

**EMPOWERMENT OF WOMEN ENTREPRENEURS THROUGH MOBILE
TELEPHONY TECHNOLOGY: A CASE OF ISINYA, KAJIADO COUNTY,
KENYA**

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2017

DECLARATION

This project is my original work and has not been presented in any other university

Signature

Date

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N69/71189/2014

This project has been submitted for examination with my approval as a university supervisor

Signature

Date

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.....

ISAAC WERE

DEDICATION

I dedicate my research project to my family. A special feeling of gratitude to my loving parents, Nelson and Mary Gitahi whose words of encouragement and push for tenacity ring in my ears. My siblings Teresa, Peter and Samuel have never left my side and are very special. Thank you for always being there for me and motivating me to pursue my postgraduate degree.

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LIST OF ABBREVIATION AND ACRONYMS

CBFW	Cherie Blair Foundation for Women
CDMA	Code Division Multiple Access
ICT	Information Communication Technology
MNO	Mobile Network Operators
UNDAW	United Nations Division for the Advancement of Women
UNIFEM	United Nations Development Fund for Women
USAID	United States Agency for International Development

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ABSTRACT

Women empowerment is a key subject in gender and feminist discourses, with the aim of inculcating strategies that mainstream gender and empower women. Mobile telephony technology has emerged as one of the ways in which women entrepreneurs can benefit and enhance their empowerment. This study sought to investigate the empowerment of women entrepreneurs through mobile telephony technology in Isinya, Kajiado County. Using a cross-sectional design and mixed method, the study targeted women entrepreneurs to identify the mobile phone services and applications they use, how these benefit them and the challenges they face. Survey method, which targeted 50 women entrepreneurs, was used for quantitative data and 3 women-only focus group discussions provide the qualitative data.

The results showed that women entrepreneurs use a variety of mobile phone services and applications including M-Pesa, M-farm, NikoHapa, Olalashie, iCow, WhatsApp, and My Social Media. These enhance the women's entrepreneurial success through market information, networking, reducing costs and acting as advertising platforms as well as easing communication. However, the women face challenges in access and use of the mobile phone services. These include information gap as well as the socio-cultural constructions of gender, power relations and norms that limit use of the services.

The study concludes that mobile telephony technology is an important pillar supporting women empowerment. It recommends that women empowerment programs and strategies need to tap into the potential of technology in transforming the lives of women.

1.0 BACKGROUND TO THE STUDY

1.1 Introduction

Mobile communication has turned into a piece of regular daily existence for a large number of individuals and business associations over the world. Individuals now consider the capacity to impart by cell phones the nation over (and even the world) as normal and important (Donner and Escobari, 2009). The hugeness of Mobile media communications benefits past fundamental individual to-individual voice correspondence can't be overemphasized. Cell phones have turned out to be completely essential for anybody working together today because of the way that they give adaptability and productivity in correspondence that has never existed, and has rapidly turned out not out of the ordinary in the quick moving universe of present day business.

In the USA, Women business people have watched extraordinary change in their organizations in the wake of receiving versatile innovation. The primary drivers of this pattern are enhanced business rehearses, expanded rivalry and execution and new business openings (Komunte, Rwashana, and Nabukenya, 2012). As indicated by Webster's (1992) down to earth proficiencies including IT are fundamental subjects for directing joined showcasing operations. "The center firm will be characterized by its end-utilize market and its learning base, and in addition its specialized fitness, not by its plants and its office structures. Client center, showcase division, focusing on and situating, helped by data innovation, will be the adaptable bonds that hold the entire thing together" (Webster, 1992:5 as referred to in Saren, 2011:40). Existing endeavors and new business openings are given and can be gotten to through the selection of cell phone benefit including portable cash, web, messages and so on (Komunte, Rwashana, and Nabukenya, 2012).

In Chennai, India, a system of ladies' gatherings built up since 2001 to grow chances to advertise items utilizing phones for correspondence detailed a relationship (Vaughan, 2012). Through the system the ladies have expanded their pay, fabricated certainty for the advancement of their families, and are progressively more inspired. Thusly the venture has discovered that the mobile phone was a strengthening instrument among ladies (Vaughan, 2012). Vaughan's examination did not concentrate on sexual orientation relations, local

effects and power relations, and subsequently leaves a learning crevice which this investigation will look to address

In an examination looking at the present and potential effect of ICTs in Africa, concentrating particularly on sexual orientation issues, Rathgeber and Ofwona (2000) underscored the requirement for data to be made applicable to the necessities of ladies in the ranges of wellbeing, micro-enterprise and training. The creators consider ICTs to be having the capacity to change data awkwardness and sexual orientation imbalances, however stretch the significance of making data pertinent to the requirements of ladies inside particular segments. Changing the irregularity calls for tending to the sex advanced gap. As indicated by Huyer et al. (2003), the 'sexual orientation advanced gap' portrays the current disparities and inclinations in access to and utilization of ICTs by ladies and men. At the point when fittingly outfit, ICTs hold extraordinary potential for ladies' entrance to data at an individual level, to better their self-esteem, increment certainty and open them to more profession open doors, and additionally enhancing their backing, campaigning and systems administration exercises.

Kenyan ladies business visionaries utilize web based business, m-trade, and Social media based stages including on the web installments, web keeping money and E-showcasing to publicize and achieve a more extensive customers and in addition access new markets. They instruct themselves enough or utilize the general population with the correct capabilities to deal with these innovative devices and computerized stages sufficiently. In this space it is watched that the business visionaries are educated in insight about the devices or applications that will work best for their endeavors through the joining of innovation, especially for business in Kenya (Kalundo, 2014). This has been seen to apply in both the casual and formal business spaces. Present day Kenyan ladies business people can open their monetary development and accomplishment through staying aware of the cutting edge times and grasping ICT and different advancements as a component of their strategies for success. The utilization of Twitter has been seen to be a developing pattern for the adolescent to explore and furthermore showcase and promote continuously and so forth. South Africa and Kenya have been individually recorded to be the most astounding

Twitter clients on the landmass (Hisrich and Peters, 2012). Business visionaries have empowered numerous open doors through the retail channels of Mobile Network Operators (MNO's), which has been made conceivable through the arrangement administrations, for example, instruction, wellbeing and help appropriation. Business people have been urged to offer portable items and participate in versatile cash channels by joining MNO's retail channels, which have a wide achieve that incorporates the rustic environs. The position of separation is made superfluous using ICT and particularly with portable innovation by worldwide and transnational organizations in overseeing generation and business forms. Cell phones have empowered business people and the general masses to engage themselves, and to approach data and information, which contribute financially and socially to groups with whom they are in contact with (Cherie Blair Foundation for Women, 2011).

1.2 Problem Statement

In the contemporary society, great advances in information communication technology have been made as evidenced in the mobile telephony technologies. Both small scale and large scale enterprises have greatly benefited from these advancements and owners have relied on the mobile telephone services and applications to develop their businesses (Trauth, 2006). However, these developments have a gendered dimension where the adoption and the consequent benefits have yielded gender differences by taking the course of traditional gender differences and inequalities (Trauth, 2006). In spite of the capability of ventures keep running by ladies to support neighborhood economy (USAID, 2001) briefs show that ladies possessed endeavors become less quickly and are probably going to close sooner than male partners. As indicated by Kalundo (2012), ladies' gainful exercises are packed in smaller scale endeavors, for example, selling, retail, and assembling in little scale and market exchange periodicals. In such manner, ladies are packed in endeavors that adjust to their conventional sexual orientation parts, generally in nourishment handling and article of clothing making. This decision of business likewise characterizes productivity of the undertaking. Ladies claimed ventures produce less income contrasted with incomes created by undertakings possessed by men, which earned 74% more (Central Bureau of Statistics, 2011). An important question on whether this

would be attributable to the gendered variation in the adoption of appropriate technologies emerges.

Reynolds (2004) places that ladies business visionaries are probably not going to receive more advanced innovations on the off chance that they are not comfortable with the essential ones instead of men. That is why entrepreneurships owned by men grew faster at a rate of 32% annually as compared to 16% of those owned by women. This is because of the limited number of women who have technical knowledge. Women are still observed to be lagging behind in development issues and lacks empowerment traits.

Numerous women-ran businesses are as yet missing the gigantic potential advantages of utilizing mobiles innovation as a piece of their business improvement (Ikiara, 2001). The different modes of communication embedded in most mobile phones including voice, SMS, radio, TV, interpersonal and group communications don't seem to improve the situation (AFFRI, 2009). This has resulted to some of them despite being in the market for long, being overtaken if not edged out of the business by those who utilize mobile telephony. Owing to this gap and foregoing this study therefore sought to assess the empowerment of women entrepreneurs through mobile telephony technology in Isinya, Kajiado County, Kenya and sought to answer the following questions.

1. Which mobile phone applications and services support women entrepreneurship in Isinya, Kajiado County?
2. To what extent has mobile phone service been used to enhance entrepreneurial success among enterprises run by women in Isinya, Kajiado County?
3. What are the challenges facing women's access to/use of the mobile phone in their quest to achieve sustainable enterprises in Isinya, Kajiado County?

1.3 Objectives of the study

1.3.1 General Objective

The general objective of this study was to investigate the empowerment of women entrepreneurs through mobile telephony technology in Isinya, Kajiado County.

1.3.2 Specific Objectives

The specific objective of the proposed study was guided by the following specific objectives.

1. To examine the mobile applications and services that support women entrepreneurship in Isinya, Kajiado County.
2. To evaluate the extent to which the mobile phone information service has been used to enhance entrepreneurial success among enterprises run by women in Isinya, Kajiado County.
3. To establish the challenges facing women's access to/use of the mobile phone in their quest to achieve sustainable enterprises in Isinya, Kajiado County.

1.4 Justification of the Study

This study facilitates a better understanding of the role played by the mobile phone to empower women and develop businesses. Women, who are considered to be the largest group of ICT users, may acquire information on how they use the mobile phone to their advantage to make their enterprises thrive. It may give women entrepreneurs' insights on how best to develop their business at a reduced cost and time. The women entrepreneurs will also be aware of other mobile phone applications they can use to increase their product visibility hence bridging digital divide. This study will also help curb unemployment among the women as they will use it to understand better how they can increase their income through use of the mobile phone.

1.5 Scope and Limitations

The study only focused on the issues specified in the objectives which include mobile technology and its empowerment on women in Isinya, Kajiado County only and will be guided by gender schema theory. The study only covered women enterprises. The study focused and limited itself to the use of mobile telephony as a tool for empowering women. The choice of this technology was due its accessibility and affordability among other advantages. This study was done on women entrepreneurs in Isinya, Kajiado County. The categories of the enterprises considered in the survey were from all sectors of the economy, these include; agriculture, energy, Health services, hospitability, real estates, information Communication Technology services, logistical services, manufacturing, Retail and Distribution.

2.0 LITERATURE REVIEW

2.1 Introduction

This section reviews various pieces of literature on mobile technology usage and women empowerment. The literature provides insights that inform and shaped the study in terms of the study focus areas and inherent themes. This chapter also highlights the theoretical framework of the study and conceptual framework that will be adopted in the study.

2.2 Mobile technology usage and women empowerment

The setting of strengthening and whether the cell phone is an engaging device is an issue of enthusiasm for this study. Talks among specialists give contrasting points of view. Kabeer (1999) places that ladies' strengthening is about the procedure by which the individuals who have been denied the capacity to settle on key life decisions get such capacity. This capacity to practice decision joins three entomb related measurements: assets (characterized comprehensively to incorporate access, as well as future cases, to both material, human and social assets); office (counting procedures of basic leadership, and in addition less quantifiable signs of organization, for example, arrangement, misdirection and control); and accomplishments (prosperity results).

Kabeer (1999) contends that these three measurements of decision are unbreakable in deciding the significance of a pointer and subsequently its legitimacy as a measure of strengthening. For cell phones to add to strengthening they need to fit inside the three measurements. He alerts that an expert from the outside may utilize an arrangement of significant worth judgments to characterize and measure strengthening, utilizing values which may not hold any importance whatsoever for the ladies included. He exhorts that political, social and financial components should all be inspected in light of the fact that they impact the thoughts of strengthening and they way it is characterized (Kabeer, 1999). Malhotra et al. (2002) see strengthening in an unexpected way. They contend that "strengthening" has been utilized all the more frequently to advocate for specific sorts of arrangements and intercession systems than to break down them, as shown by various archives from the United Nations (United Nations Division for the Advancement of Women (UNDAW) 2001; United Nations Children's Fund 1999), UK Department For International Development (2000), and different associations.

Bennett depicts strengthening as "the upgrade of advantages and capacities of various people and gatherings to connect with, impact and consider responsible the foundations, which influence them." Social incorporation is characterized as "the evacuation of institutional hindrances and the improvement of motivations to build the entrance of different people and gatherings to resources and advancement openings." Bennett takes note of that both of these definitions are planned to be operational, and portray forms as opposed to end-focuses

In the World Bank's Sourcebook on Empowerment and Poverty Reduction, Narayan (2002) recognizes that ladies' strengthening envelops one of a kind components. Initially, ladies are not only one gathering among a few impaired subsets of society (poor people, ethnic minorities, and so on.) they are a crosscutting class of people covering with all these different gatherings. Second, the family and interfamilial relations are a focal locus of ladies' debilitation in a way that is not valid for other impeded gatherings. This implies endeavors at enabling ladies must be particularly discerning of the ramifications of more extensive arrangement activity at family level.

Women strength requires systemic change in an extraordinary organizations, but rather on a very basic level in those supporting patriarchal structures. /In characterizing strengthening, choices, decision, control, and power are regularly alluded to as critical to ladies' capacity to settle on choices and influence results of significance to themselves and their families. Control over one's own life and over assets is additionally frequently pushed. In this manner, there is visit reference to some variation of the capacity to "influence one's own prosperity," and "settle on vital life decisions."

2.3 Use of mobile phones to enhance entrepreneurial success

The utilization of the cell phone among ladies in business is affected by various variables that likewise seem to impact the advantages from and probability of strengthening (or absence of it) of ladies in business. Along these lines, the sort of the business that ladies choose to embrace is gendered. Kalundo (2004) found that ladies' profitable exercises were packed in miniaturized scale/ventures, for example, selling, retail, fabricating, and occasional market exchange. In such manner ladies were amassed in ventures that fit in with their customary sex parts, e.g. sustenance handling and piece of clothing making.

This circumstance is clear in Kenya. The 2013 Central Bureau of Statistics overview found that while the quantities of endeavors claimed by ladies and men were practically equivalent, ladies dwarfed men in administrations (55.7%), while men dwarfed ladies in assembling, (65.7%) and development (91.2%). This decision likewise characterized productivity of the ventures. Ladies possessed organizations created less income than those claimed by men (which earned 74% more; Central Bureau of Statistics, 2013).

Aptitudes base decides decision of business. Gakure (2004) takes note of that when ladies need or need to procure cash they swing to their household aptitudes to misuse in the smaller scale undertakings. In this way, the decision of business gone into was to a great extent gendered in any case. This is aware of the social predisposition in instruction and preparing and consequent profession decisions characterized by social setting. The decision of the business characterizes the data needs, which thus characterize the ICT apparatuses (Kalundo 2004).

The legitimate status of the business additionally decides data needs and ICT instruments. As per Tandon (2002), independent ventures for the most part have no choice however to stay casual to maintain a strategic distance from the difficulties of the customs of tax assessment, announcing and authorizing, taking note of this amid preparing exercises in Tanzania, Lithuania, Cameroon and Mozambique. It is just when the business ends up noticeably bigger that business visionaries consider different types of ICTs. Therefore, lawful status impacted the sort of business instruments they expected to get to data and the cell phone was regularly the start and end of ICT speculation for data access, with coming about high entrance among independent companies.

Entrance of the cell phone is high among the little and medium endeavors (SMEs) in Kenya. As per an investigation by Maru (2004) among 50 business visionaries in Eldoret, there was a critical entrance of cell Phones, that is, 88% of the aggregate ICT apparatuses utilized were cell phones. The respondents demonstrated that, cell phones made their correspondence speedier and less demanding, less expensive and this converted into higher deals. The most essential data required was available and providers. So also, Mureithi (2005), revealed high infiltration of the cell phone among SMEs in a mechanical bunch in Nairobi known as Kariobangi Light Industries with 450 plots, at 93.8% against entrance

of the settled line of 29.7%. Of those without a landline, 22.0% said they didn't require one.

The care groups of ladies impact the devices used to get to data. Ladies utilized close, casual care groups for their organizations their companions, relatives and ladies' gatherings. Hisrich and Peters (2002) noticed that ladies counseled their mate first on real choices for their organizations the inverse of men, who counseled their' mate last. By counseling casually, data stream took after this example, with the cell phone being characterized as the best instrument.

The necessities of business and utilization of the data were additionally educated by the inspiration for building up the business in any case. The investigation by Imbaya (2004) situated in Eldoret, Kenya, looked to decide the degree of entrepreneurial manner and its impact on execution among ladies, with a pursuit of social components affecting development and improvement of female worked undertakings. In this investigation of 175 female worked endeavors, Imbaya (2004) found that most performed ineffectively, and the reason proposed for this was absence of locus of control. For the majority of the ladies (68.6%) the choice to start a new business was controlled by individuals other than themselves, including spouse (24.6%), guardians (27.4%) and companions (13.1%). The choice to start a new business was a self-decided act gone before by their very own unmistakable meaning circumstance by just 31.4% of the ladies. Business was hence a need instead of an open door. Keeping in mind the end goal to accomplish development they have to reclassify their circumstance with the goal that they see the business as a way to more noteworthy flourishing for themselves and their families.

2.4 Empowerment of women entrepreneurs through the mobile phone information service

Women in developing countries are separated by their family and work circumstances, and the absence of framework for contact with urban-based data assets, (Nath, 2001), Illiteracy, absence of occupation aptitudes, and absence of time to get to data from urban territories on account of childcare obligations all hinder these ladies from getting to data and monetary open doors, restricting their capacities to settle on educated choices and

increment their welfare, (WCW, 1995). This absence of correspondence in benefit and work just strengthens destitution for them and their youngsters, (Jiyane and Ocholla, 2004).

Numerous ladies are not ready to address their family's issues through their deliver yields and should supplement their wage to survive, which they do by making independent ventures, or benefits, and by exchanging. These independent ventures keep running by ladies (Khasiani, 2003) possess large amounts of country and urban territories alike, making a huge casual market economy in numerous nations that contributes altogether to building up the national economy. The adaptability of their organizations, which are exceptionally differing in nature, enables them to proceed with family, childcare and farming work. It likewise makes an income amongst urban and rustic regions from the work' of female merchants who go between the two. Ladies depend vigorously on them for their product needs. This enables rustic zones to grow monetarily. Be that as it may, access to applicable data to meet their data requirements for development and maintainability of the independent companies they run has been a noteworthy test. In Chennai, India, a system of ladies' gatherings built up since 2001 to extend chances to advertise items utilizing cell phones for correspondence announced a relationship (Joseph 2005). Through the system, the ladies have expanded' their salary, constructed certainty for the improvement of their families, and are progressively more inspired. Therefore the venture has discovered that the cell phone was a strengthening device among ladies (Joseph 2005).

Other work in Africa has a tendency to depict an alternate point of view. An investigation by the United Nations Development Fund for Women (UNIFEM) referred to in Huyer et al. (2005) noticed that in four Southern African nations ladies were missing out on growing business arranges by depending on cell phones as opposed to the Internet. By depending on the telephone (settled and cell phone), they restricted their contacts to casual family systems - and in this way constraining their potential for business development. At the individual level Huyer et al. (2005) referred to an examination supported by the International Development and Research Center led in the final quarter of 2004 among 6750 people and 380 establishments in six nations of Francophone West Africa. This found men regularly felt that the new opportunity of ladies to have cell phones was destabilizing

their conjugal relationship. By and large, men observed the cell phone and Internet utilization of their companions. While the cell phone exhibited a pick up in Chennai, dependence upon it is not seen as helpful in Southern Africa and without a doubt it is even a reason for trouble in ladies' associations with men (Huyer, et al. 2005; Joseph, 2005).

2.5 Challenges to access to/use of mobile phones

Review of existing literature demonstrates that get to (or absence of it) to the cell phones and ICTs is because of various contrasting components. In a general sense, access to ICT instruments is general low in the public arena particularly in Africa. Marcelle (2002) recognizes that numerous ladies worldwide are as yet not completely ready to profit by utilizing these instruments because of absence of availability, lacking access, ignorance, and dialect and behavioral hindrances, among others. A more profound comprehension of these hindrances was given by the UNDAW Expert Group Meeting (2002) held in Korea to investigate courses in which the fast dispersion of ICTs and related development of the ICT part offered both open doors and dangers to ladies' strengthening.

The investigation distinguished six non specific difficulties (mindfulness, legislative issues, get to, pertinence, manageability, and coordination) that can fundamentally influence any ICTs for advancement activity, regardless of whether at worldwide, national, local or neighborhood level. These difficulties must be considered in any push to expand profits by ICTs. Such advantages are, as indicated by Jorge (2002), influenced by access to data and the presence of correspondence systems serving ladies' needs. Ladies' systems have significant potential for the successful exchange of data, and spouses and other male kinfolk are additionally distinguished as critical wellsprings of data. Natasha (2003) distinguishes social and social developments of sex, absence of education, destitution, absence of get to and dialect obstructions among the variables thwarting ladies' entrance to ICTs in creating nations.

The uncontrolled utilization of ICTs in working environments has many burdens that obstruct the advance of work. Numerous representatives utilize organizations' PCs for questionable purposes. What's more, they may surf the Internet amid available time. In this manner, representatives may not play out the work required of them in the constrained time accessible. Caplan (2006) clarifies that digital loafing and individual web utilize may

hinder efficiency. The utilization of a PC in the work environment once in a while prompts a downturn in representative execution and efficiency. Unsecure cell phones have turned into a typical issue for workers because of advanced culprits. They focus on workers' cell phones by utilizing recently created programs. These projects can sidestep cell phone security to take essential data and mess with the substance of the telephone. Also, these advanced offenders can send the information to their PCs or to other cell phones. As per Dibben (2009), if the clients reacted, the culprits could then get to telephone clients' close to home information and send it somewhere else. In this way, programmers assault clients' cell phones utilizing new programming to take critical data.

2.6 Theoretical Framework

The theoretical basis for this study is anchored on the gender schema theory discussed below.

2.6.1 Gender Schema Theory

Gender schema theory proposes that gender-based schematic processing is the basis of sex typing phenomenon. Sexual orientation diagram hypothesis recommends that sex based schematic handling is the premise of sex writing wonder. The hypothesis, progressed by Bem (1981) and partners has focused primarily on singular contrasts in sexual orientation schematic handling of data. Especially, the hypothesis suggests that when the self-idea is imbued in the sexual orientation pattern, the sex writing develops. This sex based schematic preparing comes somewhat from penetrating emphasis on the useful importance of the sex partition (Bem, 1981).

A diagram is conceptualized as the intellectual structure or a system of affiliations that organize and encourage a person's recognition (Bem, 1981). As a structure, pattern absorbs new data in connection to that specific blueprint. Along these lines, schematic preparing is impressively particular and enables people to frame structure and significance onto a wide assortment of new boosts or affectations. In the schematic handling, what is seen is a mix of communication between internal data and the prior pattern of the perceiver. Along these lines, sexual orientation blueprint hypothesis declares that sex writing originates from sex based schematic preparing, coming from general slant to handle data in view of the sex-associated affiliations that shape the sex outline. The sex construction is an element of

socialization handle where youngsters are associated to be men or ladies. Consequently, men and ladies have diverse pattern and in this manner discernments and preparation to handle data and utilize the wellsprings of data are distinctive. In the socialization procedure, individuals realize which qualities are related with their sex and in this way with themselves.

In connection to sexual orientation pattern hypothesis, women's activist examination has prepared in offering a remedial to sex visual impairment in the advancement of ICTs. Research examinations on the reception, dissemination and effect of ICTs must perceive the sex relations found in the public eye as entirety. Furthermore, Rakow and Navarro (2008) affirmed that there are sex contrasts in the way cell phones are obtained and are made utilization of. For instance, when the cell phone was first presented in Kenya in the mid 1990s, ladies generally utilized the calling administration to keep up their associations with their spouses and dealing with their families. Consequently, men for the most part trusted that ladies required cell phones chronically for security reasons.

2.6.2 Relevance of the hypothesis to the investigation

Sexual orientation outline hypothesis is significant to this examination since it shows how ladies are minimized in data correspondence innovations (ICTs) and financial advancement talk in view of the sex mapping. The hypothetical perspectives in the sexual orientation diagram hypothesis demonstrates that sex flow assume a urgent part with regards to the investigation of ladies business visionaries. In this examination sex hypothesis gives experiences by shading light on the accompanying (Leinbach and Hagen, 2014). From a sex mapping hypothesis perspective, correspondence innovations, for example, the cell phone can expand ladies' liberation in the economy, on the off chance that they have evenhanded (Martin and Halverson, 2011).

Sexual orientation pattern hypothesis relates well with gendered utilization of ICTs, including the cell phone. It turns out to be of criticalness when it goes ahead examining the exploration question on the advantages gotten from cell phone use in ladies business visionaries in Kenya. All the more in this way, sex hypothesis expects to remedy sex visual impairment in ICTs use and ladies business enterprises. Sex hypothesis guesses that ladies are as a general rule the last on-screen characters to profit by ICTs as a monetary asset in

the public arena. This theory manages the exploration question with reference to what challenges ladies business people confront in utilizing cell phone benefits in Kenya (West and Zimmerman, 2011). Finally, from the sexual orientation construction hypothesis, it is conceivable to estimate the boundaries that ladies would confront in their reception of cell phone innovation, in light of the sex blueprint and in this manner help answer the third research question.

2.7 Conceptual Framework

Independent

Dependent

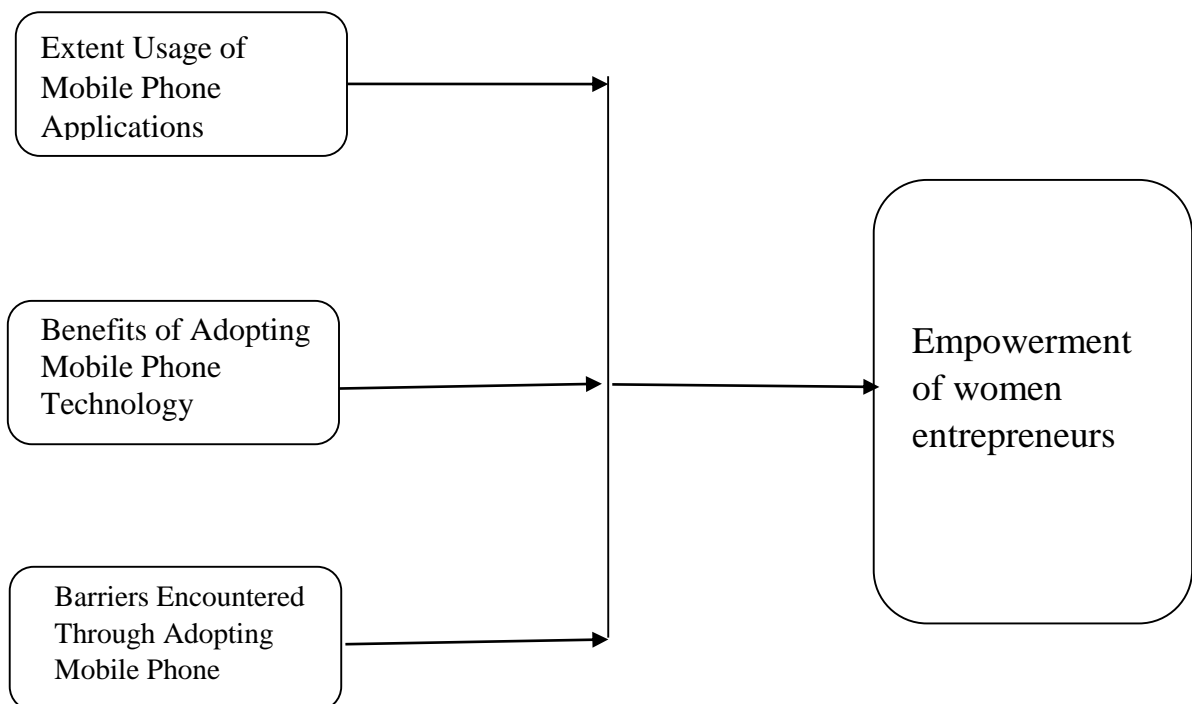


Figure 2.7: Conceptual Framework

2.8 Assumptions

The following assumptions guided the study:-

1. There exists many mobile applications and services that support women entrepreneurship in Isinya, Kajiado County.
2. Mobile phone information service has been used to enhance entrepreneurial success among enterprises in Isinya, Kajiado County.
3. There are challenges facing women's access to/use of the mobile phone in their quest to achieve sustainable enterprises in Isinya, Kajiado County.

3.0 METHODOLOGY

3.1 Introduction

This section discusses the research design, study population, sampling procedure and sample size, data collection methods and data processing. The section also outlines the ethical issues.

3.2 Research Design

The study employed a cross-sectional using mixed method of data collection. Cross-sectional research seeks to study phenomena at one point in time. By using the design, the study investigated the empowerment of women entrepreneurs through mobile telephony technology. The use of mixed method helped collect both qualitative and quantitative data and the methods helped in triangulation where the strengths of one method offset the limitations of the other.

3.3 Study Site

Kajiado County is situated in the southern Kenya and has an area of 21,900km² and a population of 687,312 as per the 2009 population census (GOK, 2013). It borders Nairobi County to the North East, Narok County to the West, Nakuru and Kiambu Counties to the North, Taita Taveta County to the South East, Machakos and Makueni Counties to the North East and east respectively, and the Republic of Tanzania to the South (GOK, 2013). It is a metropolitan county with five administrative sub-counties namely Isinya, Kajiado North, Kajiado Central, Mashuuru, and Loitoktok. Isinya is a rural-urban setting covering an area of 1056km² with minimum threshold of 10,000 people (Kenya National Bureau of Statistics, 2013).



Figure 3.3: Study Site Map

Source: Kajiado County Integrated Development Plan 2013-2017

3.4 Study Population and Unit of Analysis

A population is a group of individuals, objects or items from which tests are taken for estimation. In this examination, populace was ladies business visionaries in Isinya, Kajiado County. As per Mugenda and Mugenda (2003), a populace is characterized as an arrangement of individuals, administrations, components and occasions, gathering of things or family units that are being researched. It is the whole gathering or components that have no less than one thing in like manner (Kombo and Tromp, 2006). The unit of analysis was the individual woman entrepreneur in Isinya, Kajiado County.

3.5 Sample Size and Sampling Procedure

The study used stratified random sampling using the different types of business enterprises from all sectors of the economy, these include; agriculture, energy, health services, hospitality, real estate, hand-craft, logistic services, ICT services and manufacturing. In the sampling, the study will target women entrepreneurs at least 18 years and use mobile telephony technology in their enterprises in Isinya, Kajiado County. These served as the criteria of inclusion. The study targeted 50 women entrepreneurs for the survey and 3 women only focus group discussions. The researcher solicited participation from the women meeting the criteria of inclusion and if they agreed to participate in the study, they were recruited as study participants.

3.6 Data Collection Methods

3.6.1 Survey

The study used survey method to collect quantitative data. The tool for this method was a questionnaire. The questionnaire had both open-ended and close-ended questions targeting to establish the empowerment of women entrepreneurs through mobile telephony technology in Isinya, Kajiado County. Data from the questionnaires augmented data from the focus group discussions.

3.6.2 Focus Group Discussion

Three women-only focus group discussions (FGDs) were held across Isinya sub-county. The FGDs helped collect qualitative data. A focus group discussion guide was used as a tool and focused on key themes in relation to mobile telephony technology and empowerment of women entrepreneurs.

3.7 Data Processing and Analysis

Both quantitative and qualitative data analysis methods were used. Quantitative analysis from the questionnaires checked for completeness and cleaning was done. The data was then coded and analyzed using the Statistical Package for Social Sciences (SPSS). It was presented using figures, tables and charts in the manuscript.

Qualitative data from focus group discussions was transcribed in English. Using content and thematic analysis, codes and themes were developed from the transcripts. Direct

quotes reflecting major themes were extracted and presented in the reporting of the findings.

3.8 Ethical Considerations

The approval to conduct the study was sought and obtained from the Institute of Anthropology Gender and African Studies and National Commission for Science, Technology and Innovation (NACOSTI). The researcher issued the participants with informed consent forms which they signed. In the informed consent, the participants were informed about the purpose of the study and the procedure used. They were also informed that participation in the study was to be voluntary and that they were free to withdraw at any stage. Another aspect of ethical consideration was confidentiality and anonymity. Here, the participants were assured that the information they gave will remain confidential and would not be used for other purposes. In anonymity, the participants' identity was not divulged or connected to the information they gave. Thus, no names were used in the study and any identifier was removed or pseudonyms used.

CHAPTER FOUR: EMPOWERMENT OF WOMEN ENTREPRENEURS THROUGH MOBILE TELEPHONY TECHNOLOGY

4.0 Introduction

This chapter presents the findings of the study in relation to the study questions and objectives. The study sought to determine which mobile phone applications and services that support women entrepreneurship in Isinya and the extent to which the information obtained enhance entrepreneurial success among the enterprises owned by women. The study also sought to identify the challenges that women face in access and use of mobile phones in their quest to achieve sustainable enterprises in Isinya. The chapter however first presents the socio-demographic characteristics of the respondents collected in the study.

4.1 Socio-demographic characteristics of the Respondents

All targeted respondents answered to the study questions and this yielded a 100% response rate and allowed meaningful data analysis, presentation, and interpretation. The characteristics measured in this study were age, education background of the respondents, occupation (business category), and marital status. All respondents were women entrepreneurs.

4.1.1 Age of the Respondents

In the study, most respondents aged between 18 and 25 years and accounted for 36% of all the respondents as shown in table 4.1. Age category or group 26-35 had 15 respondents, representing 30% while those aged between 36 and 45 years accounted for 18%. While only 1 respondent was aged above 56 years, 7 (representing 14%) belonged to 46-55 age categories as shown in table 4.1.

Age Category	Frequency	Percentage
18-25	18	36
26-35	15	30
36-45	9	18
46-55	7	14
56 and above	1	2
	50	100

Table 4.1: Age of the Respondents

4.1.2 Education

The study sought to establish the highest level of education attained by the respondents. The respondents' levels of education are illustrated in Figure 4.1. Accordingly, only 2 (representing 4%) had attained University education while the majority (44%) had attained primary education. Those who reported to have secondary education were 16 (32%), while 10 respondents (20%) had tertiary education.

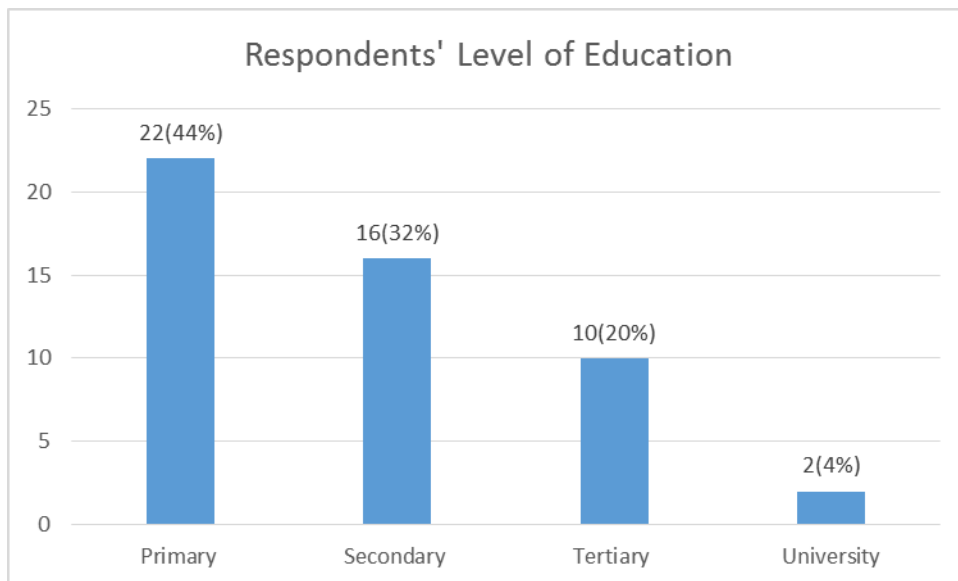


Figure 4.1: Respondents' Level of Education

4.1.3 Marital Status

Figure 4.2 shows the marital status of the respondents. Majority of the respondents (56%) were married, only 5 (10%) were widowed, 11 (22%) were single and 6 (12%) divorced.

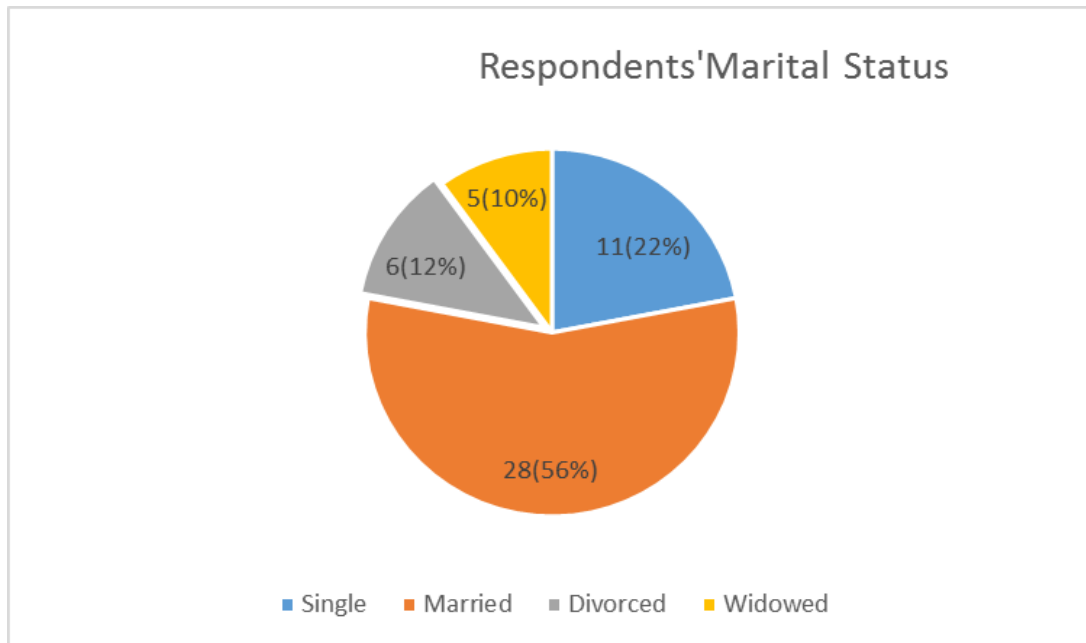


Figure 4.2: Marital Status of the Respondents

4.1.4. Occupation

The study sought to establish the entrepreneurial activities that the respondents engaged in. The categories were developed depending on the kind of entrepreneurial activity each respondent reported. Resultantly, there were four categories namely, trade, production, service, and hand-craft. Most respondents (20), representing 40% were in trade while only 10 (20%) were in hand-craft business. The production category or industry accounted for 12% of the respondents while the service industry accounted for 14 (28%) of the respondents. These are shown in Figure 4.3.

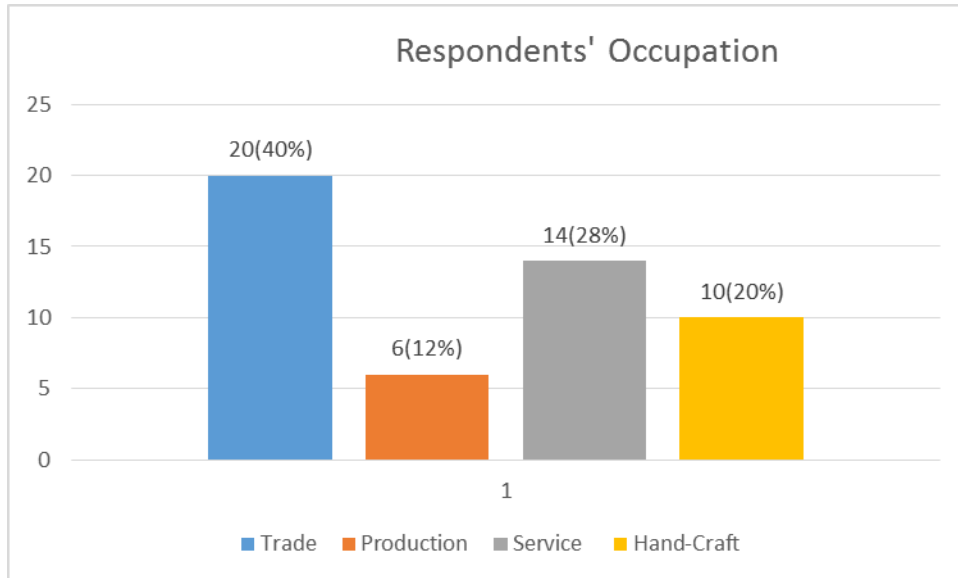


Figure 4.3: Respondents' Occupation

4.2 Mobile phone applications and services that support women entrepreneurship

The figure above on the occupation of women respondents in the study shows that all engaged in some form of entrepreneurial activity. The study sought to identify what mobile applications and services support women entrepreneurship, as the first objective. The findings showed mobile use is a fundamental aspect in empowering women entrepreneurs. The underlying service women entrepreneurs accrue from mobile telephony is the ability to communicate and interact among themselves, suppliers, customers/clients and other parties involved in business. Mobile phones enable women coordinate and better manage their enterprises. All respondents agreed that they have used mobile services and at least one application to run their businesses. However, there were variations in terms of the range of the applications. These are: **M-farm, NikoHapa, Olalash, iCow, M-Pesa, WhatsApp, My Social Media, M-shop, M-Pepea**

The figure below shows the distribution of mobile phone applications that support women entrepreneurs.

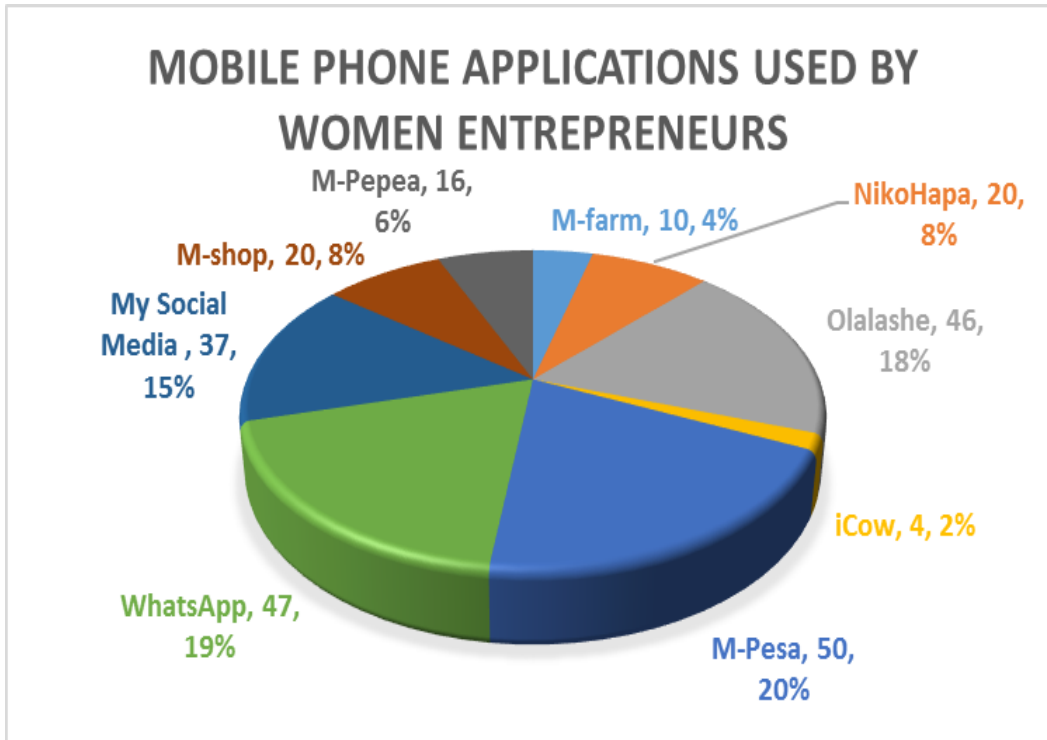


Figure 4.4: Mobile phone applications used by women entrepreneurs (Multiple Responses)

The findings revealed that women entrepreneurs use a variety of mobile phone applications and these support their enterprises. Apparently, M-Pesa application and services were found to be used by all respondents interviewed. Other applications are used variously, with iCow ranking low in terms of use at 2%.

Qualitative data showed that women entrepreneurs use the mobile phone applications for different and reasons as revealed by the FGDS.

I use WhatsApp to connect with clients, suppliers, and my fellow traders. Actually, we have a group where we share market information amongst us (FGD 3 Discussant)

The mobile phone applications and services I use help me to send and receive money from clients and suppliers and also help me get some loans (FGD 1 Discussant)

Although being a farmer in this place can be hard, this application called iCow has really helped me because that is where I get information on how to attend to my cows and can link with the veterinary officer (FGD 2 Discussant)

From the quotes in the FGDs, it is apparent that women entrepreneurs use mobile phone applications for facilitating their business including money transfer and reaching out to clients and suppliers. The women entrepreneurs also share and obtain information for running their businesses from these mobile phone applications. The use of the applications also points out to the benefits that women entrepreneurs accrue.

4.3 How mobile phone service enhance entrepreneurial success among enterprises run by women

The study sought to investigate the extent to which the mobile phone services boost entrepreneurial success among the women-owned enterprises. The findings showed that there is a wide range of benefits that women entrepreneurs accrue from the use of mobile phone applications. These benefits add to the success of the enterprises. All respondents answered to the affirmative that there are many benefits of adopting mobile phone technology in business and that this has contributed immensely to the growth of their enterprises.

In order to determine the extent to which mobile phone services enhance entrepreneurial success among the enterprises owned by women, the respondents were asked to give specific benefits. These benefits were classified according to the emerging themes: Increased access to market information, networking among women entrepreneurs, enhanced communication with clients/suppliers, reduced costs. The frequencies of the responses on how mobile phone services and applications benefit women entrepreneurs are shown below.

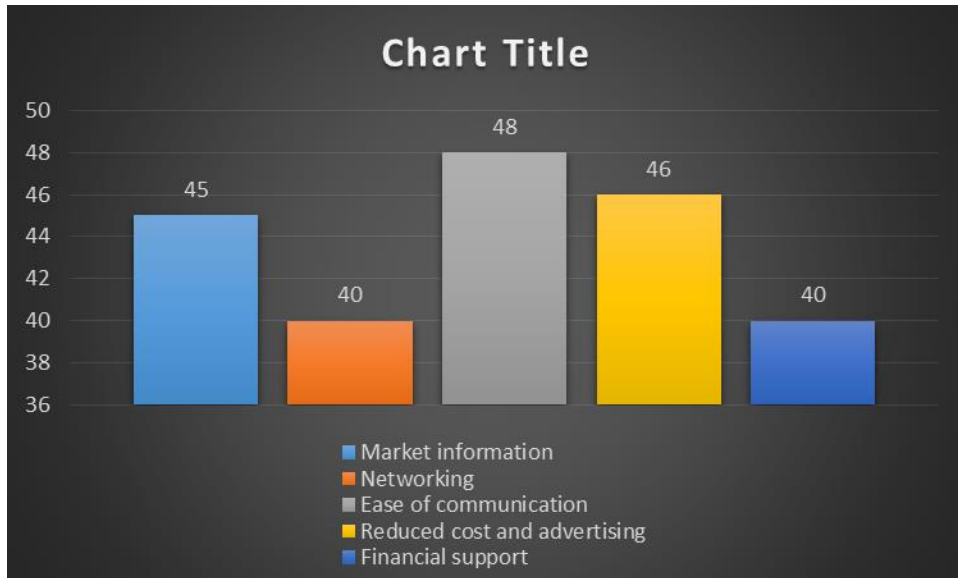


Figure 4.5: Benefits of Mobile phone services and applications among women-owned enterprises (Multiple responses)

4.3.1 Market Information

The results showed that women benefit from mobile phone services through enhanced access to market information. Quantitative data showed that 45 respondents, accounting for 90% said that mobile applications and services have helped them have great access to market information. This is in regard to market prices, demand, and legal dynamics. This was amplified by the focus group discussions as illustrated by the quotes below.

For me, I am aware of what is happening in the market through my phone applications such as WhatsApp. I can also reach my suppliers and other service providers readily. This way I can plan accordingly for profitability (FGD 3 Discussant)

When it comes to this [accessing market information], I can say that it is true. This is because I have downloaded M-Farm on my phone. With it [M-Farm], I am able to know the retail prices of products. This enables me to know the appropriate time and location to sell my products.

Thus, mobile phone services and applications enhance growth of enterprises owned by women through availing market information and linking them with service providers, thereby helping the women make appropriate decisions.

4.3.2 Networking

The findings indicate that women entrepreneurs in Isinya are brought together by mobile phone services and applications. Quantitative data reveals that 80% of the respondents cited networking among themselves as one of the key benefits. The results showed that women entrepreneurs have formed groups where they not only interact but also exchange information for the welfare of their businesses.

Data from the FGDs also revealed that through this networking, women entrepreneurs make groups among them for financial support including creation of savings groups among themselves. Consider the quotes below.

A friend of mine introduced me to NikoHapa. That time I was still using my WhatsApp. Both of these helped me connect with other women traders and we now have a savings group (FGD 2 Discussant).

Through the services and applications of mobile phones, I am able to connect with many people. Some of us have similar interests and we have thus merged into a group. In the group we share a lot of information including how to boost our businesses (FGD 1 Discussant)

The social media has really helped us women here [in Isinya]. I use Facebook to know how my business friends deal with certain problems (FGD 2 Discussant)

Through the mobile phones, women entrepreneurs have formed networks that support their businesses through strategies and also financially.

4.3.3 Ease of Communication

Communication is important for any business. The study findings indicated that women entrepreneurs in Isinya can send and receive information even when not related to market

or business directly. Quantitative data show that 96% of the respondents cited communication as a major benefit women accrue from the mobile phone services and applications. This was confirmed by the FGDs as illustrated by the quotes below.

Unlike before, now I can talk to anyone no matter where they are. This is because the phones have many ways of reaching out to other (FGD 3 Discussant)

There is one application that we [women in Isinya] love very much. It is called Olalashe. I had a problem when the vehicle carrying my goods broke down. I used Olalashe and was able to alert my people and one friend who is a businesswomen about the problem and they helped me. I would say this is the power of easy communication (FGD 1 Discussant)

The view that it is easy to send a message and alert others on an issue is a benefit that women entrepreneurs have benefitted from in Isinya.

4.3.4 Reduced Cost of Doing Business

Another benefit associated with the use of mobile phones is the reduced cost of doing business. According to the study findings, women entrepreneurs cited mobile phones as enablers towards cost reduction due to efficiency. Around 92% of the respondents cited reduced cost of doing business as a benefit they get from the mobile phone services and application. This view is supported by one quote from one of the FGDs.

When people can communicate easily, it means that do not have to go for physical meeting when it is not necessary. This not only saves money but also time. There is a time I called a colleague who agreed to carry for me the goods together with hers'. In that situation, I saved a lot of money (FGD 1 Discussant).

The benefit of reduced cost was also coupled with the benefit of increased sales. Some women entrepreneurs reported to have diversified markets and increased sales through the use of social media, WhatsApp to advertise goods and services. Consider the quote below.

I reach more customers through my Facebook account where I post my products for potential customers to see (FGD 3 Discussant)

Therefore, mobile phone services play a significant role in enhancing businesses owned by women through reducing cost incurred in various stages. Findings revealed that women entrepreneurs also save time.

4.3.5 Financial Services

Evidence from the study's findings shows that women have access to financial and credit services through mobile phones applications. The major applications cited in this case include M-pesa, M-pepea. Of all the respondents, 80% cited to have benefited from the mobile phone applications and services by accessing loans and credit facilities of different packages. The FGDs supported this view.

Although we have some problems with M-Pepea because of employment restrictions, we enjoy full services of M-Shwari that comes with M-pesa. I have been a beneficiary of this more time than I can remember. When you want to buy some goods for sale and you run short of cash, you can borrow from the phone without going to banks. There is low interest too (FGD 3 Discussant)

I get loans from my phone. I am also able to save because there are savings accounts there. I can say these services came and changed everything. It is also fast (FGD 1 Discussant)

These also revealed that there is ease of access to loans and the benefit of low interest compared to the commercial banks. These services from mobile phone essentially enhance economic empowerment of women and promote their businesses as well.

4.4 Challenges facing women's access to/use of the mobile phone Services

As the third objective, the study sought to investigate the kinds of barriers or challenges that women entrepreneurs face is accessing and using mobile phone services. In so doing, the respondents were asked open-ended questions in the survey and the focus group discussions also elicited responses on the barriers. Collectively, the responses fell into two major categories or themes: information gap/illiteracy and socio-cultural barriers.

4.4.1 Information gap/Illiteracy

Both qualitative and quantitative data showed that women entrepreneurs in Isinya sub-County lack information on the “hidden” importance of mobile phone services on one hand and lack of knowledge on how to use the services optimally. This finding may be attributable to the considerably low levels of education among the women as it corresponds well with the education level presented in Figure 4.1. However, this barrier is only apparent prior to use and after learning how to use mobile phones and manage the applications, women entrepreneurs overcome the challenge. Consider the quotes below.

These things [phones] came the other day and some of us may have problems in using them especially when they are complicated. However, for me I get help from my children and they have taught me how to download and use applications that I want (FGD 1 Discussant)

You may have a phone, but you don't know how to use it. At first, this is always a challenge. I did not know that the phone can help me this much until when a friend showed me that there are hidden benefits (FGD 3 Discussant)

Responses from the survey showed that some women may struggle with operating the applications and using them well. While the problem of intruders (through hacking) was cited by few respondents, its persistence rests on limited knowledge on how to secure phones

4.4.2 Socio-cultural Barriers

The other set of barrier that the study found to limit women's use and access to mobile phones are on socio-cultural foundation. Essentially, the socio-constructions of gender including power and relations were found to create a barrier on how women access and use mobile phones service to promote their enterprises. This was more apparent among married women entrepreneurs. Data from the FGDs illustrated this well.

Here [Isinya] men have a lot of power. They may feel bad when we have phones and they may not have. So he can take yours and give you the one that does not have the applications you want (FGD 2 Discussant).

If I have to own a nice phone, it means that I get my husband one first. This is because culturally, you may not have something good when he doesn't have (FGD 1 Discussant).

Respondents also cited restriction from the society and husbands particularly as a barrier to use of mobile phones. Consider the quote below from FGD 3.

When using your phone probably at night, it may not be appropriate because women here are supposed to be listening to their husbands. Some [men] may even suspect that you have an affair with other men. He may not trust you (FGD 3 discussant).

Thus, socio-cultural issues that influence how men and women relate may pose important barriers for women entrepreneurs. Similar findings were reported by Natasha (2003). Accordingly, social and cultural constructions of gender may hinder women's access to information and communication technology in developing countries.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the study findings on the objectives. These were: to identify the mobile phone applications and services that support women entrepreneurship in Isinya, how mobile phone services enhance entrepreneurial success on enterprises owned by women; challenges women face in access and use of mobile phones and services. The chapter also presents study's conclusion, the recommendations and areas of further research.

5.1 Summary of Findings

The study findings showed that in the phase of advanced information communication technology, women entrepreneurs in Isinya, Kajiado County have embraced the transformation. This is demonstrated in their use of mobile phone services and applications to advance their enterprises. They use discrete applications and services and these have fundamentally enhanced entrepreneurial success. However, this has not come without various challenges or barriers.

5.1.1 Mobile Phone Applications that support women entrepreneurship

The study findings show that women in Isinya have kept the pace with development in information and communication technology by adopting mobile telephony technology. In this regard, the women entrepreneurs have not only used the mobile phones to enhance their social life but also to boost their enterprises. Specifically, the women entrepreneurs have adopted mobile phone applications that have supported the growth of the businesses and women entrepreneurship.

The findings indicate that women entrepreneurs in Isinya have adopted mobile phone calling services and the use of short message system to manage their businesses. In addition they have adopted business-enhancing applications and these include M-farm, NikoHapa, Olalashé, iCow, M-Pesa, WhatsApp, My Social Media, M-shop, and M-Pepea. These have been adopted variously, with M-pesa reporting 100% adoption, regardless of the business industry. WhatsApp was also found to be used by majority of women entrepreneurs across the business industries. Another criterion of adoption is the kind of business the women

engage in. For example, women entrepreneurs with farming business were found to have iCow and M-farm more than those who engaged in service industry. The service or need was also found to determine the choice or adoption of a mobile phone application. For example those who obtained loans and credit facilities tended to have M-pepea.

5.1.2 How mobile phone service enhance entrepreneurial success among enterprises run by women

The adoption and use of mobile telephony by women has spurred growth of enterprises owned by women. The study established that the mobile phone services have significantly enhanced the success of women-ran enterprises. There are various benefits women accrue from the inclusive mobile phone services. Firstly, the majority of the respondents enjoy the benefit of market information and this has contributed to the growth of their businesses. The study revealed that women are able to access a lot of information on the market dynamics including price and supply of goods as well as demand.

In addition, the findings revealed that women entrepreneurs have created strong links and networks among them through the mobile phone services. The mobile phone services act as common ground or meeting platform for distant-placed entrepreneurs who have similar interests. The findings show that women have used social media platforms and other mobile applications and services to create social and savings groups and that these serve as interactive platforms where women exchange ideas and benefit financially when there have savings groups.

Results also showed that women entrepreneurs find it easy to communicate with each other and their clients or suppliers. This idea rests on the view that unlike before, the women can easily call other people for help or inquire some information with little or no hassle. This benefit is also linked with the reduced cost of doing business. Apparently, by use of mobile phone services, women entrepreneurs cut cost through effective communication and bypassing unnecessary activities such as transport that would otherwise add the cost. On the same note, women entrepreneurs use mobile phone services to diversify market and advertising. The mobile applications are used as advertisement platform and have the capacity to reach wider audience.

Mobile phone applications were also found to have financial linkages. This is where women entrepreneurs use some of the services/applications to access loans/credit facilities and savings. This was found to have a direct effect in term of economic empowerment and contributed directly to the empowerment of women entrepreneurs.

5.1.3 Challenges

Women entrepreneurs may face the barrier of information gap regarding the importance and use of mobile phone technology. The study established that at first, women may lack the knowledge on the potential of the mobile phone services to transform their enterprises. This may hinder them from embracing the technology. In addition, they may initially face difficulties in operating the phone especially managing the applications. However, this limitation is offset after informal learning or training where women entrepreneurs gain the skills to use the mobile phones.

In addition, the study findings showed that there are socio-cultural barriers that women face in the access and use of mobile phones. Given the importance of mobile phone services in boosting entrepreneurship, this challenge would be detrimental to women entrepreneurs. Essentially, the prevailing gender constructions put women at a disadvantage in terms of ownership of the phones especially when the men do not have. The gender power relations and norms may also hinder women from using the mobile phone services.

5.2 Conclusion

The deductions drawn from the study address the importance of adoption of mobile telephony by women. The study concludes that mobile telephony technology has impacted the gender discourse and is a major pillar in empowering women. In the context of gender dimension, the adoption of mobile telephony technology has increasingly led to closing of gender gaps in terms of equality and more specifically in terms of closing economic gaps between men and women. Women have traditionally been relegated to back scene and suffer social and economic disadvantages. Even when they own businesses, various social and economic factors have rendered the women-owned enterprises redundant.

However, mobile phone technology and the services thereof have come in handy to restore the balance. The study findings have shown that through this breakthrough, women have adopted the services and their enterprises have significantly benefited. Women entrepreneurs have not only advanced socially but also economically because of the adoption of mobile telephony technology. Women are also open to adoption of technology. This is well illustrated by the study where the women entrepreneurs interviewed revealed receptive attitudes towards mobile telephony. This is partly based on the benefits their enterprises accrue from the technology.

There is an emerging correlation between women economic empowerment and technology. The study concludes that one of the ways to achievement of gender equality and emancipation of women from social and economic disadvantages is through technology. The underlying idea is that women's economic activities are well favored by technology. Mobile phone services and the applications for instance help women not only boost their businesses but also achieve financial or economic freedom.

5.3 Recommendations

1. Women empowerment programs and strategies need to tap into the potential of technology in transforming the lives of women and create advocacy for gender mainstreaming in technology
2. The mobile telephony technology is just one pillar supporting women empowerment. For sustainable empowerment, gender advocates and stakeholders need to devise and support complementary strategies especially the ones focusing on social realm for sustainable socio-economic inclusion of women.

5.4 Areas of Further Research

Despite the perceived women empowerment through technology as in adoption of mobile telephony technology, the study has identified critical barriers or challenges and are of socio-cultural foundation. Future studies can investigate the contextual underlying drivers of these socio-cultural drivers and recommend on best practices to address them.

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APPENDICES

Appendix I: Consent Form

EMPOWERMENT OF WOMEN ENTREPRENEURS THROUGH MOBILE TELEPHONY TECHNOLOGY: A CASE OF ISINYA, KAJIADO COUNTY, KENYA

Investigator: Jacinta Wakarindi Gitahi

Introduction

I am **Jacinta Wakarindi** from the University of Nairobi, Institute of Anthropology, Gender and African studies. I am conducting a study on **Empowerment of women entrepreneurs through mobile telephony technology: A case of Isinya, Kajiado County, Kenya**. You have been selected to participate in this study by the virtue of being a woman entrepreneur from this county.

Purpose

The study seeks to investigate the empowerment of women entrepreneurs through mobile telephony technology in Isinya, Kajiado County. This is through establishing to what extent mobile phone information service been used to enhance entrepreneurial success and the challenges facing women's access to/use of the mobile phone in their quest to achieve sustainable enterprises.

Procedure

If you agree to participate in the study you will be asked questions concerning the nature of your interaction with mobile telephony technology. The questions will be about the woman owned enterprise. Which mobile phone applications and services support women enterprises and challenges faced while accessing or using the mobile telephony technology in a woman owned enterprise.

Confidentiality

Your confidentiality will be maintained at all times and there will be no use of names or any possible identifiers that may connect you with the reports or publications that will be availed as a result of the study.

Voluntarism

Participation in the study is of voluntary nature and if you choose not to participate you will not be penalized in any way. You will also be free to withdraw from the study at any time and refuse to answer any question that you deem is too personal. However, I humbly request your full participation and cooperation in the study.

Contact Persons

In case of any questions you may have regarding the study, you may contact Jacinta Wakarindi through telephone number: 0732360887 or email address: jacintagitahi@gmail.com. Your participation in the study will be highly appreciated.

I _____ hereby voluntarily consent to participate in the study. I acknowledge that I have understood the explanation given to me with regard to the nature of the study by _____. I clearly understand that my role with regard to my participation which is completely voluntary.

Signature _____ Date _____

Signature _____ of

Researcher/Assistant _____ Date _____

Appendix 2: Survey Questionnaire

Introduction

My name is.....and am conducting a study on empowerment of women entrepreneurs through mobile telephony technology: a case of Isinya, Kajiado county, Kenya. With your honest answers, the interested stakeholders will have the right information to plan the way forward. You are hereby guaranteed that the information you give will be treated with utter confidentiality. Your participation in this study will be highly appreciated.

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

What is the name of your business (optional?)

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1. What is your Age Category?

18-25

26-35

36-45

46-55

Above

2. Highest level of education attained

Primary school

Secondary School

Tertiary

University

3. Marital Status

- Single
- Married
- Widowed
- Divorced

4. What kind of business (occupation)

- Trade
- Production
- Service
- Hand-Craft
- Other (Specify)

SECTION B: USE OF MOBILE PHONE APPLICATIONS IN EMPOWERING WOMEN ENTREPRENEURS IN ISINYA, KAJIADO COUNTY

5. Do you use mobile phone applications for your business?

- Yes
- No

If No proceed to section D

6. Which mobile phone applications do you use in your business?

7. How often do you use the mobile phone applications? Explain

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.....

SECTION C: BENEFITS OF ADOPTING MOBILE PHONE TECHNOLOGY IN EMPOWERING WOMEN ENTREPRENEURS

8. Are there benefits of adopting mobile phone technology in business?

Yes [] No []

Explain.....

9. Have you ever benefited from the adopting mobile phone technology? Explain

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.....

10. What other benefits of adopting mobile phone technology would you like to have in your business?

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SECTION D: BARRIERS ENCOUNTERED THROUGH ADOPTING MOBILE PHONE TECHNOLOGY IN EMPOWERING WOMEN ENTREPRENEURS

11. Are there barriers encountered through adopting mobile phone technology?

Yes No

Explain.....
.....
.....

12. Have you encountered any challenges from the adopting mobile phone technology? Explain

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.....
.....

Appendix 3: Focus Group Discussion Interview Guide

Introduction

My name is.....and am conducting a study on empowerment of women entrepreneurs through mobile telephony technology: a case of Isinya, Kajiado county, Kenya. You have been selected to participate in this discussion and with your honest answers, the interested stakeholders will have the right information to plan the way forward. You are hereby guaranteed that the information you give will be treated with utter confidentiality. The discussion will take about 15 minutes. Your participation in this study will be highly appreciated.

Questions

1. What is the extent of use of mobile phone services and applications by women entrepreneurs here?
2. Which mobile phone applications and services are used by women entrepreneurs in this place? Do the women know how to use them? Why if no.
3. Do mobile phone services and applications help women entrepreneurs boost their businesses? How?
4. What challenges do women face when accessing and using the mobile phone services and applications in their quest to achieve sustainable enterprises in Isinya, Kajiado County?
5. How can these challenges be addressed?