THE IMPACT OF KNOWLEDGE MANAGEMENT ON ECONOMIC EMPOWERMENT WITHIN COMMUNITIES: A CASE STUDY OF INFORMAL SETTLEMENTS IN NAIROBI, KENYA.

BY

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UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

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BY

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A Research Project Submitted to the Chandaria School of Business in partial fulfilment of the Requirement for the Degree of Masters of Business Administration (MBA)

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FALL 2017
STUDENT’S DECLARATION

I, undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed _________________________ Date _______________________

Nankya Maria Grace (ID 647607)

The research project has been presented for examination with my approval as the appointed supervisor

Signed _________________________ Date _______________________

Prof. Maina Muchara, PhD

Signed _________________________ Date _______________________

Dean, Chandaria School of Business
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ABSTRACT

The purpose of this study was to investigate the impact of Knowledge Management (KM) on economic empowerment within communities specifically focusing on informal settlements of Kibera, Mathare, Korogocho and Mukuru of Nairobi, Kenya that are supported by Umande Trust. It tested 3 research questions: First, establishing the effect of knowledge generation on economic empowerment, whether existing knowledge sharing mechanisms affect economic empowerment, and how ICT-enabled knowledge management affects economic empowerment. The study used a descriptive survey design which employed a quantitative methodology that helped in providing and analysing quantitative data. It involved use of a structured questionnaire as a data collection tool to gather information from the respondents. The population of the study were 55 Community Based Organizations (CBOs). The questionnaire was administered to a sample size of 200 respondents with at least 3 randomly picked from each CBO. Out of the questionnaires administered, 115 were considered valid representing 57.5% of the response rate. Data was analysed using computer statistical packages. Descriptive statistics including frequencies, mean, correlations and regression were utilized to inform the analysis. The study showed that knowledge within communities is mainly generated from development partners’ project teams/staff and interactions amongst community members. Knowledge sharing mostly takes place during social interactions such as trainings, meetings and workshops. Use of computers/phones/internet helps to reduce costs related to KM and provide quick and better access to information. This study concluded that knowledge generated from development partners’ project teams/staff enhances members’ ability to support CBOs to set priorities and planning of economic activity programmes. Knowledge sharing through social interactions enhances CBO members’ ability to hold leaders accountable and make more informed decisions affecting both their CBOs and personal businesses. Possession of computers and access to cyber cafes (internet) for KM enhances the community members’ ability to support their CBOs to set priorities and planning for economic programmes. The study recommends that cultivating an enabling environment to spur interactions to facilitate knowledge generation to support economic empowerment should be strategic and intentional.
Economic empowerment initiatives to employ more of social interacting knowledge sharing initiatives/platforms. There is need to invest in technology including KMS and infrastructure, sensitization and awareness about the value of ICT as an integral part of KM to enhance economic empowerment. Given this study only covered the impact of knowledge generation, knowledge sharing mechanisms and ICT-enabled KM on economic empowerment in communities, future research studies could be conducted on other aspects of the KM process such as knowledge storage, presentation, etc. and how these affect economic empowerment.
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The project has been supervised by Prof. Maina Muchara, whom I would like to express my gratitude for his professional guidance and continuous encouragement during the process. Prof. Muchara helped me to think critically right from polishing my topic, research questions and critiquing research issues from a broader perspective to finally producing the final project document. I appreciate his patience during our discussions and effective feedback when he was correcting the chapters at different stages. It has been a wonderful experience working with Prof. Maina Muchara.
DEDICATION

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this program and on His wings only have I soared. This research proposal is also dedicated to my parents and siblings, for their constant encouragement, prayers and endless support towards my studies. Their selflessness can’t go unnoticed.
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LIST OF ABBREVIATIONS AND ACRONYMS

KM - Knowledge Management
MDP - Ministry of Devolution and Planning
MED - Monitoring and Evaluation Department
AfDB - African Development Bank
NGO- Non Government Organizations
KNBS- Kenya National Bureau of Statistics
NIMES- National Integrated Monitoring and Evaluation System
CSO - Civil Society Organisation
ICT- Information and Computer Technology
SDGs- Sustainable Development Goals
OECD- The Organisation for Economic Cooperation and Development
UN- United Nations
APEA- Asian Pacific Evaluation Association
AfrEA- African Evaluation Association
ESK- Evaluation Society of Kenya
AfDB- African Development Bank
USAID- United States Agency for International Development
DFID- Department for International Development
BMGF- Bill and Melinda Gates Foundation
AGRA- African Agriculture for Green Revolution in Africa
TMEA- Trade Mark East Africa
ILRI- International Livestock Research Institute
COMESA- Common Market for Eastern and Southern Africa
EAC- East African Community
KIPPPRA- Kenya Institute for Public Policy Research and Analysis
KALRO- Kenya Agricultural and Livestock Research Organisation
UON- University of Nairobi
MIS- Management Information System
CIDP- County Integrated Development Plan
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Problem

Knowledge is widely recognised as a critical organisational resource irrespective of the economic sector or type of organisation (Sharrat, 2003). The most vital resource of today’s enterprise is the collective knowledge residing in the minds of an organization’s employees, customers, and vendors. Learning how to manage organizational knowledge has many benefits, some of which are readily apparent, others not (Becerra-Fernandez, 2010). A number of management theorists have contributed to the evolution of Knowledge Management (KM), including notables such as Peter Drucker, Ikujiro Nonaka, Hirotaka Takeuchi, Paul Strassmann, and Peter Senge. Drucker (1999) emphasizes that to produce information executives need for their work, they ought to know the type of information they owe to the people they work for and depend, in specific a form and a time frame. Senge et al (1994) concentrates on the learning organization, a cultural dimension of managing knowledge. Learning in organizations means continuous testing of experience, and the transformation of that experience into knowledge-accessible to the whole organization, and relevant to its core purpose (Senge et al, 1994). These have contributed to the understanding of how knowledge is produced, used, and diffused within organizations. By the mid-1980s, the importance of knowledge as a competitive asset was apparent, even though classical economic theories ignore its value as an asset and most organizations still have no or inadequate strategies and methods for managing it (Yiyu, 2017).

Leung (2014) observes that there has been an evolution of KM under different approaches and conditions. The explicit concept of managing knowledge emerged as a result of rapid developments in information technology. Answers to managing knowledge were sought in ICT tools such as databases, and (online) libraries. According to Becerra-Fernandez (2010), this approach still exists though KM evolved further and got personal. The next major step in KM was the focus on people
interacting in an environment: within a company, a network or a community. This was followed by the integral approach which then regards the objective of KM to be instrumental for ‘integral development’. This approach is based on the principles of systems thinking and is closely related to concepts like organizational learning and innovation systems (Leung, 2014). A hallmark of today’s economy is the ability of organizations to realize economic value from their collection of knowledge assets and assets of information, production distribution, and affiliation (Gold, 2015).

On the other hand, the term “empowerment” has been liberally applied by both academicians and social workers since the 1970s. Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways that recognize the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth. (OECD, 2017). According to Calves (2009), this term has featured in the social services, social psychology, public health, adult literacy and community development spheres. Dalberg (2014) found out that the field of international development has not been insusceptible to this concept either: the idea of empowerment prominently features in the current discourse of international development organizations. As observed by Calves (2009), there was a rise of the feminist movement in the Global South attributed to the formal appearance of the term “empowerment” in the field of international development in 1987. According to Calves (2009), just around the same time, empowerment initiatives also bloomed in Asia and Africa among feminist organizations such as the Self-Employed Women’s Association (SEWA) and Working Women Forum in India and the Green Belt movement in Kenya. Though the feminist literature concentrates on the process of empowerment for women, most of the publications recognize empowerment as being relevant to both women and men.

According to Calves (2009), from 1990 to the end of the decade, empowerment had ultimately become part and parcel of the new credo and doctrines of international development organizations on poverty reduction. Empowerment has gradually been
institutionalized in the political language of international development organizations such as the World Bank. According to Dalberg (2014), international organizations are on a craze to promote empowerment of the poor including community-based projects and, more recently, the participation of civil society and particularly associations of the poor. This has been evidenced by a number of international summits, including the Millennium Summit in New York in 2000 setting the Millennium Development Goals (MDGs) with a target date of 2015, the sustainable development summit in Johannesburg in 2002 and the Paris Declaration in 2005. These were blueprints accepted by several countries and world leading development institutions as galvanized effort to meet the needs of the world’s poorest. Currently, the Sustainable Development Goals (SDGs) constituting 17 global goals with 169 targets have become a centre of focus for actors in development and economic empowerment. This is the case for Kenya cascaded down to its 47 counties.

Globally, major actors in the economic empowerment sphere including donors/funders such as USAID, DFID, BMGF, World Bank among others, development agencies, governments, NGOs, and civil society organisations such as professional umbrella bodies like AfrEA, APEA, ESK, among others have recognised significance of KM as a vital component in sustainable economic empowerment as revealed in AfrEA (2017). At regional level, organisations including development agencies and research institutions driving economic empowerment specifically targeting communities are embracing the integration of the KM discipline into economic empowerment initiatives/projects and programmes. This is evident in seeing structures including Knowledge Management roles/and officers embedded within the economic empowerment project staffing/designs.

In Kenya, economic empowerment related KM is overseen by the Ministry of Devolution and Planning (MoD&P) through the Monitoring and Evaluation Department (MED) and then cascaded down to the counties (MoD&P, 2017). According to MoD&P (2017), the ministry also from time to time collaborates with other ministries, government organs such as Kenya National Bureau of Statistics
(KNBS), County Governments, and stakeholders including development agencies, research and academia institutions to gather, manage and make use of knowledge related to economic empowerment from communities. The Kenyan Government through the MoD&P specifically the Monitoring and Evaluation Department (MED) has also embraced ICT-enabled knowledge management by adopting and rolling out the National Integrated Monitoring and Evaluation System (NIMES), the e-promise (Electronic Project Information System) all geared towards efficient KM to track the progress and achievement of the national development strategies up to county level (MoD&P, 2017).

By 2006, close to 40% of Kenya’s urban population was thought to live in absolute poverty. Against this background, the Government of Kenya (GoK) with assistance from strategic partners launched a series of initiatives including the Key Informal Settlements Improvement Project (KISIP) in 2014 aimed at transforming municipalities into centres for economic growth. Such projects represent part of GOK initiatives aimed at remedying the disproportionate living conditions in informal settlements elicited by past trends in urbanisation that were not matched by economic growth (GoK, 2014).

Umande Trust is a rights-based agency working to economically empower communities in Kenya’s urban and informal centres through improving their access to water supply, sanitation and environmental services. Working in close partnership with communities, Umande Trust believes that modest resources can significantly improve access to water and sanitation services if financial resources are strategically invested in support of community-led plans and actions which will subsequently empower communities economically. Among other communities in the country, the agency works with 64 CBOs in Kibera, Mathare, Korogocho and Mukuru in Nairobi County to transform livelihoods of communities in these informal centres. This is through improving their access to water and sanitation services, and subsequently supplementing their livelihoods through the commercialized bio-centres programme geared towards economic empowerment and sustainability (Trust, 2017). For
successful economic empowerment project/programme implementation, both the agency and CBOs heavily rely on knowledge management to inform learning, improvement and decision making.

1.2 Statement of the Problem
Knowledge Management (KM) comprises doing what is needed to get the most out of knowledge resources. Although KM can be applied to individuals, it has recently attracted the attention of organizations. Knowledge Management is viewed as an increasingly important discipline that promotes the creation, sharing, and leveraging of the organizational knowledge (Becerra-Fernandez, 2010). Knowledge Management is a notion and term that arose nearly two decades ago, roughly in 1990. The operational origin of KM arose within the consulting community and from there the principles of concept were rapidly spread by the consulting organizations to other disciplines (Bhatt, 1997). Drucker (1999), suggests that the information revolution is unprecedented and unmatched in reducing the cost of spreading information and knowledge within an organization. He attributes this to the growing levels of Information and Communication Technology (ICT) which facilitate swift information generation, processing, sharing, storage, retrieval and dissemination.

Arbabi (2013) revealed that organisations are embracing the recognition that knowledge once managed optimally is a key economic resource for human capital empowerment and overall organizational development. Mohammad (2014) shows that there is a positive relationship between the process of KM and empowerment of human beings. According to a study conducted by Sangeeta (2014) in large Indian organizations, it was found out that it is important to manage knowledge as a strategic asset. This study looked at the impact of KM capabilities on knowledge effectiveness. Handzic (2017) validated the opinion that creation and reuse of knowledge can improve project management capabilities resulting in continuous learning and provides a structure to link project/program management to knowledge management. Drucker (1999) emphasizes that to produce information executives need for their work, they ought to know the type of information they owe to the
people they work for, in specific a form and time frame. All these studies however, do not show how knowledge generation affects economic empowerment of individuals within communities specifically informal settlements.

Knowledge transfer is often regarded as a basis for competitive advantage in firms as revealed by (Jonathan, 2015). According to a study done by Leung (2014) in a social service organization practising knowledge management in Hong Kong, both technical and people-based methods of knowledge sharing should have their own roles and positions within knowledge management practice. Jasimuddin (2005) reports that the essence of knowledge sharing is related to working out with whom to transfer (agents involved), what is to be transferred (content and context of knowledge), and how it can best be transferred (mechanisms). However, all these studies do not explain how knowledge sharing mechanisms affect economic empowerment within a local community particularly informal settlements.

According to a study conducted by Jelena et al (2012) in Slovenian and Croatian companies, information technology positively influences knowledge management and organizational performance. Becerra-Fernandez (2010) argues that rapid changes in the field of KM have to a great extent resulted from the dramatic progress we have witnessed in the field of information technology (IT). However, all these scholars do not explain how ICT-enabled knowledge uptake and learning affect economic empowerment in a community context in Africa, Kenya.

Despite the fact that there has been recognition that KM can significantly influence organizational performance, there hasn’t been establishment of the extent to which the knowledge management process affects economic empowerment within communities. This study sought to ascertain this by focusing on how the existing knowledge management process specifically: knowledge generation, knowledge sharing mechanisms and ICT-enabled knowledge management affects economic empowerment in informal settlements in Nairobi County in Kenya specifically the CBOs in the informal settlements of Kibera, Mathare, Korogocho and Mukuru.
1.3 Purpose of Study
The purpose of this study was to examine the impact of knowledge management on economic empowerment within communities- A case study of informal settlements in Nairobi, Kenya.

1.4 Research Questions
Specifically, the study investigated;

1.4.1 What is the effect of knowledge generation on economic empowerment within communities?
1.4.2 How do existing knowledge sharing mechanisms affect economic empowerment within communities?
1.4.3 How does ICT-enabled knowledge management affect economic empowerment within communities?

1.5 Justification of the Study
The study attempted to rationalize and inform the impact of knowledge management on economic empowerment at the community level specifically focusing on the community based organizations (CBOs) in the informal settlements of Kibera, Mathare, Korogocho and Mukuru in Nairobi County, Kenya.

1.5.1 Community Based Organizations
The study findings will inform CBOs on the implications/and impact of knowledge management on economic empowerment and subsequently guide their planning and resource allocation.

1.5.2 Implementing Agencies
The findings will also inform implementing agencies such as Umande Trust on the significance of investing in knowledge management interventions specifically knowledge sharing platforms such as social interactions and technology to drive impact on economic empowerment amongst target communities.
1.5.3 Donors
The findings will also inform donors on the significance of resource allocation for investing in knowledge management specifically knowledge sharing platforms such as social interactions and technology to drive impact on economic empowerment.

1.5.4 Researchers and Academia
The findings supplement knowledge to the scholarly body specifically on the two variables of knowledge management and economic empowerment. The study gives recommendation on where further research can be done on other aspects of the knowledge management process such as knowledge storage and presentation and how these affect economic empowerment in communities.

1.6 Scope of Study
The study focused on the role of knowledge management in economic empowerment in communities with a case study of the informal settlements in Nairobi, Kenya. It looked at community based organizations (CBOs) engaged in economic empowerment projects/initiatives in the informal settlements of Kibera, Mathare, Korogocho and Mukuru as a unit of analysis. Data was collected for two weeks between the months of August and September, 2017.

1.7 Definition of Terms
1.7.1 Knowledge Management
Knowledge management is the process that deals with development, retrieval and dissemination of information and expertise within an organization to support and improve its business performance (Gupta et al, 2000).

1.7.2 Knowledge Generation
Knowledge generation is the formation of new ideas through interactions between explicit and tacit knowledge in individual human minds. It consists of socialization (tacit to tacit), externalization (tacit to explicit), combination (explicit to explicit), and internalization (explicit to tacit) (Nanoka, 2008).
1.7.3 Knowledge Sharing

Knowledge sharing implies the giving and receiving of information framed within a context by the knowledge of the source. What is received is the information framed by the knowledge of the recipient (Sharratt, 2003).

1.7.4 ICT-enabled Knowledge Management

According to Subashini, (2012) ICT knowledge management involves use of technologies which facilitate an organization to generate, process, retrieve, store, share, store, and present knowledge and information across the organization.

1.7.5 Economic Empowerment

Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways that recognize the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth (OECD, 2017).

1.8 Chapter Summary

The chapter introduces the background, statement of the problem, the purpose and importance of the study. This is followed by research questions and the scope of the study and definition of key terms. The next four chapters including; chapter two examine the literature in relation to each of the research questions, chapter three presents the study research methodology, while chapter four analyzes and explains the data on the basis of the research questions and chapter five provides a discussion on the findings of the study for each of the research questions by provision of both similarities and deviations from previous studies.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This section discusses the theories of knowledge management and economic empowerment, introduces and describes the two variables, the concepts, trends and studies conducted about the variables by other scholars. It finally examines the literature in relation to each of the research questions under the study.

2.2 Knowledge Generation and Economic Empowerment

Stewart, (1997) defines knowledge as intellectual capital or material such as useful information, intellectual property, and experience that can be used to create wealth. Knowledge is considered as a vital resource for effective organizational functioning, innovativeness, performance, and competitiveness. Polanyi and Nonaka who are early scholars of KM divided knowledge into two types: tacit and explicit. Explicit knowledge is the knowledge that can be easily captured, codified, and shared through manuals, documents and standard operation procedures. On the other hand, tacit knowledge is the skill, experience and ‘know-how’ that is embedded in a person and cannot be easily expressed and shared (Hubert, 1996). Since knowledge is a valuable intangible resource, it ought to be managed intelligently and dynamically by any organization that seeks to achieve competitive advantages.

Knowledge Management may simply be defined as doing what is needed to get the most out of knowledge resources. Although KM can be applied to individuals, it has recently attracted the attention of organizations. Knowledge Management is viewed as an increasingly important discipline that promotes the creation, sharing, and leveraging of the organizational knowledge (Becerra-Fernandez, 2010). Knowledge Management is a notion and term that arose nearly two decades ago, roughly in 1990. The operational origin of KM arose within the consulting community and from there the principles of concept were rapidly spread by the consulting organizations to other disciplines (Bhatt, 1997).
According to Yew, (2015) Knowledge Management is concerned with the exploitation and development of the knowledge assets (explicit and tacit) of an organization, aligned with the company’s strategic objectives and mission. Knowledge Management is also regarded as the process of opening communication channels and fostering knowledge flow in the organization through teamwork so that it can be used, enhanced and built upon to leverage the performance of individuals and consequently the whole organization. In summary, KM is the management of an organization’s knowledge resources and knowledge processes, with the objective of creating value through knowledge usage that will give competitive advantages to the users.

According to Bhatt, (1997) the knowledge management process can be classified into: knowledge creation, validation, presentation, distribution, and knowledge application activities. To profit from knowledge, an organization ought to be swift in balancing its knowledge management activities. Generally, such a harmony requires changes in organizational culture, and techniques and technologies. Many modern organizations today believe that by focusing exclusively on people, technologies, or techniques, they can efficiently manage knowledge. However, this exclusive focus on people, technologies, or techniques does not facilitate a firm to maintain and sustain its competitive advantage in its market. It is rather the collaboration between technology, techniques, and people that allows an organization to manage its knowledge effectively. By creating a nurturing and “learning-by-doing” kind of environment, an organization can sustain its competitive advantage in the market.
Figure 2.1: Components of Knowledge Management

A hallmark of today’s economy is the ability of organizations to realize economic value from their collection of knowledge assets and assets of information, production distribution, and affiliation (Gold, 2015). Despite the competitive inevitability and requirement of becoming a knowledge-based organization, senior managers have found it difficult to transform their organizations through programs of knowledge management. This is specifically true if the organizations have long histories of process and a customs and practices of business success.

Leung (2014) observes that there has been an evolution of KM under different approaches and conditions. The explicit concept of managing knowledge emerged as a result of rapid developments in information technology. Answers to managing knowledge were sought in ICT tools such as databases, and (online) libraries. According to Becerra-Fernandez (2010), this approach still exists though KM evolved further and got personal. The next major step in KM was the focus on people interacting in an environment: within a company, a network or a community. This was followed by the integral approach which then regards the objective of KM to be instrumental for ‘integral development’. This approach is based on the principles of systems thinking and is closely related to concepts like organizational learning and innovation systems. (Leung, 2014)
Knowledge generation is described as the formation of new ideas through interactions between explicit and tacit knowledge in individual human minds. It consists of socialization (tacit to tacit), externalization (tacit to explicit), combination (explicit to explicit), and internalization (explicit to tacit) (Nanoka, 2008)

### 2.2.1 Knowledge Generation Systems

Knowledge generation systems are designed to help elicit and store knowledge organisational and individual knowledge which includes both explicit and tacit. This knowledge can be generated using mechanisms or technologies so that the captured knowledge can be shared and used by others. According to Becerra-Fernandez, (2010), the earliest mechanism for knowledge generation dates to anthropological use of stories-the earliest form of art, education and entertainment. Story telling is one of the mechanisms by which early civilization passed on their values and wisdom from one generation to another. Therefore KM generation systems support the process of eliciting either explicit or tacit knowledge that may reside in people, artefacts or organizational entities. These systems can help to generate knowledge existing either within or outside organizational boundaries, among employees, consultants, competitors, customers, suppliers or prior employers/employees of the organization. Knowledge Management generation systems facilitate externalization-conversion of tacit knowledge into explicit form or internalization- conversion of explicit knowledge into tacit form. Learning by observation and face to face meetings are some of the mechanisms that facilitate internalization.

Technologies also support knowledge generation by facilitating externalization and internalization. According to Becerra-Fernandez (2010), using metaphors and stories as a mechanism of knowledge generation and transferring tacit knowledge is increasingly drawing the attention of organizations. Story telling basically includes a plot, major characters, an outcome and implied moral. Stories originate within the organisation and typically reflect organizational norms, values and culture. Stories have been observed to be useful to generate and communicate organisational managerial systems (including how things are done), norms and values. This is
because they make information more engaging, vivid, entertaining and easily related to personal experience in knowledge generation.

Source: Adopted from Food and Agriculture Organization (2017)

Figure 2.2: Types of knowledge and the knowledge creating process (conversion)

Tacit knowledge collects all things that we know how to do but possibly do not know how to explain (at least symbolically), (Polyani, 2016). It populates the minds of people and is (depending on one’s interpretation) either impossible, or difficult, to express/communicate. Most knowledge is initially tacit in nature; it is strenuously developed over a long period of time through trial and error, and it is not effectively used because the organization does not know what it knows. Some knowledge is embedded in business processes, relationships and activities that have been created over time through the implementation of a continuing series of enhancements and improvements. Explicit knowledge on the other hand exists in the form of sentences, words, documents, organized data, and computer programs and in other explicit forms.
According to Phoel (2006), eight steps are prescribed for successful story telling as a knowledge generation system including: having a clear purpose, identifying an example of successful change, telling the truth, stating the ‘who’, ‘what’ and ‘when’, trimming detail, underscoring the cost of failure, ending on a positive note and inviting the audience to dream. There is also emphasis to tell the story right and not just what is said but how it is said that will eventually determine success. Guber (2007), explains the crucial importance of truth as an attribute of both the powerful story and effective story teller. Denning (2000), argues that story telling supplements analytical thinking by enabling individuals to imagine new perspectives and new worlds; it can be used to communicate change, bridge knowledge gaps, launch and nurture communities and stimulate innovation within an organization.

Learning by observation can be used as part of the knowledge generation system. According to Becerra-Fernandez (2010), humans and animals learn through observation. Russel and Norvig, (2002) define learning by observation as a computing agent’s ability to improve how it will act in the future, as the agent observes its interactions with the world and its own decision-making process. It involves designing agents that already know something and are trying to learn some more.

However, only few organisations have implemented successful KMS and some studies even depict major failures. Much attention has been given to the possible reasons of these failures which are often discussed in terms of psychological, social, technical and organisational factors that influence the use and acceptance of KMS. (Jonathan, 2015)

According to Sangeeta (2015), organizations have started to recognize, create, transform, and distribute knowledge and have a KM system in place to guide their operations. The study reveals that for projects to compete successfully, firms must leverage their existing knowledge and create new knowledge that strategically positions them in their preferred and ideal markets. Firms must therefore develop an
‘absorptive capacity’—the ability to use prior knowledge to recognize the value of new information, assimilate it, and apply it to create new knowledge and capabilities to attain this position. This implies that any organisation ought to strategically put a knowledge generation/creation system in place to ensure efficiency, and absorptive capacity.

Handzic and Durmic (2015) explain the process of creating the KM within project management using the intellectual capital integrated model. This is by ensuring that all perspectives of knowledge management that exist in literature are included in consideration. In this regard, they discuss three types of strategies or schools of knowledge management, referring to them as generations: The first generation of KM can be described as technocratic as described by (Earl 2001). It views knowledge as an object and emphasizes the role of information and communication technologies in KM. The systems focus on formalized knowledge bases in which the knowledge of human experts is made explicit so that they can be used by non-expert workers. KM systems are designed to document knowledge processes and store best business practices. Data captured in shared databases, data warehouses and document management systems are used to support planning and decision making to meet customer needs.

The second generation of KM is directed towards people and organizations. It accentuates knowledge as a competitive weapon and sees KM as a firm’s strategy. It incorporates human capital as one of the key knowledge assets from which organizations extract and retain value. The essence of second generation of KM is the pooling of knowledge by networked employees and communities of practice. It focuses on organizational structures and cultures that facilitate knowledge sharing and pooling. It also considers physical spaces for greater facilitation of knowledge exchange. These facilitators are reflected in the concept of “ba” as coined by Nonaka and Konno (1998). In general, the second generation KM models address issues of organizational culture, learning, change and risk management and support of communities of practice (Handzic and Durmic, 2015).
The third generation argues that the effectiveness of a knowledge management practice is dependent on the context in which the knowledge is being used. A number of researchers have taken a contingent theoretical approach to KM and provided substantial empirical support for the view e.g. Hansen et al. (1999); Snowden, (2002); Becerra-Fernandez and Sabherwal (2001); and Becerra-Fernandez et al. (2004). Snowden grips an exciting stand that a bureaucratic context is as good as a training environment, communities of practice encourage knowledge exchange through socialization, and informal contexts use stories and symbols to provide shared understanding, while innovative contexts require action and risk taking to impose order on chaos (Handzic and Durmic 2015).

2.2.2 Knowledge Mapping
Knowledge mapping refers to identification of where knowledge resides and defining which knowledge needs to be shared with whom, how, and why (Babita et al, 2000). The knowledge mapping process therefore provides a framework for detecting knowledge generation sources as well as the respective knowledge consumers and users within an organization.

Drucker (1999) emphasizes that to produce information executives need for their work, they ought to know the type of information they owe to the people they work for and depend on, in specific a form and a time frame. He further explains this with the knowledge worker productivity theorem: where a worker’s productivity begins by knowledge of his task, what he is expected to contribute and what hampers this contribution and how it should be eliminated. This way, knowledge is created within the organization.

Organizations need to forge linkages between structured and unstructured information so that it can be used for solving a specific problem/situation/paradigm. It is imperative for leaders of organizations to understand who has knowledge, where knowledge resides, and develop support systems for its creation and application. Through such a process, they can create knowledge maps that identify where
knowledge resides and hence which knowledge needs to be shared with whom, how, and why, with built-in rewards for knowledge creators and brokers (Babita et al, 2000). This also involves putting in place a knowledge generation strategy including structures, processes and systems.

Handzic (2017) validated the opinion that generation, reuse and transfer of knowledge can improve project management capabilities resulting in continuous learning, and provides a structure to link project/program management to knowledge management. The study suggests that project team members should be able to conceptualize their respective tasks, reuse and apply the past knowledge and experiences supported by a knowledge management system. Handzic shows that knowledge is developed at the task level which is embedded into the project methodology in the project environment and eventually improving the capability of an organization. Handzic refers to and is in agreement with former researchers like Owen who suggested that knowledge is embedded throughout the project lifecycle at both tactic and explicit levels: Tacit knowledge is captured and reused at the project level in the form of personal knowledge contributed by the project team members, while explicit knowledge is reused in terms of project documentation captured during the project lifecycle.

According to Elise (2016), one of the biggest impediments to creating knowledge based/data driven programmes for women’s economic empowerment is the lack of sex disaggregated data. The United Nations Foundation with support of the William and Flora Hewlett and the BMGF created Data 2x, a team of experts who have identified the major gaps in data across five areas of development: education, health, political participation, economic opportunities, and human security. The analysis shows that data on women’s unpaid work and informal employment is lacking in their coverage across countries. Data on earnings, employment mobility, and conditions of migrant workers are also lacking in coverage and do not utilize international standards which are all aspects of economic empowerment. This makes knowledge generation for key projects difficult and irrelevant in the economic empowerment.
However, some initiatives have been taken to enhance knowledge generation for instance some data exists in the areas of employment mobility, entrepreneurship, and asset ownership, though they are frequently deficient in complexity and granularity, both of which are necessary in order to have a clear picture of the situation. According Elise (2016), it is also revealed that knowledge generation on women’s ability to receive financial services or obtain child care are inconsistent and sometimes completely absent which slows down economic empowerment.

2.2.3 Collaboration

According to AIIM (2017), collaboration is a working practice whereby individuals work together to a common purpose to achieve business benefit. It enables individuals to work together to achieve a defined and common business purpose. Dodgson (1994) defines collaboration as any activity where two or more partners contribute differential resources and know–how to agree complementary aims.

The creation of organizational knowledge requires collaboration of personal experiences. Collaboration takes place at two levels within the organization: between individuals and between the organization/project and its network of partners including actors and communities in the economic empowerment spheres. Collaboration between individuals brings together individual differences such as cognitive style, preferred tools, backgrounds, experiences, etc. and can be used to create knowledge (Sangeeta, 2015). This assumes that interaction between the individuals will promote learning and hence a positive effect for economic empowerment. Collaboration between individuals is also the basis for socialization. However, the ability to acquire knowledge is partly based on an organization’s or projects absorptive capacity. This is because all the necessary skills for innovation may not be found within a single project and, hence, is the need to collaborate with partners along the economic empowerment chain including communities.
Knowledge networks are the social networks and communities that are recognized, from a KM perspective, to add significant value to the creation, dissemination and application of better knowledge at a much faster rate (http://www.knowledge-management-online.com, 2017). The term ‘Communities of Practice’ (COP) describes what ideally should be a naturally flourishing knowledge network of people with a high interest in learning, investigating, developing and improving the knowledge subject matter and share common work goals. A COP should be self-directed, although it does requires good facilitation and moderator support. The activities of an effective Community of Practice will result in the surfacing of much more of the hidden and locked knowledge that resides in our heads. An effective Community of Practice will enable members to more quickly leverage the knowledge that exists in this knowledge network.

Identifying the value of social interaction and face to face interactions and communications, knowledge forums and knowledge cafés have evolved and are social meeting techniques that can be organized within and between organizations with a special interest in creating and leveraging specialist knowledge (http://www.knowledge-management-online.com, 2017).

According to Sharratt (2003), in order to nurture knowledge networking across the entire organization and support the knowledge creation processes to also include retaining, leveraging, reusing, measuring and optimizing the use of the organizational knowledge assets, a centralized knowledge server is required. This will manage the communications and collaboration between networks of people, enable the access, creation and sharing of knowledge between them.

2.3 Knowledge Sharing Mechanisms and Economic Empowerment
Knowledge sharing is the giving and receiving of information framed within a context by the knowledge of the source. What is received is the information framed by the knowledge of the recipient (Sharratt, 2003). Knowledge sharing occurs when knowledge is diffused from one entity to another or when one entity is affected
by the experience of another. The entity might be either an individual or a group of people belonging to a specific organisation, for example, a project team, a service or a company. Knowledge sharing is often claimed as a basis for competitive advantage in firms and has been the focus of many research works. Indeed, although at first glance this definition of knowledge sharing seems very simple, it raises the non-trivial question of how to diffuse something so intangible, and so intimately linked to individuals. This is why interaction between people is considered as a key element in knowledge transfer (Jonathan, 2015).

According to Jasimuddin (2005) the essence of knowledge sharing is related to working out with whom to share with (agents involved), what is to be shared (content and context of knowledge), and how it can best be shared (mechanisms). Explicit knowledge which can be easily articulated in words is usually shared via Information and Communication Technologies (ICTs), whereas on the other hand, since tacit knowledge is hard to codify, the ways through which such knowledge is exchanged is by means of communities of practice, narratives and storytelling, and most specifically through face-to-face interaction. For economic empowerment initiatives, project implementers mainly share tacit knowledge through success stories, and face to face interactions.

According to Sangeeta (2015) knowledge sharing processes contribute to knowledge management effectiveness. He further establishes that organizations view knowledge as their most valuable and strategic resource for achieving sustainable competitive advantage and hence knowledge sharing as a vital aspect of KM is significant in enhancing performance.

2.3.1 Knowledge Sharing as a Social Process

According to Leung (2014), the knowledge sharing process is viewed as a social process and is therefore greatly influenced by the socio-cultural factors of an organization, which determine the success or failure of any knowledge management efforts. Leung explains the people-oriented perspective whose primary goal is to
promote people-to-people (and mainly face-to-face) knowledge sharing as a social process. He further establishes that the people-oriented perspective is enhanced by technology as a social process.

According to Handizac (2017), among all four parts of his model, in representing organizational knowledge activities, he found that socialization of tacit knowledge was the most frequent gap in project environments. He there proposed a theoretical framework for project knowledge sharing contribution to project success: the proposed model suggests that there are significant relationships between effective project knowledge sharing practice and project success. In more details, it indicates that providing appropriate motivators and removing relevant inhibitors to sharing knowledge and experience would result in more efficient and effective sharing of knowledge in projects which, in turn, would lead to an increased probability of project success. In this regard, ensuring when and how tacit and explicit knowledge is shared is essential for enhancing project success, where project success stands for achieving the project objectives and goals on scope, time, budget, accepted quality and satisfaction of stakeholders.

According to Babita et al (2000), organizations can realize the full value of their knowledge assets only when they can be effectively transferred between individuals. Based on the work of Nonaka and Takeuchi, Dataware Technologies, in their executive briefing, identify the following four processes that are commonly used by organizations for knowledge conversion: First, socialization which involves sharing of experiences through observation, imitation and practice. It usually occurs through workshops, seminars, apprenticeships, and conferences. Secondly, capture which includes the conversion of tacit knowledge (e.g. what one learned at a workshop) into explicit form (e.g. written report). Thirdly, dissemination consists the copying and distribution of the explicit knowledge. Lastly, internalization- a process of experiencing knowledge through an explicit source, i.e. one can combine the experience of reading the workshop report with previous experiences.
It is also argued that instead of a situation where ‘one person has a huge mental bin of information in his or her mind that is transmitted to the minds of the listeners’, knowledge sharing should be considered as ‘an interaction between people who together create new perspectives and understanding’. Hence, knowledge sharing ought to be considered as a somewhat complex process by which, whether intentionally or not, people co-construct some shared understanding and shared perspectives through their interaction. Hence, knowledge sharing initiatives often combine technical, social and organizational aspects (Jonathan, 2015).

The study according to Leung (2014), also reveals that unit-based knowledge sharing activities took place within the service units. Common examples were team meetings and retreats, peer group consultations and emergency meetings on crisis handling. Many of the respondents revealed that sharing activities are effective ways of sharing knowledge within the organization, especially with the thought that fellow practitioners had a common language and mutual understanding of their daily situations, and that this would make their sharing ‘down to earth’.

According to Leung (2014), information and communication technologies play an essential role in fulfilling knowledge sharing. On the other hand, the primary goal of the people-oriented perspective is to promote people-to-people (and mainly face-to-face) knowledge sharing, usually through the development of a Community of Practice (CoP). Knowledge sharing is viewed as a social process and is influenced greatly by the socio-cultural factors of an organization, which determine the success or failure of any knowledge management efforts.

Markus (2001) identifies three (3) major roles involved in what she called the ‘knowledge reuse processes’. In an article, Markus first describes the ‘knowledge producers’ as people who own knowledge and externalise it in the form of information. Then, the ‘knowledge intermediaries’ assist the knowledge producers in the externalisation process by helping them to elicit their knowledge. They also have to transform and format the information collected with regard
to knowledge reuse situations. Subsequently, they distribute the formalized content to the knowledge re-users which role is also called knowledge brokerage. The knowledge re-users role is the one where formalized content is retrieved and interpreted to be put into practice (Jonathan, 2015).

According to a study conducted by Leung (2014), face-to-face knowledge sharing was a much more important activity in the case study’s passing on of process knowledge. Four kinds of knowledge sharing activities were identified: supervision, unit- based, network-based and organization-wide. Among these, network-based sharing was considered an especially important knowledge management strategy adopted by the organization.

According to Jasimuddin (2005), face to face interaction in knowledge transfer amongst individuals is the most efficient mode of knowledge sharing. Face to face conversation between knowledge contributor and user should be a starting point in any knowledge transfer and presentation process because knowledge which is distributed asymmetrically in the organization, is embedded within particular contexts and communities. The fact is that the even the use of knowledge based technology should follow the social interaction. The proposed integrated approach of knowledge transfer, knowledge storage and knowledge presentation is an interactive, ongoing, and dynamic process that cannot rest on a static body of knowledge, one particular mechanism to communicate or a single directional flow of knowledge for presentation.

According to Handzic (2017) knowledge artefacts are some of the avenues through which organizational knowledge is manifested in the form including: videotapes, books, memos, business plans, manuals, patents and products. Handzic also classified the detected barriers to effective knowledge transfer into three categories including: Barriers related to inter-project transfer of lessons learned, where collection of lessons learned almost never occurs, or if it does, it occurs periodically rather than throughout the performance, which causes important information to be missed or
forgotten. There are barriers related to social communication, where lack of links between project teams results in lack of knowledge sharing between them. A very big barrier in this aspect can also be a negative atmosphere created in project based organizations which makes employees unwelcome to share bad experiences. His study also revealed that social communication is the most effective way to share valuable knowledge and information. Lastly, there are barriers related to the project manager, which mainly include situations where project managers hoard their knowledge, as they view it as a potential threat for them in the future.

2.3.2 Knowledge Organisational Culture
Organisational culture is an interactional psychology perspective in which aspects of both individual and situation combine to influence a focal individual's response to a given situation (Charles, 1991). In this regard, aspects of individuals, such as values and expectations, interact with facets of situations, such as incentive systems and norms, to affect the individuals' attitudinal and behavioural responses.

According to Sangeeta (2015) organizations believe that most important knowledge is tacit knowledge which can be shared by creating a culture in the organization. It has also been observed that KM is not just about capturing, storing, and transferring information; the pattern of interaction between people, technologies, and techniques is also important. When it comes to economic empowerment therefore, sharing the tacit knowledge amongst the project teams but also amongst communities themselves for instance upscaling the model farmers to train and pass on what they have tried and worked for them becomes paramount.

Companies have started to adopt different technical and managerial initiatives in order to foster knowledge sharing within their design teams. Among these initiatives, the adoption of knowledge management systems (KMS) is one of the most popular ones. A KMS can be defined as an information system developed to support and enhance the three processes of knowledge creation, knowledge codification and knowledge application (Jonathan, 2015).
Organizational culture is a critically important aspect for facilitating sharing, learning, and knowledge creation. An open culture with incentives built around integrating individual skills and experiences into organizational knowledge will be more successful as illustrated by Backman Laboratories, Inc., a family owned specialty chemical company-based in Memphis. Their success results because of their commitment to the individual. Backman’s values represent the flip-side of the prevailing corporate mind-set, where the company comes first, and employees are fortunate to have jobs. The Backman Code of Ethics captured on a wallet-sized laminated card and passed out to every employee, stipulates a fundamentally different operating philosophy. The first proposition is “that the company is made up of individuals – each of whom has different capabilities and potentials – all of which are necessary to the success of the company”. This approach to KM facilitated by having an open organizational culture is now being benchmarked by many companies (Babita et al, 2000).

Effective knowledge-sharing and learning require cultural change within the organization, new management practices, senior management commitment and technological support. However, a major problem is how to convince, coerce, direct or otherwise get people within organizations to share their information. It is a major change management problem that poses serious leadership challenges to a chief information officer (CIO) or chief knowledge officer (CKO) (Babita et al, 2000).

According to Babita et al (2000), KM is more relevant to enterprises that are operating in knowledge intensive areas. Consulting firms are the ultimate example of organizations selling knowledge directly. However, there are certain indicators for an organization’s ability to create, disseminate and apply knowledge. Demarest (1997) identified six key questions an organization has to answer to participate in KM effectively. In summary, they relate to: the culture, actions and beliefs of managers about the value, purpose and role of knowledge; creation, dissemination and use of knowledge within the firm; the kind of strategic and commercial benefits a firm can expect by the use of effective KM; the maturity of knowledge systems in
the firm; how a firm should organize for KM; and the role of information technology in the KM program. Demarest emphasizes the role of culture as a driver and part of an enabling environment of knowledge sharing within an organization.

2.4 ICT-enabled Knowledge Management and Economic Empowerment

According to Subashini, (2012) ICT Knowledge Management involves technologies which facilitate the management to generate and share knowledge and information across the organization. Such technological tools enhance the value of knowledge management to be made available to the right people at the right time. Thus, knowledge sharing and presentation is facilitated through information and communication technologies including computers, telephones, e-mail, databases, data-mining systems, search engines, video-conferencing equipment, etc.

2.4.1 Knowledge Management Systems

Knowledge Management Systems (KMS) refer to any kind of IT system that stores and retrieves knowledge, improves collaboration, locates knowledge sources, mines repositories for hidden knowledge, captures and uses knowledge, or in some other way enhances the KM process. (Knowledge Management, 2017).

Becerra-Fernandez (2010) states that rapid changes in the field of KM have to a great extent resulted from the dramatic progress we have witnessed in the field of information technology (IT). Information technology facilitates sharing as well as accelerated growth of knowledge. IT allows the movement of information at increasing speeds and efficiencies within and outside organisations.

According to Drucker (1999), information revolution is unprecedented in reducing the cost of spreading information and knowledge. It also improves the speed sweep of the impact the information creates with the recipients. This implies a shift in embracing information technology within the organizational knowledge management processes to improve efficiency and effectiveness.
Technology is an integral part of successful functioning of knowledge management. Amidon (1997), indicates that supporting technology gives a commensurate economic return for investment in technology to support knowledge management. Technology serves as a competitive advantage in the KM dimension through creating an enabling environment for quick learning, accelerating innovation, facilitating creation of large databases, data mining, conferencing and intranetworking.

According to Yiyu (2017), there are computer systems can be designed for the management of knowledge management for organisations including economic empowerment projects. These may include: Data Retrieval Systems (DRS) such as database management systems which are well suitable for the storage and retrieval of structured data, Information Retrieval Systems (IRS) such as web search engines which can be very effective in finding the relevant documents or web pages that contain the information required by project actors and implementers regarding specific projects/programmes they work with. This creates efficiency in terms of saving project/programme resources including time.

However, there are a number of issues and challenges related to the utilization of information and communication technologies for KM: the need to balance knowledge exploitation and exploration, overload and useful content, additional workload and accurate content. There is also a need for flexibility, evolutionary development and user acceptance of knowledge systems (Handzic and Durmic 2015).

2.4.2 Infrastructure
Technology infrastructure comprises the hardware, software, middleware and protocols that allow for the encoding and electronic exchange of knowledge (Sangeeta 2015). The primary focus of many organizations has been to develop new applications of information technology (IT) to support the digital capture, storage, retrieval, and distribution of organization’s explicitly documented knowledge. This in economic empowerment has been exhibited in use of mobile technologies to enable communities to access real time information and data on services they require.
Amidon (1997) reports that many organizations have recognised the need for creation of infrastructure to enable the flow of knowledge including having staff positions, internet, connectivity and equipment squarely tied to seamless facilitation of knowledge management.

According to the knowledge management model developed by Gold et al (2001) which is based on the capabilities perspective, there are three (3) key infrastructure capabilities including: technical- which involve the know-how and specialised skills, structural- which involve the established mediums and mechanisms to facilitate the knowledge management process, and cultural- that enable the maximization of social capital (intangible capital) both within and outside an organization. If an organisation has all the three capabilities combined with ICT, there is effective facilitation for the knowledge management process.

Sangeeta (2015) further reveals that technology comprises a crucial element of the structural dimension needed to mobilize social capital for the creation of new knowledge. Technology is able to overcome the barriers of time and space that would otherwise be limiting factors in both KM and economic empowerment activities. It also serves as a repository in which knowledge can be reliably stored and efficiently retrieved. The entire technology infrastructure used in Organizational Knowledge Management Systems (OKMS) is tangible and it acts as an enabler for facilitating KM and economic empowerment initiatives in communities.

According to Elise (2016), part of the recommendations and principles provided to enhance women economic empowerment is to get more women connected: internet connectivity and mobile phones as a way of enhancing ICT- enabled knowledge management. This would improve access and speed to information related to markets, financial services, maternity services, etc. and attempt to close the remaining gaps in inadequate access to real time information to enhance women’s economic potential and hence subsequently improve the national GDP.
Effective knowledge-sharing and learning require technological support. Technologies that are being used successfully range from desktop video-conferencing, Lotus Notes, multimedia mail, document management systems, Intranet-based Webs, and artificial intelligence tools, information retrieval engines, help-desk applications, data warehousing and data mining tools. An illustrative example is in technology transfer – the articulation and codification process at Ericsson helped them transfer the telecommunication know-how globally, and subsequently resulted in the firm’s growth (Babita et al, 2000).

However, technology is secondary to a human element in the KM process. In his study Babita argues that in most cases, managers obtain information not from IT systems but through other channels: “… managers get two-thirds of their information from face-to-face or telephone conversations; they acquire the remaining third from documents, most of which come from outside the organization and aren’t on the computer system”. Hence, organizations need a process of articulation and codification of tacit knowledge into explicit knowledge so that it can form a repository of corporate memory. Chaparral Steel, one of the first organizations to adopt knowledge-focused management, based their internal organizational structure and corporate strategy to capture technical and market leadership without the assistance of information technology practice (Babita et al, 2000).

According to Leung (2014), information and communication technologies play an essential role in fulfilling knowledge sharing. The knowledge sharing process is viewed as a social process and is therefore greatly influenced by the socio-cultural factors of an organization, which determine the success or failure of any knowledge management efforts. The people-oriented perspective whose primary goal of is to promote people-to-people (and mainly face-to-face) knowledge sharing utilizes technologies, but as facilitative mechanisms which enable or enhance the social processes. The study also concludes that ICT facilitates seamless knowledge sharing and retrieval.
According to Babita et al (2000), the adoption of new KM methods is also facilitated by the collapse of time/space boundaries owing to innovations in telecommunications technology. These innovations have not just facilitated sharing information across an entire organization, but almost made it imperative for the continued survival and expansion of an organization. This concept is clearly supported by the emerging new organizational theories that imply that the only competitive advantage a firm has in the twenty-first century is what they know and how they use it. There are currently two major trends in KM: measuring the intellectual capital of an organization-developing measurement ratios/indexes and benchmarks and knowledge mapping-capturing knowledge gained by individual and disseminating it throughout the organization, mainly via information technology.

Sangeeta (2015) also observes that KM is not just about capturing, storing and transferring information but rather the pattern of interacting between people, technologies and techniques is also important. He further establishes that ICT comprises a crucial element of the structural dimension needed to mobilize social capital for creation of new knowledge. He says that technology is able to overcome the barriers of time and space that would limiting factors in KM activities, serving as a respiratory in which knowledge can be reliably stored and efficiently retrieved.

### 2.5 Economic Empowerment

Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways that recognize the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth (OECD, 2017). Empowerment involves the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives. It entails giving a group of people the means to be in control of their own economic destiny. It also consists of helping people improve their economic status as well as letting them gain more control over that status. Economic empowerment typically includes efforts
to make the vulnerable such as the poor, disadvantaged, etc., people self-sufficient. For instance, it can involve efforts to provide affordable loans to people so that they can open their own businesses, training so that they will be more aware of how to improve their economic status among other strategies.

Empowerment is also described as the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives. (Narayan, 2002). Economic empowerment is about making markets work for communities (at the policy level) and empowering men and women to compete in markets (World Bank, 2006). This definition has clear focus on economic factors specified as land, labour, product and financial markets (Kabeer, 2012).

An exploration of local terms associated with empowerment include: self-strength, control, self-power, self-reliance, own choice, life of dignity in accordance with one’s values, capable of fighting for one’s rights, independence, own decision making, being free, awakening, etc. Empowerment is of inherent value and is relevant at the individual and collective level. It can be economic, social, or political. The term is used to characterize relations within households or between poor people and other actors at the global level (Levis, 2011).

According to Calves (2009), this term has featured in the social services, social psychology, public health, adult literacy and community development spheres. Dalberg (2014) found out that the field of international development has not been insusceptible to this concept either: the idea of empowerment prominently features in the current discourse of international development organizations. As observed by Calves (2009), there was a rise of the feminist movement in the Global South attributed to the formal appearance of the term “empowerment” in the field of international development in 1987. According to Calves (2009), just around the same time, empowerment initiatives also bloomed in Asia and Africa among feminist organizations such as the Self-Employed Women’s Association (SEWA) and
Working Women Forum in India and the Green Belt movement in Kenya. Though the feminist literature concentrates on the process of empowerment for women, most of the publications recognize empowerment as being relevant to both women and men to facilitate gender equity, inclusion and sustainability of development programmes at community level.

While originally empowerment was conceived as a strategy in opposition to the mainstream top-down development model, today it is viewed by international organizations not as a mechanism for social transformation, but rather as a means to increase efficiency and productivity. The World Bank, for example, which appears less concerned with the transformation of power relations in favour of the poor than with the creation of a propitious environment for market penetration, has imposed an instrumental vision of empowerment that is more interested in how the poor can contribute to development than how development can contribute to increase the power of the poor. The goal of empowerment is to “build the assets of poor people to enable them to engage effectively in markets” (Calves, 2009). This also implies empowering the poor to be able to make responsible/better decisions and choices that will support them to make a difference in their households and communities, improve their incomes, access to services such as education, finance, employment, basic needs like water, food, shelter, etc.

Levis, (2011) reveals that across different social, cultural, economic, and political contexts, the common elements that underlie poor people’s exclusion are voicelessness and powerlessness. Challenged with unequal power relations, poor people are unable to influence or negotiate better terms for themselves with stakeholders including: traders, financiers, governments, and civil society. This severely compels their capability to build assets and emerge out of poverty. Dependent on others for their survival, poor women and men also frequently find it difficult to prevent violations of dignity, respect, and cultural identity.
According to Calves (2009), from 1990 to the end of the decade, empowerment had ultimately become part and parcel of the new credo and doctrines of international development organizations on poverty reduction. Empowerment has gradually been institutionalized in the political language of international development organizations such as the World Bank. According to Dalberg (2014), international organizations are on a craze to promote empowerment of the poor including community-based projects and, more recently, the participation of civil society and particularly associations of the poor. This has been evidenced by a number of international summits, including the Millennium Summit in New York in 2000 setting the Millennium Development Goals (MDGs), the sustainable development summit in Johannesburg in 2002 and the Paris Declaration in 2005. These were blueprints accepted by several countries and world leading development institutions as galvanized effort to meet the needs of the world’s poorest. Currently, the Sustainable Development Goals (SDGs) have become a center of focus for actors in development and economic empowerment spheres.

According to Calves, (2009) a report released by the World Bank defined empowerment as a means enhancing the capacity of poor people to influence the state institutions that affect their lives, by strengthening their participation in political processes and local decision-making (World Bank 2001, 39). As “voicelessness and powerlessness are key dimensions of poverty (World Bank 2001, 112), the fight against poverty thus becomes inseparable from empowerment of the poor within communities. The report further suggests that fostering empowerment requires making state institutions more responsive to the poor especially within communities.

According to Kabeer (2012), economic empowerment is essential to realise that both men and women’s rights to achieve broader development goals such as economic growth, poverty reduction, health, education and welfare. The report also states that a man or woman is economically empowered when he/she has both the ability to succeed and advance economically and the power to make and act on economic decisions. The process includes the capacity of both men and women to participate
in, contribute to and benefit from growth processes in ways that recognise the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth in society. This entails efforts to increase people’s access to markets in land, labour and capital and for investments in basic social services, social protection and infrastructure.

Calves (2009) advocates for Freire’s concept of “developing critical consciousness”. This involves an active teaching method that helps the individuals amongst communities become aware of their own situation, of themselves as “subjects,” so that they may obtain the “instruments that would allow them to make choices” and become “politically conscious”. For Freire, “the role of the educator is not simply to transmit knowledge to the student, but to seek alongside him the means to transform the world that surrounds him.”

Source: Adopted from Noar Foundation (2017)

Figure 2.3: The Virtuous Circle of Economic Empowerment
2.5.1 Inclusion and Participation

According to World Bank, (2004) inclusion focuses on the question of: Who is included? While participation addresses the question of: How they are included? And the role they play once included. Inclusion of the poor and other traditionally excluded groups in priority setting and decision making is critical to ensure that scarce public resources build on local knowledge and priorities, to create economic sustainability and commitment to change. This will be in areas such as: national priority setting, budget formation, and delivery of basic services.

Participation can take different forms: direct, representational- by selecting representatives from membership-based groups and associations, political- through elected representatives, information-based, with data aggregated and reported directly or through intermediaries to local and national decision makers, based on competitive market mechanisms, increasing choice about what people can grow or to whom they can sell, or by payment for services selected and received (World Bank, 2004).

Participation of poor people is the most developed component of economic empowerment in World Bank projects and increasingly also in preparation of Bank Country Assistance Strategies (CAS). In low-income countries, the process of preparing Poverty Reduction Strategy Papers (PRSP) has opened new opportunities for broad-based participation by poor people, citizens’ groups, and private sector groups in national priority setting and policy making (World Bank, 2004).

Despite the perceived campaigns, effort and desire to encourage “participation” by the poor, and the emphasis placed on funding and supporting community-based development projects, many studies show that there has not been any significant interrogation of the top-down approach, which encompasses the needs and interests of the vulnerable such as women and the poor being predetermined and imposed from above (Calves, 2009). On the other hand, several scholars support the rhetoric of participation and the “bottom-up” model of the 1970s, which advocates for the engine
of development as the empowerment of the poor and the local community, rather than the market and the state. This also comes with more of a hands-up approach than the hand-out approach for community economic empowerment interventions (World Bank, 2004).

2.5.2 Access to Information and Education

According World Bank (2004), access to timely information about programs, or about government performance is a necessary precondition for action for communities/poor people in economic empowerment. As it is for a fact that information is power, informed communities are well-suited to exercise their rights, take advantage of opportunities, access services, negotiate effectively and hold their leaders and those in power accountable.

Without information that is timely, relevant, and presented in forms that can be understood, it is impossible for the poor people to take effective affirmative action for their economic progression and transformation. Information dissemination includes both written scripts and group discussions, poetry, storytelling, debates, street theatre, and soap operas, etc. It also involves use of various media platforms including radio, television, and the internet. Timely access to information in local languages from independent sources at the local level is particularly important for economic empowerment progress, as more and more countries devolve authority to local government a case in point of the Kenyan county devolution system (World Bank, 2004).

However, most economic empowerment and investment projects at both community and national or global levels sometimes underestimate the need for information and invest so little in information disclosure and dissemination. Significant areas worth substantial investment include information about rules and rights to basic services, state and private sector performance, financial services, markets, and prices. Information and communications technologies (ICT) can play important roles in connecting communities to these kinds of information (World Bank, 2004).
According to Waigi (2008), access to education is another significant factor to community economic empowerment. An educated society is a breeding ground for innovation and advancement for positive self-sustaining economic growth. It is vital and imperative to educate both men and women no matter where they live, for they will grow to become responsible citizens to their communities. Waigi further states that the long-term solution to poverty, illness, violence and other problems communities face is education.

Education and training provide basis for labour force skills and knowledge. Education and skills training, including technical, vocational, and agricultural training and extension services. These provide both men and women with the knowledge needed to engage in higher-value and emerging jobs and sectors while breaking down occupational segregation. To support communities to develop knowledge and skills, and be able to participate in paid employment and in higher-value work, it is imperative to build both men and women’s life skills, basic literacy and numeracy, and financial literacy; increase access to technical and vocational training, including in non-traditional, higher-value, and emerging sectors; and create links between education, training programs and employment opportunities to facilitate the transition from education to work (The Department of Foreign Affairs, Trade and Development, 2013).

2.5.3 Accountability
Accountability refers to the ability to call public officials, private employers or service providers to account for, be answerable for their policies, actions and use of public funds. Corruption, which is defined as the abuse of public office for private gain, affects the poor and communities the most because they are the least likely to have direct access to officials and the least able to use connections to get services; they also have the fewest options to use private services as an alternative. Ability of communities to hold their leaders accountable for public actions and outcomes comes with empowerment if they are to be effective. Access to information by communities
builds momentum for improved governance and accountability, for instance in setting priorities for national expenditure, providing access to quality education, ensuring that roads once financed actually get built, or medical service delivery. (World Bank, 2004).

Accountability for public resources at all levels can also be ensured through transparent fiscal management and by offering users choice in services. At the community level, this may for instance include giving poor groups such as community based organisations choice and the funds to purchase technical assistance from providers rather than requiring them to accept technical assistance provided by government. In this case, the poor can hold providers accountable and have them in control (World Bank, 2004).

2.5.4 Local Organizational Capacity, Access to Resources and Credit

Local organizational capacity refers to the ability of people to work together, organize themselves, and mobilize resources to solve problems of common interest. Usually outside the reach of formal systems, poor people in communities turn to and rely on each other for support and strength to solve their everyday problems. Poor people’s organizations for instance community based organisations (CBOs) are often informal, for example a group of women who lend each other money. They may also be formal, with or without legal registration, as in the case of farmers’ groups or neighbourhood clubs (World Bank, 2004).

Organized communities are more likely to have their voices heard and their demands met than communities with little organization. Poor people’s membership-based organizations may be highly effective in meeting survival needs, but they are constrained by limited resources and technical knowledge. In addition, they often lack bridging and linking social capital, that is, they may not be connected to other groups unlike themselves or to the resources of civil society or the state. It is only when groups connect across communities and form networks or associations that they begin to influence government decision making and gain collective bargaining power.
with stakeholders such as suppliers of raw materials, buyers, and financiers. Local organizational capacity is key for development effectiveness. (World Bank, 2004). Such capacity is also reflected in the local organizational governance structures to manage the resources at their disposal.

According to Muthoni et al (2015), one of the greatest factors disfavouring women economic empowerment is limited access to resources. For example, in many cultures, land is passed on to men and not women. Most rural land is registered to men despite the fact that women are the ones dealing in production of the land. For example, women hold only about 1% of registered land title deeds in Kenya according to Kimenye (1999). When it comes to water accessibility in communities, the subject matter is usually of more concern to the women than men. The location of the water source implies an increase or decrease in the time spent fetching or hauling water. Once a water supply system is brought to a community, a lot of time from water collection is saved. Many times women use this saved time in expanding or initiating more economically and productive activities aimed at income-generation that subsequently benefits their households.

According to Muthoni et al (2015), an individual is economically empowered when one has both the ability to succeed and advance economically and the power to make and act on economic decisions. For this to happen, both men and women need the skills and access to resources to compete in markets as well as fair and equal access to economic institutions. To have the power to benefit from economic activities, both men and women need to have the ability to make and act on decisions and control resources and profits.

Access to credit is still a problem for many people in developing countries according to the United Nations. Formal financial institutions such as banks are hesitant to lend to community groups and the poor. Microfinance programs providing communities with financial and business credit also have policies and thresholds that cut off the poor in terms of accessing loans including title deeds. Without title deeds, individuals
at household level as well as groups within their communities are often unable to access credit. Lack of resources and accumulated wealth, access to affordable and trustworthy financial services, poor communities face persistent poverty and remain economically un-empowered (Muthoni et al 2015).

Access to financial and business literacy trainings and capacity building increases communities’ awareness, knowledge and skills on how to manage the acquired loans to run their economic activities and businesses better as empowered individuals and groups. Such capacity building ultimately enhances the profitability of business and other economic activities and subsequently the individual/household incomes. (Muthoni et al 2015).

According to Muthoni et al (2015), a number of micro finance institutions have emerged over time in Kenya to meet the demand for credit. These range from non-governmental organizations, savings and credit co-operatives, commercial banks and regulated specialized providers. Access to savings and credit facilities strengthens communities in economic decisions. It does not only improve their skills, knowledge and but also enhances their status in the community. The credit also facilitates growth and support of start-ups that usually support households and livelihoods.

2.6 Chapter Summary
The chapter has provided a review of literature guided by the research questions. The literature helped the researcher come up with an appropriate research methodology in the next chapter. The chapter has been completed on the basis of the research questions; what is the effect knowledge generation on economic empowerment within communities? How do existing knowledge sharing mechanisms affect economic empowerment within communities? How does ICT-enabled knowledge management affect economic empowerment within communities? Chapter three covers the research methodology.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the study research methodology. The chapter is organized as follows: the research design is presented first, followed by the population and sampling design, data collection methods, data analysis, research procedures and finally the summary of the chapter is presented.

3.2 Research Design
A research design is a plan or strategy of shaping a research study (Matt Henn et al, 2006). The study used a descriptive research design investigating variables by answering who, what, where, when and how questions (Saunders & Thornhill, 2009). Employing this research design, the researcher conducted a survey on the sample derived from the population of choice, namely CBOs in the informal settlements of Kibera, Mathare, Korogocho and Mukuru working with Umande Trust. The independent variable being tested was knowledge management comprised of knowledge generation, knowledge sharing and ICT-enabled knowledge management, while the dependent variable was economic empowerment represented by inclusion and participation, access to information and education, accountability and local organization capacity access to resources an credit.

3.3 Population and Sampling Design
3.3.1 Population
According to Cooper & Schindler, (2014) a population is the total collection of elements about which the researcher wishes to make some inferences. It can be group of people or items that researcher takes opportunity to study in terms of characteristics and behavior. A population can also be a well-defined set of people, group of things, households, firms, services, elements or events which are being investigated. The population for this study was 55 Community Based Organizations (CBOs) involved in economic empowerment initiatives within the informal
settlements of Kibera, Mathare, Korogocho and Mukuru in Nairobi County in Kenya working with Umande Trust.

3.3.2 Sampling Design
According to Cooper and Shindler (2014), sampling is a selection of individuals from the population in such a manner that every individual in the population has an equal chance of being selected into the sample population. Mugenda (2003), defines a sample design as a technique used by a researcher in getting a sample from the population to ensure precision and accuracy of the information. Sampling focuses on the selection of a subset of individuals or respondents from within a population to estimate and determine characteristics for the entire population as described below:

3.3.2.1 Sampling Frame
A sampling frame is a list of elements from which the sample is actually drawn- it is a complete and correct list of population members only. (Cooper and Shindler, 2014). The purpose of a sampling frame is to provide a means for choosing the particular members of the target population that are to be studied. The sample frame for this study was obtained from Umande Trust office and CBOs databases.

3.3.2.2 Sampling Technique
According to Cooper and Shindler, (2014) a sampling technique is the selection of elements from the population that represent the population. It is a scientific method of selecting the sample to be studied from a population. This study did a census: all CBOs in informal settlements of Kibera, Mathare, Korogocho and Mukuru in Nairobi County were surveyed. A census is a count of all elements in a population (Cooper and Shindler, 2014).

3.3.2.3 Sample Size
The sample size is a smaller set of the larger population (Cooper and Shindler, 2014). Mugenda and Mugenda (2003) suggest that the sample ought to be carefully selected to ensure it is representative of the population and the need for the research ensuring
that all the sub-divisions involved in the analysis are catered for accurately. To get
the sample size for this study, databases of Umande Trust and CBOs of Kibera,
Mathare, Korogocho and Mukuru were reviewed to determine the total number of
CBO members involved in economic empowerment projects/initiatives to be
sampled for the study. A sample of 200 respondents was randomly selected from 55
CBOs of Kibera, Mathare, Korogocho and Mukuru.

3.4 Data Collection Methods
Data collection methods involve gathering of relevant facts presented to the
researcher from the study environment for the study (Cooper and Shindler, 2014).
The study used primary data while CBO records from Umande Trust offices and the
CBO databases were used in sample selection. Primary data involved collection from
respondents using a structured questionnaire. The questionnaire included close
ended questions to which respondents were expected to provide answers. The
questions were structured with a five-point Likert-scale and ranking for the responses
from the respondents. The close-ended questions were used to provide a greater
uniformity and homogeneity of responses. The questionnaire had two major sections
of the independent and dependent variable with sub-sections under each variable.
Under the independent variable, respondents answered questions on knowledge
generation, knowledge sharing mechanisms and ICT-enabled knowledge
management while under the dependent variable, respondents answered questions on
inclusion and participation, accountability, access to information and education, local
organization capacity, access to resources and credit.

3.5 Research Procedures
Pretesting was done by administering at least ten (10) questionnaires to community
members from three (3) randomly selected Community Based Organisations (CBOs)
in the informal settlement of Kibera in Nairobi. This was done to ensure the validity
and reliability of the data collection tool/questionnaire. It also helped to gather
relevant feedback and suggestions for further improvement of the tool. The final
questionnaires were then printed and distributed amongst the respondents with the
help of three (3) data administrators. To improve the response rate, a cover letter explaining the reasons for the research and its importance including why the recipient was selected and a guarantee of the respondents’ confidentiality was provided. The questionnaire had instructions for easy responses from the selected respondents.

3.6 Data Analysis Methods
Data analysis is a process of transforming a mass of raw data into tables, charts with frequency distribution and percentages, which are a vital part of making sense of the data (Saunders & Thornhill, 2009). The collected data was first checked for completeness, validity, reliability and accuracy. The data was then sorted, edited and entered into computer statistical packages to enable carrying out the analysis. Analysis was done using descriptive statistics which involved transforming the mass of raw data into tables, charts with frequency distributions and percentages to make sense of it. The researcher then used frequency distribution tables, percentages, correlations and regressions to present and later on interpret the study findings.

3.7 Chapter Summary
This chapter summarizes the methodology used in conducting the study. First, the research design was applied in a descriptive nature. It specifies the population, sample frame, sample size and the sampling technique that was used in the study. It then discusses the data analysis method and research procedures that were utilized for the study. The next chapter presents the results and findings of the study of the research questions with respect to the data collected from the respondents.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
This chapter presents, explains and analyses the data on the basis of the research specific objectives. It includes tables used to present the quantitative data with respective brief descriptions of the figures (percentages) as highlighted in the tables. It presents the analysis and reports on general information with respect to the respondents and then the respective variables under study: knowledge generation, knowledge sharing, ICT enabled knowledge management, and economic empowerment.

4.2 Description of Demographic Information
General information about the respondents including gender, age, marital status, level of education, years of membership to the CBO, leadership role and membership of CBO was captured and is presented in this section.

4.2.1: Response Rate
To show and interpret the number of respondents who participated in the study, Table 4.1 was used. From the table, it is seen that from a population of 200 questionnaires administered within the 55 CBOs of Kibera, Mathare, Korogocho and Mukuru, only 115 filled questionnaires were considered valid representing 57.5% of the response rate while 85 were considered invalid by the researcher as they did not meet reliability and validity measures representing 42.5% of the response rate. This shows that a significant number of the sample participated in the study.
Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Sample</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid questionnaires</td>
<td>115</td>
<td>57.5%</td>
</tr>
<tr>
<td>Invalid questionnaires</td>
<td>85</td>
<td>42.5%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2.2: Gender
The majority of the respondents from the CBOs interviewed were female with a composition of 62% while the male respondents were 38% of the total respondents.

Figure 4.1: Gender of the respondents
4.2.3: Age Category

Majority of the respondents were aged between 34-54 years with almost 57% of the followed by 34% in the range of 26-34 years while respondents aged above 55 years took about 9% share of all the respondents.

![Age category of the respondents](image)

Figure 4.2: Age category of the respondents

4.2.4: Marital Status

From the findings, the married respondents were 61.74% while divorced and separated were about 25%. Widowed and single respondents were 6.09% and 7.83% respectively.
4.2.5 Education

Majority of the respondents (52.17%) had high school as the highest level of education, college education followed with 33.04% while primary school and university education were 9.57% and 4.35% respectively.
4.2.6 Years of Membership in the CBO

Majority (42.61%) of the respondents reported to have spent 1-3 years in the CBO. Respondents who had spent 4-6 years in the CBO were 34.78%, those who has spent more than 7 years were 14.78% while about 7% hadpent below 7 months.

Table 4.2: Years of Membership in the CBO

<table>
<thead>
<tr>
<th>Years in the CBO</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6 months</td>
<td>1</td>
<td>0.87</td>
</tr>
<tr>
<td>7months to 1 year</td>
<td>8</td>
<td>6.96</td>
</tr>
<tr>
<td>1-3years</td>
<td>49</td>
<td>42.61</td>
</tr>
<tr>
<td>4-6 years</td>
<td>40</td>
<td>34.78</td>
</tr>
<tr>
<td>&gt;7 years</td>
<td>17</td>
<td>14.78</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>115</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

4.2.7 Leadership Position held in the CBO

Out of the respondents interviewed, 6.96% indicated that they held the chairperson position, 22.61% the secretary position, 13.4% the treasurer position, 7.83% the vice chairperson position while 49.57% held other positions in the respective CBOs.

![LEADERSHIP POSITION HELD IN THE CBO](image_url)

Figure 4.5: Position/ Membership held in the CBO
4.2.8 Number of Group Members in the CBOs

Most of the respondents (64.35%) reported that they had a membership range of 21-40, while 28.7% indicated a membership of 41-60, and 4.35% revealed that they had group members ranging from 61-80 while only 2.61% reported a membership range of 1-20 in their CBOs.

Table 4.3: Number of Group Members in the CBOs

<table>
<thead>
<tr>
<th>Number of Group Members</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>3</td>
<td>2.61</td>
</tr>
<tr>
<td>21-40</td>
<td>74</td>
<td>64.35</td>
</tr>
<tr>
<td>41-60</td>
<td>33</td>
<td>28.7</td>
</tr>
<tr>
<td>61-80</td>
<td>5</td>
<td>4.35</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3 Knowledge Generation

Knowledge generation is key for supporting organisational growth, continuity and survival in today’s competitive and dynamic environment. The study sought to investigate how knowledge used is generated within the groups within the informal settlements. The descriptive results show how knowledge is generated and shared within the group members in the CBOs are presented (Table 4.4 and 4.5) below.

The findings from the study showed that respondents get information through storytelling sessions to a very little extent (70.2%) while entertainment and art plays a little role (67%) in knowledge generation. Moreover, over 50% of the respondents noted they obtain knowledge through observation and membership in CBO/community. It can be noted that most (over 70%) respondents get information through project teams/staff members. Interaction with group members during CBO activities contributes to knowledge generation to a large extent with over 60% while use of flyers, manuals, posters and reports, collaboration/partnership with other groups, institutions, partners etc. provides information to a little extent; 46% and 29.8% percent respectively.
### Table 4.4: Knowledge Generation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get information/knowledge through storytelling sessions</td>
<td>80(70.2)</td>
<td>30(26.3)</td>
<td>3(2.6)</td>
<td>1(0.9)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I obtain information/knowledge through entertainment and art</td>
<td>22(19.1)</td>
<td>77(67)</td>
<td>15(13)</td>
<td>10(9)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I use observation to obtain knowledge for learning</td>
<td>11(10.4)</td>
<td>34(32.1)</td>
<td>54(50.9)</td>
<td>7(6.6)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I get knowledge/information from development project teams/staff</td>
<td>5(4.4)</td>
<td>10(8.8)</td>
<td>14(12.3)</td>
<td>48(42.1)</td>
<td>37(32.5)</td>
</tr>
<tr>
<td>(such as Umande Trust staff)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get the knowledge/information. I use from project documentation</td>
<td>6(5.3)</td>
<td>52(46)</td>
<td>39(34.5)</td>
<td>14(12.4)</td>
<td>2(1.8)</td>
</tr>
<tr>
<td>such as flyers, manuals, posters, reports, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get knowledge/information from my CBO/community</td>
<td>6(5.3)</td>
<td>22(19.5)</td>
<td>60(53.1)</td>
<td>23(20.4)</td>
<td>2(1.8)</td>
</tr>
<tr>
<td>I get knowledge from community extension workers</td>
<td>31(30.1)</td>
<td>35(34)</td>
<td>22(21.4)</td>
<td>14(13.6)</td>
<td>1(1)</td>
</tr>
<tr>
<td>I get knowledge/information and learn when I interact with individuals</td>
<td>4(3.5)</td>
<td>38(33.3)</td>
<td>48(42.1)</td>
<td>24(21.1)</td>
<td>0(0)</td>
</tr>
<tr>
<td>during CBO activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My group gathers knowledge/information through collaboration/partnership</td>
<td>7(6.1)</td>
<td>34(29.8)</td>
<td>31(27.2)</td>
<td>29(25.4)</td>
<td>13(11.4)</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 4.4 Knowledge Sharing Mechanisms

Once knowledge is generated, the other most significant process that determines its value and impact is how it is shared. Many organisations grapple with knowledge sharing especially tacit knowledge as most of the organizational knowledge (almost 80%) is tacit. This therefore implies and qualifies the knowledge sharing mechanisms ought to mainly be a social process affected by factors like organisational culture. This study investigated the knowledge sharing mechanisms specifically in groups within informal settlements.

The study found out that about 84.5% of the respondents felt that the language used has very little or little influence on their level of understanding during knowledge sharing sessions such as group meetings while 3.5% noted that language affected their understanding to a large extent. In terms of gender, 44.3% of the respondents
indicated that one’s gender had little influence on information sharing whereas 6.1% noted that gender affects information sharing to a large extent, moreover 38.9% indicated that age has a little influence on how knowledge is shared. Furthermore, the study found out that 29.8% of the respondents share knowledge through workshops, meetings and conferences to a large extent, 22.8% to a little extent, 21.1% to a moderate extent and 9.6% to a very large extent.

In bid to ascertain the influence of personal experience on knowledge sharing, 38.1% felt that this had a little influence while 2.7% influences knowledge sharing to a very large extent. From the findings 38.6% of the respondents share knowledge with others to a moderate extent while 7% largely share knowledge during supervision. From the results 33.3% said that they share knowledge during training to a moderate extent, 31.5% to a large extent and 26.9% to a little extent. The study sought to find out whether leaders of CBOs easily accept change in management practices to allow knowledge sharing when need arises: it was found out that change is accepted to a medium extent according 42.1% of the respondents. 35.1% of the respondents noted that their group welcomes new technology available to support knowledge sharing among members while 30.7% agreed that new technology is welcome to a medium level.
Table 5.5: Knowledge Sharing mechanisms

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>The language used (English, Kiswahili, Sheng, etc.) affects the level of my understanding during knowledge sharing in my group</td>
<td>50(43.5)</td>
<td>48(41.7)</td>
<td>13(11.3)</td>
<td>4(3.5)</td>
<td>0(0)</td>
</tr>
<tr>
<td>One’s gender/sex affects how knowledge is shared in my group</td>
<td>29(25.2)</td>
<td>51(44.3)</td>
<td>28(24.3)</td>
<td>7(6.1)</td>
<td>0(0)</td>
</tr>
<tr>
<td>One’s age affects how knowledge is shared in my group</td>
<td>43(38.1)</td>
<td>44(38.9)</td>
<td>14(12.4)</td>
<td>12(10.6)</td>
<td>0(0)</td>
</tr>
<tr>
<td>We share knowledge through workshops, meetings and conferences</td>
<td>19(16.7)</td>
<td>26(22.8)</td>
<td>24(21.1)</td>
<td>34(29.8)</td>
<td>11(9.6)</td>
</tr>
<tr>
<td>I use experiences (including personal) to share knowledge with others</td>
<td>6(5.3)</td>
<td>43(38.1)</td>
<td>39(34.5)</td>
<td>22(19.5)</td>
<td>3(2.7)</td>
</tr>
<tr>
<td>I share knowledge with others during supervision and follow-ups with my group members</td>
<td>9(7.9)</td>
<td>43(37.7)</td>
<td>44(38.6)</td>
<td>10(8.8)</td>
<td>8(7)</td>
</tr>
<tr>
<td>During trainings, we share knowledge in my CBO</td>
<td>6(5.6)</td>
<td>29(26.9)</td>
<td>36(33.3)</td>
<td>34(31.5)</td>
<td>3(2.8)</td>
</tr>
<tr>
<td>The leaders of my group easily accept change in management practices to allow knowledge sharing when need arises</td>
<td>6(5.3)</td>
<td>24(21.1)</td>
<td>48(42.1)</td>
<td>35(30.7)</td>
<td>1(0.9)</td>
</tr>
<tr>
<td>My group welcomes new technology available to support knowledge sharing among members</td>
<td>6(5.3)</td>
<td>40(35.1)</td>
<td>35(30.7)</td>
<td>32(28.1)</td>
<td>1(0.9)</td>
</tr>
</tbody>
</table>

4.5 ICT- enabled Knowledge Management

Findings from the study revealed that over 90% of respondents from the CBOs sampled felt that they do not have enough computers for knowledge management in their CBOs. Over 40% of the respondents were indifferent about the fact that there are enough cyber cafes/personal computers that they use for managing CBO knowledge. However, over 60% of respondents felt that use of computers/phones/internet helps to reduce costs related to knowledge management. 70% of the respondents on the other hand revealed that information is quickly accessed and shared using such mediums.
Table 4.6: ICT-enabled Knowledge Management

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very Large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>My CBO has enough computers for use the management of knowledge</td>
<td>59(51.3)</td>
<td>38(33)</td>
<td>9(7.8)</td>
<td>9(7.8)</td>
<td>0(0)</td>
</tr>
<tr>
<td>In my area, there are enough cyber cafes/personal computers that we use for managing knowledge for our CBO work</td>
<td>5(4.3)</td>
<td>36(31.3)</td>
<td>57(49.6)</td>
<td>17(14.8)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Using computers/phones/internet, etc. helps me to reduce costs related to information/knowledge management</td>
<td>4(3.5)</td>
<td>31(27)</td>
<td>41(35.7)</td>
<td>36(31.3)</td>
<td>3(2.6)</td>
</tr>
<tr>
<td>I quickly access, use and share information/knowledge when I use computers, internet/phones, etc.</td>
<td>3(2.7)</td>
<td>21(18.9)</td>
<td>48(43.2)</td>
<td>34(30.6)</td>
<td>5(4.5)</td>
</tr>
<tr>
<td>I learn better and faster when I access knowledge/information using computers, internet/phones, etc.</td>
<td>3(2.6)</td>
<td>29(25.4)</td>
<td>55(48.2)</td>
<td>19(16.7)</td>
<td>8(7)</td>
</tr>
<tr>
<td>I use a mobile phone to get knowledge and share it with other members of my group</td>
<td>9(7.9)</td>
<td>29(25.4)</td>
<td>34(29.8)</td>
<td>38(33.3)</td>
<td>4(3.5)</td>
</tr>
<tr>
<td>My group uses computers(desktops and laptops) for to manage the group information</td>
<td>31(27)</td>
<td>28(24.3)</td>
<td>43(37.4)</td>
<td>13(11.3)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I use the internet to access, use and share knowledge</td>
<td>11(9.6)</td>
<td>43(37.4)</td>
<td>38(33)</td>
<td>20(17.4)</td>
<td>3(2.6)</td>
</tr>
</tbody>
</table>

4.6 Economic Empowerment

4.6.1 Inclusion, Participation and Accountability in Economic Empowerment

Results from table 4.7 below indicate that group members have a say in setting of priorities and planning of economic activities of their groups. This is according to over 60% of the respondents who indicated a moderate to large extent participation in planning of group economic activities. Furthermore, 39.1% of the respondents felt that they are ably trained to participate in group economic activity matters to a little extent and according 35.1% of the respondents, holding of leaders of both their group, community, and county accountable for their actions/decisions related to economic activities affecting my life was to a little extent.
Table 4.7: Inclusion and Participation in Economic Empowerment

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very Large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to support my CBO to set priorities, and do planning of economic activity programmes</td>
<td>15(13)</td>
<td>32(27.8)</td>
<td>41(35.7)</td>
<td>23(20)</td>
<td>4(3.5)</td>
</tr>
<tr>
<td>I am ably trained to participate in my/and group economic activity programmes matters</td>
<td>8(7)</td>
<td>45(39.1)</td>
<td>38(33)</td>
<td>19(16.5)</td>
<td>5(4.3)</td>
</tr>
<tr>
<td>I am able to hold the leaders of both my group, community, and county accountable for their actions/decisions related to economic activities affecting my life.</td>
<td>3(2.6)</td>
<td>40(35.1)</td>
<td>32(28.1)</td>
<td>26(22.8)</td>
<td>13(11.4)</td>
</tr>
</tbody>
</table>

4.6.2 Access to Information and Education

The study found out that over 70% of the respondents (table 4.8) noted that they were able to use the knowledge gained from training to: promote economic related activities and business, solve problems both in personal and/or CBO economic activities and business, and understand and run their own personal finances and business while over 50% were able to get employment because of the education/information/knowledge received from group training.
### Table 4.8: Access to Information and Education

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very Large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to use the knowledge from the trainings I receive to promote economic related activities and business</td>
<td>1(0.9)</td>
<td>38(33)</td>
<td>48(41.7)</td>
<td>27(23.5)</td>
<td>1(0.9)</td>
</tr>
<tr>
<td>I am able to apply the education I have received to solve problems both in my/and CBO economic activities and business</td>
<td>5(4.4)</td>
<td>35(30.7)</td>
<td>46(40.4)</td>
<td>28(24.6)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I am able to get employment because of the education/information/knowledge I have received</td>
<td>9(7.9)</td>
<td>37(32.5)</td>
<td>46(40.4)</td>
<td>22(19.3)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I am able to understand and run my personal finances and business</td>
<td>2(1.8)</td>
<td>36(31.9)</td>
<td>50(44.2)</td>
<td>18(15.9)</td>
<td>7(6.2)</td>
</tr>
</tbody>
</table>

### 4.6.3 Local Organization Capacity, Access to Resources and Credit

Findings from table 4.9 below indicate that 38.3% of the respondents were indifferent in terms of having a group to turn to for support to solve everyday problems, the same scenario was noted when respondents were asked to give their view on their groups’ technical knowledge and skills to support group members.

From the study, it was found out that 36% of the respondents felt that they had access to water and other resources needed to conduct economic activities.

To a large extent over 45% of respondents noted that they had access to loans in their CBO and community; over 60% were able to manage loans to run a business that can improve their income. Only 19.5% of the respondents indicated that they had a bank/SACCO/microfinance account where they can save while over 50% didn’t. It can be noted that over 55% felt that they were able to provide education for their children. 50% of the respondents felt that since joining CBOs, their economic status has changed because they are now able to buy water, food and meet other needs of their family. They also indicated improved ability to make economic decisions and control regarding the resources they have including profit from their business/economic activities.
Table 4.9: Local Organization Capacity, Access to Resources and Credit

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Very little extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Large extent</th>
<th>Very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have formal/informal groups in my group I turn to for support to solve everyday problems such as self-help groups</td>
<td>4(3.5)</td>
<td>33(28.7)</td>
<td>44(38.3)</td>
<td>33(28.7)</td>
<td>1(0.9)</td>
</tr>
<tr>
<td>Such groups have sufficient technical knowledge and skills to support us an organised group</td>
<td>4(3.5)</td>
<td>28(24.3)</td>
<td>62(53.9)</td>
<td>21(18.3)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I have access to water and other resources needed to conduct economic activities</td>
<td>4(3.5)</td>
<td>34(29.8)</td>
<td>35(30.7)</td>
<td>41(36)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I am able to access loans in my CBO/community</td>
<td>4(3.5)</td>
<td>23(20)</td>
<td>32(27.8)</td>
<td>53(46.1)</td>
<td>3(2.6)</td>
</tr>
<tr>
<td>I am able to manage loans to run a business that can improve my income</td>
<td>7(6.4)</td>
<td>32(29.1)</td>
<td>56(50.9)</td>
<td>11(10)</td>
<td>4(3.6)</td>
</tr>
<tr>
<td>I have a bank/SACCO/microfinance account where I save income</td>
<td>22(19.5)</td>
<td>36(31.9)</td>
<td>33(29.2)</td>
<td>22(19.5)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I am able to provide education for my children</td>
<td>27(23.7)</td>
<td>36(31.6)</td>
<td>31(27.2)</td>
<td>20(17.5)</td>
<td>0(0)</td>
</tr>
<tr>
<td>I am able to make economic decisions and control regarding the resources I have including profit from my business/economic activity</td>
<td>5(4.3)</td>
<td>25(21.7)</td>
<td>54(47)</td>
<td>28(24.3)</td>
<td>3(2.6)</td>
</tr>
<tr>
<td>I am able to buy water, food and meet other needs of my family</td>
<td>10(8.7)</td>
<td>24(20.9)</td>
<td>37(32.2)</td>
<td>35(30.4)</td>
<td>9(7.8)</td>
</tr>
<tr>
<td>My state has changed since I joined my CBO</td>
<td>1(0.9)</td>
<td>42(38.9)</td>
<td>53(49.1)</td>
<td>12(11.1)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

4.6.4 Correlation between KM and Economic Empowerment

4.6.4.1 Correlation between KM and Inclusion and Participation

Economic empowerment depicted through ability to support CBOs to set priorities, and do planning for economic activity programmes was highly correlated to sharing knowledge through workshops, meetings and conferences (v13). Ability to apply the knowledge/education one has received to solve problems both in CBO economic activities and business (v35) and also correlated with sharing knowledge in CBO during trainings (v16). It was also noted that with increase in age, the economic empowerment reduced as presented in Table 10.
### Table 4.10: Correlation between KM and Inclusion and Participation

<table>
<thead>
<tr>
<th>Statement</th>
<th>I am able to support my CBO to set priorities, and do planning of economic activity programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>v32 I am ably trained to participate in my and group economic activity programmes matters</td>
<td>0.41</td>
</tr>
<tr>
<td>v33 I am able to support my CBO to set priorities, and do planning of economic activity programmes</td>
<td>0.38</td>
</tr>
<tr>
<td>v6 I get knowledge/information from my CBO/community</td>
<td>0.18</td>
</tr>
<tr>
<td>v9 My group gathers knowledge/information through collaboration/partnership with other groups, institutions, partners, etc.</td>
<td>0.04</td>
</tr>
<tr>
<td>v12 One’s age affects how knowledge is shared in my group</td>
<td>-0.08</td>
</tr>
<tr>
<td>v13 We share knowledge through workshops, meetings and conferences</td>
<td>0.33</td>
</tr>
<tr>
<td>v16 During trainings, we share knowledge in my CBO</td>
<td>0.26</td>
</tr>
<tr>
<td>v21 My CBO has enough computers for use the management of knowledge</td>
<td>-0.08</td>
</tr>
<tr>
<td>v35 I am able to apply the education I have received to solve problems both in my and CBO economic activities and business</td>
<td>0.26</td>
</tr>
<tr>
<td>v39 Such groups have sufficient technical knowledge and skills to support us an organised group</td>
<td>0.28</td>
</tr>
<tr>
<td>d2 Age category</td>
<td>0.21</td>
</tr>
<tr>
<td>d4 Education</td>
<td>-0.001</td>
</tr>
<tr>
<td>d5 Length of CBO membership</td>
<td>0.13</td>
</tr>
<tr>
<td>d6 Leadership/ membership</td>
<td>0.03</td>
</tr>
</tbody>
</table>

*Note: A positive sign indicates a positive relationship (an increase in one influence causes a positive increase in the other and vice-versa)*

### 4.6.4.2 Correlation between KM and Access to Information and Education

The study showed that economic empowerment through access to information and education specifically the ability to apply the information/knowledge received to solve problems both CBO economic related activities and businesses (v35) was highly correlated to the CBOs generating knowledge/information through collaboration/partnership with other groups, institutions, partners, etc. (v9). However, training to participate in group economic activity programmes matters
was negatively correlated to enough computers for use the management of knowledge (v21) as presented in Table 4.11.

Table 4.11: Correlation between KM and Access to Information

<table>
<thead>
<tr>
<th>Statement</th>
<th>I am able to apply the information/knowledge I have received to solve problems both in my CBO economic related activities and business.</th>
</tr>
</thead>
<tbody>
<tr>
<td>v33 I am able to support my CBO to set priorities, and do planning of economic activity programmes</td>
<td>0.34</td>
</tr>
<tr>
<td>v6 I get knowledge/information from my CBO/community</td>
<td>0.09</td>
</tr>
<tr>
<td>v9 My group gathers knowledge/ information through collaboration/partnership with other groups, institutions, partners, etc.</td>
<td>0.20</td>
</tr>
<tr>
<td>v12 One’s age affects how knowledge is shared in my group</td>
<td>-0.02</td>
</tr>
<tr>
<td>v13 We share knowledge through workshops, meetings and conferences</td>
<td>0.19</td>
</tr>
<tr>
<td>v16 During trainings, we share knowledge in my CBO</td>
<td>0.29</td>
</tr>
<tr>
<td>v21 My CBO has enough computers for use the management of knowledge</td>
<td>-0.33</td>
</tr>
<tr>
<td>v35 I am able to apply the education I have received to solve problems both in my/and CBO economic activities and business</td>
<td>0.21</td>
</tr>
<tr>
<td>v39 Such groups have sufficient technical knowledge and skills to support us an organised group</td>
<td>0.18</td>
</tr>
<tr>
<td>d2 Age category</td>
<td>0.11</td>
</tr>
<tr>
<td>d4 Education</td>
<td>-0.04</td>
</tr>
<tr>
<td>d5 Length of CBO membership</td>
<td>0.11</td>
</tr>
<tr>
<td>d6 Leadership/ membership</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Note: A positive sign indicates a positive relationship (an increase in one influence causes a positive increase in the other and vice-versa)

4.6.5 Regression Analysis

4.6.5.1 Impact of Knowledge Management on ability to support CBOs

According to the findings of the study, getting knowledge/information from CBOs/community, sharing knowledge through workshops, meetings and conferences, having enough computers for use and the management of knowledge, enough cyber cafes/personal computers used for managing knowledge for the CBO
work and use of IT positively influences members’ ability to support their CBOs to set priorities and planning for economic programmes as presented in Table 4.12.

The members that had ability to support CBOs to set priorities and planning for economic activity programmes also indicated that they were able to apply the education received to solve problems in the CBO economic activities and business. They also revealed that their CBOs had sufficient technical knowledge and skills to support the members. The results also showed that CBO members’ ability to make economic decisions and control regarding the resources also positively influences economic empowerment. The results are in line with the correlation coefficients results presented in table 4.11.
### Table 4.122: Impact of KM on ability to support CBOs

| Variable                                                                 | Coef. | Std. Err. | t     | P>|t|  |
|-------------------------------------------------------------------------|-------|-----------|-------|-------|
| V6 I get knowledge/information from my CBO/community                     | 0.29  | 0.11      | 2.59  | 0.012 |
| V7 I get knowledge from community extension workers                     | 0.05  | 0.08      | 0.61  | 0.546 |
| v9 My group gathers knowledge/ information through collaboration/partnership with other groups, institutions, partners, etc. | -0.25 | 0.10      | -2.63 | 0.011 |
| v12 One’s age affects how knowledge is shared in my group               | -0.21 | 0.10      | -2.00 | 0.05  |
| v13 We share knowledge through workshops, meetings and conferences      | 0.35  | 0.09      | 4.07  | 0     |
| v14 I use experiences (including personal) to share knowledge with others| -0.07 | 0.10      | -0.65 | 0.517 |
| v16 During trainings, we share knowledge in my CBO                      | -0.38 | 0.12      | -3.15 | 0.003 |
| v21 My CBO has enough computers for use the management of knowledge     | 0.37  | 0.12      | 3.08  | 0.003 |
| v22 In my area, there are enough cyber cafes/personal computers that we use for managing knowledge for our CBO work | 0.37  | 0.12      | 3.18  | 0.002 |
| v26 I learn better and faster when I access knowledge/information using computers, internet/ phones, etc. | 0.32  | 0.10      | 3.04  | 0.004 |
| v28 I use a mobile phone to get knowledge and share it with other members of my group | 0.23  | 0.10      | 2.22  | 0.03  |
| v29 My group uses computers(desktops and laptops) for to manage the group information | -0.10 | 0.11      | -0.87 | 0.389 |
| v30 I use the internet to access, use and share knowledge               | 0.14  | 0.11      | 1.37  | 0.176 |
| v34 I am able to use the knowledge from the trainings I receive to promote economic related activities and business | 0.08  | 0.10      | 0.76  | 0.453 |
| v35 I am able to apply the education I have received to solve problems both in my/and CBO economic activities and business | 0.27  | 0.15      | 1.76  | 0.085 |
| v39 Such groups have sufficient technical knowledge and skills to support us an organised group | 0.39  | 0.12      | 3.28  | 0.002 |
| v42 I am able to manage loans to run a business that can improve my income | -0.03 | 0.12      | -0.26 | 0.793 |
| v44 I am able to provide education for my children                      | 0.05  | 0.09      | 0.56  | 0.576 |
| v45 I am able to make economic decisions and control regarding the resources I have including profit from my business/economic activity | 0.18  | 0.10      | 1.71  | 0.093 |
| v47 My state has changed since I joined my CBO                          | -0.37 | 0.15      | -2.47 | 0.017 |
| d2 Age category                                                         | -0.39 | 0.15      | -2.52 | 0.015 |
| d4 Education                                                            | 0.17  | 0.12      | 1.32  | 0.191 |
| d5 Length of CBO membership                                             | 0.28  | 0.13      | 2.23  | 0.03  |
| d6 Leadership/ membership                                               | 0.17  | 0.06      | 3.00  | 0.004 |
| _cons                                                                  | -2.80 | 1.11      | -2.53 | 0.014 |

Source: SS df MS Number of obs = 80
Model: 49.21894 24 2.050789 Prob > F = 0.0000
Residual: 18.73106 55 .340 564809 R-squared = 0.7243
Total: 67.95 79 .860 126582 Adj R-squared = 0.6041

---

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4.6.5.2 Impact of Knowledge Management on Inclusion and Participation

Ability to participate in group economic activity programmes matters was negatively influenced by relying on knowledge gained from other development projects and project documentation as presented in Table 4.13.

Knowledge gained when CBO members shared information was significant in influencing economic empowerment. The language used during sharing of information also positively impacted on economic empowerment since the CBO members would even use the local language that is clearly understood by the members. Information shared during trainings and workshops had a positive influence on economic empowerment while knowledge gained through directives and supervision activities in the group had negative influence. The CBOs that adopted and used new technology were able to participate in group activities. Since most groups did not adopt new technology, members could not quickly access information through new technology such as mobile phone and internet. Respondents also revealed that because of empowerment through group activities, they were able to get employment, do business and provide basic necessities to the family. Results from correlation coefficients table 4.13 agree with the regression results presented in table 4.12 above.
Table 4.133: Impact of KM on Inclusion and Participation

| Variable                                                                 | Coef. | Std. Err. | t     | P>|t|  |
|--------------------------------------------------------------------------|-------|-----------|-------|-------|
| v4 I get knowledge/information from development project teams/staff (such as Umande Trust staff) | -0.25 | 0.08      | -3.13 | 0.003 |
| v5 I get the knowledge/information I use from project documentation such as flyers, manuals, posters, reports, etc. | -0.24 | 0.10      | -2.25 | 0.028 |
| v7 I get knowledge from community extension workers                       | 0.05  | 0.09      | 0.58  | 0.562 |
| v8 I get knowledge/information and learn when I interact with individuals during CBO activities | 0.26  | 0.10      | 2.49  | 0.015 |
| v10 The language used (English, Kiswahili, Sheng, etc.) affects the level of my understanding during knowledge sharing in my group | 0.25  | 0.10      | 2.51  | 0.015 |
| v13 We share knowledge through workshops, meetings and conferences         | 0.25  | 0.07      | 3.46  | 0.001 |
| v15 I share knowledge with others during supervision and follow-ups with my group members | -0.26 | 0.11      | -2.41 | 0.019 |
| v16 During trainings, we share knowledge in my CBO                        | 0.14  | 0.10      | 1.42  | 0.161 |
| v18 My group welcomes new technology available to support knowledge sharing among members | -0.32 | 0.09      | -3.48 | 0.001 |
| v21 My CBO has enough computers for use the management of knowledge      | -0.43 | 0.11      | -4.03 | 0.001 |
| v25 I quickly access, use and share information/knowledge when I use computers, internet/ phones, etc. | 0.09  | 0.11      | 0.77  | 0.442 |
| v26 I learn better and faster when I access knowledge/information using computers, internet/ phones, etc. | -0.33 | 0.10      | -3.18 | 0.002 |
| v29 My group uses computers(desktops and laptops) for to manage the group information | 0.28  | 0.10      | 2.88  | 0.005 |
| v35 I am able to apply the education I have received to solve problems both in my and CBO economic activities and business | 0.24  | 0.11      | 2.18  | 0.033 |
| v36 I am able to get employment because of the education/information/knowledge I have received | 0.66  | 0.12      | 5.75  | 0.0001 |
| v37 I am able to understand and run my personal finances and business     | 0.22  | 0.13      | 1.70  | 0.095 |
| v38 I have formal/informal groups in my group I turn to for support to solve everyday problems such as self-help groups | -0.18 | 0.10      | -1.90 | 0.063 |
| v39 I am able to apply the education I have received to solve problems both in my and CBO economic activities and business | -0.15 | 0.13      | -1.16 | 0.252 |
| v44 I am able to provide education for my children                         | -0.23 | 0.09      | -2.60 | 0.012 |
| v45 I am able to make economic decisions and control regarding the resources I have including profit from my business/economic activity | -0.12 | 0.09      | -1.26 | 0.211 |
| v46 I am able to buy water, food and meet other needs of my family        | 0.25  | 0.09      | 2.88  | 0.005 |
| d4 Education                                                              | -0.14 | 0.12      | -1.13 | 0.264 |
| d6 Leadership/ membership                                                  | 0.06  | 0.05      | 1.13  | 0.261 |
| _cons                                                                     | 2.20  | 1.16      | 1.89  | 0.063 |

Source Table:

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 87</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2.31</td>
<td>850901.0</td>
</tr>
<tr>
<td>Residual</td>
<td>21.11107</td>
<td>63</td>
<td>.335</td>
<td>96418.0</td>
</tr>
<tr>
<td>Total</td>
<td>74.43678</td>
<td>86</td>
<td>.865</td>
<td>543972.0</td>
</tr>
</tbody>
</table>

Root MSE = .57888
Adj R-squared = 0.6128
4.6.5.3 Impact of Knowledge Management on Accountability

Respondents holding CBOs/groups, community, and county leaders accountable for their actions/decisions related to economic activities was positively influenced by knowledge sharing and ability to use the knowledge gained from the CBO as presented in Table 4.14 below.

Respondents that had received training/empowerment from the CBOs indicated that they had ability to hold their CBO, community and county leaders accountable for their actions/decisions related to economic activities. Specifically, those who shared knowledge through workshops, meetings and conferences and during training were significantly empowered to hold leaders accountable. The CBO members holding leaders accountable were also able to apply knowledge gained to run and solve problems in their personal businesses and also secure jobs. They were able to make economic decisions and provide basic needs for the families. The results agree with correlation coefficients results presented in table 4.13.
| Variable                                                                 | Coef. | Std. Err. | t     | P>|t| |
|------------------------------------------------------------------------|-------|-----------|-------|-----|
| v4 I get knowledge/information from development project staff           | -0.13 | 0.09      | -1.46 | 0.15|
| v5 I get the knowledge/information from project documentation such as   | -0.33 | 0.11      | -2.96 | 0.004|
| v7 I get knowledge from community extension workers                     | 0.13  | 0.10      | 1.33  | 0.187|
| v11 One’s gender/sex affects how knowledge is shared in my group       | 0.12  | 0.10      | 1.22  | 0.227|
| v13 We share knowledge through workshops, meetings, and conferences     | 0.29  | 0.08      | 3.52  | 0.001|
| v18 My group welcomes new technology available to support knowledge     | -0.13 | 0.11      | -1.21 | 0.23 |
| v21 My CBO has enough computers for use the management of knowledge    | 0.17  | 0.13      | 1.29  | 0.203|
| v26 I learn better and faster when I access knowledge/information       | -0.09 | 0.11      | -0.80 | 0.424|
| v28 I use a mobile phone to get knowledge and share it with other      | 0.07  | 0.09      | 0.73  | 0.468|
| v35 I am able to apply the education I have received to solve problems  | 0.38  | 0.13      | 3.00  | 0.004|
| v36 I am able to get employment because of the education/information    | 0.23  | 0.12      | 1.92  | 0.059|
| v37 I am able to understand and run my personal finances and business   | 0.10  | 0.13      | 0.79  | 0.435|
| v39 I am able to apply the education I have received to solve problems  | 0.14  | 0.13      | 1.06  | 0.291|
| v45 I am able to make economic decisions and control regarding the      | 0.33  | 0.11      | 3.02  | 0.004|
| v46 I am able to buy water, food, and meet other needs of my family    | 0.38  | 0.10      | 3.87  | 0  |
| v47 My state has changed since I joined my CBO                          | 0.01  | 0.16      | 0.04  | 0.965|
| d3 Marital status                                                       | 0.20  | 0.10      | 2.05  | 0.044|
| d6 Leadership/membership                                               | 0.08  | 0.06      | 1.29  | 0.203|
| _cons                                                                  | -2.19 | 0.73      | -2.98 | 0.004|

Source: SS df MS Number of obs = 90

<table>
<thead>
<tr>
<th>Model</th>
<th>77.94018</th>
<th>18 4.33</th>
<th>976</th>
<th>F(18, 71) = 8.80</th>
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<tr>
<td>Residual</td>
<td>34.94871</td>
<td>71 .492</td>
<td>235398</td>
<td>Prob &gt; F = 0.0000</td>
</tr>
<tr>
<td>Total</td>
<td>112.8889</td>
<td>89 1.26</td>
<td>841448</td>
<td>R-squared = 0.6904</td>
</tr>
</tbody>
</table>

Root MSE = .70159 Adj R-squared = 0.6119
4.7 Chapter Summary

This chapter presents the results and findings of the study. Findings are presented in frequency tables and figures. The presentation is aligned to the research questions and reports on the findings of knowledge generation, knowledge sharing mechanisms, ICT-enabled knowledge management, and economic empowerment within the CBOs in the informal settlements. Lastly, it shows the regression and correlation analysis showing the extent of how knowledge generation, knowledge sharing and ICT-enabled knowledge management affect economic empowerment in CBOs in informal settlements. The next chapter presents the discussion of findings, conclusions and recommendations.
CHAPTER FIVE

5.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a discussion on the findings of the study for each of the research questions by provision of both similarities and deviations from previous studies. The chapter begins with a summary of the study through highlighting the research problem, methods of data collection, and summarized findings for each of the research questions that were explored. In the subsequent sections, the researcher gives detailed discussions, conclusions and recommendations for further research for each respective research question.

5.2 Summary

The purpose of this study was to investigate the impact of knowledge management (KM) on economic empowerment within communities specifically focusing on informal settlements of Kibera, Mathare, Korogocho and Mukuru of Nairobi, Kenya that are being supported by Umande Trust. The researcher tested three research questions: First, establishing the effect of knowledge generation on economic empowerment, whether existing knowledge sharing mechanisms affect economic empowerment, and how ICT-enabled knowledge management affects economic empowerment.

The study used a descriptive survey design. This employed a quantitative methodology which helped in providing and analysing quantitative data. It involved use of a structured questionnaire as a data collection tool to gather information from the respondents. The structured questionnaire was administered to 200 respondents. The population of the study were 55 Community Based Organizations (CBOs) working with Umande Trust on economic empowerment projects in the informal settlements of Kibera, Muturu and Mathare within in Nairobi county. The sample size was 200 community members with at least 3 respondents randomly picked from the 55 CBOs. A census was conducted for the study to ensure that every
community member is picked. Out of the 200 questionnaires distributed, only 115 were considered valid representing 57.5% of the response rate while 85 were considered invalid by the researcher as they did not meet reliability and validity representing 42.5% of the response rate. A Likert scale of 1 to 5 representing very little extent to very large extent was utilized in testing the impact of knowledge management on economic empowerment within communities specifically informal settlements in Kenya. Data analysis was done using computer statistical packages. Descriptive statistics including frequencies, mean, correlations and regression were utilized to inform the analysis.

The findings from the study were then presented in tables and figures and interpreted. Dealing with the research problem at hand, the researcher empirically tested the components of knowledge management and economic empowerment whose responses were employed and incorporated in the sampled unit. Knowledge management was comprised of three independent variables including knowledge generation, knowledge sharing mechanisms and ICT-enabled knowledge management while economic empowerment was broken down into inclusion and participation, accountability, access to information and education, and local organisation capacity, access to resources and credit.

In terms of the demographics, it was evident that the CBO population within the informal settlements is mainly composed of females with a percentage of 62% while males is only 38%. This can inform to justify that more women are involved groups targeted by economic empowerment initiatives in informal settlements. Under age, the highest category was comprised of those aged between 34 to 54 years (56.52%), highlighting the most productive age in community based organisations. This was followed by the youthful workforce aged between 26 to 34 years implying that the youth are becoming more involved in CBO economic activities. It was followed closely by those aged between 31 and 35 years (22.2%). On the other hand, it also showed that the elderly and aging population aged above 54 years only form 9% of the CBOs.
This may be attributed to the wearing energy to actively get involved in economic activity of the community. In terms of marital status, most of the respondents from the CBOs (61.74%) were married implying that involvement in CBO economic activities is valued by married couples. These were followed by the divorced members with a 17.39%, single, separated and widowed. On level of education, the majority of respondents (52.17%) had a high school as the highest level of education, followed by college education while university and primary levels were reported least. This implies that a larger population of the CBO composition is literate. In terms of the number of years of membership in the CBOs, majority of the respondents had spent 1 to 3 years with 42.61% followed by those that had spent between 4 to 6 years (34.78%), 14.78% above 7 years while only 7% had spent below 7 months. This shows that the majority of the members have good experience in CBO activities and that CBOs are relevant to the community thus the long stay in membership. Almost half of the respondents (50.44%) interviewed held a leadership position on the board of their CBOs while 49.56% were active members in their respective CBOs. This implies fair representation and involvement in the CBO activities. In terms of the overall membership of the CBOs considered for the study, most of the CBOs (64.35%) had a membership between 21 to 40 members, followed by those with membership ranging from 41 to 60 with a percentage of 28.7% while 7% were either above 60 or below 20. This implies that most of the CBOs are small and still in the infant/early growth stage of development.

5.3 Discussion

5.3.1 Knowledge Generation and Economic Empowerment

The study revealed that knowledge generation influences economic empowerment in the CBOs within the communities in the informal settlements. This was evident from the findings focusing on the specific knowledge generation dimensions of knowledge generation systems, knowledge mapping and collaboration. In terms of knowledge generation systems, it was found out that knowledge within
communities is mainly generated from development partners’ project teams/staff for example Umande Trust and interactions amongst community members during CBO activities such as meetings and learning through observation. It was also established that knowledge and information from such systems is used to influence members’ ability to support CBOs to set priorities and planning of economic activity programmes. This shows that knowledge generation systems facilitate the processes of externalization and conversion where people are able to take in, reflect, understand and generate their own knowledge for subsequent use in matters that affect their economic well-being. Becerra-Fernandez, (2010) cites that KM generation systems such as interactions support to generate knowledge existing either within or outside organizational boundaries, among employees, consultants, competitors, customers, suppliers or prior employers/employees of the organization. This therefore implies that communities ought to intentionally and strategically cultivate and offer an enabling environment to spur interactions both internally and externally to facilitate knowledge generation for economic empowerment. The study also confirms Russel and Norvig, (2002) description of learning by observation as a computing agent’s ability to improve how it will act in the future, as the agent observes its interactions with the world and its own decision-making process. However, the study revealed that communities use less of storytelling to generate knowledge and information used in their CBOs which is contrary to Denning (2000) submission that storytelling as part of the knowledge generation system bridge knowledge gaps, launches and nurtures communities and stimulates innovation.

In terms of knowledge mapping, the findings showed that knowledge resides with the development partners’ project teams/staff for example Umande Trust and fellow CBO/community members. This implies that communities through their CBOs need to forge linkages between structured and unstructured information so that it can be used for solving specific problems. This resonates with the submission of Babita et al, (2000) that it is imperative for leaders of organizations to understand who has knowledge, and develop support systems for its creation and application.
Through such a process, they can create knowledge maps that identify where knowledge resides and which knowledge needs to be shared with whom, how, and why. This indicates that the development partner teams and CBO/community members need to understand the specific CBO work to be able to provide the required knowledge and information for economic empowerment. This is further affirmed by the worker productivity theorem by Drucker (1999), where he emphasizes that to produce information executives need for their work, they ought to know the type of information they owe to the people they work for and depend on, in specific a form and a time frame.

The study established that there was a significant correlation between use of collaborations/partnerships with other groups and institutions to generate knowledge and access to information and education. Respondents revealed that their ability to participate in group economic activity programmes had improved as a result of the knowledge/information they had gathered/shared through collaboration/partnership with other groups, institutions, and partners. They also indicated that they are in better position to apply the knowledge/education they had received to solve problems both in the CBO economic activities and personal business. This justifies the significance of partnerships/collaborations including complementing and leveraging for synergies for improvement. This is consonance with AIIM (2017) which establishes collaboration as a working practice where individuals work together to a common purpose to achieve business benefit. According to AIIM (2017), collaboration and partnerships enable individuals to work together to achieve a defined and common business purpose. The findings are in line with Dodgson (1994) who terms collaboration as any activity where two or more partners contribute differential resources and know-how to agree complementary aims. The findings of the study also concurred with Sangeeta (2015) who states that the creation of organizational knowledge requires collaboration of personal experiences. This takes place at two levels within the organization: between individuals and between the organization/project and its network of partners including actors and communities in the economic empowerment spheres. This
therefore means that perhaps communities specifically CBOs ought to invest in and spur strategic partnerships and collaborations as part of their knowledge generation strategy to inform economic empowerment initiatives.

5.3.2 Knowledge Sharing Mechanisms and Economic Empowerment

The study found that knowledge sharing mechanisms employed impact economic empowerment within communities. This was seen in the two dimensions under knowledge sharing mechanisms the researcher tested: knowledge sharing as a social process and knowledge organisational culture.

In terms of knowledge sharing as a social process, the findings revealed that the language (English, Kiswahili or Sheng- mixture of Kiswahili and English) used had little influence on the level of understanding during the knowledge sharing process for the CBOs. This can be attributed to the fact that most of the members of the CBOs are literate as revealed by the education levels of the respondents during the study. The study revealed that knowledge sharing takes place to a large extent during social interactions such as trainings, meetings, workshops and conferences and that such positively influence members’ ability to support CBO to set priorities and planning of economic activity programmes, hold leaders accountable and make more informed economic decisions affecting CBOs and personal businesses. This can be explained by the fact that naturally human beings learn more in social settings as explained by both Leung (2014) and Jasimuddin (2005) that face to-face interaction in knowledge transfer amongst individuals is the most efficient mode of knowledge sharing. This further confirms Handizac (2017) model which establishes that socialization of tacit knowledge was the most effective organizational knowledge sharing activity. This implies that institutions including communities such as CBOs and economic empowering partners like Umande Trust ought to employ and engage more of social interacting knowledge sharing initiatives within their economic empowerment programmes/projects. The findings of the study also found out that gender and
age as a socio-cultural factors had little influence on the knowledge sharing process within the CBOs. This can be ascribed by the several gender and equality awareness initiatives and campaigns that have been conducted in the past amongst communities in Kenya.

With reference to knowledge organisational culture as a critically important aspect for facilitating sharing and learning, the study revealed that most CBO leaders easily accepted change in management practices to allow knowledge sharing when need arises. This is confirmed by Babita et al (2000) where it is stated that effective knowledge-sharing and learning require cultural change within the organization specifically new management practices, senior management commitment and technological support. In addition, Sangeeta (2015) emphasised that the most important organizational knowledge (tacit) can be shared by creating a knowledge sharing culture in the organization. The study also revealed that majority of the CBOs embraced and welcomed new technology available to support knowledge sharing. However, findings also showed that most groups did not adopt the new technology. This can be attributed to the resource constraints and high expenditure associated with the technology and thus members could not quickly access information through new technology such as mobile phone and internet. On the other hand, findings under the regression analysis showed that CBOs that adopted and used new technology to access information were able to participate in group activities and through the empowerment received from such group activities, the members were able to get employment, do business and provide basic necessities to the family. This means that institutions promoting economic empowerment including community based organisations and development partners like Umande Trust may have to re-think about the strategy for information access for the members by facilitating and investing in new technology such as smart phones and internet to increase access to information as well as having a good attitude geared towards economic empowerment.
5.3.3 ICT-enabled Knowledge Management and Economic Empowerment

Adoption and use of technology to access information and knowledge required for economic development has significantly become part and parcel of economic empowerment in the 21st century. According to the findings of the study, the researcher found out that ICT-enabled knowledge management positively influences economic empowerment. This was after testing ICT knowledge management dimensions of knowledge management systems (KMS) and infrastructure.

The KMS include an IT system that stores and retrieves knowledge, improves collaboration, locates knowledge sources, mines repositories for hidden knowledge, captures and uses knowledge, or in some other way enhances the KM process for example mobile phones, computers (Knowledge Management, 2017). The study revealed that possession of computers, access to cyber cafes (internet) for use and the management of knowledge by CBO members enhanced their ability to support CBOs to set priorities and planning for economic programmes. However majority of the respondents indicated that their CBOs did not have enough computers for knowledge management process. This could be due to resource constraints and high costs related to the purchase of computers. This can be explained by the ease in using ICT. The study also showed that majority of the CBOs use ICT (including mobile phones, internet and computers) to quickly access, use and share information. Majority also indicated that they learn better, faster, and incur less cost when they use ICT. This also confirms Drucker (1999) that information revolution is unprecedented in reducing the cost of spreading information and knowledge. This means that it is worth for institutions implementing the economic empowerment agenda including communities to invest in technology as an integral part of successful functioning of knowledge management for enhanced economic empowerment. This is confirmed by Amidon (1997) who indicates that supporting technology gives a commensurate economic return for investment in technology to support knowledge management. Technology serves as a competitive advantage in the KM dimension through creating an enabling environment for quick learning,
accelerating innovation, facilitating creation of large databases. Yiyu (2017) also recommends that computer systems can be designed for the management of knowledge for organisations including economic empowerment projects.

In terms of infrastructure including both hardware and software, the findings confirm Elise (2016) recommendations and principles provided to enhance women economic empowerment highlighting the need to get more women connected through internet connectivity and mobile phones as a way of enhancing ICT-enabled knowledge management. This would improve access and speed to information related to markets, financial services, etc.

5.4 Conclusion

5.4.1 Knowledge Generation and Economic Empowerment
The study revealed that knowledge generation influences economic empowerment in the CBOs within the communities in the informal settlements. This was evident from the findings where respondents indicated that knowledge and information generated from both development partners and the community is used to influence CBO members’ ability to set priorities and planning for economic programmes. This implies that knowledge generation impacts economic empowerment within communities.

5.4.2 Knowledge Sharing Mechanisms and Economic Empowerment
The study established that knowledge sharing mechanisms employed relatively impact economic empowerment within communities. This was seen in how the respondents revealed that the two dimensions under knowledge sharing mechanisms the researcher tested: knowledge sharing as a social process and knowledge organisational culture including socio-cultural factors such as gender, age have little influence on knowledge sharing for economic empowerment initiatives in their CBOs. However, the major highlight was that knowledge acquired by CBO members through social interactions such as
meetings, trainings and workshops positively influence members’ ability to support the CBOs to set priorities and planning of economic activity programmes, hold leaders accountable, make more informed economic decisions affecting CBOs and personal businesses.

5.4.3 ICT enabled - Knowledge Management and Economic Empowerment

The study concluded that ICT-enabled knowledge management specifically knowledge management systems (KMS) and infrastructure positively influences economic empowerment. The study showed that majority of the respondents in the CBOs who use ICT (including mobile phones, internet and computers) quickly access, use and share information related to economic empowerment projects. These also indicated to learn better faster, and less cost when they use ICT. This revealed that ICT-enabled knowledge management influences economic empowerment within communities.

5.5 Recommendations

5.5.1 Recommendations for Improvements

The following recommendations are made in tandem with the research questions which were outlined in the study.

5.5.1.1 Responses to Knowledge Generation

The study recommends that communities ought to intentionally and strategically cultivate and offer an enabling environment to spur interactions both internally and externally to facilitate knowledge generation to support economic empowerment. The study also recommends that institutions promoting economic empowerment including communities need to forge linkages between structured and unstructured information so that it can be used for solving specific problems as most of the knowledge used is from development partners’ project teams and interactions amongst community members during CBO activities such as meetings and learning through observation.
5.5.1.2 Responses to Knowledge Sharing Mechanisms

The study recommends that institutions including communities and economic empowering partners ought to employ and engage more of social interacting knowledge sharing initiatives/platforms such as trainings, meetings, workshops and conferences, etc. to enable effective knowledge sharing for economic empowerment programmes/projects. This is because naturally human beings learn more in social settings like face to-face interactions which renders it the most efficient mode of knowledge sharing. It also recommends that such institutions ought to invest in new technology such as mobile phones, computers, access to internet to improve information access and sharing amongst communities.

5.5.1.3 Responses to ICT- enabled Knowledge Management

The study recommends that it is worth for institutions implementing the economic empowerment agenda including communities to invest in technology including knowledge management systems and infrastructure (including hardware and software) and also sensitize/raise awareness for the value/use of the same as an integral part of successful functioning of knowledge management for enhanced economic empowerment for communities.

5.5.2 Recommendations for Further Research

The study recommends that future research studies are conducted on other aspects of the knowledge management process such as knowledge storage and presentation and how these affect economic empowerment in communities. This would serve to holistically understand the component of knowledge management in economic empowerment in communities and how it ought to be handled. Moreover, the study was only carried out in informal settlements in Nairobi County in Kenya, and thus can be replicated in other counties in the country and other African countries.
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APPENDICES

APPENDIX A: COVER LETTER

Dear Respondent,

RE: RESEARCH QUESTIONNAIRE

I am a graduate student pursuing a Masters of Business Administration (MBA) - Strategic Management. I am currently undertaking a research on the impact of knowledge management on economic empowerment within communities. This is a requirement in partial fulfilment of the MBA degree program at the United States International University of Africa (USIU-A). The study will be based on knowledge generation, knowledge sharing mechanisms and ICT-enabled knowledge management impact on economic empowerment within communities in Kenya - A case study of informal settlements in Nairobi. The results of the study will be instrumental for your Community Based Organizations (CBO), other communities and stakeholders focusing on economic empowerment in Kenya.

This is an academic research and confidentiality shall strictly be adhered to. Your name will not appear anywhere in the report. Kindly spare at least 10 minutes to complete the questionnaire attached.

Sincerely,

Maria Grace Nankya
APPENDIX B: QUESTIONNAIRE

SECTION ONE

Please tick appropriately *with an X* the extent to which you agree with the following statements in the space provided:

<table>
<thead>
<tr>
<th>SN</th>
<th>Variable</th>
<th>Very little extent (1)</th>
<th>Little extent (2)</th>
<th>Moderate extent (3)</th>
<th>Large extent (4)</th>
<th>Very large extent (5)</th>
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<tr>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>I get information/knowledge through storytelling sessions</td>
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<td>2</td>
<td>I obtain information/knowledge through entertainment and art</td>
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<td>3</td>
<td>I use observation to obtain knowledge for learning</td>
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<tr>
<td>4</td>
<td>I get knowledge/information from development project teams/staff (such as Umande Trust staff)</td>
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<td>5</td>
<td>I get the knowledge/information I use from project documentation such as flyers, manuals, posters, reports, etc.</td>
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<td>6</td>
<td>I get knowledge/information from my CBO/community</td>
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<tr>
<td>7</td>
<td>I get knowledge from community extension workers</td>
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<tr>
<td>8</td>
<td>I get knowledge/information and learn when I interact with individuals during CBO activities</td>
<td></td>
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<tr>
<td>9</td>
<td>My group gathers knowledge/ information through collaboration/partnership with other groups, institutions, partners, etc.</td>
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<td></td>
<td><strong>Knowledge sharing mechanisms</strong></td>
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<tr>
<td>10</td>
<td>The language used (English, Kiswahili, Sheng, etc.) affects the level of my understanding during knowledge sharing in my group</td>
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<td>11</td>
<td>One’s gender/sex affects how knowledge is shared in my group</td>
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<td>12</td>
<td>One’s age affects how knowledge is shared in my group</td>
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<td>13</td>
<td>We share knowledge through workshops, meetings and conferences</td>
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<tr>
<td>14</td>
<td>I use experiences (including personal) to share knowledge with others</td>
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<td>15</td>
<td>I share knowledge with others during supervision and follow-ups with my group members</td>
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<td>16</td>
<td>During trainings, we share knowledge in my CBO</td>
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<td>17</td>
<td>The leaders of my group easily accept change in management practices to allow knowledge sharing when need arises</td>
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<tr>
<td>18</td>
<td>My group welcomes new technology available to support knowledge sharing among members</td>
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<td>21</td>
<td>My CBO has enough computers for use the management of knowledge</td>
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<td>22</td>
<td>In my area, there are enough cyber cafes/personal computers that we use for managing knowledge for our CBO work</td>
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<tr>
<td>23</td>
<td>Using computers/phones/internet, etc. helps me to reduce costs related to information/knowledge management</td>
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<td>25</td>
<td>I quickly access, use and share information/knowledge when I use computers, internet/ phones, etc.</td>
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<td>26</td>
<td>I learn better and faster when I access knowledge/information using computers, internet/ phones, etc.</td>
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<td>28</td>
<td>I use a mobile phone to get knowledge and share it with other members of my group</td>
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<tr>
<td>29</td>
<td>My group uses computers(desktops and laptops) for to manage the group information</td>
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<tr>
<td>30</td>
<td>I use the internet to access, use and share knowledge</td>
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<tr>
<td></td>
<td><strong>ECONOMIC EMPOWERMENT</strong></td>
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<tr>
<td>31</td>
<td>I am able to support my CBO to set priorities, and do planning of economic activity programmes</td>
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<tr>
<td>32</td>
<td>I am ably trained to participate in my/and group economic activity programmes matters</td>
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<td>33</td>
<td>I am able to hold the leaders of both my group, community, and county accountable for their actions/decisions related to economic activities affecting my life.</td>
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<td></td>
<td><strong>Access to information and education</strong></td>
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<td>34</td>
<td>I am able to use the knowledge from the trainings I receive to promote economic related activities and business</td>
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<td>35</td>
<td>I am able to apply the education I have received to solve problems both in my/and CBO economic activities and business</td>
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<td>36</td>
<td>I am able to get employment because of the education/information/knowledge I have received</td>
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<td>37</td>
<td>I am able to understand and run my personal finances and business</td>
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<td></td>
<td><strong>Local organization capacity, access to resources and credit</strong></td>
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<td>38</td>
<td>I have formal/informal groups in my group I turn to for support to solve everyday problems such as self-help groups</td>
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<tr>
<td>39</td>
<td>Such groups have sufficient technical knowledge and skills to support us an organised group</td>
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<tr>
<td>40</td>
<td>I have access to water and other resources needed to conduct economic activities</td>
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</table>
41. I am able to access loans in my CBO/community

42. I am able to manage loans to run a business that can improve my income

43. I have a bank/SACCO/microfinance account where I save income

44. I am able to manage loans to run a business that can improve my income

45. I am able to provide education for my children

46. I am able to make economic decisions and control regarding the resources I have including profit from my business/economic activity

47. I am able to buy water, food and meet other needs of my family

My state has changed since I joined my CBO

SECTION TWO

Demographic information

Kindly respond to the following questions by ticking on the appropriate box (X)

1. What is your gender?
   ( ) Male       ( ) Female

2. How old are you?
   ( ) 18-25  ( ) 26-34  ( ) 35-54  ( ) 55-64
   ( ) 65 and above

3. What is your current marital status?
   ( ) Single     ( ) Married  ( ) Divorced  ( ) Separated
   ( ) Widow (er)

4. What is your highest level of education?
   ( ) Primary school     ( ) High school     ( ) College     ( ) University
   ( ) Others

5. How long have you been a member of this CBO/group?
   ( ) 1-6 months  ( ) 7 months to 1 year  ( ) 1 to 3 years  ( ) 4 to 6 years
   ( ) 7 years and above

6. Are you a leader/part of the CBO board? If yes, which position do you hold?
7. How many active members does your CBO/group have?

( ) 1-20 ( ) 21-40 ( ) 41-60 ( ) 61-80
( ) 80 and above

THANK YOU FOR YOUR TIME AND COOPERATION

**********END************