TACIT KNOWLEDGE SHARING AND PUBLIC SECTOR PERFORMANCE IN KENYA

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DECLARATION

I declare that this is my original work and has not been presented in any University for a degree or for any consideration of any certification.

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DEDICATION

This study is dedicated to my family which has sacrificed a lot by ensuring that the learning bug that was implanted in me in early childhood is exploited; not to overlook the Almighty God who is the reason why I live.

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I am greatly indebted to the Almighty God for granting me superb health to go through this strenuous course. Special gratitude to: My lecturers and staff of Dedan Kimathi University of Technology, for their invaluable support throughout the duration of the study; my supervisors, Prof. Mwita Marwa and Dr. Juma Misiko, for their invaluable guidance and support; and my nuclear family for loving me.

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ABSTRACT

Knowledge is the most important asset to an organization since, unlike other organizational assets; it is non-imitable and takes a long time before it gets outdated. Many organizations pay a lot of attention to the quality of other factors of production like land and capital and ignore labor, entrepreneurship and management. The study sought to establish the influence of tacit knowledge sharing on the performance of public sector departments in Kenya.

Chapter one traces the historical advancement of knowledge management up to the level of tacit knowledge sharing. it explores the following objectives: To determine the factors that influence tacit knowledge sharing and their influence on public sector performance, examining the extent to which tacit knowledge is shared in the public sector departments, examining government policies that address tacit knowledge sharing in public sector departments and generating strategies and specific interventions that the public sector can utilize to enhance tacit knowledge sharing and performance. The study is significant, since in the knowledge age, knowledge is one of the most important tools for gaining competitive advantage. The study also acts as a springboard for other researchers to base future researches on the gaps occasioned by this study. Though comprehensively researched, the study area was confined to the public sector and to only four variables. The study assumed that the research instruments were adequate and would be returned duly filled.

Both scholarly and empirical literature that was reviewed confirmed that tacit knowledge sharing influences public sector performance and is crucial for competitive advantage. Literature by scholars such as Nonaka and David Kolb was reviewed. The study was guided by intellectual capital theory, constructivism theory, self-efficacy theory and Nonaka's model of knowledge creation.

The study employed use of descriptive and comparative research design and targeted all public sector departments in Kenya. Eight counties namely Samburu, Makueni, Kirinyaga, Kilifi, Nairobi, Homa Bay, Bungoma and Garissa, formed the sample of the study. The study adopted purposive sampling to seek responses from the management and the line staff in the chosen public departments. Questionnaires were dropped and picked and the data collected was analysed using descriptive statistics and Pearson's correlation coefficient. The analysed data was presented in graphs, tables, charts and other appropriate presentations. Chief among the conclusions made were that workforce communication and interactions, organizational culture and functional boundaries have a more significant influence on organizational performance than motivation. The county by county analysis showed that workforce communication and interactions were insignificant in all the counties. Both were positive in Garissa, Makueni and Kirinyaga counties. In all other counties, they was negative and insignificant. Functional boundaries were found to be positively significant in Samburu,

Kilifi, Bungoma, Garissa and Kirinyaga counties. However in the remaining counties, they were positive but insignificant. Organizational culture was found to be positively insignificant in Samburu, Kilifi, Makueni and Nairobi County but was negatively insignificant in the other counties. Motivation was found to be positively significant in Samburu, Kilifi, and Bungoma counties but was positively insignificant in the rest of the counties. On the national government analysis, the national government was found to lack concrete policies on tacit knowledge sharing and counties displayed unique characteristics in the county by county analysis.

The study recommended that organizations consider adopting open plan offices and institute dress codes since they encourage sharing and create unity respectively among workers. The study also recommended that the government both national and county come up with knowledge sharing policies and also transform into resource centers that can generate knowledge. Recommended areas for further research are that the same study can be replicated in performing institutions to gauge the influence of tacit knowledge sharing and corporate performance. Longitudinal research can also be undertaken to establish the influence of tacit knowledge sharing on organizational performance over time.

LIST OF ABBREVIATIONS AND ACRONYMS

KM: Knowledge Management

KS: Knowledge Sharing

IKMN: International Knowledge Management Network

US: United States

SECI: Socialization, Externalization, Combination, Internalization

IT: Information Technology

C.E.O: Chief Executive Officer

KMA: Knowledge Management Africa

A*STAR: Agency for Science, Technology and Research, Singapore

AMREF: African Medical Research Foundation

R & D: Research and Development

GDP: Gross Domestic Product

DBSA: Development Bank of South Africa

ENECA: United Nations Commission for Africa

UNDP: United Nations Development Program

WHO: World Health Organization

FAO: Food and Agriculture Organization

TKS: Tacit Knowledge Sharing

OPERATIONAL DEFINITION OF SIGNIFICANT TERMS

Tacit knowledge: It is knowledge that is highly personal, aptitudes, perceptions, insights and Know how that are implied or indicated but not actually expressed and it resides in individuals and teams

Explicit Knowledge: Knowledge that is codified and conveyed to others through dialogue, demonstration, or media such as books, drawings and documents

Functional boundaries: Rigid walls or demarcations brought about by departmentation that may interfere with knowledge sharing

Public sector: The section of the government departments that offer services to the public

Line staff **:** Government employees who are neither heads of departments nor subordinate staff for example accountants, teachers

Knowledge Sharing: Ensuring knowledge moves and is transfused from one person to another

Organizational culture: Set of important understandings but often unstated like norms, values, attitudes, beliefs and paradigms.

Data: Recorded (captured and stored) symbols (text and/or verbal) or signs

Information: Message that contains relevant meaning, implication, or input for decision and/or action which can be current and/ or historical

Knowledge: Cognition or recognition (know-what), capacity to act (know-how), and understanding (know-why) that resides or is contained within the mind or in the brain

Knowledge Sharing Forums: Gatherings, symposiums or colloquiums both physical and social deliberately organized where ideas, views or topics of interest to specific parties are exchanged

Online Discussion Forum: A forum for discussing and posting of views, ,l;lopinions, facts etc.

Video Conferencing: A telecommunication technology that facilitates interactions between two or more people in different locations in two-way video and audio transmissions simultaneously.

Shared Space Collaboration Tool: A tool that allows interaction and connectivity between two persons

Enterprise Information Portal: A stakeholders platform that that is logged on to to access organisational information.

Document Management System: A computer system that tracks and stores documents electronically.

Content Management System: A program that helps in creating, updating, translating and archiving of digital information

Data Warehousing: Store or data inventory

Search Engine: A system that helps in finding information in a computer

Taxonomy Generator: A gadget for information or knowledge

Customer Relationship Management System: A system that helps in collecting, storing, analyzing and managing relationships with customers

Learning Management System: A system that enables access and delivery of online knowledge to those who need it.

CHAPTER ONE

BACKGROUND OF THE STUDY

1.0. Introduction

Chapter one reviews the background of knowledge management and gives insight on tacit knowledge and tacit knowledge sharing development. It also provides the statement of the problem, research objectives and research questions, the purpose and scope of the study together with operational definition of terms.

1.1. Background Information

1.1.1. Concept of Knowledge Management

Knowledge, according to the Oxford English dictionary, refers to a theoretical or practical understanding of a subject which can be implicit or explicit or formal or systematic. It is the familiarity, awareness or understanding of facts, information, descriptions or skills acquired through experience or education. Plato's *Theaetetus,* Socrates and Theaetetus discuss three definitions of knowledge: knowledge as nothing but perception, knowledge as true judgment, and finally knowledge as true judgment with an account. In the three definitions, the truth concept is emphasized.

Knowledge management as defined in the business dictionary refers to strategies and processes designed to identify, capture; structure, value, leverage and share an organization's intellectual assets to enhance its performance and competitiveness and is based on two critical activities: capturing and documentation of individual explicit and tacit knowledge and dissemination within the organization. Many organizations in Kenya and abroad have espoused the concept of Knowledge Management (KM) as one that gives them a competitive edge over others. KM has been touted as the ultimate solution to most organizations' competitiveness in this era of knowledge edge (Maingi, 2011). The knowledge possessed and used by an organization's personnel could be the difference between its survival and collapse. According to the Organization for Economic Cooperation

and Development, because of the "Knowledge Based Economy", the role of research centers, private or public, is becoming predominant. They are crucial for the production of knowledge, which is an economic asset capable of sustainable growth and a decisive competitive advantage for businesses. Hicks, Dattero, and Galup (2007) in their works, "A Metaphor for Knowledge Management: Explicit Islands in a Tacit Sea", identified three fundamental concepts of knowledge which include: data, information and knowledge. They explain that data is a set of records and represents a fact or statement of event and information. It is formed when we attach semantics to the data and when intelligence is attached to information; knowledge is created (Govil, 2007). This shows that there is a close relationship between data, information, and knowledge. Others distinguish between raw information and knowledge. They state that raw information is widely available to a number of organizations, but only some organizations are able to convert it to relevant knowledge and use it to achieve their aims (Holvand, 2003). Gammelgaard (2007) argues that individuals are disposed to hoard the knowledge they possess, and therefore, as people leave organisations because of dismissal, death or for other reasons, they take with them valuable knowledge. To counteract this, the leadership factor is very important. Ramirez (2007) posits that management needs to support knowledge sharing in organizations and provide visible support to motivate employees to share their knowledge. According to Bock and Kim (2002), knowledge sharing has been considered the most important part of KM. The ultimate goal of sharing employees' knowledge is its transfer to organizational assets and resources and unless individual knowledge is shared throughout the organization, knowledge will have a limited impact on organizational effect. The goal of knowledge sharing therefore can either be to create new knowledge by differently combining existing knowledge or to become better at exploiting existing knowledge.

Knowledge sharing has been defined differently in literature. Bartol and Srivastava (2004) define knowledge sharing as the action in which employees diffuse relevant information to others across the organization. For purposes of this study, knowledge sharing is defined as

the willful application of one's ideas, insights, solutions, experiences (i.e. knowledge) to another individual either via an intermediary, such as a computer-based system, or directly (Turban, King, & Viehland, 2004). According to (Bock & Kim, 2002), to activate knowledge movement directly across individuals and indirectly through a repository, it is important to involve individuals in knowledge sharing activities since tacit knowledge is a component of knowledge that is embedded in people's mind and which is externalized through sharing with others.

1.1.2. Global Perspective of Knowledge Management

Knowledge management is as old as mankind. Its eminent debut though, can be traced in the late forties, during the Second World War, when it was noted that upon successive building of fighter planes, fewer defects were reported and this was associated with knowledge sharing. The early industrial age saw the ancient man make improvements on the survival tools which improved in quality as he made one tool after the other, each time realizing fewer defects because of perfection derived from experience. Upon such understanding, man decided to start saving the experience gained in forms that can be retrieved if need arises. This brought about the concept of learning that encouraged producers of goods to engage in quality mass production that came to warrant exchange of products in form of barter trade.

Several notable gurus are associated with the field of knowledge management, chief among them being Drucker (1999), Senge (1990), and Strassman (1985) who emphasized on the importance of knowledge as a crucial component in organizational learning. It plays an important role in ensuring that knowledge is not availed for the sake of it, but for enhancement of invention and creativity. The main KM driver at the time was improved innovation weighted at 2.9 and which advocated for innovation in processes and techniques used in production to enable development of new products and to adopt new business models. Other great contributors in this field are Everret (1970) in

his book (Diffusion of Innovations) and Allen (2006) in his book on Research on Information and Technology Transfer. During this period, many gurus concentrated on knowledge production, usage and how the same can be diffused across organizations. The 80's laid emphasis on knowledge as a tool of competitive advantage, with such terms as knowledge acquisition, taking prominence. This can be adduced to the realization that knowledge is a uniquely competitive asset that is hard to copy or replicate especially by competitors.

According to Allen (2006), the advancement in technology and world dynamism demanded for a change responsive society and which was only possible through knowledge management. The key business drivers for knowledge management in business organizations and which could have propelled the knowledge acquisition and usage, are operational effectiveness whose contribution to knowledge is weighted at 4.1 and which advocates for delivery of better outcomes through aspects such as learning from experience and development of communities of practice. The second driver which also influenced the period is operational efficiency, rated at 4.0. In this perspective, knowledge management is deployed to reduce cost and time, which involves avoiding repeating costly mistakes through continuous improvement of internal processes so as to work faster and smarter while still delivering same results. The 90's gave rise to institution's initiative of managing knowledge and as such, knowledge management reviews and articles like Sloan Management Review, Organizational Science, and Harvard Business Review came up. The main driver of KM around this period emphasized on retaining knowledge at the risk of loss, weighted at 3.1 which involved knowledge retention and transfer in order to protect against the loss of knowledge through staff retirement. The same period saw such books as the "Knowledge Value Revolution" by Sakaiya (1999) and the "Fifth Discipline" by Senge (1994) .The press took up KM around the same period with a publication "Brainpower" by Tom Stewart

in the Fortune Magazine. In 1994, International Knowledge Management Network (IKMN) went online and this acted as a springboard that made KM go viral with increased KM seminars and conferences which have dominated the world even today. The main KM drivers today are: delivering better customer service weighted at 3.5, which advocates for a focus on the needs of customers, and meeting them as customer demands, improved company growth weighted at 2.8 where KM supports company growth by allowing development of reproducible and reusable knowledge that can be deployed to help each new sector of a business to grow. The last but not the least is impacting health, safety and the environment weighted at 1.4. This driver of KM is deployed, not to help one work faster and cheaper but make work safer and cleaner. Knowledge management complements total quality management, business process reengineering and benchmarking which may not have achieved much as far as competitive advantage is concerned. Knowledge by its very nature is non-imitable and as such is a unique resource that should be nurtured at all costs.

1.1.3 Knowledge Management Initiatives in Africa

Africa lags behind as far as knowledge management initiatives are concerned. An empirical study conducted in Malaysia by Syed-Ikhsan and Rowland (2004), which investigated and examined the availability of KM strategy in the ministry of entrepreneurs and development of Malaysia and whose concerns were perceptions of KM benefits, problems, responsibilities and technology involved in managing knowledge, revealed that the ministry did not have KM strategies required to harness the benefits of knowledge even though knowledge was embedded in the ministry's procedures and policies and therefore available. Many workers felt that the ministry was responsible for managing knowledge and therefore made little attempt to go out of their way to benefit from the available knowledge. Other studies done in the public sector on KM include benchmarking of KM (Syed-Ikhan, 2004), knowledge sharing (Liebowitz& Chen, 2003), KM initiative (Shields, R., Holden. & Schmidt, T., 2000) and KM practices in public administration (WIIG, 2002)

Knowledge Management Africa (KMA) is a KM body that holds biennial conferences in different countries to promote knowledge management implementation in Africa and devices ways in which knowledge management and sharing can be enhanced. The first conference was held in Johannesburg, South Africa in 2005, and the second was in July 17-19, 2007 in Nairobi and whose theme was "Pursuit of Mutual Advantage to rival the countervailing dominance of trade, finance, and investment by affluent countries with high technology". The latest one was held in Dakar Senegal in 2009. Most of these conferences are driven by realization by Africa that her vast resources are useless unless she takes her people's knowledge as very crucial to her growth and move from a resource-based economy to a knowledge-based economy. From experts' opinion, any organization that wants to survive the intense competition for innovation must consider hiring knowledge managers whose job is to take stock of what each and every member of an organization knows and ensuring that employees leaving the organization do not leave with their knowledge but is instead reserved for future use.

Global Development Network (GDN) is another body that organizes knowledge sharing forums for development, the last of which was held in February 27 to 28, 2005 in Egypt to share experiences, meet research communication and discuss knowledge sharing challenges while building relationships among knowledge professionals. Another body known for knowledge creation and sharing is AMREF (African Medical and Research Foundation) which operates programs in the following countries: Kenya, Uganda, Ethiopia, Somalia, South Sudan and South Africa and has its headquarters in Nairobi, Kenya. Its concern is creating and sharing knowledge in the field of health by educating people on their basic rights to health (Ireri&Wairagu, 2007).Singapore established A*STAR (Agency for Science, Technology and Research, Singapore) in 1991 to be a strong and committed national strategy for R&D innovation to grow knowledge capital, and which helped raise Singapore GDP from 1.9 % in 2000 to 3.0% in 2010. The

Singapore government is aiming at 3.5 % in 2015. Other regional organizations in Africa that support the spread of knowledge management is Development Bank of South Africa (DBSA) based in South Africa and United Nations Economic Commission for Africa (UNECA) based in Addis Ababa. United Nations Development Program (UNDP), WHO (World Health Organisation) and FAO (Food and Agriculture Organization) whose presence is in Africa also contribute immensely but their role in knowledge management should be complemented by universities that can act as a platform for knowledge management initiatives especially in e-learning, knowledge sharing platforms like conferences, seminars, communities of interest and common rituals that are taking place often.

1.1.4. Knowledge Management in Kenya

Kenya has 83 registered non-profit organizations and 277 profit-making organizations which in one way or another generate knowledge but whose sharing is not ascertained (Ireri & Wairagu, 2007).Kenya as a case in point has a civil service which keeps reinventing the wheel by doing things the same way such that if there is a mistake in the way things are done, the same mistake is repeated over and over again (Ondari-okemwa, 2006). Reinventing the wheel is very costly because it is a reproduction of what others have already produced and therefore does not give the coveted competitive advantage. According to Ondari-Okemwa, Kenya exhibits similar traits with other sub-Saharan countries since she has not productively integrated KM into its government agencies. The KM system is just beginning to appear in many organizations and therefore there exists little research and field data to guide the development and the implementation of systems that can give potential benefits of KM systems. Chief among the reasons why KM has not been integrated is slow application of appreciation of information and communication technology and introduction of e-government. Other reasons include rigid bureaucracy, lack of incentives and cultural barriers. Lodge and Kalitowski (2007) confirm this view in their paper on "The Role of Knowledge

Management in Enhancing Government Service Delivery in Kenya" that: the civil service is bloated, rigid, hierarchical and over-centralised. Its monopoly status ensures that it is unresponsive and inefficient and that the government is driven by the interest of producers, not users. There is also a notable absence of a performance culture and the civil servants are unaccountable and over-privileged. The Kenya knowledge management and sharing initiatives and policies can be said to be almost wholly reliant on Africa initiatives as indicated by KMA, GDN, AMREF and World Bank report.

Kenya's Knowledge sector is also said to be underdeveloped. According to the World Bank report (2007), on Kenya's knowledge economy readiness, the 2004-2005 indexes was as follows in a scale of 1 to 6.

Table 1.1: Kenya's Readiness for Knowledge Economy in 2004 and 2005 (Scale of 1-6)

	2004	2005
Knowledge economy index	2.62	2.39
Knowledge index	2.76	2.31
Economy incentive and institutional regime	2.21	2.63
Education	1.83	1.97
Innovation	4.18	4.11
ICT	2.28	0.85

Source: World Bank, 2007 (SA Jnl Libs & Info Sci2009, 75(1)

From the table above, the highest score which is below average, is for innovation. The World Bank's assessment for Kenya's preparedness for a knowledge economy reveals that Kenya is far from being ready for a knowledge economy. Knowledge-reliant economies have distinguishing characteristics that show that they depend on

knowledge for growth, provision of superior products and services. Highly trained and educated people and knowledge dominate traditional resources of production such as labour, land and capital (Drucker, 1993).In such societies, workers manage their own self transformation and continuously improve, innovate and develop new applications. As outlined by Evers, Lay and Menkhoff (2004), in a knowledge economy, the number of consultants grows and the quality of their professionalism provides a benchmark for the stage that a knowledge economy has reached. In Kenya, like in other sub-Saharan regions, members of the public are rarely involved or consulted in policy formulation mostly due to the culture of secrecy that prevails in the government matters, which is even demonstrated by the Swahili word that denotes government's name (serekali) which if translated means "top secret" (Ondari-Okemwa2004).

Riley (2003) proposes a renewed faith in the Kenyan government that enables creation of an interactive government involved in wide dialogue with its citizens so as to ensure that knowledge management makes a significant contribution in decision making and creates a knowledge competitive workforce. Heck and Roger (2004) are of the view that knowledge management interventions could improve service delivery, create an organized and technically functional public administration and leverage and optimize skills related to workflow.

1.1.5. Knowledge Management Initiatives in the Kenya Civil Service

The benefits that knowledge management can bring to any civil service can only be realized if KM practices are effectively integrated into public service operations. This can be a very complex process and will depend on a government's approach to the situation. For example, it is crucial that any knowledge management program should take into account both tacit and explicit knowledge, as well as the dominant managerial model of governance. A further factor is the extent to which individuals are both willing and able to, maximize their own value. This, in turn, may dictate how knowledge is

structured and presented to best enhance the decision-making capabilities of civil servants. Another aspect to consider is that the introduction of knowledge management practices into a civil service will not necessarily mean that the relevant civil servants will be willing to share knowledge. Within any bureaucratic structure such as predominates the Kenyan public sector, there is an unspoken motivation not to share knowledge, since according to Weber (1978), the power of any bureaucracy rests upon two types of knowledge: "technical know-how" and "official information". Considering that technical know-how may be shared by many, a civil servant's competitive advantage may lie in official information. Knowledge sharing thus decreases as the level of competition within an organization increases.

1.1.6. Communication and Public Sector Performance

Among the most crucial factors that aid public sector performance is communication. It is the social glue that creates shared meaning, norms, values and culture in organizations. Such practices are incorporation of innovative days, storytelling, best practices day, internal conferences among others. in a culture where knowledge values are recognized, there is availability of information, sharing of information, information flow, information technology structures, personal networking, systems thinking, leadership, communication climate, problem solving, training and many other factors that support knowledge sharing. The synergy of knowledge is increased by sharing with others that which promotes common identity, mutual trust and organizational learning (Schein, 1993). This, according to Schein involves listening, persuading, teaching, learning, presenting, collaborating and partnering, which culminates into communication. In the Kenyan public service, there is limited communication especially between the higher and the lower cadre, giving a scenario of what can be regarded as one-way communication with a lot of instructions coming from the seniors to the juniors and very little from juniors to the seniors. This inhibits the synergy required to share knowledge.

1.1.7. Functional Boundaries and Public Sector Performance

Tacit knowledge sharing is made possible through joint activities such as being together and spending time and living in the same environment. This is regarded as the socialization stage of knowledge conversion (Nonaka & Konno, 1998). This stage relies heavily on the quality of conversations both formally and informally (Davenport & Prusack, 1998). The Kenyan civil service is characterized by rigid bureaucracy and extremely formal scalar chain that acts as a limitation to knowledge sharing. These are coupled with strong hierarchical chains and departmentation that demarcates areas of interactions that members may not traverse.

1.1.8. Organizational Culture and Public Sector Performance

Organizational culture is said to be the fabric that hold groups together. It includes the shared values, norms, beliefs, principles and rituals that members share and conform to. Aluko (2003) opines that man is born into organizations, lives in organizations, works for organizations and even dies in organizations. The organization and its culture become an inevitable feature of life. Fulcher and Scott (1999) add weight to Aluko's opinion by defining an organization as a structure for carrying out particular social activity on a regular basis and have the following features: a specific goal, a defined membership and rules of behavior or conduct and authority relationships. Hofsted (1999) defines culture as the collective programming of the mind that distinguishes the members of one group or category from another and consists of knowledge, philosophy, morals, languages, motivation, attitudes, values and norms shared and transmitted in a society. Organizational culture is an integral part of organizational knowledge sharing which determines whether it will grow or not. The Kenyan civil service has a very rich organizational culture which works most of the time for the betterment of the service but it is also full of bureaucratic tendencies that deter more than enable tacit knowledge sharing. It acts as a huge barrier to people's ability to exchange intellectual assets or knowledge. This is because, culture and subcultures

shape assumptions about what knowledge is and which knowledge management is worth managing. Secondly, is that culture defines the relationships between individuals and organizations and determines who is expected to control specific knowledge including who can share and who can hoard. Thirdly, culture creates the context for social interaction which in essence determines how knowledge is utilized in particular situations. Fourthly, culture shapes the process by which knowledge is created, legitimized and distributed in an organization. Looking at the four variables discussed above, the Kenyan civil service is a victim of all these factors.

1.1.9. Workforce Motivation and Public Sector Performance

Motivation is the psyche, morale or the enthusiasm to undertake a particular task without coercion or supervision. It is the force behind a process ownership that propels one to put all the energy in an endeavor to produce the best. A study by Chepkilot (2009), on strategies for public sector motivation in Kenya, revealed that most public sector workers (87%) are extremely lowly motivated while only 13 % are highly motivated. The study also showed that the public sector climate was not conducive for motivating employees specifically because it has no job security, salaries are low, there is limited training and development opportunities, lack of career development programs and lack of adequate working tools and equipment. This lack of motivation infiltrates into the workers level of knowledge sharing.

1.1.10. Public Sector Performance

Public sector performance refers to the total unit performance that adds up to the whole organizational performance which involves comparing the expected results to actual results and investigating deviations and their causes (Hashim, 2007) Knowledge is a key component in the performance of any economy and for the current Kenyan case, the counties are the basis or parameters of measurement of the overall public sector performance. There are three key elements popularly regarded as the 3 E's to be put

into consideration when measuring public sector performance: Economy, Efficiency and Effectiveness. Economy refers to the system of balancing available resources of a country i.e. land, labour, capital and enterprise against the wants and needs of consumers. Efficiency is the increase in output for a given unit of input, which may be in form of physical, human or financial resources. Effectiveness is the measurement of whether the output from given inputs meet organizational needs and requirements (Verbeeten, 2008).

It is noted that every organization's main objective is productivity which is consequently expected to translate into performance. According to Verbeeten (2008), this has made organizations to use techniques and management tools such as total quality management, benchmarking, business process reengineering and change management, which have been adopted by both the public and the private sector. This observation is confirmed by Jones and Thompson (2007) as was cited by Obongo (2009), who noted that the public sector has started to apply and adopt private sector management practices, which is a shift from emphasis on the traditional public administration to public management and entrepreneurship. Kiragu and Mutahaba (2005) emphasize this by saying that entrepreneurship becomes more market oriented especially by improving customer service delivery.

World Bank (2001) asserts that knowledge management is a crucial source of wealth creation which supplements industrial and human capital. Their view is that knowledge sharing in organizations or departments is one of the key functions of any knowledge management program. The knowledge-based theory of the firm (Grant, 1996) affirms this by suggesting that knowledge is the organizational asset that enables sustainable competitive advantage in hyper competitive environment. The emphasis on knowledge in today's organizations according to this theory is based on the assumption that barriers to the transfer and replication of knowledge endow it with strategic

importance. Amidst this view however, is a sorry state in most sub-Saharan countries. While many countries elsewhere in the world have initiated and implemented KM programs in the civil service, most sub-Saharan countries are yet to initiate because of lack of experience or knowledge to do so. Another reason advanced by World Bank (2001) is that the civil service in sub-Saharan Africa is still rigid and bureaucratic in its operations. Bureaucracies are emphatic on rigidity and adherence to retrogressive hierarchical orders, procedures, rules and regulations which make the civil service deliver not more than the stipulated results.

McEvily (2003) asserts that public institutions have strong functional boundaries that interfere with knowledge sharing. This however, may not act as a hindrance since modern KM has benefited tremendously from the internet and associated technologies and the current power of KM lies in the extensive use of emails, chat rooms, blogs, discussion forums, social networks and databases that leverage ideas and knowledge to benefit the various groups and teams involved. This advantage can only be gained if institutions are fully automated, and which is a far cry from the current situation. Aldrich (2005) concurs with this by arguing that Africa in the 21st century is ruled by knowledge and intellectual property which are key to achieving national development.

The government of Kenya has since 1992 put initiatives in place to improve service delivery. Key among them is the enactment of the public procurement and disposal act (2005), to streamline the procurement efforts partly by trying to channel the resources where they are headed within the government in a timely manner and avoid wastage of resources. The Kenya government has also increased the anti-corruption efforts implementation through the anticorruption and economics crime act (2003), aimed at reducing corruption. From the 2014 transparency international report on corruption, on a scale of 0 (worst score) to a 100 (best score) Kenya was ranked at 25 % down from 27

% in 2013 in the corruption perception index. This means that the enactment did not reduce corruption, rather it increased.

Sinofsky (2005) is of the view that in the world of technology and internet, the one who is out with no rules, no processes and no hierarchy is the one who is going to win big, while all those sloths with their spreadsheets and dashboards, all bunched up trying to plan their way out of a paper bag will not make it. All these characteristics work contrary to the platform of knowledge management and more specifically tacit knowledge sharing. Sinofsky is in other words advocating for deliberate effort by organizations to enable knowledge sharing by breaking boundaries and creating flatter departments suitable for knowledge exchange. For the purposes of this study, organizational performance will be measured using the following parameters: knowledge leveraging, efficiency in service delivery and timeliness of service delivery.

1.2. Statement of the Problem

Knowledge is a crucial component in the growth of any organization and it forms a significant fraction of all the resources required for organizational growth. Out of the renowned factors of production namely land, labor, capital, entrepreneur and management, three out of the five factors (60 %) are human factors (resource) who are actually the main drivers of tacit knowledge sharing. The world revolution has seen economies come from reliance on land ownership (the agricultural age), where the backbone of the economy was purely agriculture, through to the industrial age (reliance on industrialization) and now is the Knowledge focus (reliance on knowledge gathering, acquisition and storage as a competitive advantage) which is the third wave of human socio-economic development. In a knowledge society, the basic economic resource is no longer capital, or natural resources or even labour, but knowledge. Knowledge is now recognized as a resource that is at par with other economic resources. As a resource, it should be managed and planned for, systematically, just like

any other economic resource. In the knowledge age, wealth is based upon the ownership of knowledge and the ability to use, create and improve quality of goods and services. It is noted that in the knowledge age, 2% of the working population will work on the land (agriculture), 10% will work in the industry (industrialization) and the rest will be in knowledge (tacit).

In the Kenyan civil service, there seems to be ignorance in the following: the amount of knowledge that flows through the Kenyan civil service every day, accounting for the knowledge that the Kenyan civil servants require for present and future needs, how to acquire that knowledge, the kind of knowledge that individual employees in the civil service possess and how to share such knowledge with others. Chief among the reasons for this scenario are strong hierarchical (functional boundaries or strict demarcations), and bureaucracies that may impede generation, distribution and sharing of knowledge and information. It is against this background that the researcher wishes to investigate the influence of tacit knowledge sharing on the performance of public sector departments in Kenya. It is noted that, few studies have been done to establish empirical linkage between knowledge and organizational performance and this situation informs the quest for undertaking this study.

1.3. Purpose of the study

The purpose of the study was to investigate the influence of tacit knowledge sharing on public sector departments' performance in Kenya by establishing the influence of functional boundaries, organizational culture, workforce motivation and interactions and workforce communication. Both the formal sharing of knowledge and informal sharing of knowledge were considered as important drivers of knowledge sharing and therefore the study puts both into consideration. The study was expected to fill knowledge gaps that exist and shed more light on other factors that could be influencing tacit knowledge sharing and consequently organizational performance.

1.4. Research Objectives

The study addressed itself to the following objectives

1.4.1. General Objective

To examine the influence of tacit knowledge sharing on public sector performance in Kenya.

1.4.2. Specific objectives

i. To determine the tacit knowledge sharing factors that influence public sector performance
ii. To comparatively analyze the influence of tacit knowledge sharing on public sector performance per county under study
iii. To examine government policies that address tacit knowledge sharing and their effect on public sector performance
iv. To establish interventions that the public sector can utilize to enhance tacit knowledge sharing and consequently public sector performance

1.5. Research Questions

i. What are the tacit knowledge sharing factors that influence public sector performance?
ii. What is the influence of tacit knowledge sharing on public sector performance per county?
iii. Are there government policies on tacit knowledge sharing that influence public sector performance?
iv. What are the interventions that the public sector can utilize to enhance tacit knowledge sharing and consequently public sector performance?

1.6. Scope of the Study

The study confined itself to the public sector departments in Kenya. This group was of great interest to the study because, their ability to share was assumed to be driven by

the following factors: workforce communication and interactions, workforce motivation, functional boundaries and organizational culture. The study was limited to these four factors though it is very clear that organizational performance could be influenced by other factors that are beyond this scope. The study is confined to eight counties with the assumption that the results can be generalized to the other 47 counties using a sample population of 336 respondents. The research methodology used also limits the study scope.

1.7. **Significance of the Study**

Tacit knowledge sharing is very crucial because quality knowledge is passed from individual to individual, department to another and this ensures continuity of quality organizational performance. This study brought to the fore the characteristic features of tacit knowledge sharing so that policy makers can come up with more organized ways of ensuring that any quality knowledge can be diffused within and across departments for quality performance. The study findings are of benefit to the counties under study because the results generated from the study will act as a platform for improvement and a competitive edge especially in areas that require improvement. Other countries will also benefit for they will adopt best practices from the counties studied and possibly adopt some of the recommendations that accrue to their specific scenarios. The government will be another beneficiary especially in areas that involve policy making for benefits gained in knowledge management have to be tapped right from the planning stage where KM policies must be incorporated. Other researchers will find a benchmark on which to base their studies since the study acts as a springboard for further research. The study also comes up with specific interventions that can be used in the public sector so as to gain benefits of enhancing tacit knowledge sharing.

1.8. **Limitations of the Study**

The study was confined to the public sector departments and centered in the following counties: Samburu, Makueni, Kilifi, Kirinyaga, Homa Bay, Bungoma, Garissa and

Nairobi. The findings are generalized to all other counties and specifically to the Kenyan public departments in other counties. This is a limitation since each county has its own unique economic and social dynamics. This limitation is neutralized by targeting eight counties that represent the former eight provinces. The study was also limited to only four factors of tacit knowledge sharing namely functional boundaries, workforce communication and interactions, organizational culture and workforce motivation and which are assumed to influence organizational performance. The study was in cognizant of other extraneous factors that may influence tacit knowledge sharing and in essence organizational performance and therefore holds all other factors constant. Another limitation is that the study was confined to the public sector though it would have been more comprehensive if it also targeted the private sector. This forms an area of further research since the study puts into consideration the fact that the public and the private sector are very divergent in their characteristics and that to a large extent, the private sector's system incorporates more of tacit knowledge sharing as compared to the public sector. This is confirmed by Jones and Thompson (2013) as cited by Obongo (2009) that the public sector has started to apply private sector management policies, which is a shift from emphasis on the traditional public administration to public management and entrepreneurship. Ondari-Okemwa (2004) also confirms the same view by noting that the public sector unlike the private is dominated by a culture of secrecy demonstrated by the Swahili word that denotes the government's name (serekali) which if translated means "top secret". Another limitation is that, with the rate of organizational dynamism, the results of the study may only apply for the period within which the study was undertaken.

1.9. Assumptions of the Study

The study was premised on the assumptions that knowledge shared is that which is contextualized and of benefit to the department and that if the knowledge shared is out of context, members have the ability to sieve the right knowledge in a given context. It

was also assumed that data collection instruments and their scope would be adequate to provide the needed information and that they would be returned duly filled. It was also assumed that respondents would be truthful and in the right disposition to provide well thought out responses and that the study scope would be adequate to allow study results' generalization.

1.10. Chapter Summaries

Chapter One: Contains the background of the study that is dominated by the scholarly review that traces the evolution of tacit knowledge and sharing. The tacit knowledge factors assumed to influence organizational performance are: functional boundaries, workforce motivation and interactions, organizational culture and workforce communication. The study addressed itself to the following objectives: to examine the influence of tacit knowledge sharing on public sector performance, to assess the extent to which tacit knowledge is shared in the public sector departments, to examine government policies that address tacit knowledge sharing, and to generate strategies and specific interventions that the public sector can utilize to enhance tacit knowledge sharing and consequently public sector performance. The study purposed to establish the influence of tacit knowledge sharing on public sector departments' performance in Kenya. The study assumed that the research instrument used was adequate and would be returned duly filled.

Chapter Two: Comprises of review of both scholarly and empirical literature citing gurus that have taken time to research and write on the topic at hand. Such are like Nonaka and Kolb who underscore the importance of knowledge sharing. The chapter also highlights theories that support the topic under study which are constructivism theory, self-efficacy theory, Nonaka's theory of knowledge creation and knowledge-based view theory

Chapter Three: Comprises of research design and methodology which is descriptive research design and targeted all public sector departments in Kenya. Eight counties namely Samburu, Makueni, Kirinyaga, Kilifi, Nairobi, Homa Bay, Bungoma and Garissa, formed the sample of the study. The study adopted purposive sampling which is a non-probability sampling that allows the researcher to identify sample according to ease of manipulation.

Chapter Four: Contains data that was collected and analysed using descriptive statistics and Pearson's correlation coefficient, which is presented in graphs, tables, charts and other appropriate presentations. The study findings are also presented.

Chapter Five: Discusses conclusion and recommendations. Conclusions made were that workforce communication and interactions, organizational culture and functional boundaries have significant influence on organizational performance but motivation does not have a significant influence. On the results based on county by county analysis, workforce communication and interactions were found to be insignificant in all the counties but was positive in Garissa, Makueni and Kirinyaga counties. In all other counties, it was negative and insignificant. Functional boundaries were found to be positively significant in Samburu, Kilifi, Bungoma, Garissa and Kirinyaga counties. However in the remaining counties, it was positive but insignificant. Organizational culture was found to be positively insignificant in Samburu, Kilifi, Makueni and Nairobi County but was negatively insignificant in the other counties. Motivation was found to be positively significant in Samburu, Kilifi, and Bungoma counties but was positively insignificant in the rest of the counties. On the national government analysis, the national government was found to lack concrete policies on tacit knowledge sharing and counties displayed unique characteristics in the county by county analysis. The study recommended that organizations consider adopting open plan offices and

institute dress codes since they encourage sharing and create unity respectively among workers.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter gives an overview of what constitutes knowledge management and how tacit knowledge sharing relates to organizational performance. It also brings out authoritative scholars and researchers' views of tacit knowledge sharing, explores and reviews other researchers' works and exposes theories supporting this specific area of study.

2.1. Definitions of Knowledge

Knowledge has been defined differently by different authorities as projected by Beckman (1998). Knowledge is organized information applicable to program solving (Woolf, 1990). It is information that has been organized and analyzed to make it understandable and applicable to problem solving or decision making (Turban, 1992). Knowledge consists of truths and beliefs, perspectives and concepts, judgments and expectations, methodologies and 'know-how' (Wiig, 1993). According to Van der Spek and Spijker (1997), knowledge is the whole set of insights, experiences and procedures which are considered correct and true and which, therefore, guide the thoughts, behaviors and communication of people.

Beckman (1997) defines knowledge as reasoning about information to actively guide task execution, problem solving and decision making in order to perform, learn and teach. Myers, 1996), defines organizational knowledge as processed information embedded in routines and processes which enable actions. It is also knowledge captured by organization's systems, processes, products, rules and culture. It is the collective sum of human-centered assets, intellectual property assets, infrastructure assets and market assets according to Brooking (1996).

Table 2.1: Difference between Tacit Knowledge and Explicit Knowledge

Tacit Knowledge	Explicit Knowledge
Resides in human mind	Articulated, structured and documented
Highly individual and personal	Learnt through instruction, recitation or repetition
Learnt through experiences, skills, observations, intuitive feelings, mental models, beliefs and values	Easy to recognize, codify, formalize, store, share, communicate and use
Unstructured, difficult to see, codify, estimate, investigate, formalize, write down, capture and communicate actively	Can be found in books, journals, databases etc
Unconscious knowledge both known and unknown to the holder	Consciously accessible
Job-specific, content specific	Know-that, know what
Experience-based, knowledge in action	Academic knowledge
Transferred through conversation, and narratives (storytelling, discussions etc)	Transferred through formal learning
Knowhow	Know why
Experts knowledge	Instilled knowledge

Source: Haldin-Herrgard, (2000)

2.2. Overview of KM Components

KM is the name of a concept in which an enterprise consciously and comprehensively gathers, organizes, shares and analyses its knowledge in terms of resources, documents and people skills (Jeff & Jeeto, 1995). (Ron-Young,1935), the C.E.O of Knowledge Associate International, defined KM as the discipline of enabling individuals, teams and entire organization to collectively and systematically create, share and apply

knowledge, to better achieve their objectives. This is possible when an organization makes Knowledge management and sharing a part of the organisational culture and develops a functionality of their own within the overall organisational structure**.** Newman and Conrad (1999) came up with a four component model that proposes the following in knowledge management: Knowledge Creation which comprises of activities associated with the entry of new knowledge into the system, and includes knowledge development, discovery and capture; Knowledge Retention which involves all activities that preserve knowledge and allow it to remain in the system once introduced. It also includes those activities that maintain the viability of knowledge within the system; Knowledge Transfer which refers to activities associated with the flow of knowledge from one party to another including communication, translation, conversion, filtering and rendering; and Knowledge Utilization which includes the activities and events connected with the application of knowledge to business processes.

Jeff and Jeeto (1995) assembled a 4- process view of Tools and methodologies for knowledge sharing.

Table 2.2: Four Process View of Knowledge Creation

MAJOR PROCESS	**ACTIVITIES**
GATHERING	Data entry
ORGANISING	voice input, searching for information, scanning, Cataloging, Indexing, Filtering, Linking
REFINING	Contextualizing, Collaboration, Compacting Projecting, Mining
DISSEMINATING	Flow, Sharing, Alert, Push

Source: Jeff & Jeeto (1995)

From Jeff and Jeeto's (1995) projection, sharing is part of a wider component of KM process of disseminating knowledge. Tacit knowledge consists often of habits and

culture that people do not recognize in themselves. It is noted in the way a person thinks; It is the unwritten rules or norms of the organization; those things that employees learn over time but are difficult to incorporate into a training or orientation program. It is highly personalized knowledge which is hard to formalize, making it difficult to communicate or share with others. It includes subject insights, institutions and hunches and is deeply in individuals' actions and experiences as well as in the ideals, values and emotions that the individuals embrace. For tacit knowledge to be transmitted, it must be converted into words, models or numbers that anyone can understand (Nonaka, 1995).

2.2.1. Types of Tacit Knowledge

There are two types of tacit knowledge: technical dimension and cognitive dimension. Technical dimension is the kind of informal and hard to pin down skills or crafts often captured in the term "know-how" e.g. master craftsmen develop a wealth of expertise on their fingertips after years of experience. Highly subjective and personal insights, intuitions, hunches and inspirations, derived from bodily experience, fall into this dimension (Jeff & Jeeto, 1995).

The cognitive dimension on the other hand consists of beliefs, perceptions, ideals, values, emotions and mental models so ingrained in people that they take them for granted and even though they cannot be articulated easily, they shape the way people perceive the world around them (Popper, 2001). Popper observed that tacit knowledge is extremely difficult to capture yet it is more critical to task performance than explicit knowledge. Polanyi (1996) says that "we can know more than we can tell" and that knowledge expressed in words and in numbers only represents the tip of the iceberg of the entire body of knowledge that is in individuals. Polanyi classified knowledge into two categories: tacit and explicit knowledge. Tacit knowledge is further divided into

two categories: technical dimension-informal/personal skills of crafts often referred to as knowhow.

2.2.2. Capturing Tacit Knowledge

Popper (2001) suggests four ways to capture tacit knowledge. The first one is mentoring a new employee, which means assigning a mentor to new employees as part of an orientation process and new hire acclimatization process where the mentor transfers and shares knowledge. The second is focus on employee retention. It is expensive to recruit, hire and train new employees and so the most effective way is to retain good employees. This helps to sustain a strong tacit knowledge base. The third is to provide employees with opportunities to share experiences. This can be as formal as weekly staff meetings or as informal as annual employee events. The forth is to document all processes. This process can be automated to have very detailed and written processes sequenced step by step for every job. Worth noting is that tacit knowledge can offer comprehensive competitive advantage because competitors have a difficult time replicating it.

A major source of sustainable competitive advantage is organizational data (Chen & Edgington, 2005; Grant &Baden –Filler, 1995; Jashapara, 2003; Lopez 2005) or simple information because it gains competitive advantage when integrated with individual experience (Dougherty, 1999). Knowledge is first acquired at the individual level (Polanyi, 1962) and the effective transformation of that individual knowledge from the individual level to the organizational level is essential for knowledge to become the basis of organizational capability (Kogut & Zander, 1993). According to Kogut and Zander, Knowledge creation is a spiraling process of interactions between explicit and tacit knowledge. The same view is echoed by Nonaka (1994). There are four steps of knowledge conversion process. Socialization is the process that involves sharing of tacit

knowledge between individuals by spending time together, sharing common activities and actively working together on solving problems. Externalization involves the expression of tacit knowledge into comprehensible form. Combination is the conversion of explicit knowledge into the organization's tacit knowledge resting in intangible form. It is transformed into and shared in tacit form (Nonaka, 1994)

Tacit to tacit or person to person knowledge transfer is the most effective way to share knowledge because it is more likely to be interdocumented to another person. According to Lee (2000), tacit knowledge transfer may be in spoken word, but also could occur through body language or other actions.

Theorists have defined important facts of knowledge to be taciturn, dependence and complexity (Garud & Naygar, 1994). Tacit knowledge is highly personal and hard to express in codes (Words, numbers, programming languages) as compared to explicit knowledge that is easy to express and qualify (Polanyi, 1969). It is found in subjective insights, intuitions, hunches, knowhow and can often only be acquired through experience (Nelson & winter, 1982; Berman& West, 2002; Polanyi, 1966). It has a personal quality which makes it hard to formalize and communicate and is deeply rooted in action, commitment and involvement in a specific context (Nonaka, 1994).

2.2.3. Importance of Knowledge Management to Public Sector Performance

Governments today are under pressure from the citizenry who are demanding for better quality services with least cost so as to utilize taxpayer's money prudently (McAdam& Reid. 2000). Strategic management attention has shifted from the notion of resource-based view to knowledge-based view of the firm on realization that knowledge enables organizational capacity and leveraging of competitive advantage (Kogut & Zander, 1992). There is no doubt that knowledge is not just a crucial organizational resource but also very important in strategy and therefore needs to be aligned to it. Initially, the main drivers of organizational excellence and performance were resource based where measurements were

based on observable work and quality of output (Wiig, 2000). Later, new managerial techniques (new public management practices) were introduced which incorporated the role of IT and use of computers, thereby increasing work efficiency and quality of output. Many factors contributed to this new paradigm including economic, social and cultural changes and the new wave of globalization and shift to knowledge economies (Wiig, 1997 and Arab Knowledge Report, 2009). This encouraged KM initiatives through improvement in intellectual capacities and developing of knowledge competitive workforce. The competitiveness is enhanced by encouraging the workforce to participate in public policy formulation, implementation and control. This stakeholder involvement is the starting point of transforming the incompetent public sector into a dynamic knowledge-intensive learning organization. This is confirmed in the economic policy reforms of 2015 (http:// www.oecd.org/economic policy reforms 2015) whose main concern was economic growth, that in the past ten years, a large number of national governments, departments and agencies have embraced KM in earnest and have to an extent become more innovative and more information connected.

It is estimated that 66% of the public sector, loses core competencies when their staff die, are dismissed or transferred. Some of them rely on rented knowledge from consultants who are expensive and sometimes unreliable. While all the public sectors are in dire need of adopting innovative ways of applying knowledge in order to harness the advantage of being knowledge-based, there is a major problem in the Kenyan public sector. It has a stingy mindset of being compliant with the status quo and adoption of minimal changes coupled with periodic changes in administration even before they have settled to work. KM is very profitable to an organization and specifically the public sector at individual and organizational level. KM benefits are immense, for employees are able to share experiences, knowledge and caution each other against mistakes, which enables them to contribute immensely to organizational growth. On the organizational level, KM contributes to organizational efficiency, effectiveness, quality and productivity. (Cong, X10ming &

Pandya, 2004). However, even with all the importance of KM, this seems vague to organizational members and a general obscurity exists in exactly which department is entrusted with KM. Some think it is IT, others HR while others even think it is the top level management's docket. Another major hitch is that while all other departmental functions are well defined according to the departments, KM cuts across all departments and therefore becomes a victim of back and forth movement across departments since there is no functional department that can fully own KM. All the same, it is recognized that KM is well shared through seminars, conferences, workshops and lectures that target organizational learning.

2.3. Synopsis of Knowledge Management

2.3.1 Global perspective of Knowledge Management

Knowledge management evolution can be traced to the beginning of the world particularly in the first and Second World War when warlords needed to come up with superior weapons and tricks that assured them of winning against their enemies. The warring countries threw their economic, industrial and scientific capabilities in their war effort which involved atomic bombing of Hiroshima and Nagasaki and resulted to an estimated loss of 50 to 85 million fatalities. The empires of Japan dominated Asia and China in 1939 and in 1941; Germany conquered and controlled Europe, Poland, Finland, Romania and the Baltic Sea. Each time during these wars, men made tools and weapons that improved their chances of winning the war and increase their survival rate. They preserved such experiences which assured them of superior armory for successive wins. Successful crafting of such weapons that resulted to battle wins gave birth to barter trade to allow exchange of what individuals had made in excess of requirements. This is not to say that barter trade was basically on war tools and equipment but also supporting materials that facilitated war activities.

Several scholars got interested in saving such learned knowledge and this is where KM was born in order to manage the best practices learnt for future use. KM Gurus like Drucker (1999) and Strassman (1985) emphasized on the importance of information and explicit knowledge as organizational resources. Senge's (1990) main advocacy was for all organizations to become learning organizations and encouraged KM and organizational learning with emphasis being placed on inventions and innovations that would boost improvement on existing products and encourage inventions. Another scholar credited with KM is Thomas Allen's whose research work centered on information and technology transfer which dates back to the 70's. The mid 80's paid focus on KM being seen as a competitive asset and requiring development of systems for managing Knowledge and which relied on work done on artificial intelligence and expert systems. It brought about terms like knowledge acquisition, knowledge engineers, knowledge-based systems and computer-based ontology. The 90's emphasized on organizational learning and funding for KM related projects. Presently, the driving force for all economies that want to gain competitive advantage is KM.

2.3.2. Knowledge Management in Africa

Africa can be regarded as a knowledge society (Ondari and Majanja, 2007), meaning that it is a reservoir of knowledge for it has indigenous or local knowledge that should be captured and shared. This can be exemplified by traditional knowledge that is embedded in organizational culture as is seen in oral literature, which when an elderly person dies, a rich heritage in knowledge is lost. Developing countries in Africa, Asia and Latin America create building blocks that help in managing and quickening transition from industrialization to knowledge age. This has helped Namibia to become a knowledge based economy because of the realization that organizational learning is of paramount importance since individuals need to engage in continuous learning so as to acquire new knowledge for competitiveness (Mchombu, 2013). According to Mchombu,

two pillars which could accelerate the birth of the new knowledge-based society are e-learning and knowledge management. This assertion by Mchombu is complemented by the efforts that Africa is making towards this goal and especially in e-learning that many learning institutions especially the universities are now adopting. Banhenyi (2007) noted that Knowledge Management Africa (KMA) is the knowledge engine that promotes and facilitates sharing and utilization of knowledge across all sectors of the African continent. Its main objective is to encourage promotion of knowledge management initiatives in the African continent by tapping knowledge that can be utilized for economic growth.

2.3.3. Knowledge Management in East Africa

The concept of knowledge first emerged in the 1990s in Africa upon realization that organizations can manage the learning process to better their performance and become efficient. The East African region which is made of Kenya, Uganda, Tanzania, Rwanda and Burundi was not left behind in adopting the KM concept which is still taking shape even today. The East Africans informally and intuitively deals with knowledge and uses in-house approaches to realize the benefits of KM. It is however difficult to measure the effectiveness of these approaches due to organizational culture. There are formal emergent bodies like KMA (Knowledge Management Africa), AMREF (Africa Medical Foundation) whose headquarters are in Nairobi and whose initiatives are for managing knowledge in Africa. According to Ireri and Wairagu (2007) AMREF has partnered with local communities, health system formulators and governments to improve the health system in Africa. Kora (2006) evaluates the feasibility of ICT which he sees as a KM strategy in rural development. There is an advocacy by KM experts that the best KM model for use by growing economies like East Africa is a blend of philosophy based model, cognitive model, network model and quantum model. These models were propounded by Kakabadse, N.,Kakabadse, N., and Kouzmin A. (2003) whose observation was that each of these models

treats KM in a different perspective and therefore a blend is fit for growing economies since they have each of the advocated for, resources in limited amounts.

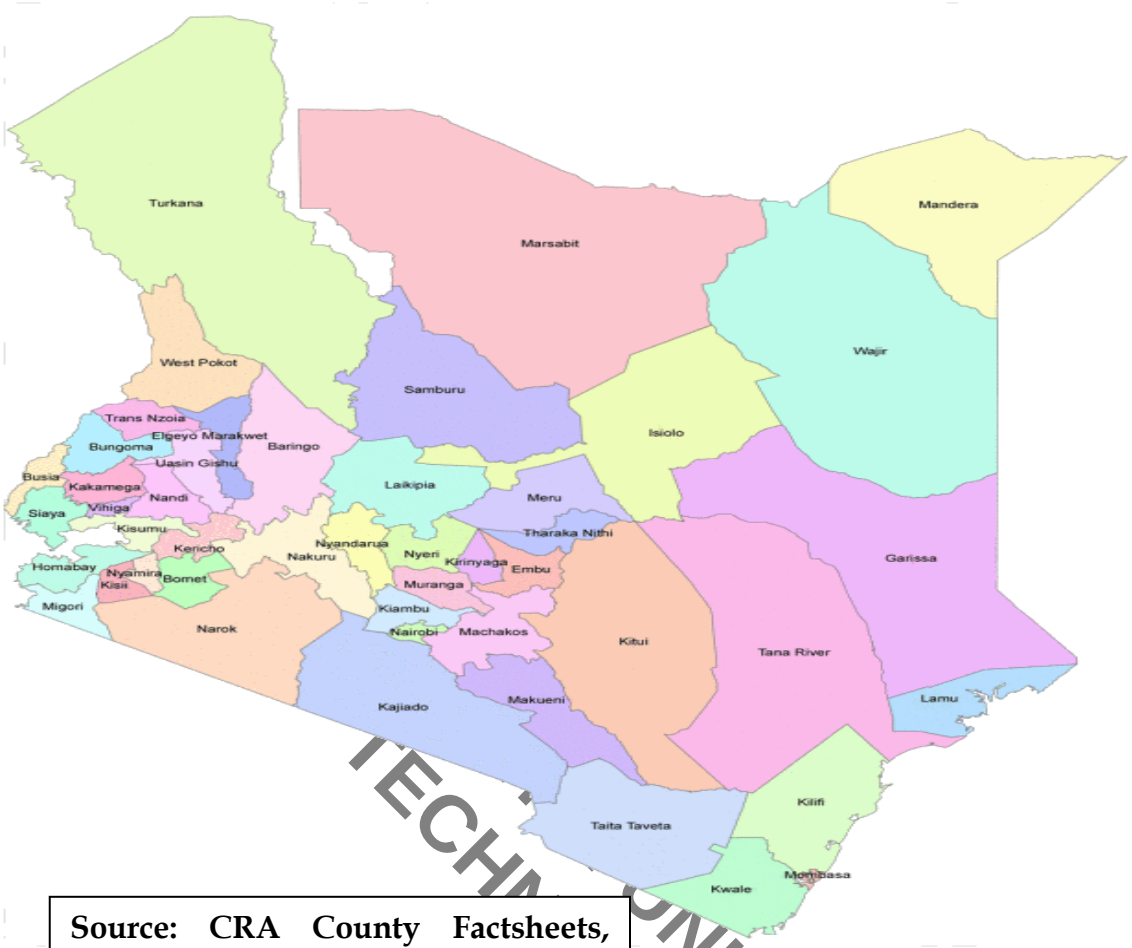
The philosophy-based model concerns itself with the epistemology of knowledge and the relationship it has with issues of truth, justification, causation, doubt and revocability. It calls for reflection and deep consideration in areas of KM practices. This model proposes that KM does not need to be knowledge centered. The cognitive model recognizes KM as an economic asset and considers ICT as the main driver of KM process (Zak, 1999). The model supports Nonaka's SECI model (1998) which is discussed earlier in this study. The network model is based on socialization and relationship of actors, dwelling closely on social patterns that boost individual relationships and connectivity. These social relations play a part in knowledge creation, sharing and transfer (Wenger & Snyder, 2000). The network informally binds participants with shared expertise and passion for KM and sharing. The quantum model is based on quantum computing which is a recent advancement in computer applications that lead to complex rationality in decision making. This model is inappropriate in low resource communities. A proposal is usually made by KM experts to use a hybrid model of philosophical, cognitive, network and quantum models which is crafted and applied to unique situations of a KM practicing economy. In a nutshell, KM and knowledge sharing or transfer requires the willingness of a group or individuals to work with others for mutual benefits and for the organization (Goh, 2002). Jacob and Ebrahimpur (2001) observed that knowledge transfer is a problematic issue for managers and especially tacit knowledge since some of it is acquired through learning by doing and is idiosyncratic to particular constellation of people, technology, structures and environmental conditions. Argote (1993) is of similar view. This indicates that any issue of knowledge is customized particularly to the group that is sharing, the culture and technology at hand, values and beliefs and any other aspects that define the sharers.

2.3.4. Knowledge Management in the Kenya Public Service

The Kenya public sector originated from the British colonial administration. When Kenya got its independence in 1963, no much change took place in the public service administration other than the replacement of expatriates with indigenous Kenyans in what was popularly known as "Kenyanisation". What resulted was a public service dominated by Kenyan workers who in essence were inexperienced and this lead to poor performance. The solution found for this scenario was addition of workforce resulting to a bloated civil service which is expensive to sustain and motivate since the country has an already bloated workforce. Kenya public service delivery has posed a lot of challenges especially because of lack of a smooth transition from the British Government to the Kenyan workforce given that the colonial masters' structure was meant for control and exercising authority on the followers. The same is still true today to some extent though a lot has changed from then especially in some controls that have been put through use of a number of instruments like code of regulations, public service commission act cap 185, the penal code 63, the prevention of corruption act cap 412, the presidential parliamentary election act and professional association or complaints committees. The government has also instituted watchdogs to oversee the usage of Kenyan resources and oversight use of resources for organizational growth. Such are like the office of the controller and auditor general, the public accounts committee, and public investments committee, inspector of state corporation and Kenya police anticorruption unit.

The new county governments in Kenya represent a rebirth of the former provincial and local government, which were manned from a central or national government, with a lot of authority decentralized. The 47 counties were formed under the constitution of Kenya review commission (CKRC) draft constitution through several deliberations of the national constitutional conference at Bomas of Kenya whose proposals were further deliberated and approved by a committee of experts. The key issues put into

consideration to come up with the number and size of these counties were: geographical features of the area, means of communication or accessibility to effective governance, population density, available resources both human and physical, historical and cultural ties of communities and minority interests. However, even with all these factors being put into consideration, the 47 counties are still a replica of the 47 districts that existed in 1992 before others were hived later from the original ones. The following are the counties by their names alphabetically arranged: Baringo, Bomet, Bungoma, Busia , ElgeyoMarakwet , Embu , Garissa , Homa Bay , Isiolo , Kajiado , Kakamega , Kericho , Kiambu , Kilifi , Kirinyaga , Kisii , Kisumu , Kitui , Kw ale , Laikipia , Lamu , Machakos , Makueni , Mandera , Meru , Migori , Marsabit , Mombasa , Muranga , Nairobi , Nakuru , Nandi , Narok , Nyamira , Nyandarua ,Nyeri , Samburu , Siaya , TaitaTaveta , Tana River , TharakaNithi , Trans Nzoia , Turkana , UasinGishu , Vihiga , Wajir ,and West Pokot county



Source: CRA County Factsheets, (http:/softkenya.com)

Figure i: The 47 counties in Kenya

When the sitting Kenyan President took over the mantle of leadership in the year 2012, he reduced the number of ministries from 44 to 18 for the purposes of reducing the duplication of some services, therein and creating a leaner public service. One more has been added in the course of this study. These ministries are as attached in appendix v.

2.3.5. Isolating Knowledge Management and Kenya Public Sector Performance

Over the years, society has transformed from being agrarian to industrial and finally to emerging knowledge economies. According to a study by Hare (2002), this metastasis

presents challenges to the government and also opportunities to tap from the wealth of knowledge that is available. According to World Bank (2002), the key factors to these opportunities are information and knowledge which must be tapped and generated from the societies. The European commission joint research Centre (2000) estimates that as much as 70% to 80 % of economic growth is said to be due to new better knowledge. This means that the role of knowledge in contributing to new ideas, inventions and innovations cannot be underestimated.

There is a claim that the 21st century has come with new information and knowledge age almost equal in magnitude to what was experienced in the 18th century during the industrial revolution. This is not the same case in Kenya and other sub-Saharan countries since they have failed to integrate KM in government agencies; the main reason being that knowledge has not been leveraged effectively in the public sector (Ondari-Okemwa, 2006). Kenya lags behind in application of ICT and this limits the benefits it can reap from knowledge and the level of efficiency that accrues to such adoptions. According to the same study by Okemwa whose theme was "enhancing government performance, effectiveness and capacity to deliver basic government services in sub-Saharan Africa through KM", it came out clearly that Kenya is not very well prepared for a knowledge economy. This is according to the World Bank's assessment on Kenya's readiness to become a knowledge economy (2004-2005) which is demonstrated in the table below.

Table 2.3: Kenya's Knowledge Economy Readiness (Most Recent)

Index	Kenya's (2004-2005)	Kenya's (most recent)
Knowledge economy Index	2.39	2.62
Knowledge index (Av of 3-6)	2.31	2.76
Economic incentive and institutional regime (Av. of 4-6)	2.63	2.21
Education	1.97	1.83
Innovation	4.11	4.18
ICT	0.85	2.28

Source: SAJnl Libs & Info Sci 2009, 75(1)

From the above indications, it is noted that from the expected averages of knowledge economy growth, (3-6) and (4-6), Kenya is performing dismally and that in the crucial areas of education and innovation, the performance is even going down though there is hope that this might improve because ICT connectivity is improving.

2.3.6. Kenya Public Sector Performance Measurement

Public sector performance measurement is an important part of organizational management and in the western world, the concept took root in the 1980's and 1990's with an advocacy for a new management style referred to as new public management (NPM) which was meant to improve the bureaucratic slow-moving organizations to act and carry out their activities like or closer to how the private sector does (Vansluis, Cachet & Ringeling, 2008). Before the 1980's, public sector performance was based on inputs and operating within allocated budgets but later economies started focusing on inputs versus outputs (collier, 2006). In the public sector, it is usually difficult to measure performance because there are difficulties in quantifying earnings and profitability in most non-profit making institutions. It is also quite difficult to separate such organizations from one another since they are interconnected in their operations

and the way they work (smith, 1995). In Kenya, performance measurement started taking shape in 2002 with the main goal being to improve service delivery. This was done by enacting the public procurement and disposal act in 2005 that was meant to streamline the procurement efforts by ensuring that resources are channeled and used where they are required. In 2003, the anticorruption and economics crimes act was enacted still targeting to ensure that allocated resources are used for the purposes they were intended for. In 2004, there was an initiative to transform public affairs by instilling professionalism, competitiveness, innovativeness and target setting in the new wave of performance contracting. The Kenya Economic Survey 2006 report presented by the Cabinet Secretary for devolution and planning on 29th April, 2014 showed that the world economy grew by 3% in 2013 as compared to 3.1% in 2012. Growth in sub-Saharan Africa and East African countries in terms of GDP which grew by between 5 to 6.1 % in 2013 and the increase was due to increase in trade and investments. Kenya outlines the following major economic sectors as far as growth is concerned: inflation, interest rates and trade, public finance and social sector. The performance of Kenya economic and social sector and also the contribution to economic growth by the main sectors of the economy between the year 2012 and 2013 is portrayed in appendices viii, ix and x. The performance of other sectors other than economic and social is also portrayed in appendix xi. These projections were provided by the ministry of devolution and planning.

The projections reflect some extent of growth but which is lower than what had been projected. The reasons that were given for the unprecedented slow growth were: drought for agriculture, decline in exports for trade, high interests in the economic sector, reduced government spending, risk aversion in the leadership to general elections and insecurity concerns. It is noted that amongst the reasons aforementioned, none touches on knowledge management or specifically knowledge sharing. Similarly,

even for the policy interventions proposed, none touches on knowledge. The policy interventions proposed for agriculture were: expediting establishment of fertilizer factories, increase investment in irrigation and ensure each county has at least one agriculture value addition processing plants. In the manufacturing sector the proposed interventions were, increase in installed electricity capacity to 5000mega watts, improve logistics framework especially in Mombasa port and standard gauge railway and reduce cost of energy. In the tourism sector, the interventions were to improve on security measures, diversify and intensify efforts to attract visitors from china, India, Brazil and the Middle East. In the trade industry, it was to improve the country's terms of trade, facilitate export growth by establishing special economic zones and enhancing bilateral arrangements with regional economic blocks to expand trade. There were also proposals to provide funds for development, enhancing revenue collection and broadening taxi base, all of which are fiscal measures. From the proposed interventions then it is very clear that Kenya does not attach any importance in the role that knowledge can play in economic growth and development since amongst all the interventions, none addresses knowledge or its management directly or indirectly.

Many public sector endeavors are to reduce costs, improve service delivery and adopt creative and innovative ways of producing goods and services or smart products which can command premium prices and be more beneficial to users. One example is the intelligent oil drill that bends and weaves its way to extract more oil than ever from the pockets of oil in underground formations. Knowledge in People-wherein is Communication- is organization's most valuable asset, according to many company reports. Knowledge in Processes, which is the KM-Practices, in many companies, often creates differences in performance levels among different groups performing the same process. Closing such a gap saved Texas Instruments the cost of one new semiconductor fabrication plant (a $1billion investment) (Skyrme & Amidon, 1997). Others include active management of

intellectual property portfolio of patents and licenses, and creating new businesses that exploit internally- generated information and knowledge.

Several studies have been done that link knowledge management and organizational performance. Choi and Lee (2003) looked at organizational performance as a factor of market share, growth rate. Profit and innovativeness, four out of which are proxies of profit while Lin and Tseng (2005) based organizational performance on seven items: productivity, cash performance, competitiveness, sales growth, profitability, market share and innovativeness, four out of which factors are proxies of profit. In essence, it is noted that organizational performance or growth is basically measured on the basis of profit.

Maja (2010) undertook a study on the link between KM and organizational performance in a Croatian environment and the analysis focused on five KM success factors and two financial indicators. The results indicated that KM has something to do with financial success of an organization. His study proved that knowledge culture is among the most critical success factors for KM. Other factors found to account as critical success factors were information technology and KM measurement. KM performance is also measured through communities of practice whereby employees across departments are persuaded to come together and form teams that facilitate exchange of information and build relationships of trust, expertise, and shared repertoire of resources, tools and artifacts that enhance organizational learning. (Lave & Wenger, 1991). These tools are an effective way of managing tacit knowledge in organizations. Communities of practice are known as sure KM enablers. Cheng (1999) associates KM to organizational performance through the perspective of employee performance. His take is that KM not only creates value of intellectual assets but also enhances employee productivity and performance. In a study by Lin (2001), Wang (2002) and Huang (2002) that involved accountants, police officers, and emergency medical technicians (all public sector workers), they all came to a conclusion that KM is positively related to performance.

2.4. Theoretical Review

The study was guided by the following theories:-

2.4.1. Intellectual Capital Theory

Intellectual capital theory which emerged during the early mercantilist period, emphasizes on the value of knowledge in organizations and distinguishes it from physical capital. According to the theory, the physical capital of organisations especially in the growing service sector is relatively less important for competitive advantage as compared to the intangible assets like knowledge and other competencies (Roos & Von Krogh, 1996). The theory defines intellectual capital as the difference between the book value of the company and the amount of money one is prepared to pay for it which of course points to the value added to an organization by intellectual capital. This capital includes assets like trademarks, customer loyalty, patents and copyrights, corporate culture, information technology, employee knowledge and personal networks. For the purposes of this study, attention is paid especially to corporate culture, employee knowledge and personal networks which are the assets that give organization property rights of the mind. Knowledge management and performance is based on balancing capital portfolio, coordination and exploitation for maximum return on investment

2.4.2. Knowledge Economy Theory

The theory was penned by Piaget (1959) and is concerned with the production and distribution of knowledge as commodity function consumption within the organization's value chain. The concept of knowledge results from the recognition of the role of knowledge and technology in economic growth. Knowledge as embedded in human beings is considered as human capital which is central to economic development. Knowledge in this theory is considered as part of the most important assets in an organization, is non-imitable and in most cases, is a resource that defies the

vagaries of time. The theory uses capital assets which are firm-specific resources and are indispensable in a firm's value chain (Nonaka, Toyama, & Byosière, 2001). Nonaka's et al views, point to the role played by knowledge as it interplays with other resources to create value that contributes to organizational performance. The knowledge assets according to the theory acts as inputs that after processes and procedures are performed on them, the results are increased productivity. Boisot (1998) notes that knowledge economy theory involves organizational processes and unconscious cultural knowledge that blends together to add value to the whole value chain of resources. The theory advocates for value gained through networks out of partnering of individuals to achieve competitive concentration of resources with a view of sharing knowledge which is said to decline with network length or distance (Inkpen & Tsang, 2005). The knowledge sharing network improves on skills and competencies and gives an organization enduring knowledge advantage that lasts beyond employee turnover, death, dismissal or resignation and offers the organization minimal or inconsequential knowledge loss. The theory calls for continuous KM that is motivated by the need to diversify KM across individuals to the degree that a reasonable magnitude of employee turnover does not disrupt organizational operations (Beazley, Boenisch, & Harden, 2002). The theory is acknowledged as the most strategically significant resource of a firm. Proponents argue that knowledge-based resources are usually difficult to imitate and socially complex. The theory advocates that heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance. This knowledge is embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems and employees. Originating from strategic management literature, this perspective builds upon and extends the resource-based view of the firm initially promoted by Penrose (1959) and later expanded by Wernefelt (1984), Barney (1991) and Conner (1991). Although the resource-based view of the firm recognizes the

important role of knowledge in firms that achieve competitive advantage, proponents of the knowledge-based view argue that resource-based view does not go far enough. Resource-based view treats knowledge as a generic resource rather than having special characteristics. It fails to recognize different types of knowledge-based capabilities like information systems than can be used to synthesize, enhance and expedite large-scale intra and inter firm management. (Alavi & Leidner, 2001)

2.4.3. Constructivism Theory

Constructivism theory by Piaget (1995), deals with the way people create meanings of the world through a series of individual constructs. Constructs are the different types of filters we choose to place over our realities to change our reality from chaos to order. Von Glasersfed (1989) describes constructivism as a theory of knowledge with roots in philosophy, psychology and cybernetics; it's a learning process which allows a learner to experience an environment first hand thereby giving the leaner reliable and trustworthy knowledge. There are several authorities of constructivism theory. Dewey (1850-1953) noted that learners are observers, participants and agents who actively generate and transform patterns through which they construct the realities that fit them. This observation is very practical in the way tacit knowledge is shared; through observation, experiences and exposures which in most cases are enhanced through interactions. Kolb (1984) emphasizes the importance of conditionalised knowledge through experiential learning. He and Roger Fry created the Kolb and Fry Model out of four elements: concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations. Their view is that learning is a continuous spiral and can begin at any one point. It begins with a person carrying out a particular action and then seeing the effect of the action in this situation. In this theory, they give generalizations that support tacit knowledge sharing; that the nature of the learner has to be self-directed, creative and innovative through analysis, conceptualizations and

synthesis of prior experience to create new knowledge. This is the concept that gives insight on how tacit knowledge is shared, more specifically through interactions and observation especially from a willing learner.

The other generalization is the importance of the background and culture of the learners. Social constructivism theory encourages the learner to arrive at his version of the truth influenced by his or her background, culture or embedded worldview. This view stresses the importance of the nature of the learner's social interaction with knowledgeable members of the society that makes it possible to acquire social meaning of important symbol systems and learn how to utilize them.

The other generalization is that the responsibility of learning should reside increasingly with the learner (Glasersfeld, 1989). Social constructivism therefore emphasizes the importance of the learner being actively involved in the learning process.

The theory pays attention to motivation which according to Von Glaserfeld (1989), if sustained, the learner's confidence in his potential to learn is enhanced. Social constructivism theory strongly suggests that the process of sharing individual perspectives called collaborative elaboration (Meter & Stevens, 2000) results in learners constructing understanding together that which would not be possible alone (Greeno, Collins, and Resnick., 1996).The theory advocates that knowledge sharing is dependent on individual efforts by knowledge sharers to create and share knowledge.

2.4.4. Self-Efficacy Theory

Self-efficacy is one of Bandura's social cognitive theories (2001) which is based on a person's belief about their ability to organize and execute causes of action necessary to achieve a goal. Persons with strong efficacy beliefs are more confident in their capacity to execute a behavior. The theory emphasizes that individual self-efficacy is influenced

through several channels: performance accomplishments i.e. one's personal mastery experiences defined as past successes or failures, Vicarious experience: observing others perform threatening activities without adverse consequences that demonstrate that the activity is do-able with a little effort and persistence. Vicarious experience can be enhanced through live modeling (observing others perform an activity), symbolic modeling and verbal persuasion. People believe they can perform tasks through use of suggestion and exhortation or self-instruction. Emotional arousal self-efficacy is enhanced by diminishing emotional arousals such as fear, stress and physical agitation that are associated with decreased performance. Self-efficacy theory encourages tacit knowledge sharing since individuals can observe and model others as they perform, and with self-belief that they can, and with diminished emotional arousals, knowledge sharing is enabled.

2.4.5. Nonaka's Model of Knowledge Creation

Nonaka and Takeuchi (1995) consider four basic processes of knowledge dynamics namely socialization, externalization, combination and internalization. Out of the four; two of them satisfy the condition of transforming one form of knowledge into another form. They are externalization and internalization. Externalization means to get some explicit knowledge out of experience in a form that can be transferred through the process of combination. Internalization is the reverse process by which some valuable knowledge got through combination can be stored.

The following is a diagram showing knowledge spiral.

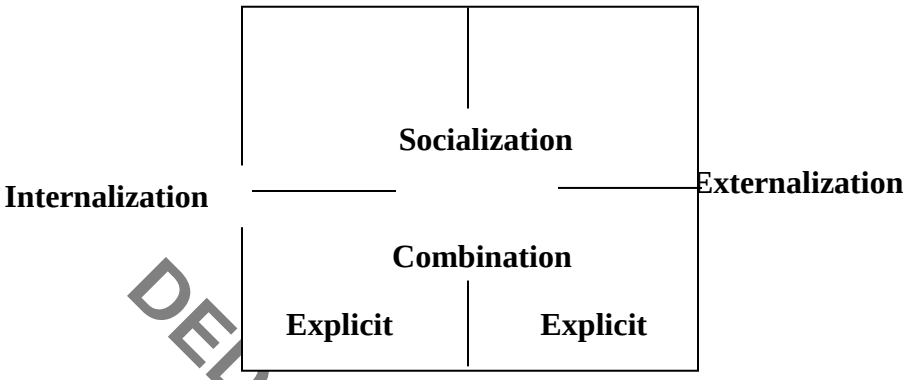


Fig ii: SECI Model of Knowledge Creation Spiral

Source: Nonaka and Takeuchi, 1995

Table 2.4: Summary of SECI Model

Interaction mode	**Conversion Process**	**Process example**
Socialization	Tacit to tacit	Social interaction and shared understanding
Externalization	Tacit to explicit	Introspection leading to formal expression of ideas
Combination	Explicit to explicit	Analysis and synthesis of written information or data
Internalization	Explicit to tacit	Understanding written information or discussion

In this model, knowledge is continuously converted and created as users practice and learn. The process should be dynamic, continuous and a swirl of knowledge. Effective knowledge management must therefore take into account the different methods described above to adopt the right strategy to support knowledge creation and transfer. Socialization reflects tacit to tacit knowledge exchange or transfer through shared

experiences. However since tacit knowledge is context- specific, a person can share through joint activities with others who are better experienced and knowledgeable with expectation of beneficial learning in theory and also in practice. Zzulanski (1996) says that due to the stickiness of tacit knowledge, it depends highly on the organizational culture and the balance between individual competition and group cooperation. The same is echoed by Bratian and Orzea (2009).

2.5. **Empirical Review**

Knowledge sharing in organizations is of great interest to researchers and practitioners alike. This is because, it improves organizational performance (Lesser & Stock, 2001), Promotes competitive advantage (Argote & Ingram, 2000); Organizational learning (Argote, 1999), innovation (Koput, & Doerr, 1996) and even business survival (Baum & Ingram, 1998). It is an integral part of any growing organization for people need to sharpen one another.

A study by Wen-Bing Gau (2011), on public servant's workplace learning: a reflection on the concept of communities of practice, revealed that knowledge transferring within an organization determines organizational efficiency. The Africa public sector human resource management managers network (APS-HRMnet) credits knowledge, knowhow and skills, networks and attitudes of personnel in the public sector as the nerve Centre of organizational performance. The major observation is that it is through them that services are planned and delivered and that critical innovations are realized and needed reforms are carried out. How to pass various types of knowledge effectively to organizational members is crucial but the most difficult area of KM is dealing with tacit knowledge. Wen-Bing Gau (2011) notes that a message which has not been digested by an individual can only be viewed as data or information rather than knowledge. The process of disseminating and digesting information in an organization can be classified as organization's learning behavior. Therefore tacit knowledge sharing is closely related

to organizational learning (Finder & Brand, 1999). Although organizations may be able to learn things by themselves, the KM mechanism in a governmental organization is especially pregnant with meaning.

The public sector has a strict division of labour and therefore there is no incentive to cause public servants to want to look after other colleague's business success. This situation makes knowledge delivery and sharing in the public sector more difficult than that in the private sector.

A study by Ondari-Okemwa (2006) indicates that these scenarios are particularly prevalent in Kenya and that it is not uncommon for civil servants to hoard information and call it "classified information" or an "official government secret". An effective knowledge management would encourage sharing of knowledge and information. In introducing and integrating knowledge management in the civil service of Kenya, it should be noted that an overly techno-centric approach may fail to produce a culture and context which nurtures organisational learning. Damodaran and Olphert (2000) are of the view that the overemphasis of technological issues is the most common cause of the failure of knowledge management in organisations. They instead recommend a more socio-technical approach, which has as its objective, the management and sharing of knowledge to support the achievement of organisational goals. Fitzgerald (2008) contends that social networking tools promise to help companies harness inside the heads of their employees and put it to work for the business. Fitzgerald (2008) argues thus: Those dealing with knowledge management (KM) have always faced the challenge of getting information out of people's heads and into a database. Social computing tools seem like a good way to help, since they encourage people to share their knowledge with others, and that expertise can be easily captured.

Public sector interactions are limited and directed specifically because of the bureaucracy, rigidity, protocol and red tape that interfere more than enhance knowledge sharing and this hinder knowledge creation and sharing. This assertion is confirmed by Wen-Bing Gau (2011), who opines that the public sector has no appropriate mechanism to create and share tacit and explicit knowledge and therefore, the government will not be able to provide the public with quality services, not to say anything on the country's development. Blackler (1995) in his study on the emergence and diffusion of the concept of knowledge work identifies five classifications of knowledge: embrained, embodied encultured, embedded and encoded. The first is embrained knowledge which is dependent on conceptual skills and cognitive abilities, while Embodied knowledge is action orientated and is likely to be only partly explicit. Encultured knowledge refers to the process of achieving shared understandings and embedded knowledge is knowledge which resides in systemic routines. The last is encoded knowledge which is information conveyed by signs and symbols. Spender (1996) concluded that there are different types of knowledge: conscious, objectified, automatic and collective.

2.5.1. Importance of knowledge Sharing

Today, the creation and application of new knowledge is essential to the survival of almost all businesses, reason being that it includes intangible products like ideas and processes that give organizations sustainable competitive advantage that enhances continuous innovation. There is also increased turnover of staff and consequently, when people leave an organization, their knowledge walk out of the door with them. Sharing knowledge also leverages expertise across the organization and this accelerates change. What motivates people to share knowledge is because knowledge is perishable, meaning that it is short -lived and rapidly loses value if not utilized. It is also obvious that if one does not put knowledge into productive use, someone else with the same knowledge will. Sharing knowledge is a synergistic process that involves one getting

more out of it than he puts in. Sharing is about soliciting for feedback, asking questions and telling people what you need to do before doing it. It involves asking other people for help or to work with you in some way, however small, telling people what you are doing and more importantly why you are doing it, asking people what they think, asking them for advice and not just sharing information but knowhow and know why. It is about being open in your way of work and relationships with other people

2.5.2. Formal and Informal Knowledge Sharing

Formal knowledge sharing involves identification of crucial organizational knowledge and direct transfer of the defined knowledge through defined structures deliberately created by top management. Informal knowledge sharing refers to knowledge that is developed organically instead of one that is gutted down the throats through top-down approach (cross and parker, 2004). The matrix portrays the defining characteristics of formal and informal knowledge sharing as advanced by De Meyer (1991), Allen (1997), and Cross and Parker (2004)

Table 2.5: Formal versus Informal Knowledge Sharing Matrix

Formal Knowledge Sharing	Informal Knowledge Sharing
• Mostly exchanged by knowledge workers who are deliberately created by top management. Nurtured through family atmosphere between R&D staff	• Mostly exchanged by technical staff
• Uses formal channels of communication like meetings and memos. • It is a creation of top management and relies on trust by individuals	• Uses informal channels of communication like rumors, grapevine, personal ties and initiatives between individuals
• Confined within organizational boundaries	• Crosses both organizational and geographical boundaries
• Enhanced through scientific methods like use of multiple devices like desktops, tablets, mobile phones and cross platforms	• Enhanced through social contacts, physical location, proximity and face to face contact
• Is mostly driven by top management initiatives, structures, policies and set methods	• Has boundary spanning individuals and technological gatekeepers who act as a link between separated networks and individuals
• It is sanctioned and dictated by top level managers who lay down and govern issues to be shared	• Is unsanctioned and ungoverned and is therefore impeded by organizational structures (divisions and functions) and geographical boundaries
• Thrives in bureaucratic and hierarchical systems of government with frameworks of reporting and sharing	• Thrives in flat organizations which allow horizontal communication

Source: Author, 2015

2.5.3. Functional Boundaries and public Sector Performance

From what is portrayed in table 2.8, it is clear that knowledge sharing is done both formally and informally. Most of the formal sharing is done in formal settings through mails, Meetings, memos, seminars and workshops, calls and short messages, conferences and any other formal settings that are guided by set formal structures. Formal knowledge sharing is common with mostly the elite and high ranking officers (management and line staff). Informal settings are those that are not undertaken in formal settings but are more driven by deliberate moves by members to informally share knowledge through unstructured means like grapevine, rumors, calls and short messages and any other method that is facilitated by close contacts and interactions. This sharing is common with lower cadre staff especially the support staff.

Reagans and Mc Evily (2003) in their study found out that both tacit and explicit knowledge are easier to transfer over strong ties which are prevalent in team environment. Hansen (1999) measured the strength by asking respondents about relationship closeness and frequency of communication with each contact. In his study, Mc Evily (2003), endeavored to establish KS as very high by bringing out the issue of duration of interactions and observed that relationships became very tight in long hours of spending time together. He also brought out the fact that the relationships must be developed over a number of years to develop trust and that the individuals must work very closely and have very strong bonds. Cross and Cummings (2004) observed in their study that where KS is high, it is difficult to draw a line in the lives of the unit of the organization. It shows collaboration of people from different units which are beneficial if not crucial to the success of the organization. Members are simultaneously involved in more than one production unit at a time and this influences knowledge flow. These ties are very strong and enriching and contribute to organizational knowledge sharing.

Klenner and Roth (1997), propose the concept of community story telling where a community undertakes work and writes down their knowhow. Ardichyili, Page, and Wentling, (2003) in their article on motivation and barriers to participation in virtual knowledge sharing communities of practice, confirm that tacit knowledge is embedded in organizational stories and delivered by organizational members through interactions. However, they observe that three keys issues may hinder knowledge sharing: other people (feelings), the trait of tacit knowledge and participant's attitude to interactions. Wenger (1998) found out in his study that people hide the skills they have as a survival tip to avoid facing the danger of being replaced by others who become more knowledgeable and to keep their superior status in the organization, and this inhibits organizational learning. A learning organization refers to a company that facilitates learning of its members and continually transforms itself. Learning organization concept was coined by Senge (1969) and encourages organizations to be more interconnected and become like communities that employees can feel commitment to. He notes that tacit knowledge needs to be consciously digested from members and that individual's tacit knowledge cannot be transferred into organizational knowledge without individual's acceptance and reflection.

2.5.4. Workforce Motivation and Public Sector Performance

The only organizational factor identified by researchers as most important in KS is motivation. This is the existence of incentives to share knowledge (Bock & KIM, 2002). Dyer and Noboeka (2000) in their study showed that non-financial incentives improve KS across organizational boundaries. The motivation for good KS and collaboration is not financial but rather the reputation of an individual. Alavi and Leiduer (2001) noted that KS can be characterized by transfer of a complete chunk of Knowledge from one person to another and that it involves the "sharers" and receiver who play interchanging roles constantly. He notes that this can only be possible if they are highly

motivated. The rewards can be in form of salaries, bonus payments and stock options. Other intangible rewards may be tied to skills gained, assessment of knowledge sharing being in form of tangible rewards and the reciprocal access gained to information and knowledge. People understand that if they share, they will be offered something in return.

An individual's desire to share knowledge and his or her attitude to interactions, are important keys to transferring tacit knowledge from the individual to the organizational level. Mazuths and Natalie (2008) assume that dialogue is the core of organizational learning; but observes that communication alone is not satisfactory; that methods to motivate mentors and mentees must be established to get them accept the roles and tasks of knowledge sharing. Tacit knowledge can be delivered through apprenticeship but the learners and mentors attitudes to interactions determine whether the learning culture or knowledge delivery will be successful.

2.5.5. Organizational Culture and Public Sector Performance

One of the biggest challenges in deriving business value from organizational KS is to ensure that KS becomes part of organizational culture. This can be done through developing a KS culture of trust and openness. To assess the culture of an organization, the following should be considered: the history of organization. This should be done with the following questions in mind; does the organization have a history of secrecy (particular events that have compounded these problems). Second, is the size of the organization; does geographical scope inhibit KS (are organization units too large or too small?) Thirdly, is the effect of technology: does use of information communication technology increase information over load. Fourthly is leadership: do senior managers openly discuss issues and encourage communication from all levels of the organization? (Chaffey & wood, 2005). Dixon (1999) in his study focuses on people side of

Management sharing and said that the most effective KS tool is conversations; that the words we choose, the questions we ask, and the metaphors we use to explain ourselves are what determines our successes in creating new knowledge as well as sharing that knowledge with each other.

Culture according to Sathe and Finley (2013) is the set of important understanding (often unstated) that members of a community share in common e.g. norms, values, attitudes, beliefs and paradigm. It is the integrated pattern of human behavior that includes thoughts, speech, action and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations. Organization culture is a relatively rigid tacit infrastructure of ideas that shape not only our thinking but also our behavior and perception of our business environment. It establishes a set of guidelines by which members of an organization work and how those organizations are structured.

2.5.6. Workforce Communication and Interactions and Public Sector Performance

Some scholars such as Faulkner and Seuker (1995) think that dividing knowledge into tacit and explicit types is inappropriate. They argue that people explain what they see and what they know in their own experience. These experiences are usually in a tacit form. Therefore, even when people are delivering explicit information, they express both tacit and explicit knowledge.

Kleiner and Roth (1997) suggest using "teaming slangs" to record important events to help organizational sharing. The purpose is to make use of a double column table to describe and analyze knowledge gained. On one column, the interviewees record their experiences and historians give their comments or analysis on another column. Such learning history is a base for coping with similar difficulties in the future.

Schwarzwalder (1999) says that data is raw material which when selected and given associated meaning, becomes information. He suggests taking advantage of three elements: Key persons, the knowledge sharing process and technology communities, to encourage knowledge sharing. Schwarzwalder suggests that establishing an appropriate environment where communication can openly and freely proceed is the core of knowledge management. Zack (1999) advocates for taking advantage of it to support knowledge sharing but this may not be achieved if an organization cannot electronically collect, index, store and distribute explicit knowledge that is more readily usable anywhere, anytime.

Wenger (1998) in his study, established from his respondents that, in order to motivate employees to participate in KM activities, both hardware (facilities of delivering knowledge) and software (the whole situation of knowledge sharing) must be taken into account. He advocates for repetitious communication to facilitate the delivery of tacit knowledge. The public service is a fixed and big system whose most of the routines and processes have been regulated by law. Technology plays a crucial transformational role and is a key part of changing the corporate culture to knowledge sharing one. People have to be trained and educated in technology use so that knowledge can be posted in organizational systems for use.

The two most important factors in knowledge sharing are: people with the appropriate knowledge sharing mindset and the appropriate knowledge sharing technology to support the sharing. Communication alone is not enough to cause people and especially the workforce to share knowledge. The time people spend together and the intensity of their interactions determine how effectively they share knowledge. Grieve (2010) in his paper, found out that employee personal relationship (social capital) was the most important factor in determining productivity. Lieberman (2000), from social cognitive neuroscience laboratory at the University of California observed that there is an

assumption that productivity is about smart people working on their own but it is common knowledge that individual intelligence is only optimized through enhanced social interactions. Lieberman (2013) notes again that there is a relationship between workplace space and connectedness since if one sits more than fifty meters from another, there is rarely any communication, meaning that the closer the people sit and the more commonalities that they have, the more they share. His emphasis is that correlating business units hinders people from speaking with others outside the business unit. Allen Thomas (1970) affirms Lieberman's notion in his research on the physical distance between people and how often they communicate. It is from his study that the "Allen curve" emerged.

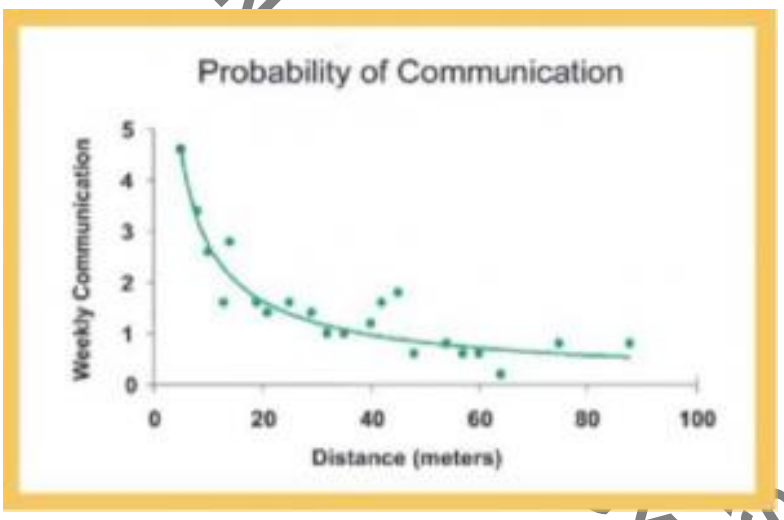


Figure iii: Allen's curve

Source: Allen (2006)

The curve shows that the probability of a pair of people in an organization communicating with each other declines rapidly as the distance between them increases. A repeated study by Allen (2006) showed a decay of all communication media with distance. Allen in his recommendations insists on physical proximity for effective and reliable communication. It is his considered view that breakthrough rarely

happens between people who work in the same business unit, doing the same things and dominated by the same like mindedness. Many organizations are making progress in enhancing communication by coming up with open plan and half-glass partitioned offices and also encouraging open door policy to create transparency in management, but the endeavor should be to reduce the distance between one communicant and another.

2.6. **Conceptualization of Variables**

A conceptual framework shows the relationship between the dependent and the independent variables which in this case are public sector performance versus tacit knowledge sharing which is determined by workforce motivation, functional boundaries, workforce communication and interactions and organizational culture respectively.

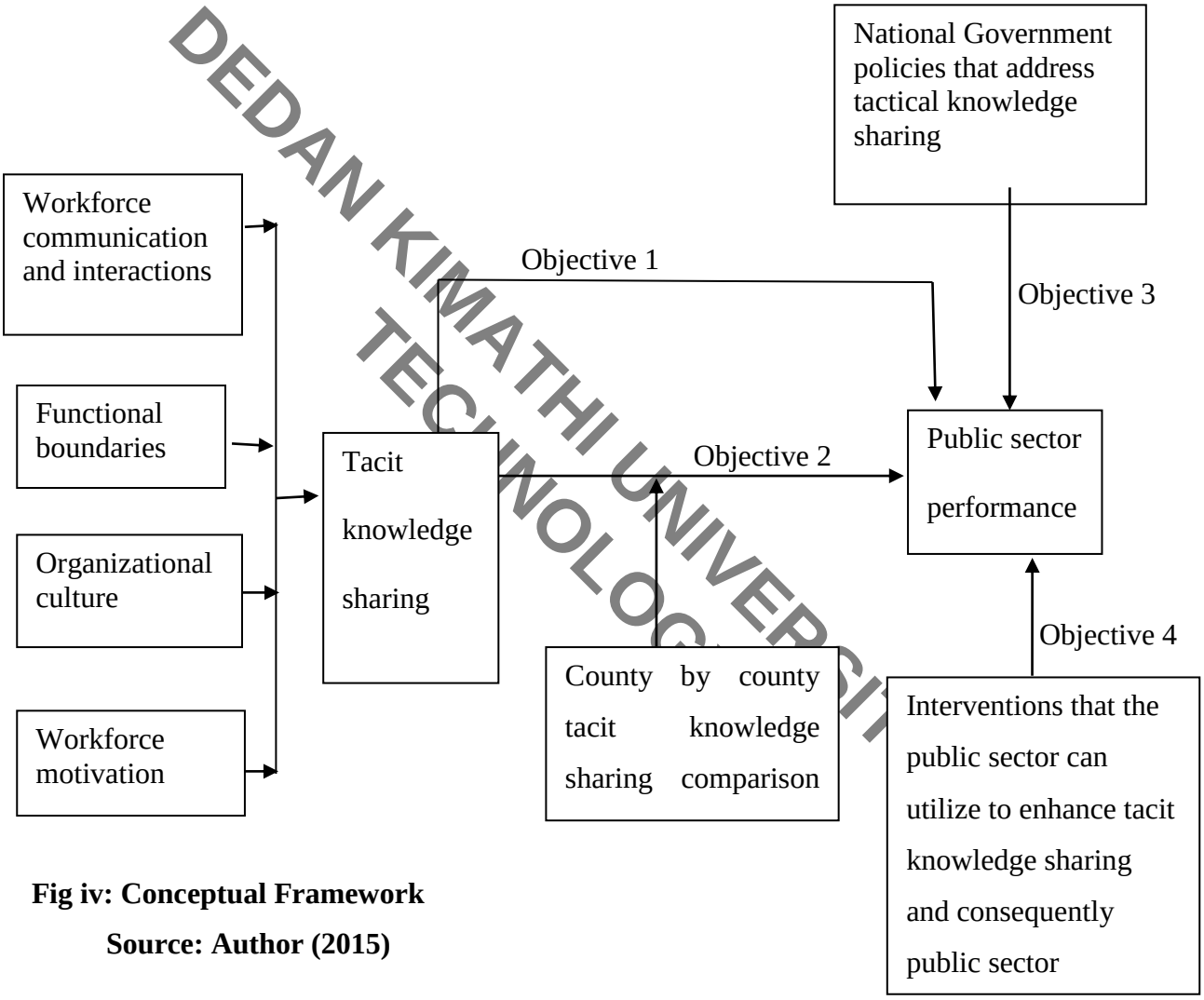


Fig iv: Conceptual Framework

Source: Author (2015)

A conceptual framework is a set of broad ideas and principles taken from relevant fields indicating how to structure a subsequent presentation. It portrays a scheme of concepts (variables) which are operationalized to achieve set objectives. The study has five variables which are explained as follows.

Public sector performance is the dependent variable referring to measurement by which the public sector will be seen as performing according to set standards

Workforce communication and interactions refer to the process by which organizational members spend time with one another and exchange information both verbally and nonverbally. In order for members to aim at common goals and learn from one another, they have to keep on generating and sharing information through shared platforms that are both formal and informal.
Effective workforce communication ensures that all organizational objectives are achieved.

Organizational culture refers to the values and behaviors that contribute to unique social and psychological environment that determines goal achievement. It is expressed through organization's self-image, working interactions, language and the levels of sharing that the workforce engages in. It takes time for culture to develop into what is commonly referred to as corporate culture. This corporate culture determines the way tacit knowledge is shared and is a great determinant of organization's productivity and performance.

Employee motivation refers to the morale, zeal or enthusiasm of an employee to perform work or tasks without supervision or coercion. It's what causes employees to act in a certain way. The degree of motivation of employees is positively related to their

performance. The level of knowledge sharing by employees is also determined by their motivation to use synergy to increase productivity through pooled efforts with others.

Functional boundaries refer to the demarcations created by departmentation that separate employees. These demarcations can be physical or even psychological but this study looks at the physical boundaries created by distance and departmentarion.

Interventions on existing policies in this study will involve first examining the policies that the government has put in place to facilitate tacit knowledge sharing (as indicated in objective 3) and also establishing interventions that can enhance tacit knowledge sharing and public sector performance (objective 4). The world has become a knowledge economy and therefore such interventions are crucial for performance.

County by county tacit knowledge sharing comparison involves analyzing tacit knowledge sharing of each of the eight counties under study and establishing how sharing influences performance. The results are compared amongst the eight counties so as to establish which country shares knowledge more and associate factors that may cause disparities in how tacit knowledge is shared and for the disparities in their performance.

2.7. **Operationalization of Variables**

This refers to the framework that seeks to establish whether a relationship exists between the parameters stated and public sector performance.

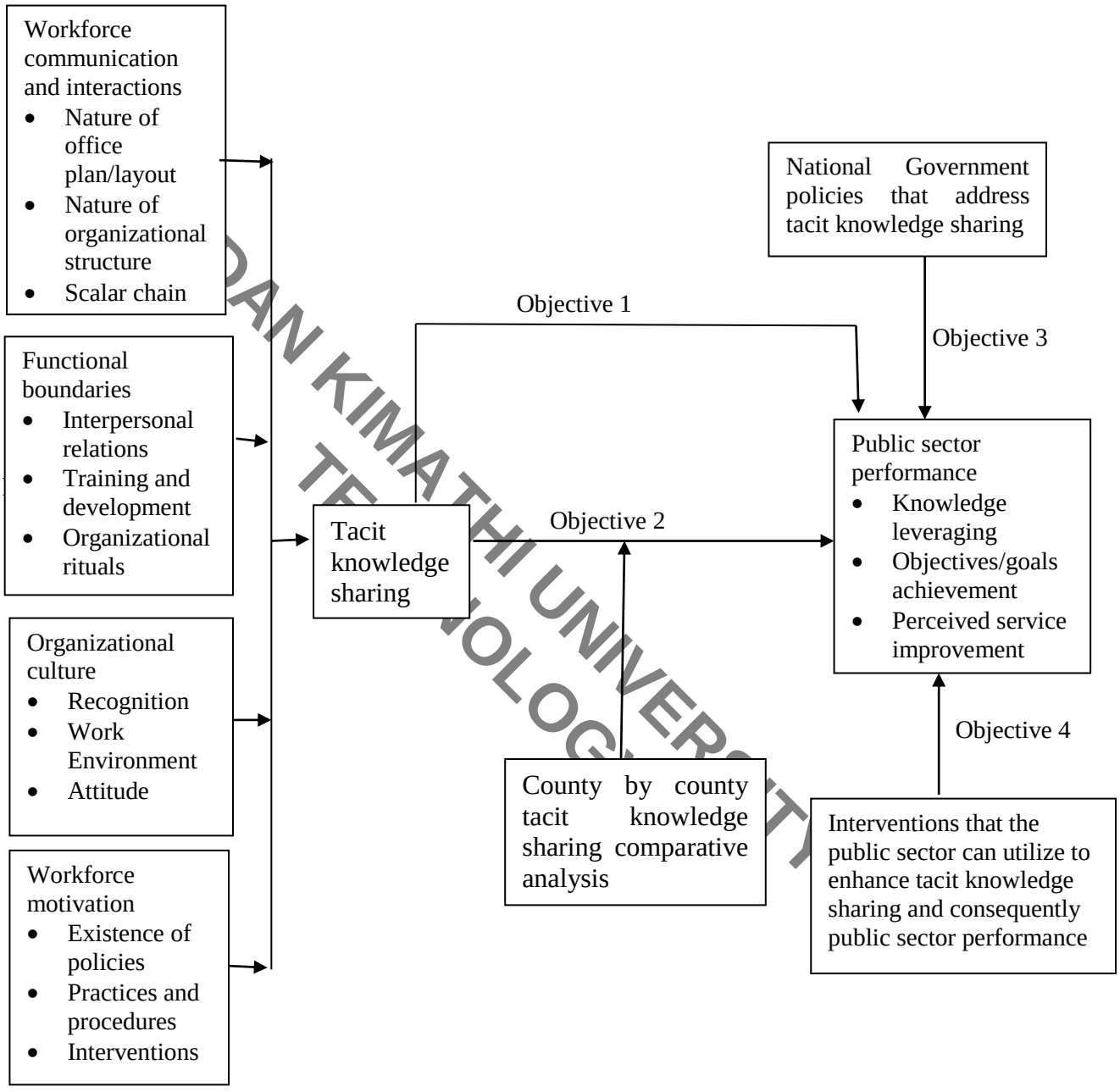


Fig. v: Operational Framework

Source: Author (2015)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter deals with the design and the methodology that the research employed. It stipulates the systematic research procedure and techniques the researcher used in collecting and analyzing data. It also describes the sample and the instruments that will be used in data collection.

3.1. Research Design

This study adopted a descriptive research design and also comparative research design. Descriptive research design according to Mugenda and Mugenda (2003) is used to obtain information concerning phenomena and to describe what exists based on chosen variables. The variables in this study are: to establish the influence of workforce communication and interactions, Workforce motivation, organizational culture and functional boundaries which are all assumed to be factors of tacit knowledge sharing that consequently influence public sector performance. Descriptive research design is also preferred in collection of a wide range of social and economic indicators especially in the public sector. Comparative research design was also used. This refers to a research method that aims at making comparisons across different categories in order to discover something about one or all of the items compared. This design was useful in the county by county analysis of tacit knowledge sharing and its influence on public sector performance.

3.2. Research Paradigm

The study utilized positivism research paradigm, a perspective that involves experimental testing of causative variables, having measured the outcomes derived

from the questionnaire data that is mainly quantitative. The questions are objective and the sample was clearly derived with precise inclusion of relevant data. According to Taylor and Roberts (2007), a research paradigm is a broad view or perspective of something which reveals how research could be affected by some patterns of beliefs and practices that regulate inquiry.

3.3. Target Population

The target population consisted of all public sector workers who are in the public sector ministerial departments of the 47 counties in Kenya. Table 3.1 provides this data.

Table 3.1: Number of Employees in the Public Sector in the Year 2012

Sector	Central Government	Teachers Service Commission	Parastatals Fully Owned by the Government	Institutions where Government owns 50%	Local Government	Total
No. of employees	222,600	260,000	90,600	43,600	37,700	655,300

Source: Economic survey, 2013

From the table 3.1 above, there were about 655,300 public sector workers according to the year 2012 statistics but this study is interested in those in the local government (Devolved Government-37,700) and those in the central Government (222,600) which in total adds up to 222,600 employees. The study is mainly centered on the 47 counties in Kenya though the complimentary influence from the national government will also be taken into account.

3.4. Sampling Procedure

A sample is a subset of the total population that can be used to make generalization about the population (Orodho, 2004).The research employed use of purposive (also called judgmental, selective or subjective sampling method) which is an appropriate non-probability sampling method if the units being investigated are based on the judgment of the researcher and focuses on particular characteristics of a population (Patton, 1990, 2002 & kuzel, 1999). Heterogeneous/maximum variation sampling (one of the types of purposive sampling) was used. The selection of the 8 counties under study out of the 47counties was premised on the basis of equal representation of all the diverse Kenyan regions, by basing it on the former eight provinces that were a representation of Kenyan diversity. The specific counties namely Samburu, Makueni, Kirinyaga, Nairobi, Garissa, Homa Bay, Kilifi and Bungoma were purposively selected on the basis of regional representation, whereby Samburu county was selected from the former Rift Valley Province, Kirinyaga from the former Central Province, Kilifi from the former Coast Province, Makueni from the former Eastern Province, Garissa from the former North Eastern province, Homa Bay from the former Nyanza province, Bungoma from the former Western province and Nairobi county from the former Nairobi province. The public departments that were investigated were selected using simple random sampling where 30% of the 18 ministerial departments were picked to make a total of 6. The 6 were purposively selected out of 12 devolved functions of the government. The decision to use a sample of 30% as respondents is derived from Nachiamus et al (1991) observation that a sample size should be big enough to enable capturing a variety of responses that can facilitate generalization of results to the rest of the population. This technique according to Ochola and Ngige (2002) is used because each element of the target population has an equal chance of being selected. From the 6 departments, 1 county director and 6 line staff formed the sample from each public

department. Therefore, from the 6 departments, there were 42 respondents. The total then for the 8 counties comes to 336 respondents. This is demonstrated in the table 3.2.

Table 3.2: Sampling Frame for Devolved Departments

County	Public Departments	No. of County Directors	No. of line Staff	Sample Size Per County
Samburu	6	6	6x6=36	42
Makueni	6	6	6x6=36	42
Kirinyaga	6	6	6x6=36	42
Nairobi	6	6	6x6=36	42
Kilifi	6	6	6x6=36	42
Homa bay	6	6	6x6=36	42
Bungoma	6	6	6x6=36	42
Garissa	6	6	6x6=36	42
TOTAL	48	48	288	336

Source: Author (2015)

Closely connected to the sample is the national government sample that was taken for the purposes of establishing the way tacit knowledge is shared in the national government and the initiatives by the national government that have something to do with knowledge management and sharing. In this respect, six departments were purposively selected which are labour, sports, national public works, national health, national education and housing. Efforts were made to stick as much as possible to the departments already picked in the devolved government.

3.5. Data Collection Procedure

The researcher administered questionnaires to the targeted population as a tool to capture the required data. The choice of questionnaires was arrived at because of ease of administration. The drop and pick method was preferred for questionnaire administration so as to give respondents enough time to give well thought out responses. Care was taken to ensure internal and content validity of the questionnaire; internal validity is the questionnaires extent of measuring what it was intended to measure while content validity measures whether it adequately covers the subject matter. The collected data was edited to ensure consistency and to locate any omissions. Majority of the questions were closed-ended and few open-ended. The questionnaires were pretested by administering them to 6 county directors and 15 line staff from a different county outside those that formed the study sample. This was assumed to be a representative of the study sample. According to Mugenda (2003), pretesting or pilot testing gives the researcher an insight on the validity and reliability of the questionnaires as an appropriate tool to be used to investigate the problem at hand.

3.6. Data Analysis and Presentation

Data collected was organized and coded, tabulated and classified into sub-samples according to its common characteristics, then posted in tables and charts. The study then made use of selected descriptive and inferential statistics as noted by Mugenda (2003) that most studies use them. Quantitative data was analyzed using Pearson's correlation coefficient. Frequencies were converted to percentages for ease of manipulation. The study assumed that public sector performance is a function of workforce communication and interactions, functional boundaries, organizational culture and workforce motivation which were considered factors that have an influence

on tacit knowledge sharing. Hence PSP = f (c + f + o + m) was used to determine the relative influence of each variable on organizational performance where:-

PSP= Public Sector Performance

C = Workforce Communication and interactions

F = Functional Boundaries

O = Organizational Culture

M = Workforce motivation

The regression coefficient and other advanced inferential statistics were used.

The regression model generally assumed the following equation

$Y = a + b_1x_1 + b_2x_2 + \ldots\ldots\ldots b_nx_n + e$ where

Y = Public Sector Performance

X1 = Workforce Communication and Interactions

X2 = Functional Boundaries

X3 = Organizational Culture

X4 = Workforce Motivation

The regression coefficient helps to quantify the strength of the linear relationship between two ranked or numerical variables and to assess the strength of the relationship between a dependent and the independent variables. (Saunders et al, 2009).

3.7. **Reliability Test**

Reliability is a measure of the degree to which a research instrument yields consistent and similar results or data after repeated trials (Crano & Brewer, 2002). This study addressed reliability by using Cronbach alpha statistical test. The Cronbach alpha coefficient normally ranges from 0 to 1 and the higher the coefficient, the more reliable the scale. A pilot study was conducted to find out if the respondents could answer the

questions without difficulty. Respondents in the pretest were drawn from Nyeri County. They were asked to evaluate the questions for relevance, comprehension, meaning and clarity. The cronbach alpha coefficient obtained was 0.84 and this study used the cutoff point coefficient of 0.7 and above as a strong measure of reliability which agrees with Nunnaly's (1978) recommendation. The questionnaire was then adjusted on the basis of the findings of the pilot test and the final version was developed thereafter for use.

3.8. **Validity Test**

Nachmias and Nachmias (2004), argued that validity is concerned with the question "Am I measuring what I intended to measure?" Therefore, validity is the accuracy and meaningfulness of inferences based on the research results to establish whether the results obtained from analysis of the data actually represent the phenomenon under study to the degree of expectation. It is the correctness and reasonability of the data as it refers to getting results that accurately reflect the concept being measured. Based on this study, the questionnaires were subjected to an examination by a panel of experts who were asked to review the instrument to ascertain its validity. Their responses ascertained that the research instruments would give valid results.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF FINDINGS

4.0. Introduction

This chapter presents the analysis, interpretation and presentation of data collected. The broad objective of the study was to determine the relationship between tacit knowledge sharing and the performance of the public sector in Kenya. The first questionnaire was used to collect data from 6 ministries in 8 counties in Kenya with the intention of establishing the influence of tacit knowledge sharing on public sector performance. The second questionnaire was used to collect data from 6 national government's departments whose intent was to establish national government's initiatives and policies on tacit knowledge sharing. Data was coded, analyzed and the results were obtained using descriptive and inferential statistics guided by the research objectives and research questions. The findings were presented in form of frequency tables and their implications explained. Pearson's Correlation Coefficient was used to determine the extent of the relationship between the dependent and independent variables.

4.1. General and Demographic Information

4.1.1. Response Rate

Out of the 336 questionnaires distributed to the respondents targeted by the study, 283 were returned giving a response rate of 84.2% of the target population. Nachmias and Nachmias (2004) have pointed out that survey researches face a challenge of low response rate that rarely goes above 50%. Accordingly, they suggested that a response rate of 50% and above is satisfactory and presents a good basis for data analysis. Further, Mangione (1995) provided the following classification of response rate: over 85% excellent, 70% - 85% very good and 60%-70% acceptable and below 50% not

acceptable. The current study therefore falls under the very good range as it attained 84.2% response rate.

4.1.2. Counties that Formed the Sample

Since the passing of the new Kenya Constitution in the year 2010, counties have been used in many studies to represent the devolved government setup as well as to establish general operations of each county government since most of the activities were transferred from the central or national government with lots of authority decentralization. 8 counties formed the major sample of the study. The choice of the counties was drawn from the 8 former provinces with each of them having a representative county.

Table 4.1 :Counties that Formed the Sample and their Response Rates

	Frequency	Percent
Makueni	36	12.7
Kirinyaga	41	14.5
Samburu	37	13.1
Nairobi	35	12.4
Kilifi	33	11.7
Bungoma	33	11.7
Garissa	31	11.0
Homa Bay	37	13.1
Total	283	100.0

From Table 4.1 above, the results indicate that 12.7% of the respondents were from Makueni County, 14.5% from Kirinyaga County, 13.1% from Samburu County, 12.4% from Nairobi County,11.7% come from Kilifi County, 11.7% from Bungoma County, 11.0% from Garisa County while 13.1% from Homa Bay County. These can be termed as a good response rate.

4.1.3. Ministries / Departments that Formed the Sample

The operations of the county are vested in various ministries / departments which operate autonomously with their main objective being economic development of the county among others.

Table 4.2: Department/Ministry

	Frequency	Percent
Agriculture	50	17.7f
Trade	50	17.7
Education	44	15.5
Health	41	14.5
Planning	54	19.1
Public Works	44	15.5
Total	283	100.0

From Table 4.2, the results indicate that 17.7% of the county employees were from Agriculture department, 17.7% from Trade, 15.5% from Education, 14.5% from Health, 19.1% from Planning while 15.5% were from Public Works. This is an indication that the entire ministries targeted by the study were adequately represented in all the counties.

4.1.4. Positions Held by Respondents

The study sought to establish the various positions held by respondents from the target departments.

Table 4.3: Position held

	Frequency	Percent
Senior Management staff	41	14.5
Line staff	242	85.5
Total	283	100.0

From Table 4.3, the results indicate that 14.5% of the respondents were senior management staff while 85.5% were Line staff. This indicates that the responses gathered are representative of the broad spectrum of workers' categories in the public sector.

4.1.5. Period Worked in the Same Department

The researcher sought to establish the period respondents had worked in the same department in order to establish the number of officers who were deployed after devolvement of the county government and those that were working under the central government with a view of finding out how tacit information flowed based on years of experience.

Table 4.4: Period of Work in the Same Department

Period of work

	Frequency	Percent
More than 15 years	82	29.0
Between 10-15 Years	8	2.8
Between 5-9 Years	98	34.6
Between 1-4 Years	59	20.8
Less than a Year	36	12.7
Total	283	100.0

From Table 4.4, the results indicate that 29.0% of the county employees had worked in the same department for more than 15 years, 2.8% between 10-15 years, 34.6% between 5-9 Years, 20.8% between 1-4 years while 12.7% for Less than one year . This is an indication that most of the County employees who responded were working for central government before the devolved government in year 2012 which accounted for those who have worked in the same department for 5 years and above. This shows that most of the responding officers have been in the same department for many years and as such, tacit knowledge if well shared can influence departmental performance. This further means that some of the employees who were working for the central government have been absorbed by the county governments.

4.1.6. Understanding of the Concept of Tacit Knowledge Sharing

The study sought to establish how well the respondent was conversant with tacit knowledge sharing concept by asking an open ended question that required the respondent to define how they understood the term tacit knowledge sharing.

Table 4:5: Understanding of the Concept of Tacit Knowledge sharing

	Frequency	Percent
0	1	.4
Knowledge acquired informally	50	17.7
Involve the act of exchanging views and ideas	9	3.2
Sharing ideas openly	16	5.7
Knowledge Acquired by people during normal interaction	23	8.1
A way of sharing knowledge by working together	39	13.8
Knowledge learnt through experience	17	6.0
On job training from colleagues	34	12.0
No response	79	27.9
Knowledge learned through others	15	5.3
Total	283	100.0

Table 4.5, shows various definition given to the term tacit knowledge with 17.7% defining it as knowledge acquired informally, 3.2% as an act of exchanging views and ideas, 5.7% as sharing ideas openly, 8.1% as knowledge acquired by people during normal interaction, 13.8% as a way of sharing knowledge by working together, 6.0% as Knowledge acquired through sharing experiences, 12.0% as on job training from colleagues, 5.3% as knowledge learned through others while27.7% did not response. There is an indication that though there are varied definitions of tacit knowledge though majority of the respondents view tacit knowledge as informal knowledge acquired from other employees by the nature of working together, experiences and

during normal interactions. However a few respondents avoided the question altogether or had no idea what tacit knowledge means.

4.2. Descriptive Analysis and General Interpretation

This section provides the analysis and interpretation of each objective using mean scores obtained from respondents. Questionnaire items per objectives were written in the form of statement using a 5-point Likert scale ranging from 5 to 1 where 5 was rated highest and 1 the lowest. The mean score for each objective was obtained and used in data analysis. In addition data was analyzed based on the responses given.

4.2.1. Employee Communication and Interactions and Public Sector Performance

Schwarzwalder (1999) suggests that establishing an appropriate environment where communication can openly and freely proceed is the core of knowledge management. The study thus sought to establish how employees within the departments communicate and interact.

4.2.1.1. Level of Department Automation

The study sought to establish the level of department automation in order to determine whether workforce communication and interaction is enhanced through automation.

Table 4.6: Level of Department Automation

	Frequency	Percent
Fully automated	2	.7
Automated to a large extent	88	31.1
Automated to a small extent	165	58.3
Not automated at all	15	5.3
Hard to tell	13	4.6
Total	283	100.0

As shown in Table 4.6, majority of the respondents said that departments were automated to a small extent which accounted for 58.3%, 31.1% said that departments were automated to a large extent, 5.3% said that departments were not automated at all or it was hard to tell with 4.6% saying that departments were fully automated. This is an indication that though most of the departments are not fully automated, plans are underway to ensure full automation with only very few departments which have not automated their operations.

4.2.1.2. Frequency of Department Augmentation or Adoption of New Technology

The study also sought to establish the frequency of department information technology augmentation or adoption of new technology.

Table 4.7: Frequency of Department Adoption of New Technology

	Frequency	Percent
75% - 100%	27	9.5
50% - 74%	161	56.9
25% - 49%	69	24.4
0% - 24%	20	7.1
Not at all	6	2.1
Total	283	100.0

Table 4.7 reveals that majority of the respondent rated the frequency of department adoption of new technology between 50%-74% which accounted for 56.9%. 24.4% of the respondents reported that department adoption of new technology was between 25% - 49%, 9.5% rated technology adoption between 75%-100%, and 7.1% rated adoption between 0% - 24% while 2.1% said that there has been no attempt to adopt new technology. This is an indication that departments have endeavored to adopt new technological changes.

4.2.1.3. Rating Department's Connectivity

The study sought to establish the rate of department's connectivity

Table 4.8: Rating of Department's Connectivity

	Frequency	Percent
Poor	35	12.4
Fair	44	15.5
Satisfactory	83	29.3
Good	114	40.3
Excellent	7	2.5
Total	283	100.0

From table 4.8, the results indicate that 40.3% rated department connectivity as good, 29.3% satisfactory, 15.5% fair and 2.5% excellent while 12.4% of the respondents rated connectivity poor. This is an indication that departments are not very well connected but may need improvement because only 2.5% said that the connectivity is excellent.

4.2.1.4. Strength of Social Media Network

The study sought to establish the strength of social media network in public sector departments

Table 4.9: Strength of Social Media Network

	Frequency	Percent
Non Existent	9	3.2
Weak	60	21.2
Fairly Strong	148	52.3
Strong	56	19.8
Very Strong	10	3.5
Total	283	100.0

From Table 4.9, the results indicate that 52.3% rated social network as fairly strong, 21.2% as weak, 96.5% strong, and 3.5% as very strong while 3.2% said that there is no

social media network. This is an indication that social media network within public sector is not well established.

4.2.1.5. Effect of Employees' Communication and Interactions factors on public sector performance

Respondents were asked to indicate how they communicated and interacted and the responses are shown in appendix xii.

The results on the effects of employees' communication and interactions within the departments is as is shown in appendix xii. It is clear from the information in the appendix that person to person communication was highly rated (mean score=3.99) followed by Informal interactions & grapevine (mean score=3.47) and Brain storming sessions on skills/competencies sharing (mean score=3.46). This could be explained by the fact that these employees are within the same building and they undertake various tasks that require daily verbal communication as well as informal interactions. In this way, knowledge is shared through informal methods. The results also indicate that there are formal methods of sharing knowledge where the departments organize Open forums of knowledge sharing (mean score=3.28) and Seminar & workshop (mean score=3.16). This can be explained by the fact that there being informal ways of disseminating knowledge in the departments, departments also hold seminars and workshops to share knowledge with officers with a wide range of experience in different areas.

4.2.1.6 Information Gathering and Sharing among Departmental Members

The researcher sought to establish whether information gathered using the methods specified in table 4.10 was shared among departmental members.

Table 4.10: Whether Information gathered is shared amongst Departmental Members

	Frequency	Percent
Not applicable	13	4.6
No	28	9.9
Yes	242	85.5
Total	283	100.0

From Table 4.10, the results indicate that most of the information gathered was shared amongst departmental members which accounted for 85.2% with 9.9% of the respondents indicating that the information was not shared. 4.6% of the respondents said that some of the information gathered may not be shared among departmental members. This could be explained by the fact that some of the information is gathered through Informal interactions & grapevine whose sharing extent may not be accounted or measured since it is not carried out procedurally.

4.2.1.7. How Knowledge gathered is shared

The study sought to establish the methods used to share knowledge gathered among the employees within the departments.

Table 4.11: Methods of Sharing Knowledge

	Frequency	Percent
Face to face encounter	177	62.5
Staff meeting	29	10.2
HOD Briefs & circulars	60	21.2
None of the Above	17	6.0
Total	283	100.0

The results as indicated by table 4.11 reveal that tacit knowledge acquired was mainly shared through face to face 62.5%, HOD briefs and circulars accounted for 21.2%, staff meeting which accounted for 10.2% and 6.0% said that tacit knowledge was shared

through other means other than the ones specified in the questionnaire. This is an indication that tacit knowledge is mainly shared through unstructured manner.

4.2.1.8. Workforce Communication and Interactions are Crucial

The research aimed at establishing whether the respondents concur with earlier findings that indicate that communication and interactions are crucial in knowledge sharing.

Table 4.12: Whether Workforce Communication & Interactions are Crucial

	Frequency	Percent
Disagree to a smaller extent	6	2.1
Agree	94	33.2
Strongly agree	183	64.7
Total	283	100.0

From Table 4.12, the results indicate that majority of the respondents found communication and interactions as crucial components in knowledge sharing which accounted for 33.2% and 64.7% with only 2.1% Disagreeing to a smaller extent. This is an indication that employees should embrace communication and interaction in order to enhance knowledge sharing.

4.2.2. Functional Boundaries and Public Sector Performance

The research sought to establish how office layout, scalar chain within the department and how free employees were and willing to share knowledge within the department, influence departmental knowledge sharing and consequently public sector performance.

Table 4.13: Nature of Office layout

	Frequency	Percent
Open plan office layout	45	15.9
Enclosed/partitioned office layout	203	71.7
Landscape office layout	7	2.5
Multi person office	28	9.9
Total	283	100.0

From Table 4.13, the results indicate that majority of the respondents stay in an enclosed/partitioned office layout which accounted for 71.7%. 15.9% of the respondents use open plan office layout, 9.9% are in Multi person office while 2.5% use Landscape office layout. These results may give an indication of limitations of office interactions and sharing since majority are using enclosed offices which may limit interactions that are a prerequisite for tacit knowledge sharing.

4.2.2.1. Nature of Office Plan and Knowledge Sharing

The study sought to establish what respondents thought about the nature of the office plan and how it influenced tacit knowledge sharing and public sector performance. The following are the results.

Table 4.14: Nature of Office Plan and its Influence on Interactions and Sharing

	Frequency	Percent
Has no effect	24	8.5
To a small extent	25	8.8
To an average extent	158	55.8
To a very large extent	76	26.9
Total	283	100.0

From Table 4.14, the results indicate that 55.8% of the respondents said that the nature of office plan facilitates to an average extent had an effect on interactions and knowledge sharing. 26.9% said to a very large extent, 8.8% to a small extent and 8.5% of

the respondents said that the nature office plan had no effect on interactions and knowledge sharing. This is an indication that the nature of office to a certain extent has an impact on interactions and knowledge sharing.

4.2.2.2. Influence of Departmentation on Knowledge Sharing

The study sought to establish the influence of departmentation on tacit knowledge sharing and departmental performance.

Table 4.15: Influence of Departmentation on Knowledge Sharing

	Frequency	Percent
Deters	14	4.9
No influence	14	4.9
Promotes	84	29.7
Fairly promotes	91	32.2
Greatly promotes	80	28.3
Total	283	100.0

As shown in Table 4.15, 32.2% of the respondents said that departmentation fairly promoted knowledge sharing, 29.7% said it promoted, 28.3% it greatly promoted while 4.4% and 4.9% said that departmentation had no influence and deterred knowledge sharing respectively. These results denote that departmentation influences tacit knowledge sharing in the public sector.

4.2.2.3. Frequency of Interactions amongst Departmental Colleagues

The study sought to establish how often colleagues interacted in a knowledge sharing forum.

Table 4.16: Frequency of Interactions amongst Departmental Colleagues

	Frequency	Percent
Not sure	2	.7
Never	2	.7
Fairly Often	83	29.3
Often	107	37.8
Very Often	89	31.4
Total	283	100.0

From Table 4.16, the results indicate that 37.8% said that colleagues interacted often, 29.3% said fairly often, 31.4% very often while 7% of the respondents said interactions never took place and 1.1% were not sure. This is an indication that colleagues' interactions take place but not very often.

4.2.2.4. Nature of Scalar Chain

Respondents were asked to indicate the nature of scalar chain in their departments which would indicate the way power flows and the level of organizations gate keeping and power distance.

Table 4.17: Nature of Scalar Chain / Power Structure in the Departments

	Frequency	Percent
Indefinable	6	2.1
Weak	19	6.7
Fairly rigid	164	58.0
Rigid	56	19.8
Very Rigid	38	13.4
Total	283	100.0

From Table 4.17, the results indicate that 58.0% of the respondents said that the power structure in the department was fairly rigid, 19.8% rigid, 13.4% very rigid, and 6.7% weak while 2.1% of the respondents said that the power structure in the department

was undefined. This may indicate that those in authority are able to exercise their authority since the structure is defined. It can also portray that the rigidity may interfere with the flexibility that characterizes knowledge sharing atmosphere.

4.2.2.5. Knowledge Sharing among Junior and Senior Staff

Another area of concern in this study was how free junior and senior staff were to share knowledge.

Table 4.18: Knowledge sharing among junior and senior staff

	Frequency	Percent
Hard to tell	4	1.4
Not free	7	2.5
Fairly free	63	22.3
Free	81	28.6
Very free	128	45.2
Total	283	100.0

From Table 4.18, results indicate that 45.2% of the respondents said that they were very free to share information with seniors or junior staff, 28.6% were free, 22.3% were fairy free while 2.5% and 1.4% said that they were not free and it is hard to tell respectively. This is an indication that majority of the employees are free to share knowledge among themselves.

4.2.3. Organizational Culture and Public Sector Performance

Zzulanski (1996) observed that due to the stickiness of tacit knowledge, it depends highly on the organizational culture and the balance between individual competition and group cooperation. It establishes a set of guidelines by which members of an organization work and how those organizations are structured.

4.2.3.1. Rating Interpersonal Relationships among Employees

The study sought to establish the interpersonal relationship that existed amongst employees since it is one of the determinants of organizational culture that contributes to tacit knowledge sharing

Table 4.19: Rating Interpersonal Relationships among Employees

	Frequency	Percent
Poor	4	1.4
Good	19	6.7
Fairly good	84	29.7
Very good	136	48.1
Excellent	40	14.1
Total	283	100.0

From Table 4.19, the results indicate that 48.1% of the respondents said that the interpersonal relationships among employees is very good, 29.7% fairly good, 14.1% excellent, 6.7% good while 1.4% of the responses indicate that interpersonal relationships among employees is poor. This is an indication that good interpersonal relationships play an important part in tacit knowledge sharing and that public sector employees are close knit.

4.2.3.2. Effect of Organizational Culture factors on Public Sector Performance

The study sought to establish the aspects of organizational culture that influences public sector performance.

The results on what employees' share that has an influence on tacit knowledge sharing within the organization is shown in appendix xiii. The indications are that appreciation of organizational logo, emblem, mission & vision leads with a mean score

of 2.36 followed by sharing common language (acoustics, sounds, nicknames) (mean score=2.04). This could be explained by the fact that the employees were expected to respond per department and that they all work together with the main aim of achieving the organizational goals hence appreciation of mission and vision was paramount amidst sharing common language as a form of communication.

The results also indicate that some employees appreciate wearing of uniforms (mean score =1.64) as a unifying factor while others felt that holding end of year parties (mean score = 1.85) and Team building exercises (mean score=1.81) enhances tacit knowledge sharing. This demonstrates that to some extent, members share common identity and also interact in unofficial forums**.**

4.2.4. Motivation and Public Sector Performance

The researcher sought to establish how motivation influences public sector performance and how knowledge sharers were motivated. This was established through the following parameters.

4.2.4.1. Salary Bracket

The research sought to establish the salary bracket of employees in various departments.

Table 4.20: Salary Bracket

	Frequency	Percent
Over 100,000	18	6.4
Between 75,000 - 100,000	47	16.6
Between 50,000 - 74,000	53	18.7
Between 25,000 - 40,000	119	42.0
Below 25,000	46	16.3
Total	283	100.0

From Table 4.20 the results indicate that 42.0% earn between Ksh 25,000 - 40,000, 18.7% earns between 50,000 - 74,000, 16.6% earn 75,000 - 100,000 and 100.0% Below 25,000 while 6.4% earn Over 100,000. Majority of the workers earn between Ksh 25,000 and 40,000.

4.2.4.2. Effect of Departments' Motivation factors on public sector performance

The study found it prudent to establish how employees were motivated

The results on how departments motivate knowledge sharers and the effect on public sector performance is shown in appendix xiv. The ratings were below average with appropriate salaries & wages having a mean score of 1.50, Personal recognition i.e. branded offices, promotions, preferential treatment) with a mean score of 1.25, while allowances and bonuses had a mean score of 1.00 and 0.64 respectively. When all the factors under study were evaluated, they were found to have a mean score of 1.69. This is an indication that though there may be some kind of motivation, it may not be directly linked to knowledge sharing.

4.2.4.3. Frequency of Knowledge Creation

The research sought to establish the frequency of knowledge creation in various public sectors departments.

Table 4.21: Frequency of Knowledge Creation

	Frequency	Percent
Never	4	1.4
Rarely	44	15.5
Fairly Often	161	56.9
Often	65	23.0
Very Often	9	3.2
Total	283	100.0

From Table 4.21, the respondents indicated that knowledge is created in the following proportions. 56.9% of the respondents said that knowledge creation is done fairly often, 23.0% often, 15.5% rarely, 56.9% very often while 1.4% of the respondents said that knowledge creation is never done. This is an indication that knowledge creation is done fairly often in various departments.

4.2.5. Contribution of Tacit Knowledge Sharing to Public Sector Departments' Performance

The study sought to establish by how much tacit knowledge sharing contributes to departmental performance.

Table 4.22 :Contribution of Tacit Knowledge Sharing to Public Sector Departments' Performance

Dependent variable

	Frequency	Percent
Below 24%	15	5.3
25% - 49%	62	21.9
50% - 74%	62	21.9
75% - 89%	65	23.0
Over 90%	79	27.9
Total	283	100.0

From Table 4.22, the results indicate that 27.9% of the respondents said that tacit knowledge sharing contributes to over 90% of the public sector department's performance, 23.0% said that tacit knowledge sharing contributes between 75%-89%, 21.9% said that tacit knowledge sharing contributes between 50% - 74%, 5.3% said that tacit knowledge sharing contributes between 25% - 49% of the public sector department's performance while 4.4% said that its contribution is below 24%. This is

an indication that tacit knowledge sharing contributes greatly to public sector department's performance.

4.3. Objective One: Influence of Tacit Knowledge Sharing factors on Public Sector Performance

The analysis was undertaken to test the expected relationships between tacit knowledge sharing on the performance of public sector departments' in Kenya. To achieve this objective, several indices were computed for each of the components of the variables the study investigated. Multi - regression analysis was performed using the field data and the results interpreted according to R value, R2 values, the beta values and F ratio at the 95% level of significance. The variables under study were regressed and the appropriate explanations to the findings of each of the tacit knowledge variables are given.

4.3.1. Workforce Communication and Interactions and Public Sector Performance

The first variable to be considered was the influence of workforce communication and interactions on public sector departments' performance. This was achieved by regressing workforce communication and departmental performance. Workforce communication was measured in terms of Brainstorming sessions on skills/competencies sharing, Person to person interactions, consultancy, Open forums of knowledge sharing, Seminars & workshops and Informal interactions and grapevine. In order to test the effect of each factor of workforce communication and interactions had on public sector performance, multi regression analysis was done. Table 4:26 a), b) and c) show the effect of each workforce communication and interactions factor on public sector performance.

Table 4.23: Workforce Communication and Interactions and Public Sector Performance

a) Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.369[a]	.136	.118	2.02852

a. Predictors: (Constant), Informal interactions & grapevine, Open forums of knowledge sharing, Consultations , Person to person interactions, Seminar & workshop, Brainstorming sessions on skills/competencies sharing

b) ANOVA[a]

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	179.203	6	29.867	7.258	.000[b]
	Residual	1135.715	276	4.115		
	Total	1314.919	282			

a. Dependent Variable: Department Performance

b. Predictors: (Constant), Informal interactions & grapevine, Open forums of knowledge sharing, Consultations , Person to person interactions, Seminar & workshop, Brainstorming sessions on skills/competencies sharing

c) Coefficients[a]

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.748	.781		4.798	.000
	Brainstorming sessions on skills/competencies sharing	.392	.130	.187	3.024	.003
	Person to person interactions	.170	.136	.074	1.245	.214
	Consultations	.294	.129	.134	2.284	.023
	Open forums of knowledge sharing	.282	.151	.115	1.868	.063
	Seminar & workshop	-.170	.114	-.091	-1.499	.135
	Informal interactions & grapevine	-.569	.110	-.312	-5.159	.000

a. Dependent Variable: Department Performance

From the regression results above in table 4.23, the R value was 0.369 indicating that there is a positive relationship between workforce communication factors and public sector performance. The R squared (R^2) value of 0.136 shows that 13.6 percent of public sector performance is explained by workforce communication factors. The remaining 86.7 percent is explained by other factors put in place by ministries in order to enhance their performance. The model was significant with the F ratio = 7.258 at p 0.000 < 0.05. This is an indication that workforce communication factors when considered singly had a positive and significant effect on public sector performance.

The beta values show the degree to which each predictor variable affects the outcome when all other predictors are held constant. Brainstorming sessions on skills/competencies sharing in the ministries and consultations had the highest positive and significant effect on public sector performance at β = 0.392 at p value 0.003< 0.05 and β = 0.294 at p value 0.023< 0.05. This means that as brainstorming sessions on skills/competencies sharing and consultations increased, public sector performance improved. On the other hand, Informal interactions & grapevine had the highest negative and significant effect on public sector performance with β =-0.569 at p value 0.000<0.05. This meant that, as informal interactions & grapevine increased, there was a decrease in public sector performance.

Of the remaining workforce communication factors, one of them (seminar & workshop β=-.170 at p value 0.135>0.05) had negative and insignificant effect on public sector performance, while the remaining two factors (person to person β=.170 at p value 0.214>0.05 and Open forums of knowledge sharing β=.282 at p value 0.065>0.05) had positive but insignificant effect on public sector performance.

It can therefore be concluded that workforce communication and interactions' factors have an effect on public sector performance but the effect may be positive or negative and the effect may be significant or insignificant.

4.3.2. Functional Boundaries and Public Sector Performance

The second variable whose influence was analyzed was functional boundaries on public sector departments' performance. This was achieved by regressing Functional boundaries parameters and departmental performance. Functional boundaries was measured in terms of Nature of office plan and office sharing, frequency of interaction with colleagues, departmentation and nature of power structure. In order to test the effect of each factor of functional boundaries had on public sector performance, multi

regression analysis was done. Table 4:27 a), b) and c) shows the effect of each functional boundaries factors on public sector performance.

Table 4.24: Functional Boundaries Factors and Public Sector Departments' Performance

a) Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.511[a]	.261	.248	1.87270

a. Predictors: (Constant), Share knowledge with Seniors/Juniors, Nature of office plan facilitate interaction and sharing, Frequency of interaction with colleague in knowledge sharing forum, Impact of departmentation on knowledge sharing, Nature of power structure in department

b) **ANOVA**

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	343.479	5	68.696	19.588	.000[b]
	Residual	971.439	277	3.507		
	Total	1314.919	282			

a. Dependent Variable: Department Performance

b. Predictors: (Constant), Share knowledge with Seniors/Juniors, Nature of office plan facilitate interaction and sharing, Frequency of interaction with colleague in knowledge sharing forum, Impact of departmentation on knowledge sharing, Nature of power structure in department

c) Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.894	.816		-1.096	.274
	Nature of office plan facilitate interaction and sharing	.142	.118	.064	1.202	.230
	Impact of departmentation on knowledge sharing	.677	.115	.338	5.892	.000
	Frequency of interaction with colleague in knowledge sharing forum	.485	.145	.188	3.343	.001
	Nature of power structure in department	-.069	.142	-.028	-.488	.626
	Sharing knowledge with Seniors/Juniors	.318	.143	.141	2.216	.028

a. Dependent Variable: Department Performance

From the regression results in table 4.24, the R value was 0. 511 indicating that there is a positive relationship between functional boundaries factors and public sector performance. The R squared (R^2) value of 0. 261 show that 26.1 percent of public sector performance is explained by functional boundaries factors. The remaining 73.9 percent is explained by other factors put in place by ministries in order to enhance their performance. The model was significant with the F ratio = 19.588 at p 0.000 < 0.05. This is an indication that functional boundaries factors have a positive effect on public sector performance and the effect is significant.

The beta values show the degree to which each predictor variable affects the outcome when all other predictors are held constant. Departmentation, knowledge sharing, frequency of interaction with colleague and sharing of knowledge with seniors/juniors had the highest positive and significant effect on public sector performance at $\beta = 0.677$ at p value $0.000 < 0.05$, $\beta = 0.485$ at p value $0.001 < 0.05$ and $\beta = 0.318$ at p value $0.028 < 0.05$ respectively. This means that as departmentation knowledge sharing, frequency of interaction with colleague and Sharing of knowledge with Seniors/Juniors increased, public sector performance improved.

Of the remaining functional boundaries factors nature of office plan had a positive but insignificant effect at $\beta = 0.142$ and p value $0.230 > 0.05$. Nature of power structure in department had negative and insignificant effect on public sector performance at $\beta = -.069$ and p value $0.626 > 0.05$. It can therefore conclude that functional boundaries factors have an effect on public sector performance but the effect may be positive or negative and further the effect may be significant or not significant.

4.3.3. Organizational Culture of the Public Sector Workforce and Public Sector Performance

Variable number three of the study sought to determine the influence of organizational culture on public sector departments' performance. This was achieved by regressing organizational culture and departmental performance. Organization culture was measured in terms of sharing common language (acoustics, sounds, and nicknames), teambuilding exercises, uniform wearing, and end of year parties and appreciation of organizational logo, emblem, mission & vision. In order to test the effect of each factor of organizational culture had on public sector performance, multi regression analysis was done. Table 4:28 a), b) and c) shows the effect of each Workforce communication and interactions factor on public sector performance.

Table 4.25: Organizational Culture Factors and Public Sector Performance

a) Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.328[a]	.108	.091	2.05826

a. Predictors: (Constant), Sharing common language(acoustics, sounds, nicknames), Uniform wearing , End of year parties, Appreciation of organizational logo, emblem, mission & vision, Teambuilding exercises

b) ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	141.423	5	28.285	6.676	.000[b]
	Residual	1173.496	277	4.236		
	Total	1314.919	282			

a. Dependent Variable: Department Performance

b. Predictors: (Constant), Sharing common language(acoustics, sounds, nicknames etc), Uniform wearing , End of year parties, Appreciation of organizational logo, emblem, mission & vision, Teambuilding exercises

c) Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.240	.309		13.718	.000
	Teambuilding exercises	.227	.143	.121	1.585	.114
	End of year parties	-.302	.096	-.190	-3.158	.002
	Uniform wearing	.217	.152	.114	1.433	.153
	Appreciation of organizational logo, emblem, mission & vision	.106	.109	.068	.966	.335
	Sharing common language(acoustics, sounds, nicknames etc)	.240	.113	.137	2.130	.034

a. Dependent Variable: Department Performance

From the regression results above in table 4.25, the R value was 0.328 indicating that there is a positive relationship between Organization culture factors and public sector performance. The R squared (R^2) value of 0.108 shows that 10.8 percent of public sector performance is explained by Organization culture factors. The remaining 89.2 percent is explained by other factors put in place by ministries in order to enhance their performance. The model was significant with the F ratio = 6.676 at p 0.000< 0.05. This is an indication that Organization culture factors have a positive effect on public sector departments' performance and the effect is significant.

The beta values show the degree to which each predictor variable affects the outcome when all other predictors are held constant. Sharing common language (acoustics, sounds and nicknames) had a positive and significant effect on public sector performance with β=.240 and p value .034<0.05. This means that as staff share common language public sector departments' performance is improved. End of year parties were

found to have negative and significant effect on performance with β=-0.302 at p value .002<0.05.

Of the remaining organizational culture factors, appreciation of organizational logo, emblem, mission & vision had a β=0.106, uniform wearing β=.217 and Teambuilding exercises β=.227 had a positive but insignificant effect on public sector departments' performance.

It can therefore be concluded that Organizational culture factors have an effect on public sector department's performance but the effect may be positive or negative and further the effect may be significant or not significant.

4.3.4. Motivation and Public Sector Performance

The forth variable sought to find out how workforce motivation influences public sector departments' performance. This was achieved by regressing workforce communication and departmental performance. Motivation was measured in terms appropriate salaries & wages, bonuses, allowances, personal recognition i.e. brand offices, promotions, preferential treatment and All the above. In order to test the effect of each factor of workforce communication and interactions had on public sector performance, multi regression analysis was done. Table 4:29 a), b) and c) shows the effect of each Workforce communication and interactions factor on public sector performance.

Table 4.26: Motivational Factors and Public Sector Performance

a) Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.431[a]	.186	.171	1.96577

a. Predictors: (Constant), All the above, Bonuses, Appropriate salaries & wages, Allowances, Personal recognition i.e brand offices, promotions, preferential treatment)

b) ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	244.526	5	48.905	12.656	.000[b]
	Residual	1070.392	277	3.864		
	Total	1314.919	282			

a. Dependent Variable: Department Performance

b. Predictors: (Constant), All the above, Bonuses, Appropriate salaries & wages, Allowances, Personal recognition i.e brand offices, promotions, preferential treatment)

c) Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.935	.259		15.179	.000
	Appropriate salaries & wages	.213	.155	.093	1.380	.169
	Personal recognition i.e brand offices, promotions, preferential treatment)	.778	.147	.380	5.296	.000
	Bonuses	-.651	.145	-.291	-4.479	.000
	Allowances	.019	.132	.009	.144	.886
	All the above	.217	.108	.114	2.010	.045

a. Dependent Variable: Department Performance

From the regression results in table 4.26, the R value was 0.4431 indicating that there is a positive relationship between Motivational factors and public sector department's performance. The R squared (R2) value of 0. 186 show that 18.6 percent of public sector department's performance is explained by Motivational factors. The remaining 81.4 percent is explained by other factors put in place by ministries in order to enhance their performance. The model was significant with the F ratio = 12.656 p value 0.000< 0.05. This is an indication that motivational factors have a positive effect on performance and the effect is significant.

The beta values show the degree to which each predictor variable affects the outcome when all other predictors are held constant. Personal recognition i.e. branded offices, promotions, preferential treatment had the highest positive and significant effect on public sector department's performance at $\beta = 0.778$ at p 0.000. This means that as

Personal recognition increased, performance also improved. On the other hand, Bonuses had the highest negative and significant effect on public sector performance with β =-.651 at p 0. 000 < 0.05. This meant that, as Bonuses increased, there was a decrease in public sector department's performance.

The two remaining Motivational factors, appropriate salaries & wages β=.213 and allowances β=.019 had positive but insignificant effect on public sector department's performance. All the above factors when put in place resulted into a positive and significant effect on public sector department's performance β=.019 with p value 0.045<0.05

We can therefore conclude that motivational factors have an effect on public sector department's performance but the effect may be positive or negative and further the effect may be significant or not significant. However when all motivational factors are implemented the effect is positive and significant.

4.4. Objective Two: Comparative Analysis of Influence of Tacit Knowledge Sharing on Public Sector Performance per County

The study sought to establish the influence of workforce communication and interactions, functional boundaries, organizational culture and workforce motivation on tacit knowledge sharing which were assumed to influence performance of county government tacit knowledge sharing. The data was regressed to establish the relationship and the result of the multi regression and interpretations are as follows

4.4.1. Influence of TKS on Organizational Performance in Nairobi County

Nairobi County had 35 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables of tacit

knowledge sharing on public sector departments' performance. Regression analysis was done to determine the effect of workforce communication and interactions, functional boundaries, organizational culture and workforce motivation on public sector departments' performance in Nairobi County. Table 4:34 a), b), and c) shows the effect of each independent variable on public sector departments' performance.

Table 4.27: Influence of TKS on Public Sector Performance in Nairobi County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.563[a]	.316	.225	1.72556

a. Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

b)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.359	4	10.340	3.473	.019[b]
	Residual	89.327	30	2.978		
	Total	130.686	34			

a. Dependent Variable: departments performance

a. Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.955	2.372		-.403	.690
	Workforce communication	-.236	.593	-.068	-.398	.694
	Functional boundaries	1.276	.629	.373	2.029	.051
	organizational culture	.361	.514	.127	.702	.488
	workforce motivation	.559	.420	.227	1.329	.194

a. Dependent Variable: departments performance

From the regression results in table 4.27, the R value is 0. 563 indicating that there is a positive relationship between work force communication and interactions, functional boundaries, organizational culture and work force motivation and public sector performance. The R squared (R^2) value of 0. 316 show that 31.6 percent of public sector

performance is explained by these factors. The remaining 68.4 percent is explained by other factors put in place by the public sector to enhance their performance.

The model was significant with the F ratio = 3.473 at p value 0.019 < 0.05. This is an indication that work force communication, functional boundaries, organizational culture and workforce motivation have an influence on overall public sector performance and the effect is significant.

Functional boundaries, organizational culture and work force motivation had positive beta which implies that as these factors increased, the overall public sector performance increases though insignificantly. Work force communication was found to have a negative effect though not significant. This implies that as work force communication and interactions increased, the overall organizational performance decreased.

4.4.2. Influence of TKS on Public Sector Performance in Kirinyaga County

Kirinyaga County had 41 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector departments' performance.

Regression analysis was done to determine the effect of workforce communication, functional boundaries, organizational culture and work force motivation on public sector performance in Kirinyaga County. Table 4:35 a), b), and c) shows the effect of each independent variable on public sector performance

Table 4.28: Influence of TKS on Public Sector Performance in Kirinyaga County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.560[a]	.314	.238	2.23971

a. Predictors: (Constant), workforce motivation, organizational culture, functional boundaries, workforce communication

b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.633	4	20.658	4.118	.008[b]
	Residual	180.586	36	5.016		
	Total	263.220	40			

a. Dependent Variable: departments performance

b. Predictors: (Constant), workforce motivation, organizational culture, functional boundaries, workforce communication

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.506	2.187		-.689	.495
	Workforce communication	.291	.738	.073	.394	.696
	Functional boundaries	1.832	.654	.459	2.802	.008
	Organizational culture	-1.123	.625	-.307	-1.796	.081
	Workforce motivation	.830	.547	.241	1.519	.137

a. Dependent Variable: departments performance

From the regression results in table 4.28, the R value was 0. 560 indicating that there is a positive relationship between work force communication, functional boundaries, organizational culture and work force motivation on public sector performance. The R squared (R^2) value of 0.314 shows that 31.4 percent of public sector performance is explained by these factors. The remaining 68.6 percent is explained by other factors put in place in the public sector to enhance their performance.

The model was significant with the F ratio = 4.118 at p value 0. 008 < 0.05. This is an indication that work force communication, functional boundaries, organizational

culture and work force motivation had an influence on overall public sector performance and the effect is significant.

Functional boundaries had a positive and significant effect on public sector performance at β = 0. 459 at p 0. 008. Similarly, work force communication and work force motivation were also found to have positive but insignificant effect. Organizational culture had negative effect on public sector departments' performance though not significant.

4.4.3. Influence of TKS on Public Sector Performance in Samburu County

Samburu County had 37 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to organizational performance.

Regression analysis was done to determine the effect of workforce communication, functional boundaries, organizational culture and work force motivation on organizational performance in Samburu County. Table 4:36 a), b), and c) shows the effect of organizational performance on each independent variables.

Table 4.29: Influence of TKS on Public Sector Performance in Samburu County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767[a]	.588	.537	1.39792

a. Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.358	4	22.339	11.432	.000[b]
	Residual	62.534	32	1.954		
	Total	151.892	36			

a. Dependent Variable: departments performance

Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.530	2.919		-.867	.393
	Workforce communication	-1.167	.621	-.223	-1.877	.070
	Functional boundaries	1.600	.484	.424	3.305	.002
	Organizational culture	.755	.501	.183	1.505	.142
	Workforce motivation	1.311	.341	.481	3.846	.001

a. Dependent Variable: departments performance

From the regression results in table 4.29, the R value was 0. 767 indicating that there is a positive relationship between workforce communication, functional boundaries, organizational culture and work force motivation with public sector performance. The R squared (R^2) value of 0. 588 show that 58.8 percent of public sector performance is explained by these factors. The remaining 41.2 percent is explained by other factors put in place public sector to enhance their performance.

The model was significant with the F ratio = 11.432 at p value 0. 000 < 0.05. This is an indication that workforce communication, functional boundaries, organizational culture

and workforce motivation had an influence on overall public sector performance and the effect is significant.

Functional boundaries and workforce motivation had positive and significant effect on public sector department's performance at $\beta = 0.424$ at p value 0.002 and at $\beta = 0.481$ at p value 0. 001 respectively. This means that as functional boundaries and work force motivation are enhanced, organizational performance improves. Similarly organizational culture had positive but insignificant effect while work force communication had negative effect on organization performance though not significant.

4.4.4. Influence of TKS on Public Sector Performance in Makueni County

Makueni County had 35 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector performance.

Regression analysis was done to determine the effect of workforce communication, functional boundaries, organizational culture and workforce motivation on organization performance in Makueni County. Table 4:37 a), b), and c) shows the effect of public sector performance on each independent variables.

Table 4.30: Influence of TKS on Public Sector Performance in Makueni County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567[a]	.321	.230	1.68570

a. Predictors: (Constant), workforce motivation, workforce communication, functional boundaries, organizational culture

b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.295	4	10.074	3.545	.017[b]
	Residual	85.247	30	2.842		
	Total	125.543	34			

a. Dependent Variable: departments performance

Predictors: (Constant), workforce motivation, workforce communication, functional boundaries, organizational culture

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.810	2.170		-.834	.411
	Workforce communication	.058	.416	.023	.139	.891
	Functional boundaries	1.115	.634	.314	1.757	.089
	Organizational culture	.531	.536	.186	.991	.329
	Workforce motivation	.509	.427	.204	1.193	.242

a. Dependent Variable: departments performance

From the regression results in table 4.30, the R value was 0. 567 indicating that there is a positive relationship between workforce communication, functional boundaries, organizational culture and workforce motivation and organizational performance. The R squared (R^2) value of 0. 321 show that 32.1 percent of organizational performance is explained by these factors. The remaining 61.9 percent is explained by other factors put in place public sector to enhance their performance.

The model was significant with the F ratio = 3.545 at p value 0. 01 < 0.05. This is an indication that workforce communication, functional boundaries, organizational culture and workforce motivation had an influence on overall public sector performance and the effect is significant.

Workforce communication, functional boundaries, organizational culture and work force motivation were all found to have positive effect on public sector performance though not significant. This implies that as these factors improved, the overall public sector performance is enhanced.

4.4.5. Influence of TKS on Public Sector Performance in Kilifi County

Kilifi County had 33 responds derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector performance.

Regression analysis was done to determine the effect of work force communication, functional boundaries, organizational culture and work force motivation on public sector performance in Kilifi County. Table 4:38 a), b), and c) show the effect of organizational performance on each independent variables.

Table 4.31 Influence of TKS on Public Sector Performance in Kilifi County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757[a]	.574	.513	1.47038

a. Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

b)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	81.463	4	20.366	9.420	.000[b]
	Residual	60.537	28	2.162		
	Total	142.000	32			

a. Dependent Variable: departments performance

b. Predictors: (Constant), workforce motivation, workforce communication, organizational culture, functional boundaries

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.604	3.361		-.477	.637
	Workforce communication	-1.363	.719	-.243	-1.895	.069
	Functional boundaries	1.616	.516	.434	3.132	.004
	Organizational culture	.702	.536	.172	1.311	.201
	Workforce motivation	1.247	.385	.440	3.235	.003

a. Dependent Variable: departments performance

From the regression results in table 4.31, the R value was 0. 757 indicating that there is a positive relationship between workforce communication, functional boundaries, organizational culture and workforce motivation and organizational performance. The R squared (R2) value of 0. 574 shows that 57.4 percent of public sector performance is explained by these factors. The remaining 42.6 percent is explained by other factors put in place in the public sector to enhance their performance.

The model was significant with the F ratio = 9.420 at p value 0. 000 < 0.05. This is an indication that workforce communication, functional boundaries, organizational culture and workforce motivation had an influence on overall public sector performance and the effect was significant.

Functional boundaries and workforce motivation had positive and significant effect on organization performance at β = 0. 434 at p value 0. 004 and at β = 0. 440 at p value 0. 003 respectively. This means that as functional boundaries and workforce motivation are enhanced, organization performance improved. Organizational culture also had positive but insignificant effect while work force communication had negative effect on organization performance though not significant.

4.4.6. Influence of TKS on Public Sector Performance in Bungoma County

Bungoma County had 33 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector departments' performance.

Regression analysis was done to determine the effect of workforce communication, functional boundaries, organizational culture and workforce motivation on public sector departments' performance in Bungoma County. Table 4:39 a), b), and c) show the effect of public sector departments' performance on each independent variable.

Table 4.32: Influence of TKS on Public Sector Performance in Bungoma County

a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755[a]	.569	.508	1.47767

a. Predictors: (Constant), workforce motivation, organizational culture, workforce communication, functional boundaries

b)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80.862	4	20.215	9.258	.000[b]
	Residual	61.138	28	2.184		
	Total	142.000	32			

a. Dependent Variable: departments performance

c. Predictors: (Constant), workforce motivation, organizational culture, workforce communication, functional boundaries

c)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.016	3.649		.552	.585
	Workforce communication	-1.250	.707	-.223	-1.769	.088
	Functional boundaries	1.305	.526	.351	2.484	.019
	Organizational culture	-.438	.367	-.156	-1.194	.243
	Workforce motivation	1.319	.393	.465	3.359	.002

a. Dependent Variable: departments performance

From the regression results (table 4.32), the R value is 0. 755 indicating that there is a positive relationship between work force communication, functional boundaries, organizational culture and workforce motivation and public sector performance. The R squared (R^2) value of 0. 569 show that 56.9 percent of public sector performance is explained by these factors. The remaining 43.1 percent is explained by other factors put in place by the public sector to enhance their performance.

The model was significant with the F ratio = 9.258 at p value 0.000 < 0.05. This is an indication that work force communication, functional boundaries, organizational culture and work force motivation have an influence on overall public sector performance and the effect is significant. Functional boundaries and workforce motivation were found to have positive and significant effect on public sector performance which implies that that as these factors increased, the overall public sector

performance increases. Organizational culture and work force communication were found to have negative effect though not significant.

4.4.7. Influence of TKS on Public Sector Performance in Garissa County

Garissa County had 31 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector departments' performance.

Regression analysis was done to determine the effect of work force communication, functional boundaries, organizational culture and work force motivation on public sector departments' performance in Garissa County. Table 4:40 a), b), and c) shows the effect of public sector departments' performance on each independent variable.

Table 4.33 Influence of TKS on Public Sector Performance in Garissa County

a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.595[a]	.355	.255	2.22567

a. Predictors: (Constant), workforce motivation, functional boundaries, organizational culture, workforce communication

b) ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.754	4	17.689	3.571	.019[b]
	Residual	128.794	26	4.954		
	Total	199.548	30			

a. Dependent Variable: departments performance

b. Predictors: (Constant), workforce motivation, functional boundaries, organizational culture, workforce communication

c) Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.341	2.415		-.969	.341
	Workforce communication	.193	.868	.048	.222	.826
	Functional boundaries	1.913	.709	.512	2.700	.012
	Organizational culture	-.965	.705	-.281	-1.370	.183
	Workforce motivation	1.000	.598	.296	1.672	.106

a. Dependent Variable: departments performance

From the regression results in table 4.33, the R value is 0. 595 indicating that there is a positive relationship between work force communication, functional boundaries, organizational culture and work force motivation and public sector performance. The R squared (R2) value of 0. 355 show that 35.5 percent of public sector performance is explained by these factors. The remaining 64.5 percent is explained by other factors put in place by the public sector to enhance their performance.

The model was significant with the F ratio = 3.571 at p value 0.019 < 0.05. This is an indication that workforce communication, functional boundaries, organizational culture and work force motivation have an influence on overall public sector performance and the effect is significant.

Functional boundaries were found to have positive and significant effect on public sector performance. Similarly workforce motivation and work force communication was found to have a positive effect though not significant while organizational culture was found to have negative effect though not significant.

4.4.8. Influence of TKS on Public Sector Performance in Homa Bay County

Homabay County had 37 respondents derived from 6 public ministries. Their responses were regressed to determine the influence of the independent variables on tacit knowledge sharing which leads to public sector departments' performance.

Regression analysis was done to determine the effect of workforce communication, functional boundaries, organizational culture and workforce motivation on public sector departments' performance in Homabay County. Table 4:41 a), b), and c) shows the effect of public sector departments' performance on each independent variable.

Table 4.34: Influence of TKS on Public Sector Performance in Homa Bay County

a)Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752[a]	.565	.511	1.43642

a. Predictors: (Constant), workforce motivation, organizational culture, workforce communication, functional boundaries

b)ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.866	4	21.466	10.404	.000[b]
	Residual	66.026	32	2.063		
	Total	151.892	36			

a. Dependent Variable: departments performance

b. Predictors: (Constant), workforce motivation, organizational culture, workforce communication, functional boundaries

c) Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.157	3.110		-.051	.960
	Workforce communication	-.748	.567	-.157	-1.319	.196
	Functional boundaries	1.338	.492	.354	2.721	.010
	Organizational culture	-.319	.312	-.123	-1.023	.314
	Workforce motivation	1.319	.362	.484	3.644	.001

a. Dependent Variable: departments performance

From the regression results in table 4.34, the R value is 0. 752 indicating that there is a positive relationship between workforce communication, functional boundaries, organizational culture and workforce motivation and public sector performance. The R squared (R2) value of 0. 565 show that 56.5 percent of public sector performance is explained by these factors. The remaining 34.5 percent is explained by other factors put in place by the public sector to enhance their performance.

The model was significant with the F ratio = 10.404 at p value 0.000 < 0.05. This is an indication that work force communication, functional boundaries, organizational culture and work force motivation have an influence on overall public sector performance and the effect is significant.

Functional boundaries and workforce motivation were found to have positive and significant effect on public sector performance which implies that as these factors increased, the overall public sector performance also increases. Organizational culture

and work force communication were found to have negative effect though not significant. From the analysis county by county above, the following is the summary of the results that were obtained

Table 4.42: Summary of County TKS Influence on Public Sector Performance (appendix xv)

A summary of the influence of tacit knowledge sharing on public sector performance in a county by county analysis are as discussed. Samburu, Kilifi Bungoma and Homabay counties have their r2 between 57 and 59% and Garissa, Makueni, Nairobi and Kirinyaga have their r2 between 31 and 36%. This denotes that there is more tacit knowledge sharing in the first four counties and that tacit knowledge sharing has more influence on public sector performance in these first four counties than in the last four whose r2 is below 36%. This scenario can be explained from the fact that Samburu, Killifi, Bungoma and Homabay are in essence dominated by same cultural groups which have a lot in common in terms of language, beliefs customs, values and rituals which they mutually share. The rest of the counties are basically cosmopolitan with high cultural diversity that discourages close interactions and encourages individuality, interpersonal indifference and cultural indifference with interactional caution. This scenario brings out several managerial implications.

Management must first and foremost strive to break cultural barriers in their departments and instead create an organizational culture which goes beyond cultural boundaries. They should also come up with organizational rituals that encourage free interactions that go beyond simple oral interactions. This will ensure appreciation of cultural diversity amongst organizational members and freeness in communication and interactions. Policy makers and strategy formulators should take it as their obligation to embrace inclusivity in these crucial areas so that no group feels left out in organizational policies and strategies. Lack of interactions and sharing in organizations

emanate from groups feeling excluded and discriminated and this automatically affects performance. this propositions agree with reviewed literature earlier in this study by Dixon (1999) on people side of management where he said that the most effective KS tool is conversations; that the words we choose and the metaphors we use to explain ourselves are what determines our success in creating new knowledge as well as sharing that knowledge with each other.

Table 4.43: Summary of County TKS Factor Relationship and Level of Significance on PSP (appendix xvi)

The county by county analysis reveals that four counties namely Samburu, Kilifi and Bungoma are indicated as having the highest influence of their public department's performance being influenced by functional boundaries and workforce motivation since their r^2 percentage influence is between 0.565 to 0.588.This means that motivational factors of salaries, personal recognition, bonuses and allowances have significant influence in these counties just like functional boundaries factors like scalar chain, nature of office plan, level of departmentation and freedom to interact. In the remaining four counties, the influence is positive but insignificant meaning that they factors influence performance but not at a high degree. Workforce communication factors were positive but insignificant in all the counties but in Makueni and Kirinyaga counties they are negative meaning that they do not have any effect on knowledge sharing or public sector performance. In the r^2 value, in Makueni and Kirinyaga is 0.321 and 0.314 respectively. Except for Nairobi County all other counties r^2 is above 5 meaning that the tacit knowledge factors have a high effect on public sector performance. The factors under consideration were brainstorming, face to face, consultation, grapevine, seminars and workshops that facilitate communication. It is worth noting that with the official language being English and the national language being Kiswahili, then communication barriers may not be a hindrance. The fourth factor was organizational culture and the

indices under consideration for organizational culture were team building exercises, end of year parties, uniform wearing, sharing common language and appreciation of logo, emblem, mission, and vision. The analyses indicated that the factors were positive but insignificant in Samburu, Kilifi, Makueni, and Nairobi while in Bungoma, Homa Bay, Garissa and Kirinyaga. Except for Homa Bay whose r^2 is 0.565, Garissa and Kirinyaga r^2 is 0.355 and o.314 respectively meaning that tacit knowledge factors do not have a strong influence on public sector performance therefore organizational culture does not have a strong influence in the counties tacit knowledge sharing. The comparison between the influences of the various factors of tacit knowledge on different counties revealed that functional boundaries and workforce motivation had positive effect in all counties but the effect was either significant or insignificant. However work force communication and interactions and organizational culture were found to have either a positive or negative effect on public sector performance though the effect was insignificant.

4.5. Objective Three: National Government Policies that Address TKS

The study sought to establish what employees in the national government understand by the term tacit knowledge, the policies that have been put in place to enable effective management and sharing of tacit knowledge and the extent to which specific tools of internal organization's best practices are used in government departments. In addition, the study also sought to establish whether the number of years of experience, had any influence on the public sector performance and if any, what the employees would identify as a factor that may lead to better performance. The respondents were also expected to give recommendations or suggest ways in which the national government could ensure that knowledge management and sharing is enhanced. The sampled departments and the respondents were as follows. A total of 30 questionnaires were administered as indicated below

Table 4.35: National Government Sample

	Top level managers	Line staff	Total
Labour	1	4	5
National Education	1	4	5
Sports	1	4	5
National Public works	1	4	5
Housing	1	4	5
National Health	1	4	5
Total	6	24	30

4.5.1. Questionnaire Return Rate

A total of 30 questionnaires were administered to the national governments' departments and the following was the return rate

Table 4.36: Questionnaire Return Rate

	Top level managers	Line staff	Total	Percentage
Labour	1	2	3	60
National Education	1	3	4	80
Sports	1	2	3	60
National Public works	1	2	3	60
Housing	1	3	4	80
National Health	1	3	4	80
Total	6	15	21	70

From the 30 questionnaires administered to the national government, 21 questionnaires were returned giving a return rate of 70 % which can be termed as good.

4.5.2. Understanding of the Term Tacit Knowledge Sharing by National Government.

The study sought to establish how well the national government employees were conversant with the concept tacit knowledge sharing, by asking an open ended question that required them to define how they understood the term tacit knowledge sharing.

Appendix xvii portrays the various definitions given to the term tacit knowledge sharing by the respondents from the national government which indicated that 28.6% of the national government employees define tacit knowledge as one that is acquired informally, 14.3% as an act of exchanging views and ideas, 9.5% as sharing ideas openly, 9.5% as Knowledge Acquired by people during normal interactions, 4.8% as a way of sharing knowledge by working together, 19.0% as Knowledge acquired through sharing experiences, 4.8% as on job training from colleagues while 9.5% as Knowledge learned through others. There is an indication that though there are varied definitions, all the national government employees gave their understanding of the term tacit knowledge sharing which they all agreed that it is an informal knowledge acquired from other employees by the very nature of working together, experiences and during normal interactions.

4.5.3. Whether Government has Policies in Place for Managing and Sharing of Knowledge

The study sought to establish whether the government has policies in place for management and sharing of knowledge.

Table 4.37: Presence of Government Policies that Enhance Tacit Knowledge Sharing

	Frequency	Percent
Yes	8	38.1
No	13	61.9
Total	21	100.0

The results indicated in table 4.37 reveal that majority of the national government departments do not have policies in place for the management and sharing of knowledge which accounted for 61.9%. This is an indication that tacit knowledge sharing has not been institutionalized by the national government departments.

4.5.National Government's has application of Policies to Enhance Tacit Knowledge Sharing

The study sought to establish how National Government has applied the following policies as a way of enhancing knowledge sharing

The results are shown in appendix xviii reveal that inventory of human resource skills is highly rated (mean score=2.4286) followed by Human capital planning/succession planning (mean score=2.0476) though this rate is still low in a scale of zero to five (scale 0 – 5) as it is below average. Documentation of how things work had a mean score of 1.7619 while the rest had a mean score of less than one with publishing of crucial information having the lowest mean score at 0.2381. This is an indication that adequate policies have not been put in place for management and sharing of knowledge through the means under consideration.

4.5.5. Extent to which Tools of Internal Organization's Best Practices are used in the Department

The study sought to establish the extent to which tools of internal organization's best practices are used in the national government's department

The results of the tools of internal organization's best practices used in the national government department are as shown in (appendix xix)They indicate that induction and orientation of new hires/employees is highly rated (mean score=3.0476) followed by Building of new and old hire capacity (mean score=2.1905). The results revealed that mitigation in the loss of experienced workers and making stored data or information searchable and available on the intranet had a mean score of 1.5714 and 1.4762 respectively. This is an indication that national government inducts and orients new hires/employees though there is no policy in place to guide this practice/induction program. Government departments were also found to take an initiative to build new and old hire capacity though very little effort is made to mitigate the loss of experienced workers. Making stored data or information searchable and available on the intranet was also scarcely done.

4.5.6. Period Worked in the Same Department

The study sought to establish the duration that employees had worked in the same department

From appendix xx, majority of the staff working in national government had worked in their departments for between 10 - 15 years which accounted for 42.9%, 19.0% of the national government employees have worked in the same department for More than 15 years, 23.8% Between 5-9 Years, 4.8% Between 1-4 Years while 9.5% for less than one Year. This is an indication that most of the national government employees have worked in the national government for more than five years. This shows that most of the responding officers have been in the same department for many years and as such, tacit knowledge if well shared can influence departmental performance. This further means that the employees who work for national government have a wealth of tacit knowledge that needs to be shared.

4.5.7. Number of Years Worked (Experience) in a Department and Public Sector Performance

The study sought to establish whether the number of years worked (experience) in a department influences performance.

Table 4.38: Number of Years Worked (Experience) in a Department and Public Sector Performance

	Frequency	Percent
No	3	14.3
Yes	18	85.7
Total	21	100.0

The results as indicated by table 4.38 reveal that majority of the national government departments' employees felt that the number of years worked (experience) in a department influences performance which accounted for 85.7% with only 14.3% saying that the number of years worked (experience) in a department may not have any influence on performance. This is an indication that experience in the same department may have a positive effect on department's performance.

4.5.8. How Years of Experience in a Department Influence Public Sector Performance

The study sought to establish the reasons why employees in national government associated number of year of experience with improved performance.

The results as indicated by appendix xxi reveal that there are various benefits that were associated with the number of years of experience in the same department. The respondents associated the number of years an employee has worked in a department with enhanced efficiency, enhanced productivity, enhanced effectiveness, reduced errors, faster decision making and better decision making.

Most of the respondents associated the years of experience with efficiency / the level of competence which generally means know how, ability or skills to undertake a particular task which accounted for 23.8% compared to other factors with 14.3% while 4.8% associating years of experience with better decision making. This is an indication that number of years of experience in the same department is a factor to consider as it leads to improved performance.

4.6. Objective Four: Strategies and Specific Interventions that the Public Sector can utilize to Enhance Tacit Knowledge Sharing and Consequently Public Sector Performance

The respondents were asked to recommend what the government could do to ensure knowledge management and sharing is enhanced.

The results indicated in appendix xxii portray the various recommendations that employees of the national government gave to be put into consideration: putting policies in place on knowledge sharing, documenting best practices, organizing team

building forums regularly, developing a knowledge sharing organizational culture, encouraging knowledge sharing and organizing seminars and workshops where employees can share tacit knowledge openly and freely. These suggestions have relatively similar response rates, an indication that the national government can evaluate all of them and determine whether they can be considered as remedy to ensure that there is enhanced knowledge management and sharing in government departments.

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

The study was an attempt to understand the relationship between TKS and PSP and how factors of workforce communication and interactions, functional boundaries, organizational culture and motivation influences the relationship. The study was premised by the growing need for economies to embrace knowledge and become knowledge economies and conform to world economies who are engaged in competitive platforms that immensely determine competitiveness, growth and development. The inauguration of the new constitution gave hope that knowledge issues would be addressed given that Kenya has been operating under the shadow of the British constitution for so long. The fact that the world is in the knowledge age, this study would not have come at a better time. This chapter comprises of the summary of major study findings as discussed in chapter four. It also draws conclusions and recommendations based on the findings as per the objectives of the study and finally gives the limitations and implications of the study results.

The objectives of the study were:

i. To determine the tacit knowledge sharing factors that influence public sector performance
ii. To comparatively analyze the influence of tacit knowledge sharing on public sector performance per county under study
iii. To examine government policies that address tacit knowledge sharing and their effect on public sector performance

iv. To establish interventions that the public sector can utilize to enhance tacit knowledge sharing and consequently public sector performance

5.1. Summary of Major Findings

5.1.1. Tacit Knowledge Sharing Factors that Influence Public Sector Performance

The first objective was to determine Tacit Knowledge Sharing Factors that Influence Public Sector Performance. It addressed itself to the following variables: workforce communication and interactions, functional boundaries, organizational culture and motivation. The first analysis undertaken on communication index was to determine the relationship between workforce communication and interactions on public sector performance. In order to ascertain the relationship between workforce communication and interactions on public sector performance, a regression analysis was carried out on the relationship between the two variables. Overall, the results of the linear regression indicated a weak positive but insignificant relationship between Workforce communication and interactions on departments' performance with R=.029 and the R squared value was .001. At 95% confidence level of significance, the p-value was 0.630. The findings of the study further indicated that informal interactions & grapevine and seminars & workshops had negative effects on public sector performance whereas Brainstorming sessions on skills and competencies sharing, Person to person, consultations and open forums of knowledge sharing had positive effects on public sector performance. Brainstorming sessions on skills/competencies sharing and consultations were found to have positive and significant effect while informal interactions & grapevine was found to have negative and significant effect.

The second variable under analysis in objective one of the study was functional boundaries influence on public sector performance. The regression results indicated a

positive relationship between Functional boundaries and public sector performance with R=.448 and R Squared .201. At 95% confidence level, the p value was .000 which was less than .05. The findings of the study further indicated that departmentation knowledge sharing, Frequency of interaction with colleagues and Sharing of knowledge with seniors/juniors taken as factors of functional boundaries had positive and significant effect on public sector performance. Further, nature of office plan was also found to have positive effect whereas nature of power structure in department had negative effects on performance though insignificant.

The third variable under analysis was organizational culture. The results of the linear regression results showed a weak positive relationship between organizational culture and public sector performance with R=.050 and the R squared value was .002. At 95% confidence level of significance, the p-value was 0.406. The findings of the study further indicated that sharing common language (acoustics, sounds, nicknames) taken as factors of organizational culture had positive and significant effect on public sector performance. Teambuilding exercises, uniform wearing and appreciation of organizational logo, emblem, mission & vision were also found to have positive but insignificant effect whereas end of year parties had negative and significant effect on public sector performance.

The fourth variable of the first objective of the study to be analyzed was workforce motivation so as to establish its influence on public sector performance. Linear regression was used and the findings of the study showed that the relationship was positive with R=.187 and R Squared of .035. At 95% confidence level, the p-value was 0.002. Since the p value was less than .05, which stated that there is significant relationship between Workforce motivation and public sector performance. The findings of the study further indicated personal recognition i.e. brand offices,

promotions; preferential treatment had a positive and significance relationship whereas bonuses had negative and significant effect on public sector performance. The findings also revealed that appropriate salaries & wages and allowances had positive but insignificant effect. When all the above were evaluated together, the effect was found to be positive and significant.

5.1.2. Comparative Analysis of Tacit Knowledge Factors Influence on Public Sector Performance per County

The second objective was to evaluate tacit knowledge factors influence on public sector performance per County. Workforce communication and interactions, functional boundaries, organizational culture and workforce motivation were analyzed on county by county basis where the study revealed that, in Nairobi county Functional boundaries, organizational culture and work force motivation had positive effect on overall public department's performance though not significant. The effect of work force communication and interactions was negative and insignificant .In Kirinyaga County, functional boundaries were found to have positive and significant effect on public sector performance whereas workforce communication and interactions and work force motivation had positive but insignificant effect.

Organizational culture had negative effect and insignificant on public sector performance. In Samburu County, functional boundaries and work force motivation had positive and significant effect on public sector performance while organizational culture had positive but insignificant effect, with work force communication having negative but insignificant effect on public sector performance. In Makueni County, all the variables under consideration (work force communication and interactions, functional boundaries, organizational culture and work force motivation) were found to have positive though insignificant effect on public sector performance. In Kilifi County,

functional boundaries and work force motivation had positive and significant effect on public sector performance while organizational culture had positive but insignificant effect with work force communication having negative but insignificant effect on public sector performance. In Bungoma County, functional boundaries and work force motivation had positive and significant effect on public sector performance while organizational culture and work force communication had negative but insignificant effect on public sector performance. In Garissa County, functional boundaries had positive and significant effect on public sector performance while work force communication and interactions and work force motivation had positive but insignificant effect with organizational culture having a negative but insignificant effect on public sector performance. In Homa Bay County, functional boundaries and work force motivation had positive and significant effect on public sector performance while organizational culture and work force communication and interactions had negative but insignificant effect on public sector performance.

5.1.3. Government Policies that Address Tacit Knowledge Sharing and their Effect on Public Sector Performance

Third objective was achieved by administering a separate questionnaire to non-devolved government departments of labour, education, sports, national public works, housing and national health in order to establish government policies that are put in place to address tacit knowledge sharing and their effect on public sector performance. From the analysis, it was noted that all respondents understood what tacit knowledge was. 61.9 % however indicated that there were no government policies on tacit knowledge sharing that are in place while 38.1 % indicated that there were policies in place. This observation concurs with a World Bank report (2004-2005) which assessed Kenya's readiness for a knowledge economy gauged at a rate of between1-6. The ratings were dismal at an average of 2 and with most crucial sectors of education and ICT

performing way below average. This concurs with reviewed literature earlier (Ondari-Okemwa ,2007) that Kenya lags behind in application of ICT and this limits the benefits it can reap from knowledge and the level of efficiency that accrues to such adoptions.

Popper (2001), in his four ways of capturing tacit knowledge which are mentoring new employees, employee retention, and providing employees with opportunities to share experiences, gave the fourth intervening factor as documentation of all processes and which can be automated so as to have detailed and written processes that are sequenced step by step. Among the government policies highly rated were inventory of human resource skills and human capital planning or succession planning. Other policies like encouragement of best educational practices, existence of knowledge repositories, formation of discussion boards for exchanging quick answers, publishing of crucial information and automation of work flows performed very dismally or they were non-existent. The same was for departmental yellow pages, induction and orientation of new hires, mitigation in the loss of experienced workers and making stored data or information searchable and available on the intranet. This is critical and needs to be addressed since if there are no mitigations for loss of experienced persons that are more competent, more productive and are able to make better and faster decisions for example, then it means loss in crucial organizational knowledge that is hard to recover since there is no clear guideline on how they can pass that knowledge they have accumulated over the years or a policy that shows how such knowledge can be managed.

Newman and Conrad (1999) proposes that knowledge creation comprises of activities associated with the entry of new knowledge into the system, and includes knowledge development, discovery and capture and also knowledge retention which involves all activities that preserve knowledge and allow it to remain in the system once introduced

This is in tandem with the importance of ensuring knowledge is shared for use even when experienced workers leave. Popper (2001) supports the view of retention of experienced workers for the purposes of knowledge retention and sharing in his four ways of capturing tacit knowledge which are mentoring new employees, employee retention, providing employees with opportunities to share experiences documentation of all processes. worth noting are the first and second advocacies by Popper that is mentoring of new workers, of course for the purposes of developing organizational knowledge and the second is employee retention which ensures that unique and competitive organizational knowledge is not only generated but also retained for competitive advantage, given that knowledge is a non-imitable resource that is hard to replicate in different cultures and structures. Further, the study revealed that the number of years worked (experience) in the same department influences public sector performance as it enhances efficiency and level of competence, productivity, effectiveness and leads to better and faster decisions.

5.1.4. Interventions by Public Sectors to Enhance Tacit Knowledge Sharing and Consequently Public Sector Performance

Objective four results were achieved using open ended questions where the respondents were requested to propose various interventions by public sectors meant to enhance tacit knowledge sharing and consequently public sector performance. From the findings, several tacit knowledge policy interventions were established, which can encourage tacit knowledge sharing and influence organizational growth. It is therefore noted that management has to adopt and spearhead KM practices and strategies and develop explicit policies with the same energy that they use to craft other organizational policies. They government could also create in their organizations, positions of chief knowledge officers, who can drive the KM agenda and cease dependence on age-old methods whose competitive advantage is not guaranteed. this view is supported by an empirical study conducted in Malaysia by Syed-Ikhsan and Rowland (2004), which

investigated and examined the availability of KM strategy in the ministry of entrepreneurs and development of Malaysia which, revealed that the ministry did not have KM strategies required to harness the benefits of knowledge even though knowledge was embedded in the ministry's procedures and policies and therefore available. Many workers felt that the ministry was responsible for managing knowledge and therefore made little attempt to go out of their way to benefit from the available knowledge. The Malaysian case is typical of what many African states, Kenya included, experiences. Another strategy closely related to the former is to harness the advantages that come with a growing knowledge economy, and put in place, structures whose core agenda is to drive key KM agendas and knowledge sharing. They could also ensure that knowledge sharers are recognized and motivated and also drive out fear of making mistakes since this enhances organizational learning.

A conducive environment and platforms to encourage KM, knowledge creation and knowledge sharing should also be created. Other recommended strategies are documentation of best practices and organising team building forums regularly which encourage knowledge creation and sharing. These teams emanate from strong organizational culture that can be traced from historical perspectives of organisations. This assertion was earlier confirmed in reviewed literature (Zzulanski, 1996), whose observation was that due to the stickiness of tacit knowledge, it depends highly on the organizational culture and the balance between individual competition and group cooperation. The same is echoed by Bratianu and Orzea (2009). Maja (2010) undertook a study on the link between KM and organizational performance in a Croatian environment and the analysis focused on five KM success factors one of which was financial success of an organization. His study proved that knowledge culture is among the most critical success factors for KM and that KM performance is measured through communities of practice whereby employees across departments are persuaded to come together and form

teams that facilitate exchange of information and build relationships of trust, expertise, and shared repertoire of resources, tools and artifacts that enhance organizational learning. Other interventions include developing a knowledge sharing organizational culture and organizing seminars and workshops that offer a platform for knowledge sharing.

5.2. **Discussion of Major Findings**

The results of the study show that Workforce communication and interactions does not have a significant effect on public sector performance. The findings concur with Wen-Bing Gau (2011) observation as was reviewed in the literature that a message which has not been digested by an individual can only be viewed as data or information rather than knowledge. According to Wen-Bing Gau, the public sector interactions are limited and directed and this hinders knowledge creation and sharing. He felt that if the public sector has no appropriate mechanisms to create and share tacit and explicit knowledge, the government will not be able to provide the public with quality services, not to say anything on the country's development.

Finder and Brand (1999) stated that the process of disseminating and digesting information in an organization can be classified as organization's learning behavior, therefore tacit knowledge sharing is closely related to organizational learning. The results of the study show that Functional boundaries have a significant effect on public sector performance. This study concurs with earlier study by Lieberman (2013) who noted that there is a relationship between workplace space and connectedness since if one sits more than fifty meters from another, there is rarely any communication. A repeated study by Allen (2006) also showed a decay of all communication media with distance. Allen in his recommendations insisted on physical proximity for effective and reliable communication. Mc Evily (2003), noted that the individuals who work very closely have very strong bonds.

The results of the study show that Organizational culture does not have a significant effect on public sector performance. Culture according to Vijay Sathe (2007) is the set of important understanding often unstated that members of a community share in common e.g. norms, values, attitudes, beliefs and paradigm. He argued that organizational culture is a relatively rigid tacit infrastructure of ideas that shape not only our thinking but also our behavior and perception of our business environment and therefore may not have the same influence in knowledge sharing across all sectors since it varies from one environment to another. The results of the study show that workforce motivation has a significant effect on public sector performance. The study concurs with earlier reviewed studies by Bock and Kim (2002) on the impact of question structure on recipient attitude during knowledge sharing where he concluded that the only organizational factor identified by researchers as most important in KS is motivation. This is the existence of incentives to share knowledge. Their study showed that non-financial incentives improve KS across organizational boundaries.

The findings that every county has its own dynamics when same factors were considered as influencers of public sector performance reflects the diversity in terms of resources available, priorities and other factors that may be put in place by the county government to enhance performance. There is no single county that has similar results as far as the influence of work force communication and interactions, functional boundaries, organizational culture and work force motivation on public sector performance is concerned. This is an indication that though most of the study may take a sample from all the county and purport to represent all the counties, when the variables are regressed together, this may not be the case as the effect from some counties will be counteracted by effect of other counties and their unique characteristic may be over shadowed.

5.3. Conclusion

The main objective of the study was to investigate the influence of tacit knowledge sharing on public sector performance. Influencers were assumed to be workforce communication and interactions, organizational culture, functional boundaries and motivation. The study noted that the departments knew the importance of tacit knowledge and tacit knowledge sharing and that they were keen on seeing the contribution it could make to public sector performance. However this contribution is hampered by several challenges noted in this pursuit. They include the provision of required infrastructure that would enable and enhance sharing of knowledge and which may not be adequate. While there could be adequate top management support, the top challenge amongst others is setting up programs that ensure connectivity in public services and full automation of the same in what is now regarded as e-government. It is also very clear that there is little documentation of the government's KM initiative and policies in the Kenya government both in national and the county government. This is seen to be common in most developing countries as the literature reviewed indicates that some African countries like Singapore have instituted a Singapore government infocomm plans aimed at providing education programs for civil servants to build awareness of KM and its implementation requirements. They have set up schemes for nurturing good KM ideas and knowledge management experimentation programs.

The general objective of the study was to examine the influence of tacit knowledge sharing on public sector performance. Researchers and practitioners have questioned the effect of tacit knowledge on public sector performance. The study findings revealed that workforce communication and interactions has a positive but insignificant effect on public sector performance. This reaffirms what other scholars have said that a message which has not been digested by an individual can only be viewed as data or

information rather than knowledge. Functional boundaries have a significant effect on public sector performance which reaffirms earlier studies which revealed that there is a relationship between workplace space and effective communication among employees. Workforce motivation has a significant effect on its performance. The study concurs with earlier studies that identified motivation as an important factor in organizational performance. Organizational culture has a positive but insignificant effect on public sector performance. According to Sathe (2007), culture is the integrated pattern of human behavior that includes thoughts, speech, action and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations. The study revealed that though there are varied definitions given by the respondent's, majority of the respondents view tacit knowledge sharing as informal knowledge acquired from other employees by the nature of working together, experiences and during normal interactions. This concurs with earlier definition that tacit knowledge is highly personalized and which is hard to formalize or communicate.

Departments were found to be in the process of automating their operations with majority having done it to a smaller extent. When the study sought to establish the frequency of department augmentation or adoption of new technology, majority of the respondents rated it at between 50% - 74%. This was an indication that though the departments are partially automated, strategies are under way to ensure that departments adapt to new technology. Public sector departments were found not to have a well-established social media network. This may be attributed to low connectivity between departments

The study revealed that person to person communication was highly rated as a means of sharing tacit knowledge followed by brainstorming sessions. These two factors of communications and interactions were found to have positive relationship with public

sector performance. Majority of the respondents said that information gathered through these means is shared among departmental members. Such interaction was found to be crucial as a means of enhancing knowledge sharing. Majority of the respondents indicated that the current setup is enclosed/partitioned office layout which may limit interactions and knowledge sharing. Scalar chain/power structure of departments was found to be fairly rigid, which is a reflection of the findings of the study that colleagues' interactions take place but not quite often. Nature of office layout was found to affect knowledge sharing to an average extent and that an open office layout may be an appropriate layout that may enhance tacit knowledge sharing. Frequency of interaction with colleagues was found to have positive relationship with public sector performance. Office layout was found to positively influence knowledge sharing with seniors and juniors. Departmentation was also found to influence tacit knowledge sharing in the public sector

Interpersonal Relationships among employees was found to be fairly good and was found to play an important part in tacit knowledge sharing among employees. Team building exercises and sharing common language, acoustics, sounds and nicknames were highly rated as factors that may enhance interpersonal relationships, tacit knowledge sharing and consequently departmental performance. However, when Team building exercises factors were regressed with other factors under organization culture, they showed a negative relationship with public sector performance.

The findings revealed that motivation of knowledge sharers is paramount with Personal recognition (branded offices, promotions, preferential treatment) found to be the only motivational factors with a positive and significant relationship with public sector performance. Appropriate salaries & wages were found to have positive relationship though insignificant but bonuses and allowances were found to have

negative relationship with public sector performance as a motivator of knowledge sharers.

The findings revealed that knowledge creation in various departments is done fairly often with majority of the respondents concurring that tacit knowledge sharing contributes greatly to public sector performance.

The comparison between the influences of the various factors of tacit knowledge on different counties revealed that functional boundaries and workforce motivation had positive influence in all counties but the effect was either significant or insignificant. However work force communication and interactions and organizational culture were found to have either a positive or negative effect on public sector performance though the effect was insignificant.

The findings reflect the heterogeneity of counties and that while coming up with policies; some of them may not cut across all of them hence the need to carry out an all-inclusive study. This study also tends to support devolution as counties have varied demands such that factors that may influence a specific dependent variable in one county may not affect the same variable the same way in another county. When the sample is taken from all the counties and considered together, some effects that relate to a specific county may not come out clearly as is indicated by the general multi regression analysis where the sample from all the counties are regressed together

Though respondents from the national government gave varied definitions of the term tacit knowledge, for most of them, their understanding of the term tacit knowledge sharing is the way of acquiring knowledge from other employees by the nature of working together, experiences and during normal interaction. The study revealed that national government had not put policies in place for management and sharing of

knowledge except for Inventory of human resource skills and human capital planning/succession planning, which were rated as some of the policies that are considered to enhance knowledge sharing, to an average extent. The national government documents the way things are done and there is an extent to which workflows have been automated.

Departments normally conduct Induction and orientation of new hires/employees as well as building of new and old hires capacity but there is very minimal effort to mitigate the loss of experienced workers. This is a major concern since majority of the national government employees felt that the number of years of experience in the same department have a positive effect on public sector performance as it leads to enhanced efficiency, enhanced productivity, enhanced effectiveness given that the same people who have been working under the national government are still the same people who have been forwarded to the counties, except for a few new hires here and there. It can therefore be concluded that, in the counties, the way things are done, the people who were serving and those who are being served are the same and that it is only the place of execution that has moved from centralized control to a decentralized one. It is also prudent to note that some functions have been devolved and others are not in some departments like health (Kenyatta National Hospital and Moi Teaching and Referral Hospitals) and education most probably because of their sensitivity as is in the case of referral hospitals which of necessity are serving county people who have been referred from their respective counties. This therefore means that to a large extent, what is being achieved in the counties is also an achievement in the national government. In essence, the county governments are a replication or extension of what the national government is doing.

5.4. Recommendations

Based on the findings of this study, a number of recommendations have been made. To start with, the study findings clearly show that workforce communication and interactions in public sector may not improve organizational performance. Indeed, the findings of this study have clearly shown that informal interactions and grapevine may not play a significant part in improving performance. Organizations should therefore make a deliberate effort to ensure that messages meant to enhance performance are disseminated in a formal structure to enable employees to digest and internalize the concept.

In addition, the study findings also revealed that functional boundaries have positive relationship with public sector performance. Following this findings, this study recommends that the layout of the office plan be designed in a manner that enhances effective and reliable communication for employees working in the same department since departmentation influences knowledge sharing through either enhancing or inhibiting.

The findings further revealed that organizational culture may not have a major impact on public sector performance, however uniform wearing was found to have moderate influence on public sector performance. Following these findings, the study recommends that various departments in the public sector should come up with dress code for their employees as this will show the employees that there is something they share in common. Findings also revealed that office layout has a significant impact on departmental knowledge sharing as this may also increase the frequency of interactions which in turn enhances public sector performance. It is on this basis that open plan offices are recommended.

Personal recognition like branded offices, promotions, preferential treatment was found to be the only motivational factor with a positive and significant relationship with public sector performance. It is on this basis that this study recommends that departments should motivate knowledge sharers through personal recognitions such as promotions, preferential treatment among others which may not necessarily be financial. The study has also established that motivation of knowledge sharers has a positive influence on public sector performance. The study recommends that the public sector develops policies on how employees will be motivated to share knowledge which may automatically lead to enhanced performance.

The study also recommends that organizations become learning centers and provide facilities for knowledge management. Some of the facilities include workshops, knowledge management conferences and refresher courses, among others. When an organization becomes a resource center, the staff will build relationships among themselves; uncover overlooked departmental needs, share ideas and evidences that generate new ideas which enhance public sector performance and creation of knowledge. During such sessions, new knowledge will be recorded and stored for use and reuse. Collaboration knowledge sharing models between local, regional and national levels, as well as between the public and the private sector is encouraged to create a healthy synergy for knowledge sharing. Deeper studies on KM initiatives and how policies can impact KM implementations should be carried out. These studies should also look into the achievements of KM and whether productivity and public service delivery have been enhanced.

From the findings, it was observed that counties have got their own dynamics and when a sample is taken from the counties, it may not necessarily be generalized to other counties so as to reflect the position of all the counties under the study. This was

observed when the data analysis was regressed county by county. Amongst the factors that were seen to prominently influence knowledge sharing and departmental performance was cultural diversity. It came out clearly that the more diverse the culture and ethnicity, the less is knowledge sharing. It was also noted that the more respondents shared local dialect, the closer their interactions and consequently sharing. This was especially true in relatively rural counties like Kilifi, Makueni and Kirinyaga counties. It also appeared that people who share common level of education shared a lot in common, not to forget the level of experience at work. It is therefore recommended that data that touches on critical issues that require policies or paramount decisions to be made, be analyzed and interpreted per county to bring out the diversity and uniqueness of specific counties in Kenya.

Finally, the results of the national government revealed there are no policies put in place for management and sharing of knowledge. It is on this basis that it is recommended that policies be put in place to ensure that there is proper management of knowledge that facilitates smooth sharing of tacit knowledge. It is also recommended that the national government undertakes the following: put knowledge sharing policies and initiatives in place, document organizational best practices, organize team building forums regularly, develop a knowledge sharing organizational culture, encourage knowledge sharing and organize seminars and workshops where employees can share tacit knowledge openly and freely. These suggestions had relatively similar response rates, an indication that the national government can evaluate all of them and determine whether they can be considered as remedy to ensure that there is enhanced knowledge management and sharing in government departments.

5.5. Limitations of the Study

The main objective of the study was to assess the relationship between TKS and public sector performance. Studies of this category have their own challenges and this one was not an exception. There were limitations on obtaining data especially because the study covered expansive areas that were far apart since it spanned across the eight former provinces. This was overcome by use of research assistants. Another limitation was that the results obtained may not allow generalization to other counties as it was noted in the county by county analysis, that each county had its own unique characteristics. This meant that though the variables used to measure TKS were the same, they could not yield the same results in every county. This limitation offers ground for further research based on other variables to compare the results of this study with other future studies. In addition, the study considered only four factors of TKS sharing which limits the scope of the study and also results.

Future studies could explore other factors like TKS tools, structures and assets to establish if they have any relationship with public or corporate performance. The last limitation to this study was based on choice of regression and correlation models in analysis. The assumption made on this study was that the relations between the data variables were linear. Given that the interactions and dependencies of these relations are causal, it could be possible that it is non-linear and, therefore, use of non-linear models could have led to different findings. In spite of these limitations, this current study remained rigorous in its analysis and quality of reporting. It contributes to the understanding of the understanding of the relationship that exists among the key constructs of TKS and public sector performance

5.6. Implications on Practice

The study was based on the relationship between TKS and public sector performance. This study basically emphasizes on the importance of understanding TKS in influencing public sector performance. The following recommendations have been put forward on practice for managers, the government and other stakeholders. To start with, managers must understand how TKS affects public sector performance. This is because TKS has become the main edge for competitive advantage and since literature has shown that the world economy is in the knowledge age, then organizations must conform to the needs of a growing economy. This calls for all aspects of knowledge management to be incorporated in organizational management.

Management should adopt strategic management practices and cease from re-inventing the wheel through use of traditional management methods that do not assure of competitive advantage. They should adopt best practices through emphasize on brainstorming sessions, open KM sharing forums, sharing of knowledge between seniors and juniors. Paying workers appropriate salaries and encourage sharing of common organizational language. These TKS parameters emerged as the most influential on public sector performance. Practicing strategic managers must seek to address the factors that influence public sector performance negatively. This study provides such factors based on the variables that were under consideration but a proactive manager endeavors to go beyond what in is obviously evident through extrapolation.

The government is responsible for the performance of the public sector. It is the government's duty to set up policies and regulations that address KM and TKS, which will prevail upon the public sector departments to not only adopt but also put into use. The government is also in charge of recruiting public sector workers. These

recruitments should be purely based on the competitiveness of the recruits specifically on their skills and competencies in their areas of specialization. Today, this area poses a big challenge in the public sector by creating an organizational culture of incompetence and sluggishness at work.

5.7. Managerial and Policy Implications

This study will enable the public sector to develop and implement policies that can transform the public sector into economies that appreciate the importance of strategic management practices. It was noted from the results of the study that different variables (communication and interactions, functional boundaries, organizational culture and motivation) have different effects on public sector performance in different counties. This calls for policy formulation practices that are based on each county's unique characteristics rather than having policies that cut across the board and which ignores county diversities

Reviewed literature showed that the public sector is committed to status quo and complacency. Policy makers need to be sensitive to the fact that the public sector needs to embrace strategic management practices that can assure better performance since even if the public sector is not profit minded, it still requires resources for maintenance of facilities and augmentation of infrastructure.

Further, the findings of the study showed that functional boundaries and motivation are key factors influencing public sector performance. Policy measures should therefore be put in place to address workforce motivation especially through appropriate salaries and wages, allowances and other monetary and non-monetary rewards. The study also showed preference for open plan offices to encourage communication and interactions. Policy makers should consider putting this into consideration

Departmental heads are called upon to ensure that measures are put in place that enhance tacit knowledge sharing. From the results of the study, it was noted that informal interactions and grapevine inhibit more than encourage tacit knowledge sharing, and therefore heads of departments should encourage formal interactions especially based on work practices that can improve level and quality of knowledge. This can be enhanced by creation of kaizen teams and quality circles geared to creation of new knowledge that encourages inventions and innovation.

They should also embrace open plan office layouts that are credited with enhancing interactions and communication and promise reliable and effective exchange of information.

Departmental heads should also pay attention to policies on motivating both knowledge sharers and non-sharers mostly through branding offices, and promotions as they are factors identified as encouraging sharing. They should also embrace use and preservation of best practices and also put in place employee exit mitigation factors that assures that knowledge does not leave the department once an experienced worker exits. Proper documentation of organisation's best practices should be undertaken in order to preserve age-old practices that are non-imitable and can give department's competitive advantage. Departments are also encouraged to come up with a common communication dialect unique to the organizational members, common rituals that members share and actively participate in, and common symbols that unify and bind members to common goals.

5.8. Suggestions for Further Research

This study makes an important contribution in our understanding of the effect of tacit knowledge on the performance of public sector departments in Kenya. It further brings out some of the factors that influence the relationship between tacit knowledge sharing

and public sector performance. Arising from this study, the researcher makes a number of recommendations for further research. A study focusing on the private sector where knowledge sharing is paramount due to interdependency of departments and stiff business competition.

Future studies may also adopt a case study research design for big and performing firms such as commercial banks and mobile network companies which would further add value in understanding the relationship between tacit knowledge sharing and corporate performance. Being an exhaustive study design, it would enable future researchers understand fully how tacit knowledge sharing affects corporate performance which would further enable the researcher to understand the effect of each factor that will be considered under the study. Use of longitudinal research design in regard to how tacit knowledge sharing affects performance would provide a more meaningful picture. This is because one would be able to study the effect of tacit knowledge sharing on departmental performance over time.

This study considered four variables, namely workforce communication and interactions, functional boundaries, organizational culture and work force motivation. Future researchers should consider other types of composition variables such as information communication technology, employees' level of education, amongst others. Finally, it would be interesting to establish the relationship between explicit knowledge sharing and corporate performance.

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APPENDIX I

LETTER OF INTRODUCTION

P.O. Box 354

NYERI.

TO WHOM IT MAY CONCERN

RE: AUTHORITY TO CONDUCT RESEARCH

Sir, I am a student in the above mentioned university undertaking a PhD degree in Business Administration, strategic management option. It is a prerequisite for one to conduct an academic research before graduating. Consequently, your department has been chosen to provide information relating to tacit knowledge sharing. You are kindly asked to fill in the questionnaire as truthfully as possible.

The information obtained is for academic purposes only and will be treated in strict confidence.

Thanking you in advance,

SUSAN NJERI WAMITU

B311/0008/2012

APPENDIX II

QUESTIONNAIRE FOR COUNTY GOVERNMENT DEPARTMENTS

SECTION A: BIODATA

1. Please indicate the name of your county and also your department

Your County:……

Department/ministry:…….

The position you hold in your department:……

2. How long have you worked in this department?

More than 15 years ☐

Between 10-15 years ☐

Between 5-9 years ☐

Between 1-4 years ☐

Less than a year ☐

3. Kindly explain briefly what you understand by the term tacit knowledge sharing.

……

……

SECTIONB: WORKFORCE COMMUNICATION AND INTERACTION

4. Please indicate the level of your department automation

Fully automated ☐

Automated to a large extent ☐

Automated to a small extent ☐

Not automated at all ☐

Hard to tell ☐

5. How do you rate the frequency of your department augmentation/or adoption of new technology?

75-100% ☐
50-74% ☐
25-49% ☐
0-24% ☐
Not at all ☐

6. How would you rate your departments ICT connectivity?

Excellent ☐
Good ☐
Satisfactory ☐
Fair ☐
Poor ☐

7. How strong is the social media network in your organization?

Very strong ☐
Strong ☐
Fairly strong ☐
Weak ☐
Non existent ☐

8. Does your department have communities of interest (act of gathering together around a topic of common interest) related to knowledge sharing?

Yes ☐
No ☐

9. Indicate how often this takes place in your department

Exercise	Very often	Fairly Often	Often	Never	Not sure
Brainstorming					

sessions on skills/competencies sharing					
Person to person Consultancy					
Open forums of knowledge sharing					
Seminars &workshops					
Informal interactions & grapevine					

10. According to the responses in 9 above, is the information gathered shared amongst departmental members?

Yes ☐

Not ☐

Not applicable ☐

11. If the knowledge is shared, indicated how this is done. Through

Staff meetings ☐

Face to face encounters ☐

HOD briefs &circulars ☐

None of the above ☐

Not applicable ☐

12. Do you agree that communication and interaction is crucial in knowledge sharing?

Strongly agree ☐

Agree ☐

Disagree to a large extent ☐

Disagree ☐

Not sure ☐

SECTION C: FUNCTIONAL BOUNDARIES

12. State the nature of your office plan

Open plan office layout ☐

Enclosed/partitioned office layout ☐

Landscape office layout ☐

Multi person office ☐

No office (and if any, it is undefined) ☐

13. To what extent does the nature of the office plan facilitate interactions and sharing?

To a very large extent ☐

To an average extent ☐

To a small extent ☐

Has no effect ☐

Inhibits ☐

14. What would you say is the influence of departmentation on knowledge sharing?

Greatly promotes ☐

Fairly promotes ☐

Promotes ☐

No influence ☐

Deters ☐

15. How often do you interact with your colleagues in a knowledge sharing forum?

Very often ☐

Often ☐

Fairly often ☐

Never ☐

Not sure ☐

16. How would you describe the scalar chain or rather protocol or power structure in your department?

Very rigid ☐

Rigid ☐

Fairly rigid ☐

Weak ☐

Indefinable ☐

17. How free are you to share knowledge with your seniors/juniors?

Very free ☐

Free ☐

Fairly free ☐

Not free ☐

Hard to tell ☐

SECTION D: ORGANISATIONAL CULTURE

18. Please rate the interpersonal relationships among employees in your organization

Excellent ☐

Very good ☐

Fairly good ☐

Good ☐

Poor ☐

19. How often do you and your colleagues attend the following?

	Very often	Fairly often	Often	Rarely	Never
Seminars/workshops/conferences					
On job trainings					
Brainstorming meetings					
Benchmarking sessions					
Team building forums					

20. Referring to question 13 above, how would you rate the sharing of knowledge acquired in those forums in your organization?

Above 85% ☐
75-84% ☐
50-74% ☐
25-49% ☐
0-25% ☐

21. Rate by ticking against what your organization shares in terms of knowledge? (5 is the highest and 1 is the lowest)

Measurement

Resource	5	4	3	2	1
Teambuilding exercises					
End of year parties					
Uniform wearing					
Appreciation of organizational					

logo, emblem, mission &vision					
Sharing common language(acoustics (sounds), nicknames etc)					

SECTION E: WORKFORCE MOTIVATION

22. Please tick against your salary bracket

Over 100,000 ☐

Between 75,000-100,000 ☐

Between 50, 000-74000 ☐

Between 2500-49000 ☐

Below 25000 ☐

23. How would you rate the suitability of your department in enhancing knowledge sharing in terms of the following?

Resource	Very suitable	Suitable	Fairly suitable	Unsuitable
Stored knowledge(data and information)				
Funds that facilitate knowledge sharing				

Knowledge Sharing environment				
Colleagues knowledge sharing attitude				

24. How often is knowledge created in your organization?

Very often ☐
Often ☐
Fairly often ☐
Rarely ☐
Never ☐

25. Rate the way your department motivates knowledge sharers

	75-100%	50-74%	25-49%	1-24%	0%
Appropriate salaries &wages					
Personal recognition i.e. branded offices, promotions, preferential treatment					
Bonuses					
Allowances					
All of the above					
None of the above					

26. Amongst other factors that contribute to organizational performance, how much does knowledge sharing contribute?

Over 90% ☐

75-89% ☐

50-74% ☐

25-49% ☐

Below 24% ☐

THANK YOU

APPENDIX III

QUESTIONNAIRE FOR NATIONAL GOVERNMENT

1. Please indicate the position you hold in your department……

2. How long have you worked in this department?

- More than 15 years ☐
- Between 10-15 years ☐
- Between 5-9 years ☐
- Between 1-4 years ☐
- Less than a year ☐

3. Kindly explain briefly what you understand by the term tacit knowledge sharing.

……

……

4. Does the government have policies in place for management and sharing of knowledge?

Yes ☐

No ☐

5. If your answer in 4 above is yes, tick against those that are available and applicable in your department

National Government policies on knowledge sharing	To a great extent	Average extent	Low extent	none	Hard to tell
Inventory of human resource skills					
Encouragement of best educational practices					
Human capital planning/ succession planning					
Documentation of how things work					
Discussion boards for exchanging quick answers					
Knowledge repositories					
Publishing of crucial information					
Automation of workflows					
Departmental yellow pages					

6. To what extent are the following tools of internal organization's best practices used in your department?

Tools of best practices	To a great extent	Average extent	Low extent	None	Hard to tell
Induction and orientation of new hires/employees					
Building of new and old hire capacity					
Mitigation in the loss of experienced workers					
Making stored data or information searchable and available on the intranet					

7. Does the number of years worked (experience) in a department influence performance?

☐ Yes

☐ No

8. Explain your answer to question 7 above

……

……

9. Give recommendations on what the government can do to ensure knowledge management and sharing is enhanced…….....

……

APPENDIX IV

RESEARCH STUDY TIMETABLE YEAR 2015

ACTIVITY & DATE	JAN-FEB	MAR-MAY	JUN-AUG	SEPT	DEC-JAN	FEB-APR	MAY-JUN	JUL-AUG
Search for topic								
writing of proposal								
Proposal defense								
Corrections								
Field work								
Data analysis								
Report compilation								
Report defense								

APPENDIX V

RESEARCH BUDGET

ITEMS	COST (ksh)
Stationery	3,275
Calls	5000
Printing and computer services	15,000
Photocopy	6,000
Travel	5,000
Data analysis (Spss and internet)	13,000
Binding	4,000
Total	51,275
Add 10% miscellaneous	5127.5
GRAND TOTAL	56,402.5

APPENDIX VI

PUBLIC SECTOR DEPARTMENTS

- Ministry of Interior and Coordination of National Government
- Ministry of Devolution and Planning
- Ministry of Defence
- Ministry of Foreign Affairs
- Ministry of Education, Science and Technology
- Ministry of National Treasury
- Ministry of Health
- Ministry of Transport and Infrastructure
- Ministry of Environment, Water and Natural Resources
- Ministry of Land, Housing and Urban Development
- Ministry of Information, Communication and Technology
- Ministry of Sports, Culture and Art
- Ministry of Labour, and Social Security Services
- Ministry of Energy and Petroleum
- Ministry of Agriculture, Livestock and Fisheries
- Ministry of Industrialization and Enterprise Development
- Ministry of Commerce and Tourism
- Ministry of Office of the Attorney General and Department of Justice

APPENDIX VII

FUNCTIONS OF NATIONAL AND COUNTY GOVERNMENTS

Functions of County Government

- Agriculture
- County health services (excluding national referral hospitals such as Kenyatta National Hospital in Nairobi County and Moi Teaching and Referral hospital in Uasin Gishu County.
- Pollution control
- Cultural activities
- County transport
- Animal control and welfare
- Trade development and regulation
- County planning and development
- Pre-primary education
- Implementation of specific national government policies
- County public works
- Fire-fighting services and disaster

Functions of National Government

- Foreign affairs
- Use of international waters and water resources
- Immigration and citizenship
- Religion and State
- Language policy
- National defense

- Police service
- Courts
- National economic policy
- Monetary policy
- National statistics
- Intellectual property rights
- Labor standards
- Consumer protection
- Education policy
- Primary schools
- Promotion of sports and sports education
- Transport and communications
- National public works
- Housing policy
- General Principals of land planning and the coordination of planning by the counties
- Protection of environmental and natural resources
- National referral health facilities
- Disaster management
- Ancient and historical development monuments
- National elections
- Health policy
- Agricultural policy
- Veterinary policy
- Energy policy
- Capacity building and technical assistance to the counties
- Public investments
- National betting
- Tourism policy

APPENDIX VIII

PERFORMANCE OF THE ECONOMIC SECTOR

Sector	Growth in 2012	Growth in 2013	Factors influencing growth
Agriculture	4.2	2.9	Tea, coffee, maize, wheat, rice and fresh horticultural product
Manufacturing	3.2	4.8	Investor confidence, ease in inflation, stable exchange and lending interests
Transport	2.8	3.3	infrastructural facilities
ICT	8.6	6.2	Liberalization, globalization. increase in literacy levels
Tourism	3.2	3.5	Increased domestic tourism, tourist confidence
Energy	1,606.1mw	1,717.8 mw	Utilization of/and increase in hydro capacity
Building and construction	4.8	5.5	investment in real estate and demand for tenancy
Interest rate	11	8.5	Decrease in borrowing, devaluation of the shilling
Stock market	49%	51%	Investor confidence
International trade and balance of payments	517.8	502	export versus imports
Public finance			Growth in gross domestic product

APPENDIX IX

PERFORMANCE OF THE SOCIAL SECTOR

Education

Indicators	**2012**	**2013**	**% change**
Number of primary schools	29.161	30.122	33
Number of secondary schools	8,197	8,848	7.9
Number of public universities	8	22	17.5
Number of private universities	27	30	11.1
Number of TIVET	701	748	6.7
Enrolment			
Total enrolment in primary school	10 m	10.2 m	20
Total enrolment in secondary school	1.91 m	2.1	10.5
Number of public primary school teachers	191,034	199,686	4.9
Number of secondary school teachers	64,338	65,494	1.8
University enrolment	240,551	324,560	34.9

APPENDIX X

CONTRIBUTION OF MAIN SECTORS TO ECONOMIC GROWTH

Sectors	**2012**	**Contribution in percentage**	**2013**	**Contribution in percentage**
Agriculture and forestry	4.2	24.6	2.9	25.3
Transport and communication	4.7	9.6	6	9.1
Manufacturing	3.2	9.5	4.8	8.9
Financial intermediation	6.5	5.2	7.2	4.8
Construction	4.8	4.2	5.5	4.4
Wholesale and retail trade	9.0	10.5	7.5	10.2
Electricity and water	10.3	11.3	5.9	4.5
Education	6.1	5.1	6	5.1

APPENDIX XI

PERFORMANCE OF THE OTHER SECTORS

Sector	2012	2013	% change
Environment and natural resources	127.1000 ha	129.3000 ha	0.9
Employment(both formal and informal)	12.8 m	13.5 m	5.1
Domestic economy	4.6%	4.7%	0.1

APPENDIX XII

EFFECT OF EMPLOYEES' COMMUNICATION AND INTERACTION FACTORS ON PUBLIC SECTOR PERFORMANCE

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Brainstorming sessions on skills/competencies sharing	283	0	5	3.46	1.028
Person to person communication	283	0	5	3.99	.947
Consultations	283	1.00	5.00	3.41	.98293
Open forums of knowledge sharing	283	0	5	3.28	.878
Seminar & workshop	283	0	5	3.16	1.152
Informal interactions & grapevine	283	0	5	3.47	1.183
Valid N (list wise)	283				

APPENDIX XIII

EFFECT OF ORGANIZATIONAL CULTURE FACTORS ON PUBLIC SECTOR PERFORMANCE

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Teambuilding exercises	283	1	5	1.81	1.154
End of year parties	283	1	5	1.85	1.359
Uniform wearing	283	1	5	1.69	1.131
Appreciation of organizational logo, emblem, mission & vision	283	1	5	2.36	1.383
Sharing common language(acoustics, sounds, nicknames)	283	1	5	2.04	1.233
Valid N (list wise)	283				

APPENDIX XIV

HOW EMPLOYEES ARE MOTIVAVED AND THE EFFECT ON PUBLIC SECTOR PERFORMANCE

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Appropriate salaries & wages	283	0	4	1.50	.939
Personal recognition i.e. branded offices, promotions, preferential treatment)	283	0	4	1.25	1.055
Bonuses	283	0	4	.64	.966
Allowances	283	0	4	1.00	1.047
All the above	283	1	5	1.69	1.131
Valid N (list wise)	283				

APPENDIX XV

SUMMARY OF COUNTY TKS INFLUENCE ON PUBLIC SECTOR PERFORMANCE

COUNTY	VALUE OF r2	PERCENTAGE INFLUENCE
Samburu	0.588	58.8
Kilifi	0.574	57.4
Bungoma	0.569	56.9
Homa Bay	0.565	56.5
Garissa	0.355	35.5
Makueni	0.321	32.1
Nairobi	0.316	31.6
Kirinyaga	0.314	31.4

APPENDIX XVI

SUMMARY OF COUNTY TKS FACTOR RELATIONSHIP AND LEVEL OF SIGNIFICANCE ON PUBLIC SECTOR PERFORMANCE

County	Workforce Communication	Functional boundaries	Organizational Culture	Workforce Motivation
Samburu	Negative but insignificant effect	Positive and significant effect	Positive but insignificant effect	Positive and significant effect
Kilifi	Negative but insignificant effect	Positive and significant effect	Positive but insignificant effect	Positive and significant effect
Bungoma	Negative but insignificant effect	Positive and significant effect	Negative but insignificant effect	Positive and significant effect
Homa Bay	Negative but insignificant effect	Positive but insignificant effect	Negative but insignificant effect	Positive but insignificant effect
Garissa	Positive but insignificant effect	Positive and significant effect	Negative but insignificant effect	Positive but insignificant effect
Makueni	Positive but insignificant effect	Positive but insignificant effect	Positive but insignificant effect	Positive but insignificant effect
Nairobi	Negative but insignificant effect	Positive but insignificant effect	Positive but insignificant effect	Positive but insignificant effect
Kirinyaga	Positive but insignificant effect	Positive and significant effect	Negative but insignificant effect	Positive but insignificant effect

APPENDIX XVII

UNDERSTANDING OF THE TERM TACIT KNOWLEDGE SHARING BY NATIONAL GOVERNMENT

	Frequency	Percent
Knowledge acquired informally	6	28.6
Involve the act of exchanging views and ideas	3	14.3
Sharing ideas openly	2	9.5
Knowledge Acquired by people during normal interaction	2	9.5
A way of sharing knowledge by working together	1	4.8
Knowledge learnt through experience	4	19.0
On job training from colleagues	1	4.8
Sharing of knowledge gained through experience	2	9.5
Total	21	100.0

APPENDIX XVIII

HOW NATIONAL GOVERNMENT HAS APPLIED THE FOLLOWING POLICIES AS A WAY OF ENHANCING TACIT KNOWLEDGE SHARING

Inventory of human resource skills	14	1.00	3.00	2.4286	.93761
Encouragement of best educational practices	21	.00	3.00	.7619	.70034
Human capital planning/succession planning	21	.00	4.00	2.0476	1.49921
Documentation of how things work	21	.00	4.00	1.7619	1.67047
Discussion boards for exchanging quick answers	21	.00	2.00	.7143	.56061
Knowledge repositories	21	.00	3.00	.7619	.70034
Publishing of crucial information	21	.00	2.00	.2381	.62488
Automation of workflows	21	.00	2.00	.9524	1.02353
Departmental yellow pages	21	.00	2.00	.6667	.96609
Valid N (list wise)	14				

APPENDIX XIX

EXTENT TO WHICH THE TOOLS OF INTERNAL ORGANIZATION'S BEST PRACTICES ARE USED IN THE PUBLIC SECTOR

	N	Minimum	Maximum	Mean	Std. Deviation
Induction and orientation of new hires/employees	21	1.00	5.00	3.0476	1.39557
Building of new and old hire capacity	21	1.00	5.00	2.1905	1.16701
Mitigation in the loss of experienced workers	21	1.00	4.00	1.5714	1.20712
Making stored data or information searchable and available knowledge on the intranet	21	1.00	2.00	1.4762	.51177
Valid N (list wise)	21				

APPENDIX XX

PERIOD WORKED IN THE SAME DEPARTMENT

	Frequency	Percent
More than 15 Years	4	19.0
Between 10 - 15 years	9	42.9
Between 5 - 9 Years	5	23.8
Between 1 - 4 Years	1	4.8
Less than 1 year	2	9.5
Total	21	100.0

APPENDIX XXI

HOW YEARS OF EXPERIENCE IN A DEPARTMENT INFLUENCE PUBLIC SECTOR PERFORMANCE

	Frequency	Percent
Experience enhances efficiency / level of competence	5	23.8
Experience enhances productivity	3	14.3
Experience enhances effectiveness	3	14.3
Experience reduces errors	3	14.3
Experience leads to faster decision making	3	14.3
Experience leads to better decision making	1	4.8
Total	18	85.7
Missing System	3	14.3
Total	21	100.0

APPENDIX XXII

RECOMMENDATIONS ON WHAT THE GOVERNMENT CAN DO TO ENSURE KNOWLEDGE MANAGEMENT AND SHARING IS ENHANCED

	Frequency	Percent
Put policy in place on knowledge sharing	4	19.0
Document best practices	4	19.0
Organize team building forums regularly	3	14.3
Develop a knowledge sharing organisational culture	5	23.8
Encourage knowledge sharing	2	9.5
Organize seminars and workshop	3	14.3
Total	21	100.0