICT in project implementation within local community?

2. How has improved security and reduced fraud through use of ICT enhanced project implementation within local community?

3. How has increased outreach through use of ICT greatly impacted on project implementation within local community?

4. How has ICT ensured improved access to information and communication dynamics to the local community in project implementation?
1.6 Significance of the Study

The study was expected to contribute useful technological information to the local community as well as other microfinance institutions, on how to provide more efficient and secure services for them in project implementation.

It was hoped that the findings will enlighten the local community on how technology has enhanced project implementation. The information yielded from the study will be very important to many microfinance institutions on improving their management systems as well as reducing their transaction cost.

The study sought to add literature on best practical ways through which technology can be used to empower the local community effectively and efficiently. The benefits/advantages of the technology used in implementing the projects will be highlighted.

1.7 Basic Assumptions of the Study

The study had made the following assumptions:

- It was assumed that the respondent chosen for the study will answer the questions as asked correctly and truthfully.

- It was also assumed that the targeted local community will co-operate and agree to talk about their financial management status as well as the projects they are involved in and how they have benefited from them.

- It was assumed that the lack of proper delivery channel is slowing down microfinance institutions in reaching remote areas to implement projects to help them.

1.8 Limitations of the study

The study had anticipated the following limitations:

- Time limit, the research was conducted over a short period of time. However this was overcomed by having a good work that enabled me to work efficiently within the specified time.

- Some respondents were unwilling to reveal any information or even participate in the research, in such cases I had to provide official documents to convince them to participate.

- The cost of conducting the research might was high since it includes hiring of research assistants, travelling to the areas of study and other requirements of the study like preparing the questionnaires, however this was overcomed by having a good budget and working within the budget.
1.9 Delimitations of the study

The research focused on a sample of six local community groups. The study was limited to studying the role of information technology in empowering local community through project implementation, the case of projects funded by Musoni Kenya Ltd a microfinance institutions.

The study sort to determine the role information technology has played in empowering local community through projects funded by Musoni Kenya Ltd and how other MFI’s just can benefit from adopting technology into their systems.

The areas of study were Gikomba, Zimmerman, Thika, Kiambu and Kitengela where Musoni Kenya Ltd funds projects.

1.10 Definition of Significant Terms

**Empowerment:** Empowerment means to gain knowledge and understanding. It refers to increasing the spiritual, political, social, educational, gender or economic strength of individuals and communities.

**Information Technology:** Refers to the use of computers and software to manage information. In some companies, this is referred to as Management Information Services or simply as Information Services. The information technology department of a large company would be responsible for storing information, protecting information, processing the information, transmitting the information as necessary, and later retrieving information as necessary.

**Implementation:** Implementation is the carrying out, execution, or practice of a plan, a method, or any design for doing something. As such, implementation is the action that must follow any preliminary thinking in order for something to actually happen.

**Local Community:** A group of interacting people sharing an environment. In human communities, intent, belief, resources, preferences, needs, risks, and a number of other conditions may be present and common, affecting the identity of the participants and their degree of cohesiveness.

**Management Information System (MIS):** Provides information which is needed to manage organizations efficiently and effectively. Management information systems involve three primary resources: people, technology, and information or decision making. Management information systems are distinct from other information systems in that they are used to analyze operational activities in the organization.

**Outreach:** The act or practice of visiting and providing the services of a charity or other organization to people who might not otherwise have access to those services.
1.11 Organization of the Study

Chapter one on this report involved background of the study, the statement of the problem and purpose are clearly stated. The objectives of the study, research questions, significance of the study, basic assumptions limitations and delimitations have also been identified and clearly stated as well as definition of significant terms.

Chapter two surveys the literature review giving a general overview of the Information communication and technology, ICT and development, ICT and Community Empowerment, ICT and Microfinance, it also describes the situation at the organization through which the research was undertaken Musoni Kenya Ltd. Reviews of related literature are highlighted increased outreach, quality service and efficiency, access to information and communication dynamics and reduced fraud. Theoretical framework supporting the study, conceptual framework and summary of the literature review.

Chapter three presents the research methodology; it identifies and provides a rationale for the research design, target population, the sample size and sampling procedure, methods of data collection. It also identifies validity and reliability of the research instrument as well as data analysis procedure and operationalization of variables.

Chapter four gives a detailed explanation on the data analysis, presentation and interpretation of the research presenting the finding of the research based on the variables.

Chapter five gives a summary of the findings, discussions, conclusions, recommendations and recommendations of further studies.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature related to Information Communication Technology and Empowerment, ICT and development and ICT and Microfinance, as well as ICT Empowerment projects implemented.

The section places emphasis on the numerous researches being carried and how such knowledge can be a guiding tool in analysing the contribution of ICTs to empowering the local community. This literature is also reviewed critically through identifying the gaps and also employing the lessons to inform the body of knowledge in the role ICT can play in empowering the local community. Two theories have been to help explain the role of ICT to local community Diffusion Theory and Empowerment theory. A Conceptual Framework has also been represented, and the Literature Gap identified.

2.2 General Overview of Information Communication Technology

Information technology has been around for a long, long time. Basically as long as people have been around, information technology has been around because there were always ways of communicating through technology available at that point in time. Information communication technologies have transformed the lives of people as well as organizations. This automated environment has led to digital divide, which is depriving the cause of human development. The technologies should come up to fill this gap and work collectively to literate the people to enable them to earn basic necessities.

Kenny (2006) says it is no surprise that ICT revolution has proven a powerful source for creative vision by utopian thinkers the world over. The reach of information and communications technologies around the world has been expanding for decades. There is one television set for each four people on the planet (World Bank, 2005). In India, over 112 million households have a TV. As early as 1995, television exposure in China was estimated at one billion people (Jensen and Oster, 2006). The reach of radio is probably even greater.

But the recent past has seen particularly rapid rollout of access to communication facilities like telephones and the Internet, as technology advance has driven down costs. Fixed phone connection and rental charges have more than halved worldwide over the past decade. Meanwhile, mobile handset costs have dropped to as low as $50. As a result, the proportion of households worldwide that had a fixed telephone almost certainly surpassed 50 percent in 2003. And even more rapid growth in access has been driven by mobile telephony. The number of mobile subscribers worldwide increased from 11
million in 1990 to 1.7 billion in 2004. This access has extended to people previously far from any phone. In Burkina Faso, for example, there were fewer than 7,000 telephones outside the capital city in 1990, serving a population of 8.3 million people spread across an area of over 100,000 square miles. There was no mobile phone service. In 2002, the mobile footprint (the area of the country where a mobile phone signal is available) covered 5.4 million people outside of the capital far more than half of the population living outside of Ouagadougou.

More widely, perhaps 83 percent of rural people in South Asia had access to a telephone in their village in 2002. In Africa, a 2001 survey of Ghana, Uganda and Botswana found that, even in rural areas, between 75 and 80 percent of respondents had made a phone call in the last three months. Across the globe, an estimated 86 percent of the World’s population, including a considerable majority of rural populations, were under the mobile footprint in 2004 and it appears quite likely that total telecoms access rates are even higher than that (Keremane and Kenny, 2006).

While the recent spread of the Internet has been somewhat less dramatic than that of the telephone, its speed would be unprecedented for a communications technology were it not for mobiles. Both Internet and mobiles reached ten percent of the world’s population within fifteen years of invention, and there are already far more Internet users in the developing world than in the developed. The number of users tripled over the 2001-2005 period in the developing world, reaching over 440 million (UNCTAD, 2006). Of course, rural areas in developing countries in particular do still see very low Internet usage. A few years ago, but ten percent of Thailand’s Internet users were rural, despite the fact that rural people made up nearly 70 percent of the country’s population (Kenny, 2006). Many rural areas of even comparatively rich developing countries still see Internet usage rates at below one percent of the population. Nonetheless, the opportunity to use the Internet has spread far and wide, even if usage itself has not.

Again, there is a long record of ICT use having an impact on development outcomes in rural areas. Over 700,000 secondary-school students in remote villages in Mexico watch the Telesecundaria program of televised classes. While students enter the program with lower mathematics and language test scores than the average, by graduation they have caught up in math and halved the language-score deficit (de Moura et al (1999)). Survey evidence from within developing countries has long suggested that rural areas with access to communication devices see lower prices for inputs, higher prices for outputs, larger non-farm incomes, a greater number of small and medium enterprises and better delivery of public services Forestier et al.(2002).

As technologies have spread, so have their impact. Robert Jensen and Emily Oster of the National Bureau of Economic Research study the rollout of cable television access in rural India and conclude
that the introduction of cable in a village is associated with higher female school enrollment, declines in fertility and increased female autonomy Jensen and Oster (2007). The size of these effects is large: within two years of introduction, between 45 and 70 percent of the difference between urban and rural areas on these measures disappears, and the impact of cable TV on fertility decisions is as large as increasing the length of time girls stay in school by around five years.

While the recent spread of the Internet has been somewhat less dramatic than that of the telephone, its speed would be unprecedented for a communications technology where it's not for mobiles. Both Internet and mobiles reached ten percent of the world's population within fifteen years of invention, and there are already far more Internet users in the developing world than in the developed. The number of users tripled over the 2001-2005 period in the developing world, reaching over 440 million (UNCTAD, 2006). Of course, rural areas in developing countries in particular do still see very low Internet usage. A few years ago, but ten percent of Thailand’s Internet users were rural, despite the fact that rural people made up nearly 70 percent of the country’s population (Kenny, 2006).

Many rural areas of even comparatively rich developing countries still see Internet usage rates at below one percent of the population. Nonetheless, the opportunity to use the Internet has spread far and wide, even if usage itself has not. Fleming (2002) attempts to examine the general struggling characteristic of African states burdened with high levels of poverty and large disparities in socio-economic levels and expresses the same sentiments echoed by Barnard and Vonk (2003). Both explain that the poverty and socio-economic disparities are symptomatic of Africa in general. They evidence this by the examination of certain states being marginally ahead in the race to equip themselves with effective ICT infrastructures that include telephone lines, access to electricity, low Internet access costs, policy and legislative platforms. They conclude that some African states lag far behind in the basic requirements for ICTs to play a meaningful and sustained role in people’s lives.

The digital divide is often characterized by low levels of access to technologies. Poverty, illiteracy, lack of computer literacy and language barriers are among the factors impeding access to ICT infrastructure, especially in developing countries. Internet usage figures collected by the International Telecommunications Union (ITU) in 2003 illustrate this gap in access. For instance, in 2003, the United States reported 5,558 Internet users per 10,000 persons, compared with 690 users per 10,000 persons in Asia and 156 users per 10,000 persons in Africa.

Information Communication Technology (ICT) is increasingly seen as a means of enabling other developmental needs rather than as an end in itself. However there are wide disparities in access to ICT in the Kenya as well as other developing countries, with many new technologies out of reach of the poor local community. Reasons include cost, inappropriate design, and lack of infrastructure, education,
human resources and support from government. Technological developments and changes in the way
new ICT are used for example sharing devices can help bridge this ‘digital divide’. The importance of
ICT in achieving development goals is increasingly recognised in international initiatives such as the
Millennium Development Goals; however there is debate over the effectiveness of ‘ICT for
Development’ (ICT4D) projects. NEPAD and the Commission for Africa is both notable for placing
ICT on the development agenda.

2.3 ICT and Development

During the 1980s, multinationals and other firms came to the fore and viewed IT as a tool for delivering
economic growth (Heeks 2008:26). To date, many are optimistic that ICT has a role to play in national
development and that there is no way a country can survive the global era without this digital platform.
Of recent, we are greatly entangled in the world where ICT has diffused into almost all spheres of
human activity at an unprecedented rate; side by side with development. Joseph (2002) views ICT
contribution as ICT growth and ICT diffusion where the former implies contribution in output,
employment, export-earning, etc., resulting from the production of ICT related goods and services that
are limited to just one segment of the economy. The latter is ICT induced growth through enhanced
productivity, competitiveness, growth and human welfare resulting from the use of this technology by
different sectors of the economy and society. Conversely, Sein and Harindranath (2007) assert that ‘the
nature of the link between IT and development remains unclear due to lack of clarity on how ICT is
conceptualised’.

Personally, I believe ICT can play a central role in national development but there is need to identify
contextual strategies that facilitate ICT being developmental and in this I agree with Heeks (2008:26)
who believes that we cannot exclude ourselves from the digital age but there is need to ask the poor
communities on what ICT can be developmental and how they spend the little they have on it. Many
ICT empowerment projects have been top down, the industrialised thinking for the developing world on
what can help to bridge the ever existing gap: which techno centric approach has led to multi failures in
ICT4D.

ICT is emerging as an important medium for communication and exchange as well as a tool for
development, including at the local and community levels. However, this potential is yet to be
effectively leveraged. In part this is the result of an ICTD “affordable infrastructure and related service
delivery and capacity deficit” that many rural and peri-urban areas continue to experience and in part
because of the “development-policy and experience divide” that, hinders the effective mainstreaming of
ICT in development interventions. However through a combination of research, policy support,
advocacy partnerships, networking and capacity building, ICT projects can act as communication tools,
development information and services hence the potential for strengthening community and local
development (Mulira 2006).

Like other countries Kenya has recognized the potential and enabling element of information and
communication technologies as a tool for social and economic development. Although there has been a
major growth economic due to the mobile technology MPESA that has really impacted on all people
living on rural or urban trying to bridge the gap though still not yet there. Kenya like the rest of other
African countries must go beyond the concept of development, as has been set by conservative thinkers and
practitioners that tend to focus only on economic growth, liberalization of trade, democratizing governments.

2.4 ICT and Community Empowerment

In the recent past there has been growing concern that more focus should be on how ICTs can be used to
empower local community. There are only a few studies on how especially women can be empowered
to use ICTs to enhance their status. The best case studies are drawn from the constantly cited
TETELMAN, M., (2006) example. However, other upcoming ones such as UNDP’s (2002) project to
empower women farmers using ICTs in 30 mandals of Audhara Pradesh in India, are mentioned
although their impact has not been assessed.

Assessing the impact of such projects would require a broad consensus on the understanding of the
construction of the sense of empowerment, which varies in different contexts. As Kvinnoforum (2001)
states, there is no set definition of empowerment, but focus should be on two basic principles;
dissemination as a starting point for the empowerment process; and empowerment not given by
someone else, but starting from within.

Nevertheless, a number of voices have welcomed ICTs, arguing that it is difficult for especially women
to shift the balance of power (experience empowerment) if they are to use only indigenous social and
knowledge systems in opposition to modernisation and modern technologies.

Other observers are also of the opinion that empowerment does not necessarily take place when incomes
are generated or when livelihoods are enhanced. It is noted that although social capital undoubtedly
empowers people, the scope of empowerment is limited because hierarchies and structures do not alter
within families, households and societies. In this context, the author suggests the use of ICTs as non-
confrontationist interactions that is without changing existing gender relations (Deshmukh 2003). This
would, however, depend on how the sense of empowerment is constructed, as it would mean the women
gaining greater control in some areas, yet remaining within the confines of traditional gender
hierarchies. This is a definite move in the direction of equality or empowerment, but represents a mere
shift in power, actually facilitating perpetuation of the prevailing patriarchal system.
In Kenya about 56% of the Kenyan people live below the poverty line and about 80% of these live in the rural areas. For the urban poor, the majority of them make out a living on agricultural related activities (Ministry of Information & Communications 2006). The poverty that such people experience has multiple and complex causes. They do not only lack basic resources but also access to information that is vital to their lives and livelihoods. In order to deal with the complexities of poverty, the livelihood approach to empowering people seeks to gain an accurate and realistic understanding of people’s strengths, assets or capital endowments and to discover how they endeavour to convert these into positive livelihood outcomes. Livelihoods include not just income-earning opportunities, but also the capabilities, assets (including both material and social resources) and activities required for a means of living (Chambers & Conway 1992). They therefore encompass consumption levels; access to assets; embeddedness in social networks; levels of human capital; and the absence of inequality as well as processes such as resilience, coping and adaptation.

2.5 ICT and Microfinance

Microfinance Institutions (MFIs) have been at the forefront of poverty alleviation efforts around the world. These institutions are based on the simple concept of promoting entrepreneurship among the poor, by making financial resources available (Attali, 2000). MFIs, such as Grameen Bank in Bangladesh, lend small amounts of credit to the poor, which provides the crucial start-up capital for job creation and sustainable development. By most accounts, MFIs have been very successful in promoting a market solution to poverty across the world. Positive outcomes include creation of social capital, alleviation of poverty, empowerment of women, and the financial performance of the MFIs themselves (Arsyad, 2005; Britta Augsburg, 2009; Hiatt & Woodworth, 2006; Kanakliguni, 2007; Marr, 2002; Swain & Wallentin, 2009). MFIs have grown tremendously due to their success. This success has changed microfinance from a predominantly non-profit socially oriented effort, to a for-profit industry (Bhattacharya, 2009; Cull, Demircug-Kunt, & Morduch, 2009).

While MFIs have been tremendously successful (Dichter, 1996; Robinson, 1996), the social dimension of their success is quite often limited because of their reach. MFIs still fail to reach a big proportion of the rural poor (Kota, 2007). In order to meet set goals (such as the UN millennium development goals), MFIs will have to increase their outreach exponentially (Hartarska & Nadolnyak, 2007). With current practices, nonstandard data and the lack of infrastructure, microfinance institutions seeking growth will have difficulty in even doubling their operations. As a result, new business practices and innovative solutions by harnessing the benefits of technology are preeminent to achieve the breakthrough in scale. MFIs will succeed only by reducing transaction costs dramatically (Bhatt & Tang, 1998). The solution to this is integrating MFI with IT based management information systems (MIS). While some have rejected the fact that IT can be used in all contexts to achieve efficiencies, IT based systems do have the
potential to have a positive impact in MFIs (De & Ratan, 2009). Information and communication technologies (ICTs) have a tremendous potential for increasing the efficiency of MFIs. IT based systems have fundamentally changed the way businesses function. However, certain challenges need to be addressed, for the complete potential of IT to be realized (Parikh, 2006). While some of these challenges are due to the unique nature of MFIs, others are infrastructural and environmental in nature.

The Millennium Development Goals call for reducing the proportion of people living on less than $1 a day to half the 1990 level by 2015 i.e. from 28.3 percent of all people in low and middle income economies to 14.2 percent (World Bank, 2003). Yet, there are still an estimated 1,000 million people living on less than $1 a day. One way of making progress in achieving the poverty reduction goal is by providing financial services to the poor which the microfinance institutions are trying so hard to do. As Jonathon Morduch, the Chair of United Nations Expert Group on Poverty Statistics, stated, “Microfinance stands as one of the most promising and cost-effective tools in the fight against global poverty” (Daley-Harris, 2005).

As of December 31, 2004, 3,164 microcredit institutions have reported reaching 92,270,289 clients, 66,614,871 of whom were among the poorest when they took their first loan (Daley-Harris, 2005). Assuming five persons per family, the 66.6 million poorest clients reached by the end of 2004 affected some 333 million family members. Despite this success, about half a billion poor households remain without access (Ivatury, 2005). The gap is even larger in rural areas. One of the main factors that prevent microfinance institutions (MFIs) from going to rural areas is the large geographical spread, low population density and small volume of transactions, which makes it more costly to operate there.

MFIs face a challenge to explore creative approaches to cut down cost while serving poor people, especially in remote rural areas. Because it is too costly to set up a physical branch, traditional bank branches, alone, do not seem to be the answer for reaching small rural depositors and borrowers (Hirschland, 2003). Alternative delivery systems need to be examined for their merits.

In Kenya microfinance has been identified as one of the strategies for poverty alleviation and despite efforts to try and reach out to the local communities in especially remote area, reduce operational cost the process has been very slow. Musoni Kenya Ltd a microfinance institution has taken the initiative to try and reduce the gap that rural local communities encounter by going 100% mobile and trying to reduce transaction cost and reach out to the rural local community.

2.6 Musoni Kenya Ltd

Musoni was born out of a desire to improve both the quality and accessibility of financial services available to poor Kenyans. Based in Nairobi but planning to expand all over Kenya, Musoni is out to enabled clients to repay their loans and deposit their savings using existing mobile money transfer
products, such as M-PESA, Zap and Orange Mobile Money. This has had numerous advantages for their clients.

Rather than carry bundles of cash to their weekly meetings on the notoriously dangerous local minibuses, clients can repay their loans before the meeting on their phones. This means that the amount of time spent in meetings is significantly reduced. This allows Musoni clients to spend more time focusing on developing their businesses or looking after their families. Clients can also repay their loans at any time during the week, allowing them to repay after a particularly successful day at the business and removing the need to safely store their cash until the day of their meeting.

Musoni is at the cutting edge of microfinance in more ways than one. responding to the fact that many MFIs struggle with, their use of mobile technology is allowing Musoni to charge a significantly lower interest rate to their clients than many other MFI's.

Musoni through MMT has enlightened and empowered the local community especially those with small businesses in that it can easily communicate and transact over the phone. Mobile Money Transfer in Kenya has tried to bridge the gap between the rich and the poor as it is accessible to anyone in any corner of the country as long you have a phone.

This is a technology that has widely grown over a short period of time; it has easily been diffused and adapted by the entire community Roger (2003) in the diffusion theory stated that several factor make a technology easily adoptable the fact that a technology is simple this will make it easily adaptable, and this has been the case for MPESA technology.

Despite the success of microfinance, the majority of people in the developing world still do not have access to formal financial services. Microfinance faces a number of challenges. Costs are too high and a large proportion of MFIs have struggled to reach out into the rural areas, instead focusing on the major towns.

This is where Musoni feels it can make a real difference. Their improved efficiency allows them to make a large cut in the cost of our loan products while their use of mobile technology enables them to leapfrog the common barrier of weak infrastructure.

2.7 ICT Community Empowerment Implemented Projects

Over the years there have been many empowerment projected that have been implemented to empower the local communities and help them live sustainable lives. In Senegal a Senegalese telephone company Sonatel, and Manobi, a French company, provided cell phones with Web Access Protocol (WAP) to rural women agricultural producers in Senegal, thereby extending their access to the Internet. This
technology helped women obtain information about market prices of the inputs for their food processing activities and for the sale of their produce. The women preferred cell phones to computers because of the ease of transport. Women in the project appreciated the economic benefits of the technology, and other women were interested in becoming part of the project.

In Bangladesh Grameen Phone has leased cell phones to poor rural women who set up local village pay phone shops. In a review of the early experience of the Grameen Phone project, this service was found to be of considerable benefit both to the provider and the users. Not least, the average operator was earning between 24 and 40 per cent of household income from providing phone services and the estimated consumer surplus from phone usage ranged as high as $2.70-$10 per call (Richardson et al. 2000).

In Kerala in India, mobile phone service was introduced over the period 1997-2001. One result was a dramatic improvement in the efficiency and profitability of the fishing industry. As mobile phone service spread, it allowed fishermen to land their catches where there were wholesalers ready to purchase them. This reduced waste from between 5-8 per cent of total catch to close to zero and increased average profitability by around 8 per cent. At the same time, consumer prices fell by 4 per cent(Jensen, 2007).

More than 2,200 miles away across the Africa in Northern Ghana, there exists a Mobile Midwife program which women are encouraged to join as it provides weekly text and voice messages via mobile phones to expectant and new mothers. The information makes them more prepared and more proactive in managing their pregnancies. Ordinarily they would have chosen to ignore the pain or just try to bear it, as this was the custom in their local culture. Instead, following the advice they receive from the Midwife messages, she immediately visits the nearest health facilities and learns of the issue with her pregnancy she could actually be saving her child from serious complications, which shows as access to information

Many of Kerala’s fishermen are using text messaging as are fishermen on Lake Victoria in Africa who use SMS as a cheap way to get information on landing prices for fish before arriving at a particular market. More advanced uses are also spreading in the developing world - the Philippines already has over 3.5 million m-commerce users, and banking over mobile phones is available in South Africa and Kenya (infoDev, 2006).

Not all uses of ICT in developing nations are in the form of identified or designated ‘projects’. For example, a yam wholesaler at a wholesale market in Accra, who uses a cell-phone to bypass intermediaries in an extensive chain of marketing information, is acting on her own, rather than being
part of a designated project Overà, (2006). It is now widely recognized that the potential impact of ICTs rests on many factors, including those that facilitate or impede their accessibility and use, whether they relate to physical infrastructure or human capabilities (e.g. Internet access is of limited use without awareness of what it can be used for) Alampay, (2006b). Knowledge of these factors is of great importance to policymakers and therefore of significance community.

2.8 Review of Related Literature

Although ICT has played a major role in empowering the local community and the improvement has been tremendous. There have been challenges that have slowed down ICT economic empowerment in the local community. The following are some of the factors that have been identified in related literature.

2.9 Increased Outreach

The impediments to the success of microfinance institutions in developing countries are the scalability, sustainability, outreach, and the impact of the various microfinance initiatives (Kashyap, 2009). These impediments can only be overcome through the usage of ICT to maximize outreach and sustainability (Kashyap, 2009; Gibson and Meehan, 2000). ICT is an enabler of affordable solutions to MFIs. It can enable MFIs to reach remote rural based clients in an effective low cost manner. Rao (2003) observed that for an MFI, transaction costs are one of the crucial bottlenecks to increase profits and to achieve long-term sustainability. ICT has been found to alleviate some of the problems faced by MFIs through provision of secure, low cost, and reliable means of transactional data capture and successful transfer MFIs (Filpo, 2006).

Through ICT service delivery has been improved by providing the local community with service that are cheaper, more efficient and faster. Electronic services such as Mobile Money Transfer have the advantage of enabling the citizens to obtain information and to carry out transactions 24 hours a day, seven days a week, and are particularly suitable for simple transactions.

If increasing outreach is taken to mean more clients from a similar demographic, then outreach and sustainability are effectively synonymous terms. Increasing client outreach provides economies of scale that in turn makes the microfinance programs more efficient and therefore more sustainable, at least in immediate financial terms. It is a case of more of the same, while continually seeking incremental improvements in operational efficiency.

According to the new World Bank Global Findex, two-thirds of the world’s poor do not have bank accounts, partly because of the cost, distance and paperwork involved in using traditional banks. In sub-Saharan Africa, where traditional banking is hampered by the lowest density of physical bank branch
infrastructure in the world, mobile money is taking root and providing a significant opportunity to increase access to financial services. The Findex also found that in Kenya, the world leader in mobile money, 68 percent of adults use a mobile phone for money transactions. In contrast, a 2009 FinAccess survey showed that less than one half of Kenyans had access to formal financial services.

2.10 Access to Information and communication Dynamics

“Information literacy is a set of abilities enabling individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” (Association of College and Research Libraries, 2000). The concept of information literacy is very much related to information technology skills, but includes a broader area of competency, such as the capacity to access the needed information effectively and efficiently; the capacity to evaluate information and to incorporate selected information into one’s own knowledge base; and the capacity to process and share information effectively with others. This concept stresses that people need skills in order to be able to access information effectively and efficiently through ICTs, such as for example the ability to use search engines, websites, e-mail or list-serves. Furthermore, it is key that people know how to assess the quality of the retrieved information. A very relevant measurement for this will be whether or not a person is able to contextualize the retrieved information and integrate selective parts of it into her/his existing knowledge base. Finally, information literacy includes the ability to distinguish between alternative information sources; and to summarize the main ideas from the gathered information, sharing it with others within and outside the community. Another important indicator for enhanced informational capabilities is the capacity of the poor not only to consume content, but also to generate and share their own content through the development of their own websites or by posting material on other sites.

According to Mohammad Yunus, founder of the Grameen Bank, the first principle of Grameen banking is that the clients should not go to the bank; it is the bank which should go to the people. Dr. Yunus perceived that to alleviate other potential imbalances, financial services should be provided to poor people on their terms, in a manner that was respectful of their needs, activities and livelihoods.

One can imagine the immense technical challenge this is. Conducting millions of small transactions every month in remote rural areas with very little infrastructure, on the barest of operating margins this is an operations puzzle that would make most corporate managers a little queasy. Bringing a bank to 45,000 rural villages every week is not a simple thing to fathom. Much of this herculean task falls upon the shoulder of loan officers. Every day loan officers travel from village to village, documenting clients, processing applications, conducting meetings, collecting repayments, disbursing loans, resolving disputes and doing all of the basic tasks upon which the entire microfinance industry relies.
One of the biggest challenges that nations in the developing world face is finding successful solutions to the problem of poverty by improving the human development condition and livelihoods. For instance, about 56% of the Kenyan people live below the poverty line and about 80% of these live in the rural areas. For the urban poor, the majority of them make out a living on agricultural related activities (Ministry of Information & Communications 2006). The poverty that such people experience has multiple and complex causes. They do not only lack basic resources but also access to information that is vital to their lives and livelihoods.

Many of Kerala’s fishermen are using text messaging –as are fishermen on Lake Victoria in Africa who use SMS as a cheap way to get information on landing prices for fish before arriving at a particular market. More advanced uses are also spreading in the developing world - the Philippines already has over 3.5 million m-commerce users, and banking over mobile phones is available in South Africa and Kenya infoDev,( 2006)

With this information, researchers can identify levels of vegetation in different areas and provide early warnings of potential areas of famine. In Ghana, satellite-gathered information on types of soil and human occupation is being combined with data on malaria prevalence and intensity to examine variations in malaria transmission. This information is instrumental to more efficient health education and planning for disease eradication (Credé&Mansell, 1998).

2.11 Quality Service and Efficiency

In Uganda, commonly used information and communication technologies (ICTs) include management information systems (MIS), personal digital assistants (PDA), automated teller machines (ATMs), mobile phones, and smart cards (Ssewanvana, 2008). MIS is important to MFIs as it is the back office and backbone of any ICT innovation for microfinance services, as it can effectively support loan portfolio, transactions, operational growth, decision making, transparent and quality services to the client, time management, and increased outreach (Turaga, 2004). PDAs also can help MFIs to save time on micro lending, lower operational costs, reduce human errors, allow loan officers to increase outreach, reduce paper work, and standardize credit processes (Turaga, 2004).

Due to its dynamism, ICTs promise fundamental change in all aspects of human life including knowledge dissemination, social networking, economic and business practices, political engagement, education, health, leisure, and entertainment (Duncombe&Heeks 2005). ICTs are also useful either as tangible goods in their own right or as value-adding services that improve efficiency and effectiveness (Stiglitz 1989; Romer 1993; World Bank 1998). More specifically, ICTs can provide reliable access to markets (local, regional and international) through increased use of affordable communications (phone, fax, email). ICT, broadly, allows for a reduction in transactions costs, improved access to timely and
usable knowledge, improved communications with markets and within the supply chain, acquisition of appropriate skills for enhancement of productivity and improved information about new opportunities.

According to Brynjolfsson and Hitt (2000), the use of ICT can help to cut down the costs of coordination, communication, and information processing, and to enable efficient service provision at lower cost. ICT is a strategic tool that enables users to be efficient and effective. ICT promotes the dual objective of microfinance, which is the sustainability and outreach to the poor people. Although ICT can help MFIs to reduce transactional costs, expand their market, and provide affordable and flexible services to customers, many of them continue to rely on inefficient manual data processing systems (Parikh, 2006) which create inefficiency.

Pride Africa, a cluster of MFIs currently operating in five sub-Saharan African countries, is using IT for increased efficiency and faster growth. In Kenya, it has launched an experimental portal, DrumNet, which stores information on the buying and business habits of Pride clients, in order to group the purchasing power of thousands of small entrepreneurs. There has also been the emergence of Mobile Money Transfer which has hastened efficiency in terms of money transfer.

2.12 Reduced Fraud

Commonly used information and communication technologies include management information systems (MIS), automated teller machines (ATMs), mobile phones, and smart cards (Ssewanyana, 2008). MIS is important to MFIs as it is the backoffice and backbone of any ICT innovation for microfinance services, as it can effectively support loan portfolio, transactions, operational growth, decision making, transparent and quality services to the client, time management, and increased outreach (Turaga, 2004). PDAs also can help MFIs to save time on micro lending, lower operational costs, reduce human errors, allow loan officers to increase outreach, reduce paper work, and standardize credit processes (Turaga, 2004).

ICT offers various benefits to clients and MFIs in various countries. The benefits to clients have been identified as access to banking services, more convenient services, and faster loan processing, less time in queues; and for the MFIs as reduced transaction costs, less fraud, improved quality of financial information, increased outreach, reduction in operational costs, and increase in customer satisfaction and loyalty (Hishigsuren, 2006).

ICT has been used to create "branchless banks" through mobile banking, automated teller machines (ATM), and point-of-sale networks among others where clients can access various financial services. Rogers (2007) examined the role of ICT and in particular mobile phones in the delivery of financial
services in five countries and summarized it as follows. In Philippines, more than 2 million people are using their phones as mobile wallets to receive and send payments, pay utility bills among other services reducing the handling of money thus reduction of fraud.

In India, rural farmers and MFIs are using mobile phones to do bookkeeping, receive and send payments and to pay utility bills. In addition, handheld devices and smart card technology are used to automate processing and tracking. Biometric ATMs with smart cards are used for financial transactions without the need for personal identification.

In Bolivia, ATMs capable of speaking in local languages are being used to provide financial services including depositing and withdrawing funds without filling forms, and to facilitate funds transfer. In Peru, phone-based systems with voice prompts are being used to provide financial services in rural areas.

In South Africa, Wizzit, a virtual bank uses mobile banking for their clients to send and receive domestic and international payments. In East Africa, the telecom companies of Safaricom, MTN Uganda and Zain are offering financial services of sending and receiving domestic and international payments. Safaricom alone serves more than seven million users with an agent’s network that exceeds the total number of bank branches in Kenya (Kinyanjui, 2009) and this has led to the reduction of theft.

2.13 Mobile Money Transfer

Though mobile money transfer is a new technology that has changed the life of many Kenyans and some members of East Africa especially Tanzania, it has soft but hard ethical issues which ought to be addressed by the industry. Being moral agents who are directed by will and freedom, mobile players will need pursue good motives which the society accepts and respect (Oruka 2007). These issues are security threats especially from online hackers, frauds and money laundering especially from drug dealers and unethical conduct of some of the industry players. These are largely contributing to ‘economic gangsters’ in Kenya as inferred by Fisman & Miguel (2008) and Spinello (1997). This is one among many issues which have compelled us to carry out this research and at least recommend on the way forward.
2.14 Theoretical Framework

The researcher will adopt diffusion theory and Friedmann’s of empowerment which represent how ICT can be adopted and used to empower the local community.

The first theory is Diffusion theory. The diffusion of innovations approach, as outlined by Rogers (2003), was used to expand understanding of reasons for adoption, usage patterns, and communication objectives that are and can be met by technology in a developing country. This includes how and why an innovation is adopted, and especially the unique reinvention of an innovation to the changing needs of the individual.

While much has been written on the global digital divide between rich and poor countries, considerably less is known about the local digital divide within poor countries Jensen (2007). Local community, due to low levels of education, high rates of illiteracy, and lack of assets (such as credit and agricultural inputs), constitute the majority of the world’s poorest FAO (2009). These factors may delay the capabilities of local community to use new technologies to do their transaction for agricultural purposes. Additionally, earlier adopters of innovations tend to be leaders and have more heterogeneous networks Rogers (2003)

According to Roger (2003) diffusion theory, there are five stages to the process of adopting an innovation. The first stage is knowledge, in which an individual becomes aware of an innovation but has no information about it. Next is persuasion, in which the individual becomes actively interested in seeking knowledge about the innovation. In the third stage, decision, the individual weighs the advantages and disadvantages of the innovation and decides whether or not to adopt it. After the decision comes implementation, in which the individual actually does adopt and use the innovation. Confirmation is the final stage. After making adopting the innovation, the individual makes a final decision about whether or not to continue using it based on his own personal experience with it. These same stages apply, to varying degrees, to groups of people in addition to individuals.

Simplicity of use is also a major factor in the adoption of innovations. No matter how good an innovation is, people will be hesitant to adopt it if it is difficult to use and to learn. Most important, though, are observable results. When people begin to see the good that the innovation is doing for them and for their neighbors, they will find it difficult to resist the temptation to adopt it. These qualities of the innovation are of the utmost importance to diffusion theory.

Diffusion theory is also concerned with the rate at which innovations spread. Some people adopt the innovation immediately, while others hold out for a long time and continue using older methods. The rate of adoption depends on many factors. If, for example, a highly respected member of a community
adopts an innovation, many more people are likely to follow. If many people give innovation poor reviews, people are likely to be slow to adopt it.

Omwansa (2007) In the first quarter of 2006 there were 147.4 million mobile subscribers in Africa; two years later the number had more than doubled, to 301.7 million, representing a penetration rate of 30.4%. Kenya’s penetration rate rose from 2% in 2001 to 39% as of the second quarter of 2008. Kenya is the most developed mobile market in East Africa and its penetration rate is forecast to reach 67.5% in 2012. Four mobile phone operators are active in Kenya. Safaricom, with well over 10 million subscribers, is the clear market leader with 81% of the total subscriber base. Zain (formerly Celtel) follows with just over 3 million subscribers, and Telkom Orange has about 1 million. Econet, barely a month old, has not released any subscription data. The fact that Safaricom controls such a large percentage of the subscription base has given M-PESA the advantage it needed to penetrate very quickly. Only Safaricom subscribers can operate an M-PESA account, though other network subscribers can receive an SMS from an M-PESA subscriber.

The second theory considered is Friedmann’s (1992) alternative development and empowerment model provided a useful framework for the analysis. This model of empowerment involves local self-reliance, direct participatory democracy and experiential social learning. Friedmann’s view that empowerment cannot be conferred by external agents is similar to that of Claridge (1996) and Lather (1991), whose work was also drawn on. However, he suggests that such agents can play a role in providing ‘support in ways that encourage the disempowered to free themselves of traditional dependency’ Friedmann, (1992).

Taking the perspective of people in households, Friedmann argues that they potentially have access to three kinds of power: social, political and psychological. Social power requires access to certain bases of household production such as information, knowledge and skills, participation in social organizations, and financial resources’ Friedmann. (1992). This form of empowerment therefore includes key features of social capital, which has been identified as an essential element of sustainable rural community development (Harrison, 1998; Simpson et al, 2001).

Psychological power is defined by Friedmann as an individual sense of potency which is demonstrated in self-confident behaviour that often results from successful action in the social or political domains, although ‘it may also result from inter subjective work’ (Friedmann, 1992: 33). Several researchers have identified self-confidence and self-esteem as essential first steps to empowerment (Anderson, 1996; Claridge, 1996). Feelings of greater individual control are another important aspect of psychological empowerment (Anderson, 1996).
All three kinds of empowerment are seen by Friedmann as relevant to women’s struggles and form an interconnecting triad. Friedmann (1992) suggests that ‘when this triad, centred on an individual woman and household, is linked up with others, the result is a social network of empowering relations that, because it is mutually reinforcing, has extraordinary potential for social change’.

Although somewhat idealistic, Friedmann’s framework of empowerment is useful because it suggests that empowerment and social change is a multidimensional process which requires analysis at the micro and macro levels of the individual and the community, organisation or group, and the interrelationships between them shown. It also highlights the power and value of Australian rural women’s networking activities that have been successful in generating action and change (Grace and Lennie, 1998). Networking was an important component of the online conversation groups established as part of the local community and ICTs project.

The various meanings in the study given to empowerment, other indicators of the empowering effects of the project could be readily coded in Friedmann’s categories of social, political and psychological empowerment. However, my analysis identified an important fourth form of empowerment that was technological empowerment. Like social empowerment, this form of empowerment also requires access to information, knowledge, skills and resources.

Feminists such as Arnold and Faulkner (1985) and Wajcman (1991) argue that an important factor in women’s empowerment is the development of knowledge and skills that enhance their technical competence and expertise. As Wajcman (1991) points out: ‘technical competence is certainly not the only source of male power, but it is an important one, especially in relation to women’. Given the technological focus of the Rural Women and ICTs project, several of the meanings of empowerment refer to confidence and competence in using technologies, and the benefits to women from using new ICTs. It can be argued that, with the increasing use of the Internet to access government information and to lobby and organize campaigns on important social, economic and environmental issues, technological empowerment is an important new prerequisite to political empowerment.

This are the two theories adopted in this study, they reflect the experience of the local community as they struggle to become empowered and the role information technology plays in empowering them to live sustainable lives. In Kenya technology like Mobile Money Transfer has slowly penetrated the and Kenya’s penetration rate rose from 2% in 2001 to 39% as of the second quarter of 2008. This technology has been accepted and adopted thus trying to empower local community as well as reduce the gap.
2.15 Conceptual Framework

**Independent Variable**

- Quality Service and efficiency
  - Improve information flows within community
  - Increased channel of service delivery

- Increased outreach
  - Increased channel of service delivery

- Access to information and Communication Dynamics
  - Improved capacity to use different forms of ICTs
  - Enhanced information literacy

- Reduced Fraud
  - Use of automated system like MMT
  - Reduced access of Money

**Intervening Variable**

- System/Network Delays

**Dependent Variables**

- Project Implementation
  - Technological change
  - Improve Management

---

2.16 Literature Gap

It is evident from the literature reviewed that many questions in the role of ICT in empowering the local community remain unanswered, despite programmes to reach out to the local community especially in the rural areas, it is evident it is quite slow. The study brings out how ICT can empower the local community to help them live sustainable lives.

The contextual experiences of Local community with ICTs, especially mobile, although beginning to be researched remain largely unarticulated. How has adoption of ICTs impacted on their daily lives in their businesses? What are the implications for local community empowerment, social emancipation and advancement? These questions are key and were part of the core concerns of this study.
In conclusion, this chapter examined the numerous researches which have been carried out and how such knowledge can be a guiding tool in analyzing the contribution of ICTs to empowering the local community. The literature reviewed ICT and Empowerment how the potential and enabling element of information and communication technologies has been identified as a tool for social and economic development, there has been a major growth economic due to the mobile technology. In ICT and Microfinance it was noted that the social dimension of their success is quite often limited because of their reach. MFIs still fail to reach a big proportion of the rural poor. A review was done on the ICT community empowerment implemented projects and some of the ICT projects were identified. It was noted that the impediments to the success of microfinance institutions in developing countries are the scalability, sustainability, outreach, and the impact of the various microfinance initiatives and these impediments can only be overcome through the usage of ICT to maximize outreach and sustainability.

Diffusion and empowerment theories were identified as the key theoretical frameworks they reflect the experience of the local community as they struggle to become empowered and the role information technology plays in empowering them to live sustainable lives. In Kenya technology like Mobile Money Transfer has slowly penetrated the and Kenya’s penetration rate rose from 2% in 2001 to 39% as of the second quarter of 2008. This technology has been accepted and adopted thus trying to empower local community. Finally the literature gap was identified as it was evident that many questions in the role of ICT in empowering the local community remain unanswered, despite programmes to reach out to the local community especially in the rural areas.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at the research methodology of the study. This chapter deals with research design, target population, the sampling procedure and methods of data collection. The researcher also gave a description of the data analysis techniques and methods.

3.2 Research Design

Research design is a plan showing the problem under investigation was studied. It is a process of selection of methods to be used to answer the research question and solve the research problem (Ngechu, 2006). Descriptive survey was used for this study to collect data in order to answer questions concerning the current status of the subject under study. Reason for choosing this design was that it is the most appropriate in collecting data about the characteristics of a large population in terms of being cost effective and within the constraints of the available and more so the questionnaire is employed as the main tool for data collection (Harrison and Kelly 2002).

Another advantage is the fact that it allowed for a large coverage of the population and its findings would be generalized. This study sought to assess the role of information technology in empowering the local community through project implementation. A survey study determined and described the way things are, in this case the researcher has no control over the variable. Typical survey studies are concerned with assessing attitude, opinion, preference, demographics, practices and procedures (Gray, 2003).

3.3 Target Population

The study sought to get an insight of the role of information technology in empowering the local community through project implementation. The target population of the study was 60 local community solidarity groups funded by Musoni Kenya Ltd a microfinance institute. The study targeted the local people and each group has approximately 10-15 members that are modeled on traditional savings clubs, known as “merry go rounds” in Kenya. The total number of group members thus is 600 members. The population was chosen due to its accessibility and proximity to research. The study also targeted five loan officials and representatives from Musoni Kenya Ltd.
3.4 Sample Size and Sampling Procedure

A sample size is a number of individual selected from a population for a study in a way that they represent the larger group from which they were selected. It would then be possible to generalize the characteristics of the sample to the population.

A population can be defined as the complete set of objectives that can be studied. According to (Orodho 2003), a design is a definite plan determined before any data is actually collected for obtaining a sample from a given population.

The study used probability sampling techniques; this is because probability samples are the only type of samples where the results can be generalized from the sample to a population. A properly designed probability sample however provides a reliable means of inferring information about a population without examining every member or element. A probability sample frequency is more accurate than a census of the entire population. The smaller sampling operation lends itself to the application of more rigorous controls, thus ensuring accuracy. This rigorous controls allows researchers to reduce non-sampling errors such as interviewers bias and mistakes, non-response problems, questionnaires design flaws and data processing.

The study sampled 10% of the groups in the local community which was consistent to what Mugenda and Mugenda (1999) suggested. They suggested that a sample size of 10-15% is enough for a survey. The study used systematic sampling to get the six local community groups from the list. Systematic sampling is a statistical method involving the selection of elements from an ordered sampling frame. The most common form of systematic sampling is an equal-probability, in which every k\textsuperscript{th} element in the frame is selected where k, the sampling interval.

\[ k = \frac{N}{n} \]

where \( n \) is the sample size and \( N \) is the population size.

\( N \) - 60 groups

\( n = 10\% \) of the 60 groups = 6

Thus the sample size was be 6 local community groups

\( k = \frac{60}{6} = 10 \)

The study thus used a sampling interval 10, thus a group will be picked after every ten till the desired sample size is obtained. The researcher will administer the interview schedule to members of these 6 groups. This added up to 60 respondent’s. The study also interviewed five local community officials.
who were picked randomly to complement the views of the respondents. Thus the study was have 65 respondents.

3.5 Data Collection Methods

There were two types of data that the researcher used in the study. These are the primary data and secondary data. The researcher used the questionnaire to collect the primary data from the respondents. The primary data was efficient because it was reliable and accurate.

The secondary data was very important in the study. The researcher will collect important and relevant information from the library books, performance reports from Musoni Kenya Ltd, journals and publications.

The researcher administered the questionnaires to the respondents with the help of research assistants. This methods was preferred as it allowed for the researcher to seek clarification on various issues. The main research instrument used in the research was questionnaires. The questionnaires were addressed to the respondents who in this study are members of the local community groups.

3.6 Validity of the study and research Instrument

Validity is the accuracy and meaningfulness of inferences, which was be based on the research results. It is the degree to which results obtained from the analysis actually represent the phenomenon under study; Mugenda and Mugenda (1999).

Validity also refers to degree of accuracy of inference based on research results. To ascertain the content validity of the research instrument, the researcher used simple and understandable language to ensure accuracy, a thorough training was done to the research assistant to ensure that they are able to guide the respondents in filling the questionnaires.

Pilot testing of the research instrument was carried out on two groups conveniently selected for piloting were issued with the questionnaires prepared for the main study and the procedure carried out as though it was the final research. These two groups did not participate in the final research. After five days had elapsed the same participants were issued with the same questionnaires a second time but with no prior notification. The responses from the first and second tests were then compared to determine whether there were any differences. A coefficient of variation was calculated. The researcher then identified the reason for the variation in the responses that were given. This helped the researcher correct questions that were not clear or ambiguous. It also assisted the researcher to ascertain whether important aspects were captured by the instrument. The researcher kept correcting the instrument until it was as clear as possible.
3.7 Reliability of the Research Instrument

According to Orodho (2003) reliability of the instrument concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. This refers to the constituency of the scores obtained for each individual. To increase the reliability of the data collected the researcher employed test-retest technique in which the instruments were administered twice to the same subject. The pilot test of the instruments was done on one of the groups to ensure that the desired data or results were obtained and after three days the test was done again on the same group to ensure the data collected was correct.

Test-retest was used to establish reliability of instruments. Reliability is ascertained when we get consistent results with repeated measurements of the same person and with the same instrument. 20 respondents participated in the test retest. They were given the same questionnaires to answer the second time (after two days) without prior notice.

Reliability was also improved by using trained and well-motivated persons to conduct the research.

3.8 Data Analysis Procedure

The study used quantitative and qualitative methods of data analysis. To ensure easy analysis, the questionnaire items were coded according to each variable of the study to ensure the margin of error was minimized and to assure accuracy during analysis. Data was analyzed using descriptive statistics. The descriptive statistics utilized in the study included frequencies and percentages. The analysis was be done with the help of statistical Package for Social Science (SPSS) program. Data was represented in tables to give a clear picture of the research findings.

3.9 Operationalization of Variables

Operational definition of variables is operationally defining a concept to render it measurable. It is done by looking at the behavioral of the dimensions, indicators, properties denoted by concepts translated into observable and measurable elements to develop an index of the concepts. Measures can be objective or subjective.
<table>
<thead>
<tr>
<th>Research Objective</th>
<th>Variable</th>
<th>Indicators of the Variables</th>
<th>Measurement</th>
<th>Level of scale</th>
<th>Data Methods</th>
<th>Collection</th>
<th>Type of Analysis</th>
<th>Level of Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community</td>
<td><strong>Independent Variable</strong> Improve access efficiency and quality service</td>
<td>Improved service delivery channels</td>
<td>Ordinal</td>
<td>Interval</td>
<td>Interview/Questionnaires</td>
<td>Quantitative</td>
<td>Qualitative</td>
<td>Descriptive</td>
</tr>
<tr>
<td></td>
<td><strong>Dependent Variable</strong> Project Implementation</td>
<td></td>
<td>Nominal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To determine how improved security and reduced fraud through use of ICT enhances project implementation within local community</td>
<td><strong>Independent Variable</strong> Reduced Fraud</td>
<td>Reduced handling of cash within the groups thus reduced chances of theft. Use of automated system like MMT</td>
<td>Ordinal</td>
<td>Interval</td>
<td>Interview/Questionnaires</td>
<td>Quantitative</td>
<td>Qualitative</td>
<td>Descriptive</td>
</tr>
<tr>
<td></td>
<td><strong>Dependent Variable</strong> Project Implementation</td>
<td></td>
<td>Nominal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To determine how increased outreach through use of ICT can greatly impact on project implementation within local community</td>
<td><strong>Independent Variable</strong> Increased outreach</td>
<td>Availability of service delivery channels such as MMT</td>
<td>Ordinal</td>
<td>Interval</td>
<td>Interview/Questionnaires</td>
<td>Quantitative</td>
<td></td>
<td>Descriptive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nominal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To determine how improved access to information and communication dynamics through use of ICT in enhancing project implementation within local community</td>
<td><strong>Independent Variable</strong> improved access to information and communication dynamics</td>
<td>Empowerment of the local community thus eliminating poverty levels improved capacity to use different forms of ICTs enhanced information literacy</td>
<td>Ordinal</td>
<td>Interval</td>
<td>Interview/Questionnaires</td>
<td>Quantitative</td>
<td></td>
<td>Descriptive</td>
</tr>
</tbody>
</table>
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The purpose of this research was to examine the role of information communication and technology in empowering local community through project implementation where the focus was on the projects funded by Musoni Kenya Limited. This chapter presents analysis and findings of the study as set out in the research methodology. The results are presented on the role of information communication and technology in empowering local community through project implementation: a case of projects funded by Musoni Kenya Ltd. The specific areas presented in this section include questionnaire response rate, gender distribution of the respondents, age of the respondents, highest academic qualifications, respondents' knowledge of the community group projects, projects and businesses run by community groups, positions held by the respondents in the groups, number of group members and the role of information communication and technology in project implementation.

4.2 Response Rate

The study administered 60 questionnaires to the members of the local community groups and five staffs of the Musoni Kenya Limited from the target population in collecting data with regard to the role of information communication and technology in empowering local community through project implementation where the focus was on the projects funded by Musoni Kenya Limited. The questionnaire response rate results are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Response</th>
<th>Members of Local Community Groups</th>
<th>Local Staffs of Musoni Kenya Ltd</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Responded</td>
<td>56</td>
<td>93%</td>
<td>5</td>
</tr>
<tr>
<td>Not responded</td>
<td>4</td>
<td>7%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
<td>5</td>
</tr>
</tbody>
</table>

From the study, 61 out of 65 target respondents filled in and returned the questionnaire contributing to 94%. The response rate composed of 56 respondents from the members of the local community groups and 5 respondents from the staffs of Musoni Kenya Limited. This commendable response rate was
made a reality after the researcher made personal calls and visits to remind the respondent to fill-in and return the questionnaires as well as explaining the importance of their participation in this study. This commendable response rate can be attributed to the data collection procedure, where the researcher personally administered questionnaires and waited for respondents to fill in, kept reminding the respondents to fill in the questionnaires through frequent phone calls and picked the questionnaires once fully filled. This response rate was good and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The questionnaires that were not returned (6%) were due to reasons like, the respondents were not available to fill them in at that time and with persistence follow-ups there were no positive responses from them. The response rate demonstrates a willingness of the respondents to participate in the study.

4.3 Demographic Characteristics of the Respondents

The study targeted members of the local community groups and staffs of the Musoni Kenya Limited in investigating the role of information communication and technology in empowering local community through project implementation where the focus was on the projects funded by Musoni Kenya Limited. As such the results on demographic characteristics of these respondents were investigated in the first section of the questionnaire. They are presented in this section under gender distribution of the respondents, age of the respondents, highest academic qualifications.

4.3.1 Distribution of the Respondents by Gender

The research sought to find out the gender of the respondents. In this study the respondents sampled were expected to comprise both male and female workers. As such, the study required the respondents to indicate their gender by ticking on the spaces provided in the questionnaire. Table 4.2 shows the distribution of the respondents by gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>25</td>
<td>44.6</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>55.4</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Accordingly, 55.4% of the respondents were female while 44.6% of them were male. It can be concluded that the majority of the members of the local community groups funded by Musoni Kenya Limited are female. The findings show that the members of the local community groups studied had both male and female members.
4.3.2 Distribution of Respondents by Age

The role of information communication and technology in empowering local community through project implementation is about a technological advancement concept which is likely to be up-taken easily by different age groups differently. In order to avoid biasness, this study thus had to investigate the composition of the respondent in terms of age brackets to understand their familiarity with this technological concept in the project implementation setting. The study posed a question requesting the respondents to indicate their age brackets. Table 4.3 shows the results of the findings on the age brackets of the respondents.

Table 4.3: Age Brackets of the Respondents

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>x</th>
<th>Frequency</th>
<th>fx</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years</td>
<td>10</td>
<td>31</td>
<td>310</td>
<td>55.4</td>
</tr>
<tr>
<td>31-40 years</td>
<td>10</td>
<td>16</td>
<td>160</td>
<td>28.6</td>
</tr>
<tr>
<td>41-50 years</td>
<td>10</td>
<td>8</td>
<td>80</td>
<td>14.3</td>
</tr>
<tr>
<td>51-60 years</td>
<td>10</td>
<td>1</td>
<td>10</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40</td>
<td>56</td>
<td>560</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From table 4.3, majority of the respondents were aged between 20 and 30 years comprising 55.4 percent of the respondents. 28.6% of the respondents were aged between 31 and 34 years, 14.3% of the respondents were aged between 41 and 50 years, while 1.8% of them were aged 51 to 60 years. Out of the 56 respondents that participated, the study findings show that more than 47 of them were well distributed in terms of age and that they are active in technological advancements and productivity and hence can contribute constructively in this study.

4.3.3 Distribution of Respondents by Highest Academic Qualifications

Local Community groups consist of members with different academic qualifications. This difference might contribute to differences in the responses given by the respondents. The study therefore sought to establish the highest academic qualifications attained by the respondents. The responses on this question are depicted in table 4.4
### Table 4.4: Level of Education of Respondent

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Secondary</td>
<td>34</td>
<td>60.7</td>
</tr>
<tr>
<td>College</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>10</td>
<td>17.9</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The study results reveal that, 60.7% of the respondents had acquired a secondary level of education. 17.9% of the respondents indicated that they had acquired undergraduate degrees. 10.7% of them had acquired college level of education, while another 10.7% of respondents indicated that they had acquired only primary as their highest level of education. This results imply that majority of the respondents (comprising over 85%) had at least a secondary level education and hence understood the information sought by this study. These findings further imply that all the respondents were academically qualified in these local community groups and also familiar with the issues sought by this study.

### 4.3.4 Distribution of the Respondents in Terms of Length of Service in Community Groups

The length of service in a community group determines the extent to which one is aware of the issues sought by the study. In the wake of technological advancements and globalization, there are likely to be many changes in institutional and operating environment that the respondents should know when responding to the issues sought by the study. This study is about the role of information communication and technology in empowering local community through project implementation in Kenya. The study further sought to establish the length of time that the respondents had been involved in community groups. The results on this question are presented in Table 4.5.

### Table 4.5: Length of being a Group Member

<table>
<thead>
<tr>
<th>Length of being a Group Member</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 years</td>
<td>31</td>
<td>55.4</td>
</tr>
<tr>
<td>3-5 Years</td>
<td>24</td>
<td>42.9</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the study, 55.4% of the respondents indicated that they had been members of the community groups for less than 3 years, 42.9% of them had been members of the community groups for a period of 3 to 5 years, while 1.8% of them had been members of the community groups for a period of over 5
years. This shows that majority respondents had enough experience in the community groups to respond effectively. The respondents are conversant with the role of information communication and technology in empowering local community through project implementation hence the respondents are likely to have been involved since the introduction of information communication and technology in project implementation.

4.3.5 Respondents' Knowledge of the Community Group Projects

The study sought to establish the various ways through which the respondents knew about the community group projects. The results of the study are depicted in table 4.6.

Table 4.6: Knowing about Community Group Projects

<table>
<thead>
<tr>
<th>Ways of Knowing about Community Groups Projects</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peers</td>
<td>42</td>
<td>75.0</td>
</tr>
<tr>
<td>Poster Advertisements</td>
<td>11</td>
<td>19.6</td>
</tr>
<tr>
<td>Gathering held by Officials</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the results, 75% of the respondents indicated that they knew about the community groups projects through friends/peers. 19.6% of them were informed of the community group projects by posters and advertisements media, while 5.4% of the respondents came to know of the community group projects through gatherings held by officials.

4.3.6 Projects and Businesses Run by Community Groups

The study sought to establish the various projects or businesses undertaken by the group members. The study findings are shown in table 4.7.

Table 4.7: Kind of Projects or Businesses Undertaken by the Group Members

<table>
<thead>
<tr>
<th>Kind of Project or Business</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tailoring</td>
<td>4</td>
<td>7.1</td>
</tr>
<tr>
<td>Poultry keeping</td>
<td>11</td>
<td>19.6</td>
</tr>
<tr>
<td>Grocery</td>
<td>7</td>
<td>12.5</td>
</tr>
<tr>
<td>Cloth selling</td>
<td>15</td>
<td>26.8</td>
</tr>
<tr>
<td>Farming</td>
<td>5</td>
<td>8.9</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>
From the results depicted in table 4.7 above, 26.8% of the respondents indicated that the group members undertook cloth selling as their main business. 19.6% of the respondents reiterated that their groups members did poultry keeping projects. 12.5% of them were involved in green grocery business, 8.9% of the respondents’ group members were involved in farming projects, while 7.1% of the community group members are involved in tailoring business. Other businesses and projects run by the community group members include dairy keeping, taxi business, kiosk businesses and shop keeping among others.

4.3.7 Positions held by the Respondents in the Groups

The respondents were requested to indicate the various positions they held in their groups. Table 4.8 shows the results on this question.

Table 4.8: Positions held by the Respondents in the Groups

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>39</td>
<td>69.6</td>
</tr>
<tr>
<td>Treasurer</td>
<td>10</td>
<td>17.9</td>
</tr>
<tr>
<td>Chairperson</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td>Secretary</td>
<td>4</td>
<td>7.1</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to the results shown by table 4.8 above, 69.6% of the respondents were normal members in the community groups, 17.9% of them were treasurers in the community groups, 7.1% of the respondents were secretaries of the community groups, while 5.4% of the respondents indicated that they were chairpersons of the community groups.

4.3.8 Number of Group Members

The study sought to establish the total number of members consisted in the community groups. Table 4.9 displays the results of this question.

Table 4.9: Number of Group Members

<table>
<thead>
<tr>
<th>Number of Group Members</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-8</td>
<td>5</td>
<td>8.9</td>
</tr>
<tr>
<td>9-12</td>
<td>38</td>
<td>67.9</td>
</tr>
<tr>
<td>13-16</td>
<td>11</td>
<td>19.6</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

38
From the study, an overwhelming 67.9% of the respondents indicated that their groups consisted of between 9 and 12 members. 19.6% of the groups consisted of 13 to 16 group members. 8.9% of them had between 5 and 8 members, while 3.6% of the community groups had other combinations of over 17 members.

4.4 Role of Information Communication and Technology in Project Implementation

This section is derived from the main objective of the study which sought to investigate role of information communication and technology in empowering local community through project implementation. This section will therefore present analysis in terms of how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community, how improved security and reduced fraud through use of ICT enhances project implementation within local community, how increased outreach through use of ICT can greatly impact on project implementation within local community, how improved access to information and communication dynamics through use of ICT in enhancing project implementation within local community and ICT Empowerment Programs.

4.5 Efficiency and Quality Service

Table 4.10 presents the results on respondents’ agreement with various statements about how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community.

Table 4.10: How Efficiency and Quality Service is Enhanced by Use of ICT

<table>
<thead>
<tr>
<th>Statements on how Efficiency And Quality Service is Enhanced by Use of ICT</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
<th>STD. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mobile money transfer technology has increased efficiency in terms of loan disbursement and payment</td>
<td>0</td>
<td>0</td>
<td>7.1</td>
<td>73.2</td>
<td>19.6</td>
<td>4.1250</td>
<td>0.50677</td>
</tr>
<tr>
<td>Lack of proper ICT equipments has led to poor service quality</td>
<td>0</td>
<td>0</td>
<td>5.4</td>
<td>67.9</td>
<td>26.8</td>
<td>4.2143</td>
<td>0.52964</td>
</tr>
<tr>
<td>ICT has enhanced service delivery greatly in project implementation within local community</td>
<td>0</td>
<td>0</td>
<td>16.1</td>
<td>48.2</td>
<td>35.7</td>
<td>4.1964</td>
<td>0.69856</td>
</tr>
<tr>
<td>Inefficiency in service delivery is one of the key issues that has slowed down most MFI that are out to empower the local community</td>
<td>0</td>
<td>0</td>
<td>10.7</td>
<td>60.7</td>
<td>28.6</td>
<td>4.1786</td>
<td>0.60624</td>
</tr>
</tbody>
</table>
A mean of 1 indicates that a large number of respondents strongly disagreed with the statement, a mean of 2 indicates that a majority of respondents disagreed, a mean of 3 means that a majority of respondents were neutral, a mean of 4 means that a majority agreed while a mean of 5 means that a majority strongly agreed. The means are rounded off to the nearest whole number.

From the study, 67.9% of the respondents agreed that lack of proper ICT equipments has led to poor service quality as shown by a mean score of 4.2143, ICT has enhanced service delivery greatly in project implementation within local community as shown by a mean score of 4.1964, inefficiency in service delivery is one of the key issues that has slowed down most MFI that are out to empower the local community as shown by a mean score of 4.1786 and the mobile money transfer technology has increased efficiency in terms of loan disbursement and payment as shown by a mean score of 4.1250.

4.6 Access to Information and Communication Dynamics

The study required the respondents to indicate their level of agreement with various statements about access to information and communication dynamics. Table 4.11 shows the results of this question.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
<th>STD. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information</td>
<td>0</td>
<td>7.1</td>
<td>69.6</td>
<td>23.2</td>
<td>4.1607</td>
<td>.53178</td>
<td></td>
</tr>
<tr>
<td>The ICT technology used by Musoni has greatly impacted on group communication</td>
<td>0</td>
<td>10.7</td>
<td>57.1</td>
<td>28.6</td>
<td>4.1071</td>
<td>.73059</td>
<td></td>
</tr>
<tr>
<td>The mobile money transfer has enhanced communication within the Rural Area</td>
<td>0</td>
<td>1.8</td>
<td>55.4</td>
<td>42.9</td>
<td>4.4107</td>
<td>.53178</td>
<td></td>
</tr>
<tr>
<td>The irony of the M-PESA technology service is that it can impact group communication and interaction both positively and negatively</td>
<td>0</td>
<td>21.4</td>
<td>46.4</td>
<td>28.6</td>
<td>4.0000</td>
<td>.80904</td>
<td></td>
</tr>
<tr>
<td>The knowledge and adoption of ICT has greatly impacted on the local community’s daily lives and in their businesses</td>
<td>0</td>
<td>19.6</td>
<td>53.6</td>
<td>23.2</td>
<td>3.9643</td>
<td>.76192</td>
<td></td>
</tr>
<tr>
<td>ICT has enhanced information literacy</td>
<td>0</td>
<td>17.9</td>
<td>16.1</td>
<td>42.9</td>
<td>23.2</td>
<td>3.7143</td>
<td>1.02184</td>
</tr>
</tbody>
</table>
The statement that has the highest standard deviation indicates that most of the respondents disagreed with the statement. The statement that has the lowest standard deviation indicated that most of the respondents agreed with the statement.

54.4% of the respondents agreed that the mobile money transfer has enhanced communication within the Rural Area as shown by a mean score of 4.4107, the ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information as shown by a mean score of 4.1607, the ICT technology used by Musoni has greatly impacted on group communication as shown by a mean score of 4.1071, the irony of the M-PESA technology service is that it can impact group communication and interaction both positively and negatively as shown by a mean score of 4.0000, the knowledge and adoption of ICT has greatly impacted on the local community's daily lives and in their businesses as shown by a mean score of 3.9643 and ICT has enhanced information literacy as shown by a mean score of 3.7143.

4.7 Increased Outreach

The respondents were further required to indicate their level of agreement with various statements about increased outreach. Table 4.12 shows the results on the respondents' agreement with various statements on increased outreach.

Table 4.12: Agreement with Increased Outreach

<table>
<thead>
<tr>
<th>Statements on Increased Outreach</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
<th>STD. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT has led to increased Outreach in the community</td>
<td>0</td>
<td>1.8</td>
<td>10.7</td>
<td>76.8</td>
<td>10.7</td>
<td>3.9643</td>
<td>0.53815</td>
</tr>
<tr>
<td>M-PESA technology has assisted in facilitating easier group payments, especially for members who might live away from their groups or be traveling during the monthly meetings</td>
<td>0</td>
<td>5.4</td>
<td>19.6</td>
<td>55.4</td>
<td>19.6</td>
<td>3.8929</td>
<td>0.77878</td>
</tr>
<tr>
<td>The current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities</td>
<td>0</td>
<td>16.1</td>
<td>33.9</td>
<td>37.5</td>
<td>12.5</td>
<td>3.4643</td>
<td>0.91382</td>
</tr>
<tr>
<td>In rural areas despite ICT enhancing increased outreach network connectivity has been a challenge</td>
<td>1.8</td>
<td>3.6</td>
<td>25</td>
<td>55.4</td>
<td>14.3</td>
<td>3.7679</td>
<td>0.80884</td>
</tr>
</tbody>
</table>
From the study, 76.8% of the respondents agreed that ICT has led to increased Outreach in the community as shown by a mean score of 3.9643. M-PESA technology has assisted in facilitating easier group payments, especially for members who might live away from their groups or be traveling during the monthly meetings as shown by a mean score of 3.8929. In rural areas despite ICT enhancing increased outreach network connectivity has been a challenge as shown by a mean score of 3.7679 and the current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities as shown by a mean score of 3.4643.

The standard deviation implies the difference between the calculated mean of the respondents and responded that had the highest disagreeing value thus the current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities had the biggest standard deviation of 0.91382.

4.8 Reduced Fraud

The study sought to determine how improved security and reduced fraud through use of ICT enhances project implementation within local community. As such, the study presented various statements and required the respondents to indicate their level of agreement. Table 4.13 shows the results.

<table>
<thead>
<tr>
<th>Statements on Improved Security and Reduced Fraud</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Mean</th>
<th>STD. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The current use of automated systems to transact have led to reduced fraud</td>
<td>5.4</td>
<td>23.2</td>
<td>17.9</td>
<td>42.9</td>
<td>10.7</td>
<td>3.3036</td>
<td>1.11060</td>
</tr>
<tr>
<td>ICT has impacted positively in fraud reduction</td>
<td>3.6</td>
<td>33.9</td>
<td>16.1</td>
<td>37.5</td>
<td>8.9</td>
<td>3.1429</td>
<td>1.10254</td>
</tr>
<tr>
<td>ICT has reduced access of Money making it easier and more secure</td>
<td>8.9</td>
<td>16.1</td>
<td>26.8</td>
<td>32.1</td>
<td>16.1</td>
<td>3.3036</td>
<td>1.18965</td>
</tr>
</tbody>
</table>

From the study, 23.2% of the respondents remained neutral with that the current use of automated systems to transact have led to reduced fraud as shown by a mean score of 3.3036. ICT has reduced access of Money making it easier and more secure as shown by a mean score of 3.3036 and ICT has impacted positively in fraud reduction as shown by a mean score of 3.1429.

4.9 ICT Empowerment Programs

The study sought to investigate whether the community groups have ICT empowerment programs in the Community. The results on this question are depicted in table 4.14.
Table 4.14: Availability of ICT Empowerment Programs in the Community

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>35.7</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>64.3</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the study, 64.3% of the respondents unanimously indicated that the community groups do not have any ICT empowerment programs, while 35.7% of them indicated that the community groups have ICT empowerment programs.

The study further sought to find out whether the respondents would like to have ICT empowerment programs in their community. Table 4.15 shows the responses on this question.

Table 4.15: Whether the Respondents would like to have ICT in their community

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
<td>89.3</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

89.3% of the respondents reiterated that they would like to have ICT empowerment programs in their community, while only 10.7% of them indicated otherwise.

The respondents were required to indicate the benefit from the projects implemented. The responses of these results are presented in table 4.16.

Table 4.16: Benefit from the Projects Implemented

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of income</td>
<td>14</td>
<td>25.0</td>
</tr>
<tr>
<td>family sustenance</td>
<td>16</td>
<td>28.6</td>
</tr>
<tr>
<td>educating the children</td>
<td>12</td>
<td>21.4</td>
</tr>
<tr>
<td>Enhances social integration by bringing the community together</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Enlightening about market</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the study, majority of the respondents benefit from the projects implemented in terms of family sustenance shown by 28.6% of the respondents, another 25.0% of the respondents as a source of income. 21.4% of them indicated that they educate their children. 10.7% of the respondents are
enhances in terms of social integration by bringing the community together, another 10.7% of them are enlightened about market, while 3.6% of them in other ways.

On whether the mobile money technology has freed the respondents from traveling thus spending more time implementing their projects and running their businesses, all the respondents unanimously agreed with the statement.

4.10 Challenges Faced using the Mobile Money Transfer Technology

The respondents were required to indicate the various challenges faced using the Mobile Money transfer technology like MPESA that are a drawback to the projects. Table 4.17 shows the results.

<table>
<thead>
<tr>
<th>Challenges Faced</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor network connectivity</td>
<td>31</td>
<td>55.4</td>
</tr>
<tr>
<td>M-Pesa delays</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>M-Pesa transaction costs</td>
<td>7</td>
<td>12.5</td>
</tr>
<tr>
<td>Thuggery and fraud</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the study, 55.4% of the respondents indicated that the challenges of poor network connectivity are a drawback to the projects, 12.5% of them indicated M-Pesa transaction costs are a drawback to the projects. 10.7% of the respondents indicated that M-Pesa delays are a drawback to the projects as well as another 10.7% of those who indicated fraud and another 10.7% of those who indicated other challenges that are a drawback to the projects.

The study sought to establish the greatest benefit of the mobile money transfer technology as opposed to banks. Table 4.18 shows the results.

<table>
<thead>
<tr>
<th>Greatest benefit of the Mobile Money Transfer technology</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Reliable/operate for longer time</td>
<td>6</td>
<td>10.7</td>
</tr>
<tr>
<td>Fast access to money</td>
<td>19</td>
<td>33.9</td>
</tr>
<tr>
<td>Reduced transaction costs</td>
<td>16</td>
<td>28.6</td>
</tr>
<tr>
<td>No many requirements to enroll and operate</td>
<td>9</td>
<td>16.1</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>
33.9% of the respondents indicated that fast access to money is greatest benefit of the mobile money transfer technology as opposed to banks, 28.6% of them indicated reduced transaction costs, 16.1% of the respondents posited that there are no many requirements to enroll and operate, 10.7% of them indicated mobile money transfer technology is reliable because it operates for longer hours than banks as well as another 10.7% of the respondents who indicated that mobile money transfer technology convenient.

The respondents were further required to indicate the various ways in which use of technology has reduced transport needs to visit banks impacted on their business.

Table 4.19: Advantages of Technology in reduced Transport needs to Visit Banks

<table>
<thead>
<tr>
<th>Technology has reduced Transport needs to Visit Banks</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport costs saved are invested</td>
<td>7</td>
<td>12.5</td>
</tr>
<tr>
<td>Saves time for working instead of travelling</td>
<td>22</td>
<td>39.3</td>
</tr>
<tr>
<td>Reduces security threats of handling cash money</td>
<td>15</td>
<td>26.8</td>
</tr>
<tr>
<td>Others</td>
<td>12</td>
<td>21.4</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

39.3% of the respondents indicated that use of technology has reduced transport needs to visit banks which saves time for working instead of travelling, 26.8% indicated reduces security threats of handling cash money, 12.5% of them indicated that transport costs saved are invested in the businesses, while the other proportion (21.4%) gave other benefits of technology in reduced transport needs to visit banks.

On what Musoni should improve on in trying to empower the local community, majority of the respondents recommended that Musoni should offer more training and create awareness on ICT services. Others responded that Musoni should increase the amount of credit and increase loan repayment period.

4.11 Inferential Analysis

Inferential analysis is utilized in this study to determine if there is a relationship between an intervention and an outcome, as well as the strength of that relationship. The inferential statistics analysis aimed to reach conclusions that extend beyond the immediate data alone between the independent variables in this study. The study the study conducted inferential analysis to establish the relationship between the independent variables and the dependent variable of which involved a coefficient of determination and a multiple regression analysis. The independent variables in this study included efficiency and quality service, security and reduced fraud, outreach through use of ICT and
access to information and communication dynamics while the dependent variable was empowerment of local community through project implementation.

4.11.1 Coefficient of Determination

The coefficient of determination is a measure of how well a statistical model is likely to predict future outcomes. The coefficient of determination, $r^2$ is the square of the sample correlation coefficient between outcomes and predicted values. As such it explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (empowerment of local community through project implementation) that is explained by all the four independent variables (efficiency and quality service, security and reduced fraud, outreach through use of ICT and access to information and communication dynamics).

Table 4.20: Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.792 (a)</td>
<td>.627</td>
<td>.303</td>
<td>.125</td>
</tr>
</tbody>
</table>

Predictors: (Constant), efficiency and quality service, security and reduced fraud, outreach through use of ICT and access to information and communication dynamics.

The four independent variables that were studied, explain only 62.7% of the empowerment of local community through project implementation as represented by the $R^2$. This therefore means the four independent variables only contribute about 62.7% to the empowerment of local community through project implementation while other factors not studied in this research contribute 37.3% of the empowerment of local community through project implementation. Therefore, further research should be conducted to investigate the other factors (37.3%) that affect local community empowerment through project implementation.

4.11.2 Multiple Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to determine the role of information communication and technology in empowering local community through project implementation where the focus was on projects funded by Musoni Kenya Ltd. Multiple regression is a statistical technique that allows us to predict a score of one variable on the basis of their scores on several other variables. The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable.
Table 4.21: Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.224</td>
<td>0.312</td>
<td>4.358</td>
<td>0.000</td>
</tr>
<tr>
<td>Efficiency and quality service</td>
<td>0.217</td>
<td>0.1440</td>
<td>0.185</td>
<td>0.776</td>
</tr>
<tr>
<td>Security and reduced fraud</td>
<td>0.118</td>
<td>0.0847</td>
<td>0.023</td>
<td>0.4069</td>
</tr>
<tr>
<td>Outreach through use of ICT</td>
<td>0.299</td>
<td>0.0715</td>
<td>0.235</td>
<td>2.7936</td>
</tr>
<tr>
<td>Access to information and communication dynamics</td>
<td>0.272</td>
<td>0.1264</td>
<td>0.089</td>
<td>0.849</td>
</tr>
</tbody>
</table>

Dependent Variable: Local community empowerment through project implementation

The researcher conducted a multiple regression analysis so as to determine the relationship between local community empowerment through project implementation and the four independent variables. The regression equation \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 \) now becomes:

\[
Y = 1.224 + 0.2176X_1 + 0.1187X_2 + 0.2994X_3 + 0.2725X_4
\]

Whereby

- \( Y \) = Local community empowerment through project implementation
- \( X_1 \) = Efficiency and quality service
- \( X_2 \) = Security and reduced fraud
- \( X_3 \) = Outreach through use of ICT
- \( X_4 \) = Access to information and communication dynamics

According to the regression equation established, taking all factors (efficiency and quality service, security and reduced fraud, outreach through use of ICT and access to information and communication dynamics) constant at zero, the local community empowerment through project implementation realized would be 1.224. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in efficiency and quality service lead to a 0.217 increase in local community empowerment through project implementation. A unit increase in security and reduced fraud will lead to a 0.118 increase in local community empowerment through project implementation; a unit increase in outreach through use of ICT will lead to a 0.299 increase in local community empowerment through project implementation whereas a unit increase in access to information and communication dynamics will lead to a 0.272 increase in local community empowerment through project implementation. These results infer that increased outreach contributes more to local community empowerment through project implementation, followed by access to information and communication dynamics and efficiency and quality service, while security and reduced fraud contributes the least to local community empowerment through project implementation.
5.1 Introduction

This chapter provides the summary of the findings, the conclusions and recommendations of the study based on the objectives of the study. The chapter finally presents the suggestions for further studies. The specific objectives of this study were to determine how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community, to determine how improved security and reduced fraud through use of ICT enhances project implementation within local community, to determine how increased outreach through use of ICT can greatly impact on project implementation within local community and to determine how improved access to information and communication dynamics through use of ICT in enhancing project implementation within local community.

5.2 Summary of Findings

On how efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community, the respondents agreed that lack of proper ICT equipment's has led to poor service quality as shown by a mean score of 4.2143, ICT has enhanced service delivery greatly in project implementation within local community as shown by a mean score of 4.1964. inefficiency in service delivery is one of the key issues that has slowed down most MFI that are out to empower the local community as shown by a mean score of 4.1786 and the mobile money transfer technology has increased efficiency in terms of loan disbursement and payment as shown by a mean score of 4.1250.

The study also found that the mobile money transfer has enhanced communication within the Rural Area, the ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information, the ICT technology used by Musoni has greatly impacted on group communication, the irony of the M-PESA technology service is that it can impact group communication and interaction both positively and negatively, the knowledge and adoption of ICT has greatly impacted on the local community's daily lives and in their businesses and ICT has enhanced information literacy as shown by a mean score of 4.4107, 4.1607, 4.1071, 4.0000, 3.9643 and 3.7143.

On increased outreach, the respondents agreed that ICT has led to increased Outreach in the community as shown by a mean score of 3.9643, M-PESA technology has assisted in facilitating easier
group payments, especially for members who might live away from their groups or be traveling during the monthly meetings as shown by a mean score of 3.8929, in rural areas despite ICT enhancing increased outreach network connectivity has been a challenge as shown by a mean score of 3.7679 and the current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities as shown by a mean score of 3.4643.

The findings on how improved security and reduced fraud through use of ICT enhances project implementation within local community were neutral that the current use of automated systems to transact have led to reduced fraud as shown by a mean score of 3.3036. ICT has reduced access of Money making it easier and more secure as shown by a mean score of 3.3036 and ICT has impacted positively in fraud reduction as shown by a mean score of 3.1429.

The study further found that the community groups do not have any ICT empowerment programs; 89.3% of the respondents reiterated that they would like to have ICT empowerment programs in their community. Majority of the respondents benefit from the projects implemented in terms of family sustenance, source of income, they educate their children, social integration by bringing the community together and enlightened about market.

The study found that challenges of poor network connectivity are a drawback to the projects as well as M-Pesa transaction costs, M-Pesa delays and fraud. From the study, fast access to money is greatest benefit of the mobile money transfer technology as opposed to of banks. reduced transaction costs, there are no many requirements to enrol and operate, mobile money transfer technology is reliable because it operates for longer hours than banks and mobile money transfer technology convenient. From the study, technology has reduced transport needs to visit banks which saves time for working instead of travelling, reduces security threats of handling cash money and transport costs saved are invested in the businesses.

From the regression analysis, a unit increase in efficiency and quality service lead to a 0.217 increase in local community empowerment through project implementation. A unit increase in security and reduced fraud will lead to a 0.118 increase in local community empowerment through project implementation; a unit increase in outreach through use of ICT will lead to a 0.299 increase in local community empowerment through project implementation whereas a unit increase in access to information and communication dynamics will lead to a 0.272 increase in local community empowerment through project implementation.
5.3 Discussion

Based on efficiency and quality service the findings indicated that efficiency and quality service is enhanced through improved service delivery by use of ICT in project implementation within local community, the respondents agreed that lack of proper ICT equipments has led to poor service quality as shown by a mean score of 4.2143. ICT has enhanced service delivery greatly in project implementation within local community as shown by a mean score of 4.1964, inefficiency in service delivery is one of the key issues that has slowed down most MFI that are out to empower the local community as shown by a mean score of 4.1786 and the mobile money transfer technology has increased efficiency in terms of loan disbursement and payment as shown by a mean score of 4.1250 therefore agreeing with the literature review whereby according to Brynjolfsson and Hitt (2000), the use of ICT can help to cut down the costs of coordination, communication, and information processing, and to enable efficient service provision at lower cost. ICT is a strategic tool that enables users to be efficient and effective. ICT promotes the dual objective of microfinance, which is the sustainability and outreach to the poor people. Although ICT can help MFIs to reduce transactional costs, expand their market, and provide affordable and flexible services to customers, many of them continue to rely on inefficient manual data processing systems (Parikh, 2006) which create inefficiency.

The study also found that the mobile money transfer has enhanced communication within the Rural Area, the ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information, the ICT technology used by Musoni has greatly impacted on group communication, the knowledge and adoption of ICT has greatly impacted on the local community’s daily lives and in their businesses and ICT has enhanced information literacy, the findings too seemed to agree with the literature according to Mohammad Yunus, founder of the Grameen Bank, is that the clients should not go to the bank; it is the bank which should go to the people. Dr. Yunus perceived that to alleviate other potential imbalances, financial services should be provided to poor people on their terms, in a manner that was respectful of their needs, activities and livelihoods.

On increased outreach, the respondents agreed that ICT has led to increased Outreach in the community as shown by a mean score of 3.9643, M-PESA technology has assisted in facilitating easier group payments, especially for members who might live away from their groups or be traveling during the monthly meetings as shown by a mean score of 3.8929, in rural areas despite ICT enhancing increased outreach network connectivity has been a challenge as shown by a mean score of 3.7679 and the current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities as shown by a mean score of 3.4643. The findings seemed to agree with the literature whereby the impediments to the success of microfinance institutions in
Developing countries are the scalability, sustainability, outreach, and the impact of the various microfinance initiatives (Kashyap, 2009). These impediments can only be overcome through the usage of ICT to maximize outreach and sustainability. Increasing client outreach provides economies of scale that in turn makes the microfinance programs more efficient and therefore more sustainable, at least in immediate financial terms.

The findings on how improved security and reduced fraud through use of ICT enhances project implementation within local community the findings were neutral that the current use of automated systems to transact have led to reduced fraud as shown by a mean score of 3.3036. ICT has reduced access of Money making it easier and more secure as shown by a mean score of 3.3036 and ICT has impacted positively in fraud reduction as shown by a mean score of 3.1429. The findings agree with the literature review whereby ICT offers various benefits to clients and MFIs in various countries. The benefits to clients have been identified as access, more convenient services, and faster loan processing, less time in queues; and for the MFIs as reduced transaction costs, less fraud, improved quality of financial information, increased outreach, reduction in operational costs, and increase in customer satisfaction and loyalty (Hishiguren, 2006). In Kenya Safaricom alone serves more than seven million users with an agent's network that exceeds the total number of bank branches in Kenya (Kinyanjui, 2009) and this has led to the reduction of theft.

The study further found that the community groups do not have any ICT empowerment programs; majority of the respondents (shown by 89.3%) reiterated that they would like to have ICT empowerment programs in their community. Majority of the respondents benefit from the projects implemented in terms of family sustenance, source of income, they educate their children, social integration by bringing the community together and enlightened about market.

The study found that challenges of poor network connectivity are a drawback to the projects as well as M-Pesa transaction costs, M-Pesa delays and fraud. From the study, fast access to money is greatest benefit of the mobile money transfer technology as opposed to of banks, reduced transaction costs, there are no many requirements to enrol and operate, mobile money transfer technology is reliable because it operates for longer hours than banks and mobile money transfer technology convenient. From the study, technology has reduced transport needs to visit banks which saves time for working instead of travelling, reduces security threats of handling cash money and transport costs saved are invested in the businesses.

From the regression analysis, a unit increase in efficiency and quality service lead to a 0.217 increase in local community empowerment through project implementation. A unit increase in security and reduced fraud will lead to a 0.118 increase in local community empowerment through project implementation.
implementation; a unit increase in outreach through use of ICT will lead to a 0.299 increase in local community empowerment through project implementation whereas a unit increase in access to information and communication dynamics will lead to a 0.272 increase in local community empowerment through project implementation.

5.4 Conclusions

The study concludes that the lack of proper ICT equipments has led to poor service quality, ICT has enhanced service delivery greatly in project implementation within local community, inefficiency in service delivery is one of the key issues that has slowed down most MFI that are out to empower the local community and the mobile money transfer technology has increased efficiency in terms of loan disbursement and payment.

The study also deduces that the mobile money transfer has enhanced communication within the Rural Area, the ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information, the ICT technology used by Musoni has greatly impacted on group communication, the irony of the M-PESA technology service is that it can impact group communication and interaction both positively and negatively, the knowledge and adoption of ICT has greatly impacted on the local community's daily lives and in their businesses and ICT has enhanced information literacy.

With regard to increased outreach, the study concludes that ICT has led to increased Outreach in the community. M-PESA technology has assisted in facilitating easier group payments, especially for members who might live away from their groups or be traveling during the monthly meetings, in rural areas despite ICT enhancing increased outreach network connectivity has been a challenge and the current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities.

The study further concludes that the current use of automated systems to transact have neutrally led to reduced fraud, ICT has neutrally reduced access of Money making it easier and neutrally secure and ICT has impacted positively in fraud reduction. The community groups do not have any ICT empowerment programs, the projects implemented benefit the group members in terms of family sustenance, source of income, they educate their children, social integration by bringing the community together and enlightened about market. However, poor network connectivity is a drawback to the projects as well as M-Pesa transaction costs.

The regression analysis depict that increased outreach contributes more to local community empowerment through project implementation, followed by access to information and communication dynamics and efficiency and quality service, while security and reduced fraud contributes the least to local community empowerment through project implementation.
5.4 Recommendations

The study recommends that:

In order to give better results of ICT in empowering local community through project implementation, the study recommends that community groups and other stakeholders should work towards putting in place the necessary technological advancements in order to realize benefits of ICT in empowering local community through project implementation. The study has identified impediments on the way of transitioning to ICT advancements is the flaw in infrastructure for mobile money transfer. The cellular service providing companies have not yet provided sufficient facilities and services for which the community groups are not yet able to properly deliver mobile money transfer services to their customers. Also, customer illiteracy is somewhat coming on the way of advent of mobile banking.

The study also recommends that the community groups involved in the implementation of various projects should be focused in terms of their needs and using the right technology to achieve goals, rather, than acquiring technology because other organizations have it. They should carry out awareness campaigns to allay fears of security/safety issues like complications of the mobile money transfer technology procedures and lack of awareness security limits of the mobile money transfer technology.

From the study findings and conclusions, cost of service delivery in mobile money transfer affects its applicability. The study therefore recommends that the community groups should focus on aspects of costs of serving low-income customers, reliability and simplicity of conducting business through transfers, payments, deposits and withdrawals in financial transactions of small businesses and value for customers' transactions.

The study recommends that, since ICT is an important tool to the service providers, the customers and the government, the relevant policy makers should improve the policies governing the industry and use of ICT in project implementation for community empowerment. Interest should be aimed towards improving services that ensure that the customer get details in time and with the least cost possible. This would enhance implementation of community projects.

5.5 Recommendations for Further Studies

The study has explored the role of information communication and technology in empowering local community through project implementation with reference to projects funded by Musoni Kenya Ltd and established that efficiency and quality service, improved security and reduced fraud, increased outreach and improved access are the main aspects of ICT that play a role in empowering local
community through project. The community groups that are using ICT in project implementation however are spread in various other areas in Kenya and funded by various other MFIs and financial institutions which differ in their way of management and have different settings all together. This warrants the need for another study which would ensure generalization of the study findings for all the local community groups that apply ICT in the implementation of their projects and hence pave way for new policies. The study therefore recommends another study be done with an aim to investigate the role of information communication and technology in empowering local community through project implementation in Kenya.
REFERENCES


ICTs for development in India's microfinance sector. Information Technology for Development. 15(4), 237-258.


Filpo, J. (2006). Banking the Unbanked: Technology’s role in delivering accessible financial services to the poor. Retrieved on 10/04/2012 from Web site:

Fleming S. (2002) Information and Communications Technologies (ICTs) and Democracy


On http://www.wougnet.org/ICTpolicy/ug/docs/cinug.html


*Dot-Comments* Newsletter Issue 15: April 2012 [Online]. Available:

Turaga, J. (2004). Opportunities and challenges in India “Kuch Apru Sock aur Kuch Jugaad”:
*Crafting the MFI/IT Paradigm – The Indian Experience.*
Retrieved on 18/04/2012, from Website:
http://www.14donline.net/issue/jan04/opportunities-full.htm


Women’s Finance and Development. pp 44-45.


## APPENDIX

### Appendix i: Sampled Groups

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<th>NAME OF GROUP</th>
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<td>3</td>
<td>JOY LADIES</td>
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<td>4</td>
<td>FAGIA JASHO</td>
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<td>5</td>
<td>LOWER NYAMAKIMA</td>
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<td>6</td>
<td>FIRST GENERATION</td>
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<td>7</td>
<td>BLESSED WOMEN GROUP</td>
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<td>8</td>
<td>INNER MUSONI</td>
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<td>9</td>
<td>TUSHIRIKIANE</td>
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<td>10</td>
<td>TSIKHABI</td>
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<td>11</td>
<td>PRECIOUS 2010</td>
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<td>12</td>
<td>ODOWA</td>
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<td>13</td>
<td>BIDII</td>
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<td>14</td>
<td>GITHUNGURI</td>
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<td>15</td>
<td>LOVE AND CARE</td>
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<td>16</td>
<td>PROMOTERS</td>
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<td>STAR SHINE</td>
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<td>21</td>
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<td>26</td>
<td>MATENDO</td>
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<td>27</td>
<td>RISE AND SHINE</td>
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<td>TUSEMEZANE</td>
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<td>29</td>
<td>NYAKOE</td>
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<td>30</td>
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<td>NEEMA CHRISTIAN INTIATIVE</td>
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<td>EMPOWERMENT</td>
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<td>PAMOJA TUJJENGE</td>
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<td>SHINING STAR</td>
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<td>44</td>
<td>SWEET DREAMERS</td>
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<td>MUUWO</td>
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<td>UMOMA JUA KALI</td>
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<td>57</td>
<td>VISION 2030</td>
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<td>58</td>
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<td>61</td>
<td>ZAWADI</td>
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<tr>
<td>62</td>
<td>PROMISE KEEPERS</td>
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</table>
Dear Sir/Madam,

RE: The role of Information Communication Technology in Empowering Local Community through Project Implementation: The Case of Projects Funded by Musoni Kenya Ltd

I would first wish to thank you for willingness to participate in this research. I am currently a Masters of Art Student at University of Nairobi. I am carrying out a research on the role of Information Communication and Technology (ICT) in empowering the local community, the case of Projects Funded by Musoni Kenya Ltd.

This study is aimed at identifying and generating information on the role ICT has played in empowering the local community, factors that have hindered or that have rendered slow penetration of ICT most especially in the rural areas, as well as factor that hinder microfinance institutions that are out to empower the local community in reaching out to remote areas. The finding provided will help enlighten other microfinance institutions on how ICT can hasten microfinance in empowering the local community through project implementation. The information provided will be strictly confidential.

Your genuine response will be highly appreciated and the information obtained will be used purely for academic reasons.

Thank you in advance.

Yours Faithfully,

Miano Faith Nyokabi.
Appendix iii: Introductory Letter

Miano Faith Nyokabi
P.O. Box 42893-00100
Nairobi
Tel:0724962552
E-mail: faithmiano@gmail.com

TO WHOM IT MAY CONCERN

My names are Miano Faith Nyokabi and am a Masters of Art in Project Planning and Management Student at University of Nairobi. The attached questionnaire is aimed at determining the role of Information Communication and Technology in empowering local community through project Implementation through projects funded by Musoni Kenya Ltd.

You have been identified as a potential respondent in this research. The information you give will help in identifying the role ICT plays in empowering Local Community.

Kindly take time to complete the questionnaire and the information given will be treated with utmost confidentiality and used for academic purpose only. Your genuine response will be appreciated.

Thank you in advance.

Yours Faithfully,

Miano Faith Nyokabi
Appendix iv: Questionnaire for Local Community

Section A: General Information

1. What is your gender?
   Male [ ]
   Female [ ]

2. What is your age bracket?
   20-30 years [ ]
   31-40 years [ ]
   41-50 years [ ]
   51-60 years [ ]
   60 years and above [ ]

3. What is your highest Level of Education?
   Primary [ ]
   Secondary [ ]
   College [ ]
   Undergraduate [ ]

4. How long have you been involved in the group?
   Less than 3 years [ ]
   3-5 Years [ ]
   More than 5 years [ ]

5. How did you know about this group Projects?
   Peers [ ]
   Poster Advertisements [ ]
   Gathering held by Officials [ ]
6. What kind of project or business does your group undertake?

7. What position do you hold in the group?

8. How many members do you have in your group?

SECTION B:

Kindly put an X against the answer that you feel best depicts your answer or opinion.

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<tr>
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<tr>
<td>Agree</td>
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<td>Neither agree nor disagree</td>
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9. Efficiency and Service Quality

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<td>The mobile money transfer technology has increased efficiency in terms of loan disbursement and payment.</td>
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<td>Lack of proper ICT equipments has led to poor service quality.</td>
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<td>ICT has enhanced service delivery greatly in project implementation within local community.</td>
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10. Access to Information and Communication Dynamics

The ICT technology used by Musoni Kenya Ltd has facilitated faster access of Information

The ICT technology used by Musoni has greatly impacted on group communication.

The mobile money transfer has enhanced communication within the Rural Area.

The irony of the M-PESA technology service is that it can impact group communication and interaction both positively and negatively.

The knowledge and adoption of ICT has greatly impacted on the local community’s daily lives and in their businesses.

ICT has enhanced information literacy.

11. Increased Outreach

Has ICT led to increased Outreach in the community?

Is it true to say M-PESA technology has assisted in facilitating easier group payments, especially for members who might live away from their groups or be traveling during the monthly meetings.

The current Mobile Technology is playing a major role in trying to breach the gap between that exists between the rich and the poor communities.

In rural areas despite ICT enhancing increased outreach network connectivity has been a challenge.
12. Reduced Fraud

The current use of automated systems to transact have led to reduced fraud.

Is it correct to say ICT has impacted positively in fraud reduction.

ICT has reduced access of Money making it easier and more secure.

SECTION C

13. Do you have any ICT empowerment programs in your Community?

14. Would you like to have ICT empowerment programs in your community?

15. How do you benefit from the projects you implement?

16. Is it viable to say that the mobile money technology has freed you from traveling thus spending more time implementing your project and running your businesses?

17. What are some of the challenges you face using the Mobile Money transfer technology like MPESA that are a drawback to you and your projects?
18. What has been the greatest benefit of the Mobile Money Transfer technology as opposed to banks?

19. In what way has use of technology reduced transport needs to visit banks impacted on your business?

20. What do you feel that Musoni should improve on in trying to empower the local community?
Kindly put an X against the answer that you feel best depicts your answer or opinion.

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<th>Strongly Agree</th>
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<td>The mobile money transfer has enhanced greater communication within the Rural Area.</td>
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<td>The knowledge and adoption of ICT has greatly impacted on the local community’s daily lives and in their businesses.</td>
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<td>Introduction of Mobile Money Transfer Technology has greatly enhanced increased outreach?</td>
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<td>Reduced handling of cash within the groups thus reduced chances of theft.</td>
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<td>Has the empowerment of the local community eliminated poverty levels thus improving capacity to used different forms of ICTs?</td>
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SECTION B

Answer the following questions appropriately

1. What services does Musoni Kenya Ltd offer to the local community?

2. Which areas of the country has Musoni have outreach programmes?

3. Why did Musoni decide to use 100% Mobile Money Transfer Technology?

4. How is Musoni using ICT to help empower the local community in project implementation?

5. Can you say by going 100% Mobile you have achieved efficiency and increased outreach?

6. If Yes how?

7. In what way has the use of automated systems such as MPESA and Management Information System benefited you?
8. Can you say you have fully achieved:­

i) Efficiency

ii) Increased Outreach

iii) Reduced Fraud

iv) Access to information and Communication Dynamics

9. What challenges have you encountered in trying to reach out and empower the local Community?
Appendix vii: Letter of Authorization
The above named is a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra-Mural Studies pursuing Post graduate diploma in Project Planning and Management.

She is proceeding for research entitled “the role of information communication technology in empowering local community through project implementation.” A case of projects funded by Musoni Kenya Ltd.

Any assistance given to her will be appreciated.

CAREN AWILLY
CENTRE ORGANIZER
NAIROBI EXTRA MURAL CENTRE