EFFECTS OF KNOWLEDGE TRANSFER AND RETENTION STRATEGIES ON SERVICE DELIVERY IN NAIROBI CITY COUNTY GOVERNMENT, KENYA

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DECLARATION

I declare that this dissertation is my original work, and as far as I am aware, it has not been presented for the award of a degree in any university

SIGN…………..………………....DATE………………………

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This dissertation has been submitted with our approval as university supervisors for the degree of Master of Science in Information and Knowledge Management.

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DEDICATION

I dedicate this dissertation to my mother Jenta Wanga who introduced me to early childhood education. Her value for education keeps me focused. I also dedicate it to everyone who encouraged me throughout life's challenges and acted as a source of inspiration when I almost gave up.

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ABSTRACT

Knowledge transfer is the sharing of experiences within an organisation. The sharing is rooted in the field the expert is knowledgeable in. Knowledge retention is the capturing of an expert's knowledge so that an organisation does not lose the knowledge during transition caused by events such as death, retirement or resignation of their employees. In such instances, intellectual capital is lost when employees are unwilling to share the knowledge they possess and leave with it. The challenge facing organisations in the 21ˢᵗ Century is how to transfer and retain knowledge. The aim of this study was to investigate the effects of knowledge transfer and retention strategies on service delivery in Nairobi City County Government. The specific objectives of the study were to: investigate the knowledge transfer and retention methods used by the Nairobi City County Government, Kenya; establish knowledge transfer and retention challenges and their effects on service delivery in Nairobi City County Government, Kenya; determine the relationship between knowledge transfer and retention methods and service delivery in Nairobi City County Government, Kenya; and propose strategies of enhancing positive influence of knowledge transfer and retention on service delivery at the Nairobi City County Government. The study adopted a convergent parallel mixed methods research design. The target population of the study was 12,363 respondents from the Nairobi City County Government, Kenya. The study applied a multi-stage sampling technique. The first stage involved stratified sampling through which the respondents were divided into top level management, middle level management and lower level employees. This was then followed by an information-oriented purposive sampling to select information-rich subjects from top level management. Simple random sampling was used to select participants from the middle and lower level clusters. Thus, a total of 40 out of 84 directors of departments were selected from the top level management and 706 respondents from middle management and lower level management. The total sample size for the three clusters was 746 respondents. The study used interview schedules and structured questionnaires to collect data. Quantitative data was analysed using inferential statistics by help of Statistical Packages for Social Sciences (SPSS) while the qualitative data was analysed thematically using ATLAS.ti. This study established that the most preferred method of knowledge transfer and retention in Nairobi City County Government was departmental meetings. The challenges hindering knowledge transfer and retention were lack of support from top management, technophobia, lack of funding, performance contracting and fear of job losses. The study confirmed that the knowledge transfer and retention challenges affect service delivery by the Nairobi City County Government in terms of accessibility, timeliness, quality, accountability, efficiency and costs. These findings demonstrate that knowledge transfer and retention methods positively influence service delivery. The study proposes a knowledge transfer and retention framework that can positively influence service delivery. The findings can be used by the county government to leverage on knowledge transfer and retention as a way to improve services.

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LIST OF ABBREVIATIONS AND ACRONYMS

CCN- City Council of Nairobi

CoPs- Community of Practice

DPSA- Department of Public Service and Administration in South Africa

ERS- Economic Recovery Strategy

IM- Instant Messaging

KR- Knowledge Retention

KT- Knowledge Transfer

MDG's- The Millennium Development Goals

NACOSTI- National Commission for Science, Technology and Innovation

NCCG- Nairobi City County Government.

SECI- Socialisation, Externalisation, Combination and Internalisation

SPSS- Statistical Packages for Social Sciences

DEFINITIONS OF OPERATIONAL TERMS

County – In this context, this refers to the local or regional divisions of the main administrative units in Kenya. There are Forty-Seven (47) Counties in Kenya as stipulated by the 2010 Constitution of Kenya. Nairobi City County is the 47th County in Kenya and is designated as County number 047.

Knowledge – This is the intuition and applied experience that individuals possess (Omotayo, 2015). In this study it refers to the intellectual property assets owned by an organisation in the form of both tacit and explicit knowledge.

Knowledge management – This encompasses the processes, people, techniques and tools used to enhance the intellectual capital owned by individuals, groups and organisations (Davenport, 1994). In this study, knowledge management refers to all techniques used by the employees of Nairobi City County Government to create, share, store or simply manage their intellectual property.

Knowledge retention – It is a strategy used to organise and retain information and knowledge that are critical in an organisation (Egeland, 2017). In line with Egeland definition, this study adopts this definition of knowledge to mean the various ways that organisations use to ensure that knowledge resides within the organisation and does not get lost.

Knowledge transfer – Refers to the broad activities that support mutually beneficial collaborations and exchange of ideas, which can sometimes be serendipitous, in order to spot new opportunities (Susanty, Handayani & Henrawan, 2012). Knowledge transfer in this case is the ways which the employees share their knowledge to enhance their service delivery.

Service delivery – This refers to provision of social services to alleviate human suffering and by extension, enhance the quality of the life of the citizens (Abe & Monisola, 2014). Service

delivery is used in this study to refer to the measure of accountability, quality, accessibility, cost, timeliness and efficiency of services in Nairobi City County government.

Strategies – This is the alignment of thoughts, ideas and experience to provide general guidance for specific actions (Nickols, 2012). In this context, strategies refer to a plan of action designed to achieve long term goals.

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.0 Introduction

Organisations in the 21st Century are facing major challenges when it comes to ensuring that the knowledge their employees have acquired is easily shared and retained within the organisation. Dychtwald, Erickson and Morison (2004) assert that employees' experiences and skills are lost once an employee retires, resigns or is suspended from work. This knowledge is valuable and takes time and money to replace. Substituting skills and knowledge from employees can be easy but at some point, maybe difficult because some of the skills are gained for a long time (Pobst, 2014).

Experiences and skills gained by employees during their period of service in the organisation are crucial economic resources for any organisation. These experiences and skills surpass the traditional resources like capital and land (Drucker, 1993). Knowledge is considered a very crucial asset that should be captured, retained and shared within organisations whether government or non-government. The knowledge economy has made knowledge to be an asset that each organisation should have to thrive (Beazley, Boenisch & Harden, 2002). This has led to the need of knowledge retention whenever employees resign or retire. Sutherland and Jordan (2004), argue that the ability to retain organisational knowledge is a key characteristic of a successful organisation in the knowledge economy.

According to Alshboul, Al-Diabat, Abu-A'ra and Aldiabat (2012), the practice of recognising and looking for the intellectual skills and assets which individuals inside an organisation own is known as knowledge management. Transferring and conveying the knowledge is done through documentation of the key knowledge and disseminating it through publications. The notion that

knowledge management is relevant in governments is supported by the Department of Public Service and Administration in South Africa (DPSA) (2005) which identifies knowledge management as an enabler of how successful the public sector performs in the 21st Century. According to DPSA (2005) the public service sector in Africa should be a learning place where all individuals can build their capacity. The organisations within the public sector should inspire creativity and cohesiveness among its employees.

Lu, Mao and Wang (2010) explain that knowledge transfer and organisation's best practices are intertwined concepts in knowledge management. Knowledge transfer enhances the reproduction of an organisation's internal practices and by doing so, organisations perform in much superior ways (Parise, Cross & Davenport, 2006). In this regard, "practice" is the repetitive use of knowledge. Carlie and Rebentisch (2003) assert that knowledge transfer occurs when experts within a knowledge domain convey knowledge that has been created across an organisation's boundary. In addition, Dewah (2012) describes knowledge retention as a method of capturing crucial knowledge owned by employees within an organisation and preventing the risk of losing it, because the main goal of knowledge retention is to preserve as much expertise knowledge from resigning or retiring employees as possible. Levy (2011) states that through knowledge retention, an expert's most valuable knowledge has to become an organisational asset.

Service delivery is the key role of any County Government in Kenya. Effective delivery of services within the County Governments in Kenya maybe enhanced if the bureaucratic layers can be removed in the process of making decisions. Abe and Oluwaleye (2014) asserts that for effective service delivery to occur, the government should make sure that citizen's needs are satisfied. This is because the effectiveness of services in the County Government is measured by people satisfaction (Eigema, 2007). The best yardstick that can be used to measure any good

governance is by ensuring that proper services are delivered to the people. Abe and Oluwaleye (2014) contend that County Governments are mandated to deliver better services to the people.

Ismail and Yusof (2009) states that knowledge management has a very important role to play in increasing efficiency in the decision making process, and hence, assisting in public service delivery. However, organisations today face a major challenge on how to transfer and retain the knowledge that they create. Dychtwald, Erickson and Morison (2004) argues that knowledge is lost any time an employee retires or resigns in an organisation. This knowledge that is lost is valuable and takes time and money to replace. According to Pobst (2014) it is usually hard to replace skills and experiences that is gained through extensive experience by employees. In the recent years, there has been great pressure on the government to increase the number of policies related to knowledge management processes and service delivery (OECD, 2001). Formulation and implementation of this polices may lead to the knowledge transfer and retention within organisations especially within County Governments.

This study looks at knowledge management techniques and practices that Nairobi City County Government uses to transfer and retain knowledge. Employing these knowledge management techniques may provide Nairobi City County with the agility to deal with service delivery problems and new ways to solve problems, sharing what is learned and using lessons learned to improve service delivery.

1.1 Contextual setting

This study investigated knowledge transfer and retention strategies in Nairobi City county government (NCCG). The aging workforce in the public utility industry is a well-known and documented phenomenon in the literature. Nairobi City County, like many governance institutions around the world, is faced with a major generational change in its workforce.

Established as the City Council of Nairobi (CCN) in 1952, it was set to offer services to the people who reside in Nairobi and also maintain the status of Nairobi as a city. The City County of Nairobi derived its legal mandate from the Local Government Act (Cap 256) of the Laws of Kenya (The republic of Kenya, 2010). Apart from this Act, there are other Acts of parliament that supplement a range of its core functions and priorities (Mwenzwa & Misati, 2014). Among these documents are: The National Development Plans; The Poverty Reduction Strategy Paper & the Economic Recovery Strategy (ERS) for Wealth & Employment Creation; The Kenya Vision 2030 & Economic Recovery Strategy (ERS) for Wealth & Employment Creation & The Millennium Development Goals (MDG's) in the long term (Mwenzwa & Misati, 2014).

The current Constitution of Kenya, 2010 establishes the Nairobi City County Government under the Urban Areas & Cities Act of 2011. Nairobi City County has a mandate of providing and managing basic, social and physical infrastructural services to the people living in Nairobi. Among the services it is mandated to provide are: services on basic education; water and sewerage services; housing; health services; garbage and refuse collection; planning and development control; urban public transport and fire services and many more (Olima, 2013). The Nairobi City County Government has several departments, each with well-defined roles and has been collapsed to ten (10) sectors. According to Phaladi (2011), many professionals who occupy decisive specialists and managerial positions in many organisations, for example, engineers, technicians, artisans, and scientists were born between 1946 and 1964. These specialists were expected to retire between 2016 and 2021. This large wave of retirements may threaten long-term County's survival.

1.2 Statement of the problem

When employees leave, intellectual capital is lost. This becomes a challenge for organisations to maintain their performance like in the past. When an organisation faces widespread loss in its labour force as a result of old age, retirement or goes in search of greener pastures, it has lesser control over potential knowledge loss, unlike situations where it can influence the worker to remain. According to Philadi (2011) organisations lose intellectual assets any time their employees leave, resign or retire. This loss does not only come in form of expert knowledge but also the loss of social networks that were created. Consequently, any institution that relies on these professional knowledge experts for effective service delivery will suffer a great loss (DeLong, 2014).

Harvey (2012) points out that there are fewer examples of strategies that are successful in the field of knowledge transfer and retention. This has led to knowledge loss because there are limited models to anchor knowledge transfer and retention on. Burmeister and Dellar (2016) explain that the history and nature of knowledge transfer and retention procedure are still not well known and are not well stated. Therefore, there is a need for more research in this area. In the recent past, Nairobi City County Government has had high staff turnover due to retrenchment of workers, suspension or dismissal, resignations and retirement of experts (Mwaura, 2018). Based on this, there is need to investigate how knowledge transfer and retention strategies used by Nairobi City County Government influence its service delivery and how the same can be enhanced for effective service delivery.

1.3 Aim of the Study

The aim of the study was to explore the effects of knowledge transfer and retention strategies on service delivery at the Nairobi City County Government.

1.3.1 The Specific objectives

The objectives of the study were to:

1. Investigate the knowledge transfer and retention methods used by the Nairobi City County Government, Kenya;

2. Establish knowledge transfer and retention challenges and their effects on service delivery in Nairobi City County Government, Kenya;

3. Determine the relationship between knowledge transfer and retention methods and service delivery in Nairobi City County Government, Kenya;

4. Propose framework of enhancing positive influence of knowledge transfer and retention strategies on service delivery at Nairobi City County Government.

1.4 Research Questions

The research questions of the study were:

1. What are the knowledge transfer and retention methods used in Nairobi City County Government, Kenya?

2. Which challenges hinder effective knowledge transfer and retention and what are their effects on service delivery in Nairobi City County Government, Kenya?

3. What is the relationship between knowledge transfer and retention strategies and service delivery in Nairobi City County Government, Kenya?

4. Which framework can be used to enhance a positive influence of knowledge transfer and retention strategies on service delivery at Nairobi City County Government?

1.5 Justification of the study

Knowledge assets in any organisation should be transferred and retained to enhance the continuity of the organisation. The study sought to demonstrate the significance of knowledge

transfer and retention on service delivery at Nairobi City County Government. The study proposes well informed strategies that are useful in addressing the existing challenges in knowledge transfer and retention at the Nairobi City County Government for efficient service delivery. It is expected to also give a significant contribution towards a discussion on knowledge management among stakeholders in Nairobi and create awareness on the key role played by knowledge management in creating a competitive advantage that can be sustained over time in the Nairobi City County Government. This study also proposes a knowledge transfer and retention framework that may be applied by Nairobi City County Government to curb the threat of losing its knowledge assets.

1.6 Significance of the study

Many challenges that face counties and residents are knowledge related (Andries, 2016). This is because no employees willingly share knowledge due to perception that knowledge shared will be used against them. The employees, therefore, keep what they know to themselves for competitive advantages. In addition, employees exit their workplaces without leaving good hand over reports. This creates a challenge in documenting the knowledge that they have. The results of this research may be used by the Nairobi City County Government to identify the challenges that face knowledge transfer and retention and get solutions to deal with the challenges. The findings may also be used to identify knowledge transfer and retention strategies that may have a positive impact on service delivery at Nairobi City County Government. The findings can be used to advise policy makers in the County on what should be done, bearing in mind some aspects of knowledge retention and transfer that could have been employed elsewhere in the world and considering what their outcomes or outputs were. The findings if this study may also

be of use to other county governments which can use the propose knowledge transfer and retention framework to improve on service delivery.

1.7 Scope of the study

This study was only limited to Nairobi City County Government, specifically, targeting only the departments which offer basic services such as education, housing, health, water and sewerage, refuse and garbage collection, planning and development control, urban public transport and firefighting. It focused on the Top Level management, the Middle Level management and the Lower Cadre employees in respective departments at Nairobi City County Government. Its coverage included knowledge transfer and retention strategies and service delivery. The measures of service delivery included: accountability, quality, accessibility, and cost of service, timeliness, and efficiency. This study was also confined to threats such as retirements, resignation and firing, loss of knowledge, knowledge transfer, retention, and delivery of services at the Nairobi City County Government.

1.8 Limitations of the study

The study had limitation due to dearth of literature on knowledge transfer and retention in county governments and Kenya. This is because they were limited studies that were found in this area. Most of the studies in the literature were from other countries and they only dealt with the entire government at large as opposed to county governments. This posed a challenge because the county government were only introduced in the year 2013 in Kenya. This limitation was addressed by analysing literature from other organisations and countries. The researcher also used all possible sources, including mass media content, to better understand the concepts.

1.9 Chapter summary

This Chapter provided the introduction and background to the study. The Chapter also presented the definition of operational terms; background information to Nairobi City County Governments; statement of the problem; aim and objectives of the study; the research questions; limitations and significance; and justification of the study.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

Literature review is a documented account of materials that have been evaluated by researchers in relation to their specific area of study (Ridley, 2012). In addition, literature review also entails the presentation of the theoretical framework which explains the theory applied in the research. This study used literature found in books, journals and other published articles basing on the objectives of the study. A conceptual framework that highlights the key concepts and their relation to each other is also presented in this Chapter. This helps to bring out the independent and dependent variables in the study.

2.2 Methods of knowledge transfer

Knowledge transfer is the passage of knowledge from one person to another (Phaladi, 2011). Segarra-Ciprés, Roca-Puig and Bou-Llusar (2014) refers to knowledge transfer as the process of sharing knowledge within and outside an organisation. This is in agreement with Agarwal and Islam (2015) who assert that knowledge transfer is the activity that involves the flow of knowledge through communications, translations and rendering. In order to enhance service delivery, every organisation should embrace knowledge transfer. Knowledge needs to be shared and retained in the organisation's database, in particular, the tacit knowledge that resides with expert employees who have resigned, or got retrenched. Accordingly, Silke and Alan (2010) posit that experiences and skills may be shared by retiring knowledge workers to the new employees or it could be from the organisational information databases to the new employees in the organisation. Inkpen and Tsang (2015) explain that an effective knowledge transfer occurs in an organisation depending on the accrued capital and social networks that it has invested in. This

notion is supported by Mohajan (2016) who agrees that knowledge transfer is not only about communication but also about the social networks, tools and tasks that knowledge members undertake.

Emadzade, Mashayekhi and Abdar (2012) state that knowledge can be transferred or be made available through the process of combing, filtering, integrating, combination, merging, coordinating, distribution, and reconstructing knowledge. An organisation can validate and document their knowledge for easier transfer in later years. This knowledge can then be published and shared through knowledge sharing platforms like social media or the intranet. This way, the transferred knowledge can readily be made available for use through a continuous and dynamic process based on the learning skills of an individual to capture knowledge during the knowledge transfer process.

Through learning, individuals or groups of persons can identify the knowledge they need and are able to attach value to it. However, the learning capability of an individual depends heavily on the literacy levels of that individual and their interest to learn new things. The knowledge transfer process is depicted by the Figure 1.
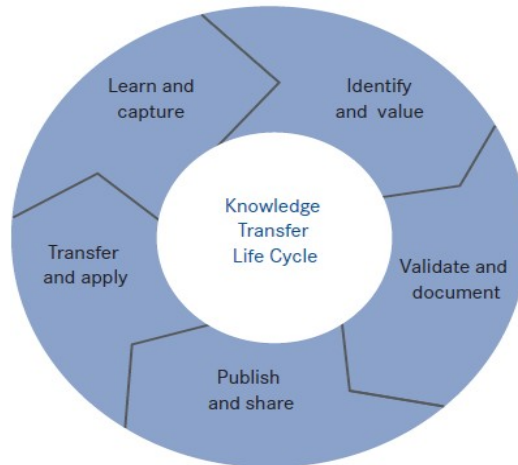
Figure 1: Knowledge transfer life cycle

Source: Adapted from Piktialis and Greene (2008)

According to Piktialis and Greene (2008), for an organisation to select a knowledge transfer method, the following needs to be considered:

i. *User needs*

User needs refer to a situation where an employee, team, or organisation has in mind a precisely described requirement. Piktialis and Greene (2008) state that when something becomes necessary to an individual, team or an organisation, it becomes a user need. At this point it becomes personalised and thus complex. Therefore, the knowledge transfer method to be utilised to satisfy the user need will depend on the willingness of that individual, team or organisation to learn.

ii. *Context and type of knowledge*

In this situation, an individual, a team or an organisation has a specified type of knowledge they require to be transferred. The different methods of knowledge transfer they can deploy in this case are shown by Figure 2.

	Specific knowledge	Analytic knowledge
Different application context	Formal Education Training Podcasts Communities of practice	Learning histories "Serious" games
Same application context	Knowledge capture Wikis Interviews IM Blogs	Mentoring Peer assists Apprenticeship Simulation

Expertise

Figure 2: Methods of Knowledge transfer based on context and type of knowledge

Source: Adapted from Piktialis and Greene (2008)

The Figure 2 above illustrates the various knowledge transfer methods applied by many organisations for their daily activities. Any method of knowledge transfer depends on an individual's ability to be taught and learn. The method for transferring knowledge is selected by organisations depending on the relationship between the person who owns the knowledge, the person to whom the knowledge is being imparted and also the context in which it happens.

iii.   Level of experience

The potential receiver of knowledge must have a specified level of experience for the exchange of knowledge to be successful. According to Piktialis and Greene (2008) the selection of the method used for transferring knowledge relies on the level of experience that the receiver and the provider of knowledge have. This is illustrated by the curve in the Figure 3 showing the different methods knowledge can be transferred based on experience.
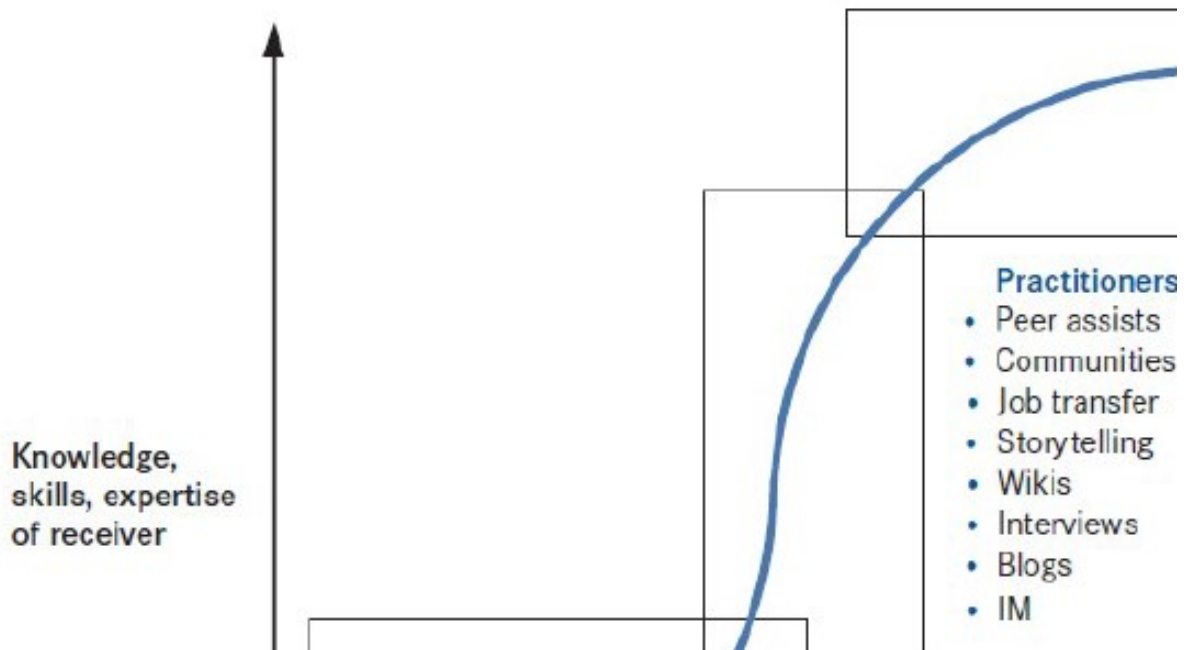
Figure 3: Knowledge transfer methods based on level of experience

Source: Piktialis and Greene (2008)

The above three elements (user needs, context and type of knowledge and level of experience) guide organisations to determine which method of knowledge transfer they can use. There are distinct approaches to knowledge transfer as discussed below:

2.2.1 Communities of practice

According to Paasivaara and Lassenius (2014), communities of practice comprise of people who come together for a common purpose. They share common problems and are within the same knowledge domain. Mládková (2012) affirms that communities of practice consist of groups of people who learn the same things and can share knowledge domain. The group has a common set of interest, share same knowledge and have similar experiences, and thus, get involved in a process of collective learning (Wenger, McDermott & Snyder, 2002).

Organisations use communities of practice in order to identify, capture and transfer knowledge. Communities of practice are not necessarily formal teams but rather groups of people with shared experience and insight as described by Wenger (2010) in his Social Cultural Learning Theory. The theory desribes communities of practice as social participants in a continuous learning process. A community of practice facilitates member participation in discussions and activities that facilitate knowledge sharing. By applying social networks, they share knowledge amongst each other because they are connected by common practices, hence, the formation of a community of practice.

A community of practice as a notion is a method of transferring knowledge that has been implemented by organisations to improve services that are delivered in a knowledge economy (Wenger, 2010). Therefore, a community of practice will enhance how tacit knowledge is transferred between employees. There is a challenge in transferring tacit knowledge. However, communities of practice make it easy to share, they become great utilities to any organisation that uses it for the enhancement of knowledge retention. This is supported by Anthony, Rosman, Eze and Gan (2009) who explain that the management of knowledge is all about utilising the tacit knowledge by establishing communities of practice. These communities distribute, store and expand tacit knowledge which will eventually remain within the organisation in case the employees retire or resign. Most organisations are allowing communities of practise to be established and thrive (Wenger, 2010). The communities of practice assist workers in the organisation to adopt collective responsibility when managing their knowledge needs (Wenger, 2010). According to Murni, Khalisah, Nasir, Ibrahim, Noor, Sofian and Bakar (2018) knowledge sharing enables retention of knowledge within an organisation. Communities of

practice assist organisations to transfer and retain knowledge through employee's ability to develop skills and assist others (Holbeche, 2015).

Mohajan (2016) explains that tacit knowledge is the most important form of knowledge in any organisation because it resides in the minds of experts and that makes it a major challenge to capture. Communities of practices are used to capture most of the organisation's tacit knowledge (Omotayo, 2015). Communities of practice can be applied when capturing knowledge from retired and long serving employees. This allows knowledge to be retained in the organisation whenever those possessing it leave. Murillo (2011) explains that, nowadays, communities of practices have been expanded to much larger groups of persons which are not necessarily within the same organisation but share the same knowledge domain. Therefore, communities of practice can be either internal, external or both depending on the different communication channels in use (Powell, 2013). This, therefore, means that knowledge transfer occurs through intranets and extranets, within and outside the organisation.

2.2.2 Mentoring and apprenticeship

Swap, Leonard, Shields and Abrams (2015) assert that mentorship together with apprenticeship can be used by organisations to facilitate knowledge sharing. They explain that mentorship is the process of encouraging new employees to learn through shared task from long serving employees within an organisation. This notion is also shared by Beazley, Boenisch and Harden (2012) who noted that mentorship of new employees is required to enable learning take place and assist the new employees perform their duties with ease. According to Hobson, (2016) mentorship enables sharing of experiences and insight amongst employees. In addition, mentors can also share experiences and skills, mostly in an informal setting, with the mentees. Many organisations have introduced pairing of experts in subject matters with individuals who are not

experts in those areas of specialisation in order to learn from each other APQC (2011). Due to this, the trainees can easily be mentored because they learn from the most experienced employee. This provides expert employees with a chance to showcase their knowledge and share experiences with new or junior employees. Rafiei and Davari (2015) opine that subject matter experts exhibit mastery of jobs related knowledge in their area of specialisation. This ensures that there is effective succession plans within organisations. This is facilitated by subject experts who play a big role in assisting in knowledge transfer and retention (Ejakpomewhe, 2017). Subject matter experts are assigned roles of mentors by their organisations who allocate them mentees to train. They act as trainers in areas of knowledge they are strong in within their organisation (APQC, 2011).

2.2.3 Blogs

Blogs are simple web pages that are frequently updated. They are written from an expert's point of view based on the knowledge they have (Alexander, 2017). The individual air their views, knowledge and perception on a specified area and the stories are shown in chronological order. Blogs can be employed in the facilitation of knowledge sharing and retention (Bondi,2018). For example, knowledge sharing by employees can occur through the development of blogs aligned to the organisation's main website. In the blogs they can key in their daily activities which will be captured and stored by the organisation so that when they exit the knowledge still remains in the organisation. Bloggers share experiences; capture knowledge and at the same time disseminate their knowledge to a wider audience or scope.

Permitting peers to have accessibility to blogs promotes transparency since the content in the blogs can be authenticated by the peers. This is an informal way of cross-checking the work and validating it. The content usually attracts criticism from peers or other people (mostly experts in

the subject matter) on the internet or within the extranet. Therefore, blogs provide useful insights about its author. Contents on the blogs are not always factual, but at least it helps in opening one's mind about the knowledge put across by the blogger.

2.2.4 Peer assistant

A meeting or a workshop that is facilitated by peers who come from diverse teams to share experiences is considered a peer assist. Peers share their experience, an insight and basically knowledge. This usually occurs when a team has made a request to be helped to meet an upcoming challenge or problem. Greenes (2013) asserts that peer assistant is a work session where peers exchange knowledge and thus learn from one another through sharing their knowledge and experience. Stories on failures and ultimately the best practice as a solution to these are best shared through persons who are knowledge experts in given subjects and have had experience in them. The role of peer assistant is to:

- focus its targets on a specific mission that can be a technical or business challenge.
- receive some assistance and insightful opinions from people with vast knowledge (experts) outside the team.
- identify approaches that can possibly lead to a new line of inquiry.
- enhance a mutual learning that develops a strong bond, especially, among new staff, creating partnership between staff and clients and even suppliers.

2.2.5 Storytelling

The practice of knowledge sharing through stories is referred to as storytelling. The story teller has the ability to personalise the problem by conveying the story, as alive as possible, to the readers (APQC, 2011). According to Holbeche (2015) story telling brings about cohesions and at the same time provides guidelines for employees to follow in the organisation. Through the

storytelling, organisations can share their cultures and this can make employees develop a sense of ownership. Holbeche (2015) asserts that storytelling allows capturing and sharing of success stories and lesson learnt within an organisation. Inzer and Crawford (2005) concurs that stories are instrumental in knowledge sharing as they allow the audience to feel part of the situation and be in context with it.

2.2.6 Instant messaging (IM)

According to Kim, Yi, Nam and Lee (2017) Instant Messaging (IM) can be regarded as a live feed communication process between sender of information and the receiver through use of text chats. Information technology such as intranet is used to convey messages or knowledge. Short messages are sent between individuals or group of people with common interest using internet connection. The communication is instant because the participants are able to view each other online facilitated by a network. Through IM a social network is created between people who interact and may share knowledge whenever they have a problem or challenge to overcome (Alsulami & Al-Aama, 2019). Because of IM people share knowledge on an area of interest and can help people solve their problems through the connections in the group. Therefore, IM acts as a forum where people can interact and discuss issues affecting them. As such, IM are powerful tools that enable an enhanced person to person or group communication at any instance that it is required or deemed necessary.

2.2.7 Leveraging on retirees

Leveraging on retirees refers to a case where organisations rely on their staffs that are on retirement because of the critical skills they possess. The employees work with the retired staff gain experience and skills through trainings (APQC, 2011). The retired staff can be hired to work on contractual basis as they transfer knowledge to new employees, thus, their knowledge

is retained in the organisation. Some organisations rely on retired employees through a consultancy-based contract since the retirees understand the organisation better (Coleman, 2013).

Another significant method of transmitting tacit knowledge is by transfer and reuse of specialised knowledge that resides in the organisation (Guthrie, Ricceri & Dumay, 2012). Richardson (2009) argues that despite the many strategies that exist for knowledge transfer, there is no single method that can be used to enhanced proper knowledge retention. This is because organisations places different values on specified aspect to knowledge.

2.2.8 Formal education and training

Formal education is used by individuals or groups to develop knowledge depending on the social environment surrounding them. According to Brew (2003), formal education facilitates a face to face interaction between academic professionals and learners to disseminate the knowledge they have. Training, on the other hand, involves the organisation developing seminars and workshops where members share knowledge. Transfer of knowledge (such as skills or processes) takes place from the one who knows a subject matter (for example academics, researchers or practitioners) using workshops, project based works, attending conferences, class set up teaching and any other methodology or medium to transfer knowledge to employees in the organisation (Bates, 2008).

2.2.9 Exit interviews

These are forums where one or many people come together in a meeting to discuss issues with the exiting staff so as to exchange knowledge. The way the session is set up depends on the type of arrangement preferred by the parties involved. It can be between two people talking to each other, but can also be a session having many people in a group having a panel. The sessions can

be recorded on tape or video or a transcription may be involved for more technical sessions. The knowledgeable team can be from the host organisation but may be outsourced as well. According to Rayan (2016), exit interviews can be integrated in the knowledge management strategies to help capture intangible information from the employees before they leave the organisation, since knowledge sharing and knowledge transfer are important aspects that can be enhanced through exit interviews.

2.3 Methods of knowledge retention

Levy (2011) posits that knowledge retention is the process of capturing knowledge that will be used later in the organisation. It ensures that the organisation captures and retains the knowledge held by its workers and does not lose it while they leave. Baker, Perez, and An (2014) are of the opinion that knowledge management systems can be used to offer a practical solution towards knowledge retention. Knowledge retention in most cases is done through exit interviews which organisations use to capture knowledge and experience of employees who are either retiring or resigning. Knowledge retention should always be done throughout the time the employees are in the organisation. However, as much as knowledge retention may be a crucial process in the organisation's success especially in the long term, not many organisations have prescribed methods and strategies of retaining knowledge (Liebowitz, 2011).

Eriksson, Karamehmedovic and Liff (2018) suggested 12 strategies of knowledge retention which include: The strategies include: the use of communities of practice; employing interviews (Critical incidence) or through use of detailed questionnaires to capture knowledge; using storytelling; process documentation of important knowledge; mentorship programmes; job shadowing; use of Expert Systems (ES) or Electronic Performance Systems (EPSS); applying

job aid; storyboarding; exchanging information and integrating the best practices such as meetings or conducting studies.

2.4 Knowledge transfer and retention challenges and their effects on service delivery

Cahir, McNeill, Bosanquet and Jacenyik-Trawöger (2014) assert that several challenges exist during the process of transferring and retaining knowledge. The challenges are driven by two forces which shape the workforce today. The forces include; the growing population of the aged knowledge workers and complex knowledge required in the technological world. The result from these forces is demonstrated in the shortage of people with skills who can work in a knowledge economy. In addition, the fact that those organisations end up with employees who retire or resign, going away with skills and experiences that are hard to replace, is another challenge facing organisations today. As such, knowledge shortage as a concept is created. DeLong and Johnson (2005) states that in the knowledge economy it is not only about headcounts but about how are organisation able to retain their critical knowledge.

Nidhra, Yanamadala, Afzal and Torkar (2013) established that the greatest challenges to knowledge transfer in organisations is the change in staffing. They argue that this situation results in organisations losing tacit knowledge, and when organisations change members of staff, especially in the middle of a project, it may cause additional delays and conflicts in the development process.

Kroll, Mäkiö and Assaad (2016) reviewed the practices and challenges in effective knowledge transfer in globally distributed teams and documented the following challenges to knowledge transfer: mismatch in transfer and retention of knowledge; differences in

technical know-how together with vocabularies used within the domain; environments that are incompatible with knowledge sharing; the difference in levels of expert knowledge in the domain,; the infrastructural support; the tools employed and the methods used for knowledge transfer and retention.

Tuitoek (2014) identified the following challenges to knowledge transfer and retention:

1. **Knowledge hoarding:** People will hoard their knowledge if they think sharing it will result in punishment. The fear that their competitors may steal their ideas can also lead to knowledge hoarding.

2. **Generation gap:** Generation gap is the difference in the attitudes, morals and principles between generations. This is exhibited more between younger persons and their parents.

3. **Hierarchical structures:** In more hierarchical organisations, managers have control over information and knowledge that flows in organisations. Therefore, tendencies and desires to restrict lower level workers from accessing valuable information is observed within the organisation leading to barriers that can significantly hinder the sharing of knowledge.

4. **Competitiveness and job insecurity:** This can be observed in a situation where those who have acquired new knowledge are not willing to share it because they it is what will make them successful and sharing it only generates completion. In this case they will guard their newly acquired knowledge. These employees feel that if they can solve problems they will be valued and maintain self-respect.

5. **Organisation's culture:** Culture dictates the values that an organisation has. It is deeply rooted within organisations. An organisation with knowledge sharing culture is, therefore, one where people share ideas and insights willingly. It becomes natural for the

employees to share their knowledge without being coerced. It is a natural process to share knowledge in such organisations.

6. **Physical barriers**: They are physical factors that interfere with either one or both participants in a communication process (Kohl & Cook, 2013). Physical barriers are obstacles such as lack of conducive environment, geographical distances, staff shortage, noise, lack of time for interaction, physical disabilities and ill health.

7. **Attitudinal challenges**: These are behaviour traits that consists of ides, beliefs and feelings that possessed by people. These attitudinal changes affect how people behave depending on situations they are in.

2.5 Relationship between knowledge transfer, retention and service delivery

According to Fogli (2006) the word "service" is defined in different ways, making it a difficult task for writers and researchers to narrow down on the meaning of service delivery. Chia, Chin and Chin (2002) observe that customers have expectations about a service that should be given to them and their perception about that service rendered with be compared to the quality of product they receive. However, Lovelock (2001) argues that the way service is offered is dictated by, the way the customers behave and the economic situation they are in. In terms of behaviour, they look at service as an action performed by a group of people to another to facilitate the service delivered. On the other hand, economic situation is seen as an activity that generates value that customers benefit from at a specified time in a given place. However, Fogli (2006) disagrees and state that what customers expect as a service varies from one person to the other, the type of service offered, variations in culture, the type of business or industry offering the service and the region where the service is offered.

According to Parasuraman, Zeithaml and Berry (2008) mandatory requirement for a business to succeed is their ability to offer a service that is rated as superior which can be illustrated by SERVQUAL model. The model consists of five aspects namely:

i   Reliability: Refers to the provision of services as expected and as accurately as was promised;

ii Responsiveness: Can be described as the way a person is willing to render an appropriate service to help customers overcome their problem;

iii Warranty: Refers to the knowledge possessed by worker's knowledge combined by how polite and courteous they are, so as to assists in building trust and enhance confidentiality in a service.

iv Empathy: This is the service provider's attitude towards understanding each and every customer based on their problem; and

v   Tangibles: Are physical evidence concerning the service provided or whatever appearance that can be seen, touched and tasted.

However, Cronin and Taylor (2012) argue that although SERVQUAL is widely accepted among academics, there is no standardised model that can cater for the different situations and contextual set ups that defines and surrounds service quality. Accordingly, Parasuraman, Zeithaml, and Berry (2008) posit that the quality of services rendered depends on the attitudes of customers that relates to but not necessarily the same as satisfaction. In addition, the quality of the service is indicated by the level of satisfaction of the clients. This satisfaction is an indicator of the results expected in the future and is hence important in defining quality of service (Meesala & Paul, 2018). Tse and Wilton (2008) argues that to determine if a customer is satisfied, there is need to evaluate how they perceive the shortcomings of the services they

receive based on the expectations they had initially. However, this notion is contested by Kendall (2006) who argues that there is a difference between customer satisfaction and service quality and the two are not linked. This fact is supported by Bolton and Drew (1991) who explain that the two can be differentiated by evaluating the quality of service over a long period of time, while customer specified by a type of transaction the business engages in.

Cronin and Taylor (2012) while studying how the quality of service, the satisfaction on the part of the clients, and how that influences their intent to purchase a product or service in the United States noted that there must be quality in the services provided for satisfaction to occur on the side of clients. They further discovered that once a customer is satisfied, they will be strongly influenced and will have an intention to purchase a service as opposed to whether the service is of a high quality or not. Customers do not necessarily buy a quality service or a product with high quality, instead they buy because of convenience, pricing and availability which can increase customer satisfaction while not decreasing perception on service quality (Cronin & Taylor, 2012). Therefore, consumer perception on quality service and satisfaction are different constructs altogether (Parasuraman, Zeithaml & Berry, 2008).

In relation to the public sector, service delivery encompasses wide and complex aspects. The problems facing the organisations in the public sector are more apparent as compared to those faced by the private sector which is more autonomous and not subject to the same type and number of rules and regulations under which public services operate (Ali, 2006). However, public organisations are supposed to be more active when it comes to service delivery to their clients (OECD, 2001). Besides that, public organisations are under pressure to increase efficiency and respond to government legislation (Robinson, 2003). Quality of service rendered in the public sector ought not to be the same as applied in private sector because quality in the

public sector means looking at the results that satisfies the needs of citizens who are the customers of public organisations (Hamid, 2001).

According to Donnelly, Wisniewski, Dalrymple and Curry (2012), two types of public service customers, are recipients of the service who contribute finances or none at all and those who pay for a specific public service but do not get the benefit directly from it. A study by Kadir, Abdullah and Agus (2014) on public service quality in Malaysia found that customer service improvement should be given high priority to achieve performance and to provide quality services to the customers. Customer satisfaction or customer priority does not mean disregarding laws and rules for the sake of satisfying customers or to gain recognition (Damanhuri, 2014), but rather it is the ability to build a good and lasting relationship with customers. Hence, in the public sectors, service delivery means providing services that are fast, are of good quality and satisfies clients need.

The county government strives to deliver services that are effective as possible, especially the basic services. By providing these services, the county governments are able to carter for infrastructure, cost of living and business friendly environment. However, Riley (2003) argues that nowadays the public has been sceptical about services rendered in the public service especially county government officers and politicians who run such public institutions. This distrust is based on the exclusion and lack of knowledge by the public on the inner and core functions of the county governments. The public is rarely involved in matters regarding formulation of policies and how the policies are implemented. This can be due to the culture of secrecy within government organisation. This may explain the origin of the Swahili word *sirikali* used to describe the government. The word can be loosely translated as "top secret" (Ondari-

Okemwa, 2006). Riley (2003), however, explains that the practices of knowledge transfer can be used as a way of developing new faith in county governments.

Wiig (2002) opines that knowledge retention can be used in making significance improvement in regards to delivery of services within the public sector. He asserts that there are situations which knowledge transfer may play a crucial role in:

- Influencing how decisions are made within the public sector;

- Assisting people to take part in making decisions members of public in participating in decision making;

- Intellectual asset building for the society;

- Creating an economy that is knowledge based.

Wiig (2002) adds the following as factors that can enhance transfer and retention of knowledge:

- Having a functioning public administration that can effectively provide services and implement public agenda;

- Having a steady, fair, logically safe organisation;

- Leveraging on intellectual asset; and

- A knowledge worker base community.

Heck & Rogger (2004) states that adoption of knowledge management initiative within government organisation, specifically knowledge transfer and retention, can be used to achieve the following:

- Improvement in service delivery, efficiency, transparency and quality services to members of public;

- Well organised public administration based on functional internal business processes;

- Relying on skill and experience of employees.

There are benefits of utilising visuals techniques in knowledge retention for the coordination, simplification, highlighting, and navigating the complex web of knowledge that institutions possess (Wexler, 2001). Wexler points out that knowledge retention can be used to capture the skills and experiences of experts in the organisation. Knowledge retention programmes in government can provide an overview of skills that employees possess. According to Ondari-Okemwa (2006), the Government of Kenya is yet to integrate knowledge transfer and retention into solving major issues arising in service delivery.

2.6 Strategies of enhancing positive influence of knowledge transfer and retention on service delivery

Omotayo (2015) explains that there are three elements that are crucial for organisations to consider while putting up initiatives to enable knowledge transfer and retention. These elements include; having a strategy, focus and a vision; integrating tools that have the capacity to capture transfer and retain knowledge; and the willingness to transfer and retain knowledge which should form the organisation culture. According to Agarwal and Islam (2015), two enablers of knowledge transfer are:

i   Computerised based systems which include: the application of document processing and management systems; using procedural repositories; having a database of contacts; using expert databases; having analytics systems for social media networks; and facilitating online training programmes.

ii   Having a mechanism driven by people with programmes to mentor, coach, and shadow employees. These should be supported by having a joint decision making process, having

exit interviews, facilitating storytelling sessions especially through think tanks in the organisation, creating networks and forums such as those of communities of practice among others

According to DeLong (2014) knowledge transfer can be from person to person, person to groups, group to person, and also from a group to another group. For the transfer to occur there should be transfer of information from sender(s) to recipient(s) and knowledge absorption occurs within individuals or groups (Silke & Alan, 2010). Knowledge transfer facilitate behavioural change, enhance practices and helps in the formulation of policies. It develops new ideas; create new processes and best practices that add value in an organisation.

Patton (2016) asserts that tacit knowledge creation should be in an area that an organisation needs to focus on as opposed to concentrating on its transfers only. This is in agreement with Beazley *et al.* (2002) who posit that coming up with a plan of knowledge retention should integrate use of technology to enhance the process. Hayward-Wright (2017) concurs that an audit of information systems, especially targeting tacit knowledge, can help an organisation make a decision on the critical areas of knowledge to retain or capture. Hayward-Wright suggested the following four questions that a departing employee should be asked as guidelines. They are: questions covering general areas; questions on special or particular task; questions regarding facts or information on key issues; and questions on areas the employee learnt or have insights on.

Islam, Agarwal and Ikeda (2015) posited that there are a number of studies that recommends establishing a process for retaining knowledge while assessing projects and estimating risks that can be encountered if knowledge is lost. The recommendations are in agreement with the

knowledge audit framework proposed by Hayward-Wright (2017) that put an emphasis on how organisations can implement and set up a foundation for expert's knowledge transfer in an organisation.

2.7 Theoretical framework

This section discusses the theoretical considerations underpinning this study. It covers the theoretical model and conceptual framework adopted in this research.

2.7.1 The theory of organisational knowledge conversion

The theory of organisation knowledge conversion consists of four processes which can be used by organisation to transfer knowledge. These processes are Socialisation, Externalisation, Combination and Internalisation (SECI). Knowledge shared can be in form of both tacit and explicit knowledge. The form of knowledge that is coded and already documented is referred to as explicit knowledge whereas tacit knowledge is one that resides in people's mind. Knowledge sharing in organisation means that long term serving workers (senior employees) transfer the skills they possess to new workers (junior employees).

The SECI model on the conversion of knowledge is illustrated by Nonaka and Takeuchi's (1995) theory which expounds on how organisations create, share and manage knowledge. This is in line with knowledge transfer and retention within an organisation. Accordingly, Newman and Conrad (2000) explains that the goal of transferring knowledge is to share and create knowledge while knowledge retention deals with capturing of knowledge that is critical for organisation's performance. Figure 4 illustrates the theory of organisation knowledge conversion.
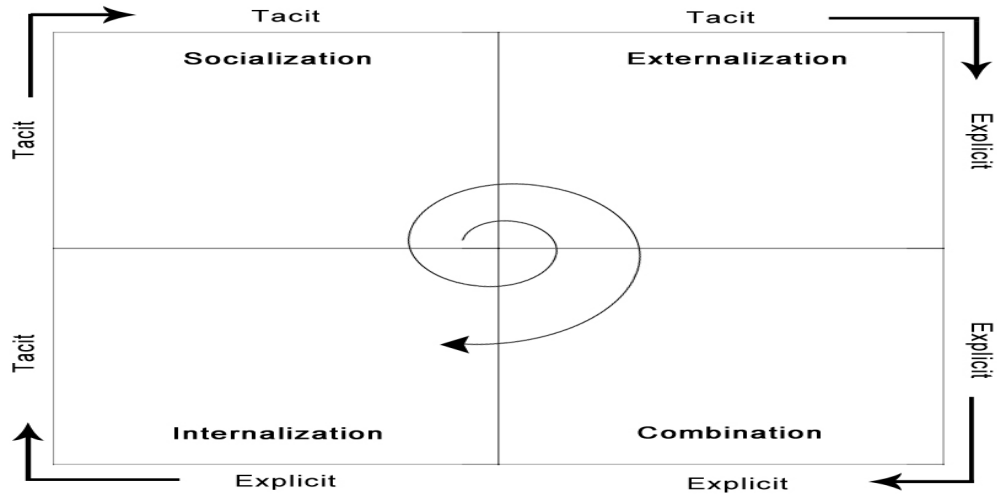
Figure 4: Nonaka and Takeuchi's model of knowledge creation in organisations

Source: Nonaka and Takeuchi (1995)

Nonaka and Tekauchi (1995) link tacit and explicit knowledge. They explain that tacit knowledge is the type of knowledge that is within people's mind. This knowledge is not codified and is hard to articulate. Accordingly, they posit that it is the most important and crucial form of knowledge that enhances competition in organisations thus creating an advantage to an organisation that has it. On the other hand, knowledge that is explicit is codified knowledge. It is converted inform of books or documents. Explicit knowledge can easily be shared among employees. Nonaka and Tekauchi (1995) state that most Japanese employees focus on tacit knowledge while those in United States focus more on explicit knowledge. Relationship that exists between the two forms of knowledge (explicit and tacit) leads to the development of the four stages in the theory of knowledge conversion abbreviated as SECI. These four stages enhance how knowledge is created, distributed, shared and retained. By interacting socially, individuals and organisations create and expand their relationship and in the process knowledge creation and expansion occurs; a process referred to as knowledge conversion. Mats and Mats (2017) reviewed the theory by Nonaka and other scholars (Nonaka,

1994; Nonaka, Byosiere, Borucki & Konno, 1994). The theory consists of the following four main knowledge conversions:

Socialisation (Tacit to Tacit))

Socialisation is the process where individual share experiences and tacit knowledge through direct interaction (Nonaka, 1994). Organisations develop social networks where employees interact and share experiences. According to Nonaka and Takeuchi (1995) trainees works with their mentors through imitation and from that they are able to acquire knowledge. This is illustrated through an informal meeting that was held at Honda to demystify how complex project development takes place through camps for brainstorming session (*tama dashi kai[1]*) forming examples of socialisation in an environment for yielding knowledge through a learning process.

Externalisation (Tacit to Explicit)

Nonaka and Tekauchi's (1995) state that articulation of tacit knowledge to clear and understandable concepts can be archived through the process of externalisation. Externalisation makes tacit knowledge explicit. Externalisation is the process where conversion of tacit occurs to yield explicit knowledge so that it is shared and articulated easily (Hemmecke & Stary, 2004). Externalisation can be done through documentation of tacit knowledge. It is mostly applied in creating knowledge in a formalised educational training.

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[1] *tama dashi kai* is Japanese name for informal meeting for detailed discussion to solve difficult problems in development projects.

Combination (Explicit to Explicit)

According to Naicker, Govender and Naidoo (2014) organising and integrating documented knowledge is referred to as combination. This is done to enable knowledge conversion. This process is enabled by use of technologies like databases that can be used in the conversion of coded knowledge from one format to another. In departmental meeting individual share documents and memos, and from this they develop better strategies that guide the organisation hence combination (Nonaka & Takeuchi, 1995).

Internalisation (Explicit to Tacit)

This is a procedure for converting to tacit knowledge from explicit knowledge. It is done when people learn by doing. The formal education that one gets is turned in to practical aspect in real life (Nold, 2009). Nonaka and Tekauchi (1995) explain that the skills learnt through socialisation, externalisation and combinations are internalised into personal tacit knowledge inform of shared know-how. Documenting it may assist a person to internalise the experience through encounters thus making their tacit knowledge very rich. It can then be documented in manuals which can be used to transmit explicit knowledge indirectly to other people by gaining experience held by others.

The phases of Nonaka and Takeuchi (1995) knowledge transfer process (SECI model) indicate that sharing of knowledge between persons lead to the conversion of knowledge. This study adoped SECI model because it was deemed suitable in understanding the process of knowledge transfer and retention. First, the theory helps the research by giving it definition of knowledge that is transferred or retained. Nonaka and Takeuchi (1995) defined knowledge and explained that it is useful in organisational terms in relation to the acts of people.

2.8 Conceptual Framework

In this study, service delivery is considered the dependent variable. Indicators of service delivery are accessibility, timelines, cost of service, service efficiency, quality, and accountability (Damanhuri, 2014). The independent variables are knowledge transfer and knowledge retention. The independent variables are anchored on the theory of organisation knowledge conversion. The four phases of SECI model assisted in this study (Socialisation, Externalisation, Combination and Internalisation). Figure 5 illustrates the conceptual framework of this study.

Socialisation	Externalisation
Community of practice	Blogs
Story telling	Exit interview
Mentorship	Formal education
Training	
Combination	**Internalisation**
Best practices	Job shadowing
Institutional repositories	

Independent variables
Knowledge transfer and retention

Dependent variables
Service delivery

Efficiency

Quality

Accountability

Cost of service

Timeliness

Accessibility

Figure 5: Conceptual framework

Source: Researcher (2019)

2.9 Literature Gaps

Without knowledge transfer and retention, the workers in the organisation and other stakeholders are still fixed in silos that are knitted together in a poor way; hence, they are prone to duplicating jobs and repeated tasks. Gaffoor and Cloete (2010) asserts that failure to adopt knowledge transfer and retention can lead to organisation resources being wasted, forgetting ideas that are good and strength not harnessed. Costs can be incurred thus affecting the efficiencies and effectiveness of the entire process in county governments. Studies have shown that low information levels and the process of transferring and retaining knowledge within public sector is the main contributor in delivery of poor services (Ismail & Yusof, 2009).

However, Syed-Ikhsan and Rowland (2004) explain that previous studies on knowledge transfer and retention practices in countries, especially in the public sector, for example, counties are very few. A number of studies that have been done in Kenya on knowledge transfer and retention include those done by Namasaka, Mondoh and Wasike (2017). Their study only focused on knowledge retention in schools and not knowledge transfer. They covered effects of sequential teaching methods on retention of knowledge in biology by secondary school students in Kenya; the subject matter of the study is chronologically a sensitive affair. This is because the time span is a long and many things may have changed within the period especially considering that a new government came in after the election of 2017 including Nairobi City County.

Therefore, the researcher by conducting this study fills the gap left by previous researches on knowledge transfer and sharing by examining how knowledge transfer and retention strategies may lead to improvement as they face continuous public sector reforms and demand for efficient and effective service delivery. The significance of having knowledge transfer and retention in the public sector is recognised but the tools, culture and resultant effects of sharing and retaining

knowledge are yet to be fully studied in Kenya, especially in Nairobi City County Government. On this background, this study aims to propose strategies for better knowledge transfer and retention.

2.10 Chapter Summary

This chapter reviewed literature based on the research objectives. The concepts of knowledge transfer and retention were discussed. Factors that hinder knowledge transfer for retention purposes were also examined. Theoretical and conceptual frameworks were also discussed.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Methodology in research is defined by Kumar (2014) is a concept that considers and explains the reasoning behind the research methods and techniques selected by a researcher for a study. It can also be defined as the study of methods used for knowledge acquisition. This chapter explains the methodology adopted in this study. This Chapter presents the research design, the population and sample size used for in this study. It also presents the procedures that were used to do sampling together with the data collection method.

3.2 Philosophical world views

Creswell and Plano (2011) describes four worldviews used in research as post-positivism, pragmatism, constructivism, and advocacy/participatory and pragmatism. These worldview's key characteristics are presented in Table 1 below.

Table 1: Philosophical world views

Post-positivism	*Constructivism*
• Determination	• Understanding
• Reductionism	• Multiple participant meanings
• Empirical observation and measurement	• Social and historical construction
• Theory verification	• Theory generation
Advocacy/Participatory	*Pragmatism*
• Political	• Consequences of actions
• Empowerment Issue-oriented	• Problem-centred
• Collaborative	• Pluralistic
• Change-oriented	• Real-world practice oriented

Source: Cresswell (2011)

Post-positivism: Emphasise on the need to recognise and survey on the causes that have an impact on results. It is similar to reductionist the expectation is to reduce reasoning into lower

distinct degree of understanding to test ideas. Examples are the concepts that put into consideration the research questions and the theories involved.

Constructivism: Holds the assumptions that a person may get to understand the world around them. This gives individual prejudiced meaning of their work which is not only varied but also multiple. The researchers, therefore, rely on the views given by the contributors on the issues being studied. In this case, the researcher relies on open-ended questioning for the respondents to better understand what they say or do in their lives. It is most appropriate for a qualitative research which entails ethnographic design and observation behaviour.

Advocacy/participatory worldview: It explains that politics and political agenda should be integrated in a study. Therefore, a plan of action should be embedded in any a research. This action plan should bring a change in the participant's lives, the organisation where they work as well as the life of the person conducting the research.

Pragmatism: This worldview emerges from the actions and circumstances, and the consequences from the actions as opposed to the previous situations as suggested by post positivists. It concerns the applications of what gives a solution to a specified problem. Rather than focus on the methodology, an emphasis is put on the research problem. The one doing research applies all kinds of approaches to identify with the problem. This approach reinforces the philosophy of mixed methods in social science researches to focus attention and convey the significance of the research problem. Pluralistic approaches then follow to give more information about the problem so as to assist the researcher to get answers to research questions. Dickson and DeSanctis (1990) posit that pragmatism tradition has taken a firm hold on research studies. This opinion is supported by Orlikowski and Baroudi (1991) who note that 96.8% of

research studies in the leading US information science journals conform to this paradigm. Consequently, this study is underpinned on the pragmatism research world view because it allows the researcher to use mixed methods research design. The study began with a broad survey in order to generalise results to a population and then in a second phase, focused on qualitative, open-ended interviews to collect detailed views from participants. This flexibility influenced the selection of pragmatism as the philosophical world view to anchor the study.

3.3 Research design

The researcher employed a mixed method research design in this study. Creswell and Poth (2017) explain that a mixed research method is used to gather, evaluate, and deduce quantifiable and qualitative data in one study or in a chain of studies investigating the same phenomenon. It entails employing quantitative techniques to provide answers to research questions that require numerical data. It, however, takes a qualitative approach when providing answers to research questions that requires qualitative data. Williams (2007) agrees that mixed method research approach is appropriate for research questions that require both textual and numerical data. Kumar (2014) argues that mixed research methods have an advantage over other methods because: it enhances research possibilities in circumstances where all the objectives cannot be explored using one method; it permits the researcher to concurrently provide answers to questions that confirms and explore further to questions on knowledge transfer and retention. According to Creswell and Plano (2011), mixed method design can be divided into the following areas:

Explanatory sequential design:

This entails conducting the research in phases. A quantitative study is carried out first where the quantitative data is collected and analysed. The result of the quantitative data is reinforced by conducting a qualitative research from the same sample. This results in a sequence where there is a chronological order of the two phases. The researcher first conducts a quantitative research followed by a qualitative study follows. It is deemed explanatory because of the use of the qualitative data to expound on the quantitative data.

Exploratory sequential mixed method:

In this case the two phases of research start with a qualitative phase where the participant's views are explored by the researcher. The researcher then constructs the quantitative phase from the analysed data and the information from the qualitative stage. Therefore, the first stage assists in building of the instrument to fit the sample of the second phase.

*C*onvergent parallel *design*:

In this design, the researcher simultaneously conducts both elements of quantitative and qualitative in the research within the same stage of the research process. The researcher then gives both methods equal weighting, analyses the two components independently, and interprets the results simultaneously (Creswell &Plano-Clark, 2011).

The researcher adopted a convergent parallel design to collect both qualitative and quantitative data. The data that was collected was independently but concurrently analysed. The researcher then obtained the results from both sets of data, merging them for comparison and validation. This enhanced the interpretation of similar and dissimilar concepts. The researcher used the

quantitative to test the independent variable of knowledge transfer and retention and the influence they have on service delivery which was the dependent variable in this study.

3.4 Target population

Stangor (2011) describes target population as the whole group of people that the researcher has a desire to learn from. The study had a target population of 12,363. These were all employees of Nairobi City County Government. Given that knowledge is expected to flow in every section of the Nairobi City County Government, the targeted population came from the different sections of Nairobi City County Government. The population of this study is summarised in Table 2 below.

Table 2: Target population

S/No.	Portfolio	Population
1.	Top level Management	84
2.	Middle level Management	2257
3.	Lower level employees	10,022
Total		**12363**

Source: Nairobi City County Government (2019)

The Top Level management at the Nairobi City County Government are in charge of controlling and managing the whole of Nairobi City County. They formulate policies, key plans, organisational strategies, and settle on choices on the bearing of the county. Middle Level management are responsible to the top administration for their specialty's capacity while the Low Level employees are responsible of doing the actual work.

3.5 Sampling technique

In this study, the researcher used multi-stage sampling technique. Alvi (2016) explains that a multiple-stage sampling technique is where more than two sampling techniques are used in the same research. This can be perceived as sampling within samples in which the last sample is obtained by sampling from different levels/stages. A stratified sampling was initially used by the

researcher to obtain the first sample thus generating the following strata; Top Level Management, the Middle Level Management and the Lower Level Employees. According to Leedy and Ormond (2015), cases used in a sample are selected for a specific purpose. This is linked directly to the study or are chosen and included since they give different perspectives on an issue. Therefore, by employing stratified sampling, the study identified and targeted individuals believed to be typical of the population being studied by the researcher and who fall in categories of interest to the study as suggested by Davies (2017).

The researcher then conducted the second stage of sampling from the strata to determine the actual respondents. The researcher made use of an information-oriented purposive sampling to sample the Top Level Management because they are likely to make key decisions affecting the adoption and implementation of knowledge transfer and retention strategies, therefore, they were considered to be information rich. According to Palinkas, Horwitz, Green, Wisdom, Duan and Hoagwood (2015) a purposive sampling technique that is information-oriented can be used extensively to identify and select respondent who have rich information where limited resources are effectively used.

A simple random sampling technique then followed to get the actual sample from the Middle Level Management and Lower Level Employees. Kothari (2014) describes simple random sampling as a research technique that gives all items in a given population equal opportunity for selection as a sample. Obtaining a sample from the items in a population is entirely by chance or by probability. Because of this, the simple random sampling technique is occasionally referred to as a chancing method (method of chance).

3.6 Sample size and sampling procedure

A small group obtained from the population and is used for a study is referred to as a sample. The population is represented by the sample selected for a study. The procedure used to select a sample from the population (a number of objects or individuals within a population) is known as sampling. According to Orodho and Kombo (2012) sampling is done so that the characteristic of the group that is selected has a representation or the elements of everyone in the whole group. This view is shared by Best and Kahn (2016) who explains that a sample size is a subset of a statistical population selected for observation and analysis. It is also a comparatively lesser group of persons selected from a population for the purposes of investigation (Best & Khan, 2016).

The sample size for Top Level Management was forty (40) directors. The selection of the sample was limited to the departments offering essential services that is basic education, housing, health, water and sewerage, refuse and garbage collection, planning and development control, urban public transport, and fire-fighting services.

The researcher used Yamane (1973) formula to arrive at the sample size for Middle Level Management and Lower Level employees. The formula was applied due to its reliability and flexibility and because it fulfils the requirement of efficiency. The actual sample size for Middle Level management and Lower Level employees was seven hundred and six (706). Below is the Tara Yamane formula:

$$n = N/ (1+N(e)^2$$

n - sample size required

N- population size/ population under study

e- sampling error (For example, 0.10,0.05, 0.01)

e^2 - square of sampling error

By Substitution the following sample size was obtained

Middle Level management n=2257/1+2257*(0.05) ^{2}= 322

Lower Level employees n=10,022/1+10,022*(0.05) ^{2}= 384

Table 3: Sample size

S/No.	Portfolio	Population	Sample Size
1	Top Level Management	84	40
2	Middle Level Management	2,257	322
3	Lower Level employees	10,022	384
Total		**12,363**	**746**

3.7 Data collection techniques

The strategies used to gather data in this research was both quantitative and qualitative in nature. This involved application of questionnaires and interviews as well. The questionnaires were administered to the Middle Level and Lower Level staff. This is because the sample was large and hence difficult to interview. The questionnaire gave the researcher an opportunity to interrogate and examine the relationship among variables related to knowledge transfer, retention and service delivery.

Qualitative data was collected using interviews. The researcher interviewed the directors selected for the study because they were key informants. According to Rubin and Rubin (2012), an interview enables a follow up by the researcher thereby to gaining more information. This technique was best applied on the key informants because it enabled the researcher to make a follow-up and ask for clarification of concepts. The interview schedule contained questions

which were more concerned with policy issues and thus, their application on Top Level management who are involved with policy formulation and decision makers.

3.8 Data collection tools

The study incorporated both quantitative and qualitative research instruments. These comprised of questionnaire and interview schedules as explained in the sections below.

3.8.1 Structured questionnaires

Kumar (2014) describes a questionnaire as a written list of questions, which demands recorded answers from the respondents. The researcher used a structured questionnaire containing closed-ended questions based on Likert's scales as well as multiple choice questions. The questionnaires were administered to the Middle Level and lower level management employees. The questionnaires were self-administered this enabled the respondents to complete them on their own and at their own convenience. Because this sample was large, the administration of questionnaire was suitable for this category of respondents. Conducting personal interviews would have been difficult for the researcher to achieve. The use of questionnaires also ensured that all the necessary data required for analysis was obtained during data collection process. However, the total reliance on closed questions can distort results from a study (Creswell & Creswell, 2017).

Data that was collected was based on the following sections: Section A covered the demographics of the respondents which included age, gender and length of service of the staff; Section B covered the knowledge transfer and retention strategies on service delivery; reward/incentives that encourage knowledge transfer at Nairobi City County Government; Section C covered the relationship between knowledge transfer and retention strategies on

service delivery at Nairobi City County Government and Section D covered the challenges of knowledge transfer and retention on service delivery.

3.8.2 Interviews schedules

An interview schedule is a list of questions that the researcher prepares and is intended to assist in data collection involving the issue under investigation (Lewis-Beck, Bryman & Liao 2003). The interview schedules enhance the accuracy of the data collected. They also enable the collection of further information during follow-up. The schedules also ensure the flow and consistency of research questions. They help reduce the possibility of the researcher forgetting key questions during the interview. The tool was used to gather data from the key informants namely the Top Level management at the Nairobi City County Government.

The data that was collected using interview schedules. The schedules were based on the following sections: The policies that govern implementation of knowledge transfer and retention at Nairobi City County Government; the reward and incentives provided for knowledge transfer and retention; the challenges towards knowledge transfer and retention on service delivery and the strategies used to enhance knowledge transfer and retention on service delivery at Nairobi City County Government.

3.9 Data collection procedure

The researcher first presented the proposal to the Technical University of Kenya for approval before venturing into data collection. The approval was given through relevant letters from the Department of Information and Knowledge Management as well as the School of Graduate and Advanced Studies of the Technical University of Kenya. The researcher used these letters to seek permission from the National Commission for Science, Technology and Innovation (NACOSTI) to collect data. The researcher then sought approval from Nairobi City County Government to

carry out the research in their organisation. This was in accordance with the proposition of De Vos, Delport, Fouché and Strydom (2011) that a covering letter should be an integrated part of a questionnaire. Consequently, the researcher drafted a cover letter that was attached to the questionnaire. The cover letter outlined the nature of the study, explaining that participation in the research was voluntary and acknowledged the value derived from the participation respondents.

Once approvals were granted, the researcher went to the Nairobi City County Government offices to meet the respondents. The researcher coordinated how the questionnaires would be distributed and received back after their completion by the respondents. A telephone call was made an appointment made to meet and introduce the researcher to the interviewees who were used to obtain qualitative data. The researcher dropped the questionnaires in a central place from where the respondents picked them for filling. The researcher requested the respondents to fill and return the questionnaires to the central picking point within one (1) week.

3.10 Piloting

A pilot study was conducted by the researcher before the actual data collection. A pilot study is a small-scale trial of the data-collection instrument to determine the clarity of the questions. Polit and Beck (2016) who explains that a pilot study is applied to determine whether the instrument elicits the desired information. This study adopted a pre-test method. Essentially, pretesting is conducted in order to identify possible weaknesses in the research instruments. In addition, a pre-test study was necessary before the actual study to allow the researcher identify gaps in the questionnaire and the interview schedule and, hence, correct them before the commencing the study.

The pilot study acted as a shadow of what was to be expected in the actual data collection process, thus, preparing the researcher for data analysis. The researcher conducted the pilot study at the Kakamega County Government. The organisation was selected because it has similar characteristics to the one being studied. The research instruments were administered to a similar sample as that at Nairobi City County Government. Findings from the pilot study enabled the researcher to know that the background information on gender was missing from the questionnaire and that it had typo errors. Also, there was a suggestion to include Participant Respondent Information Sheet (*see appendix 4*) that enabled Nairobi City County Government employees to understand the concept of knowledge transfer and retention. The informants, who were very rich in information, suggested a review of the flow of questions in the interview schedule. The researcher made appropriate corrections as suggested by the respondents in the pilot study. This facilitated better data collection tools to be formulated and also gave an appropriate size of sample to administer the questionnaires to or conduct interviews with.

3.11 Data analysis and presentation

Leedy and Ormrod (2015) assert that data analysis is the process of applying scientific and statistical and/or rational methods to describe and demonstrate, condense and summarize, review and evaluate data. On the other hand, data presentation is described by Lacey and Luff (2001) as the visual and graphic, textual or pictorial representation showcasing the analysed data from the research. The study used both qualitative and quantitative approaches to analyse and present data based on the type of data collected.

3.11.1 Quantitative data analysis and presentation

Upon receiving the questionnaires from the respondents, the collected data was checked for errors and verification done to ensure it was consistent and accurate. This study adopted

statistical analysis for quantitative data. To conduct the statistical tests, the researcher used Statistical Package for Social Sciences (SPSS) version 25. SPSS was used to conduct the Pearson correlations and regression analysis to help in analysing the independent and dependent variables. The data was presented by use of graphs and tables.

3.11.2 Qualitative data analysis and presentation

Data analysis in qualitative research is usually done during data collection to allow questions to be refined and new avenues of enquiry to be developed (Guest, Namey & Mitchell, 2012). According to Ngulube (2015) extensive amounts of data tend to be generated through qualitative researches even if few sources are consulted. In this respect, Dawson (2009) categorises methods of analysing qualitative data as: thematic analysis, comparative analysis, content analysis and discourse analysis. This is supported by Vaismoradi, Turunen and Bondas (2013) who explain that there are two approaches that are commonly-used for data analysis are thematic analysis and content analysis.

This study adopted thematic analysis for qualitative data. This is because thematic analysis is considered as one of the foundational approaches to qualitative data analysis as explained by Anderson (2013) who argues that thematic analysis is the most appropriate when data is collected through interviews. Thematic analysis approach is inductive in nature and is predominantly common in qualitative studies (Ritchie, Lewis, Nicholls & Ormston, 2013). The qualitative data from the study that was obtained from the interview schedules. The researcher recorded the data as the interviewees were giving their responses. Through the data collection process, the researcher reviewed the patterns and themes that were exhibited. The researcher also conducted data reduction which involved removing the data that is not meaningful based on the research questions. To enable analysing of the data, the researcher grouped the data into

meaningful patterns or themes. By using the themes, the researcher was able to analyse the meaning of the themes and connect back to the questions. After analysing the data into themes, the researcher assembled, organised and compressed the data to facilitate drawing conclusion. The data was presented using graphs, textual display and table/matrix. This study, therefore, used ATLAS.ti software to analyse data based on thematic analysis approach. The themes that emerged from the study were used for coding and analysis and ATLAS.ti used to display generated data using network views illustrating relation in the various themes. The data was therefore presented according to the themes derived from the objectives in form of networks.

3.12 Validity and Reliability

The validity and reliability of the research was reached as explained below.

3.12.1 Validity

Kumar (2014) posits that validity refers to the ability of a research instrument to measure what it was envisioned to measure. Brynard, Hanekom and Brynard (2014) agree that validity refers to the ability of a research design or instrument to measure and achieve what it was intended to do. Therefore, validity as a concept can be explained by procedures and accuracy of instruments employed for measurement. The researcher ensured that the research findings are valid by having the research instruments tested by experts in the field of research. The recommendations from the experts helped in revising the research instruments for enhanced validity. The researcher used data triangulation in order to reinforce the data and results obtained. This was done by collecting both qualitative and quantitative data to enhance the validity of the findings. This is because the researcher was able to get the same result from the different types of data which enhanced generalisation.

3.12.2 Reliability

According to David and Sutton (2004), reliability means the degree to which the indicator or test is consistent over time. For example, if respondents are asked the same questions at different times, they will offer similar responses every time they are asked. Simply put, reliability is concerned with the accuracy and consistency of measures. This, therefore, means that an instrument must yield similar data much later when subjected to same conditions, for instance, when a test-retest technique is employed (Brynard, *et al.*, 2014).

To ensure the reliability of the instruments, the researcher pre-tested the research tools at Kakamega County Government. The researcher also used data triangulation by the use of different tools such as questionnaires and interviews to collect data.

3.13 Ethical Considerations

Major ethical issues that were observed when conducting this research are discussed in subsequent paragraphs.

3.13.1 Permission to collect data

The researcher made a request to the Postgraduate School at the Technical University of Kenya to offer an introduction letter to be taken to NACOSTI so as to obtain a research permit to conduct the research (*see Appendix 9*). The researcher then applied for NACOSTI for a research permit (*see Appendix 10 & 11*). After obtaining the research permit from NACOSTI, the research made another request to Nairobi City County Government to give a letter of authorisation to collect data (*see Appendix 12*).

3.13.2 Confidentiality

The researcher assured the respondents of their confidentiality and protection from any harm that may arise from the research. The researcher gave assurance that the findings would only be used for the study. Consequently, the respondents' personal details were not incorporated in the data collection tools. Only the background information (age, gender and year worked in the organisation) were captured but with the assurance of ultimate anonymity of the respondents.

3.13.3 Respect for privacy

Privacy refers to the right of an individual to determine the circumstances, time, and extent, type of information to share or withhold from others (Polit & Beck 2016). Privacy is based on the principle of respect, therefore, the researcher ensured privacy of the respondents at all times during the research. For example, the researcher avoided asking questions about personal matters.

3.13.4 Informed consent

The researcher made sure that the respondents interviewed agree to be interviewed. This was by understanding and demonstrating the willingness to participate in the study by signing an informed consent form. The respondents were also asked to authorise any audio-visual recording of the interviews.

3.14 Chapter summary

This chapter presented the philosophical world views underlying the research methodology. In addition, discussion on research design, target population, sampling techniques, sample size, data collection techniques, data collection tools and piloting of the study. The chapter also discussed data analysis, presentation, ethical considerations, reliability and validity of the research.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.0 Introduction

This chapter presents the analysed data and the findings from the research based on the objectives of the study. The data was obtained from questionnaires and interviews and analysed to give results. The chapter is divided into three main sections. The first section is about descriptive statistics on the background information of the respondents. The second section presents the research findings while the third section is on correlations and regression analysis.

4.1 Response rate

Response rate refers to the degree of complete responses actually provided or obtained from the targeted respondents. This rate was obtained by calculating the number of respondents who successfully completed the questionnaires or participated in the interview divided by the sample size used in the study, then multiplied by one hundred in order to get the percentage. The sample size for the research constituted 746 respondents. The researcher targeted to interview 40 respondents while questionnaires were administered to 706 respondents. The research response rate obtained per strata is shown in Table 4.

Table 4: Response rate

Portfolio	Sample size	Number of responses	Response rate (%)
Top level Management	40	24	60
Middle Level Management	322	263	82
Lower Level Employees	384	300	78
Total	**746**	**587**	**79**

The total response rate from the interviews and questionnaires was 587 (79%). Out of the 322 questionnaires administered to the Middle Level management, 263(82%) were duly filled and returned. Similarly, out of 384 questionnaires administered to lower level employees 300(78%) were dully filled and returned. In regards to the interviews, only 24(60%) were done out of the anticipated 40 for the Top Level management of Nairobi City County Government.

4.2 Background Information

This section of the questionnaire and interview schedule was meant to collect the background information of the respondents. The respondents were asked to indicate their gender and work experience.

4.2.1 Gender of the respondent

The gender distribution of the respondents is indicated in Figure 6 below.
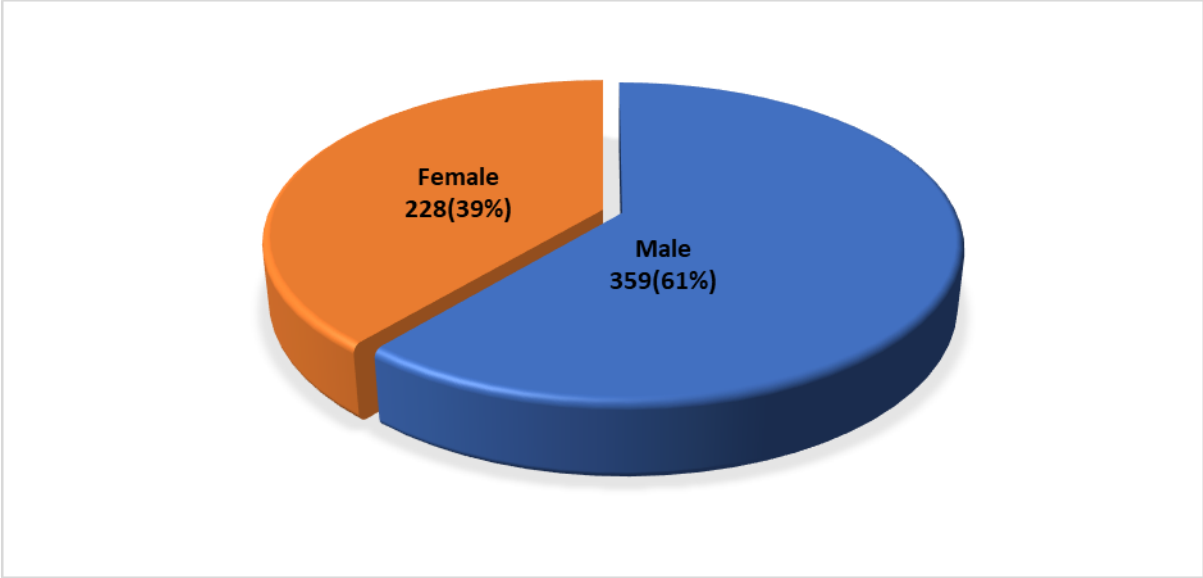
Figure 6: Distribution of Respondent by Gender

The study sought to establish the gender distribution of the respondents. From the findings, the study established that the majority of the respondents were male. The distribution shows that there were 359(61%) males whereas females were 228(39%).

4.2.2 Period worked at Nairobi City County Government

In order to determine the respondents' period of service at Nairobi City County Government, the study requested the respondents to indicate the number of years they had worked at Nairobi City County Government. This information indicating the number of years worked by the respondents at Nairobi City County Government is provided by Figure 7.
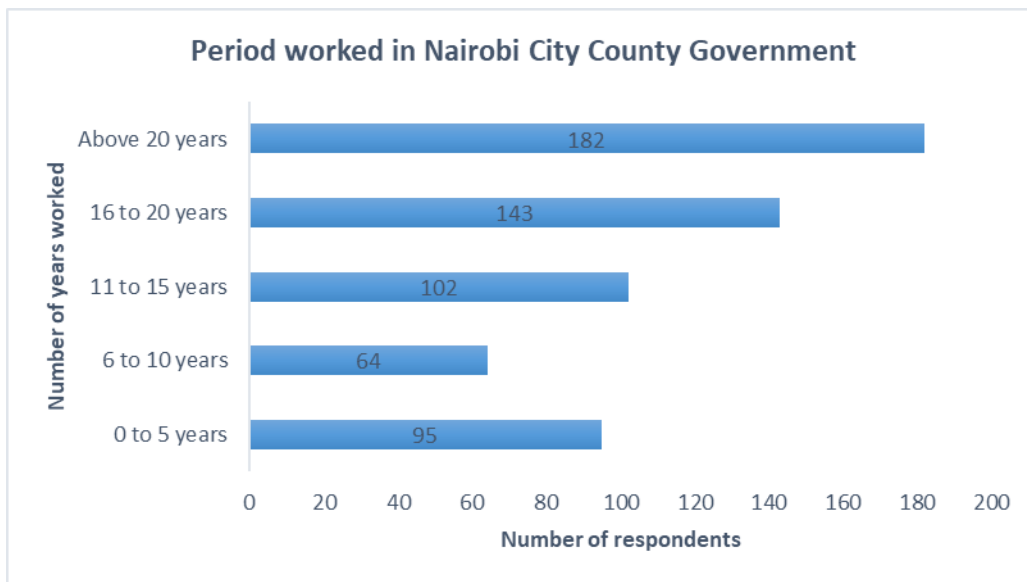
Figure 7: Period worked at Nairobi City County Government

The findings of the study indicate that most 182(31%) of the respondents had worked for 20 years and above; 143(24%) had worked for 16 to 20 years; 102(17%) had worked for 11 to 15 years; 95(16%) had worked for 0 to 5 years; and lastly 64(11%) had worked for 6 to 10 years. This is an indication that the respondents were well distributed in terms of the period they had worked for the Nairobi City County Government.

4.3 Methods of knowledge transfer and retention used at Nairobi City County Government

The respondents were asked about the methods of knowledge transfer and retention they use or have experienced being in use at Nairobi City County Government. The following results were obtained.

4.3.1 Knowledge transfer methods

When respondents in the Top-Level management were interviewed on knowledge transfer methods that they use or have come across during their work period at Nairobi City County Government, the following methods were mentioned: trainings, workshops, mentorship, communities of practice, conferences, departmental meetings, and social media. The themes were presented using a network. The codes showing the workflows are illustrated as follows:

- Trainings: 22 times in 24 primary documents

- Mentorship: 14 times in 10 primary documents

- Community of Practice: 4 times in 8 primary documents

- Conferences: 13 times in 9 primary documents

- Departmental meetings: 20 times in 20 primary documents

- Social media: 18 times in 20 primary documents

Figure 8 illustrates the network view of workflow on knowledge transfer methods using the themes from data and their respective relationship.
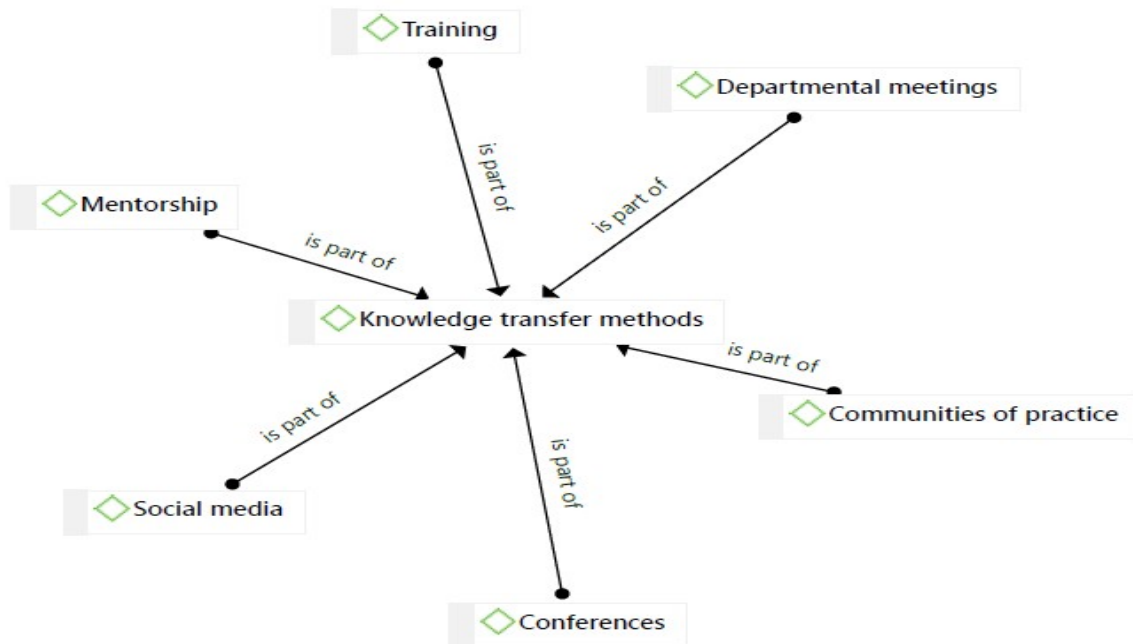
Figure 8: Knowledge transfer methods

Excerpts on knowledge transfer methods from interviewed respondents

The following arse of excerpts from interviews with the respondents with regards to knowledge transfer methods:

"Nairobi County is privileged to carry out continuous training of our employees to help in capacity building and enhance service delivery"

"For us, training is very important since things are changing very fast here"

"Nairobi County has had high rate of staff turnover in the recent past so it has been very important to equip our staff with requisite knowledge to handle activities here"

"When I came to Nairobi City County a few months back, I attended a few conferences and was given documents on training to read... I spent time daily reading them ... I imagined how I embody the capacities and

transfer… It reminded me that even though I was capable in my new role I

still required a lot of knowledge from previous expertise…"

"We do have mentorship programmes where young employees can

sometimes listen to and learn from older employees through stories…"

The respondents in the Middle Level management and Lower Level employees were asked about methods of knowledge transfer that they use or have come across at the Nairobi City County Government. The findings are presented in Figure 9.
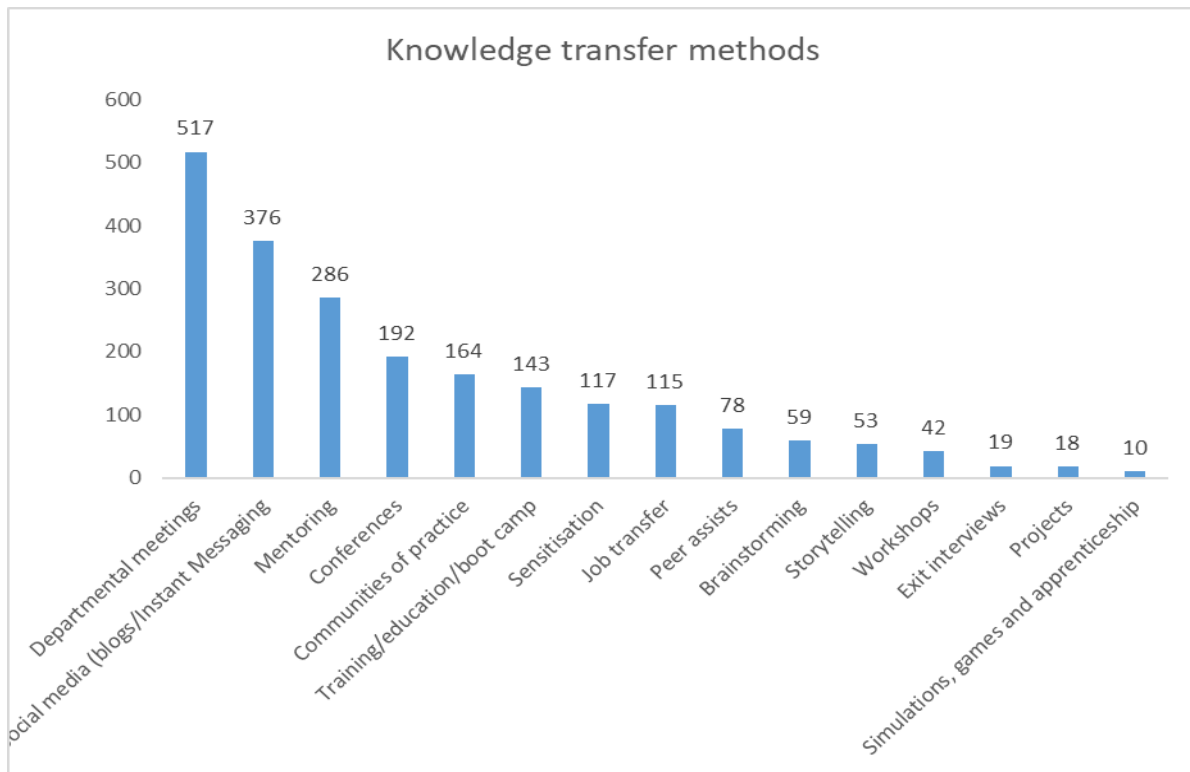
Figure 9: Knowledge transfer methods experienced by Middle Level management and Lower Level employees

This was a multiple response question where the respondents could choose more than one method of knowledge transfer. The total entries were 2189. The percentages where calculated

out of the total number of entries and not out of the respondents. Most of the respondents 517 (24%) indicated that departmental meetings were the most commonly used method of knowledge transfer at Nairobi City County Government. It was followed by social media (blogs/Instant Messaging) at 376 (17%); mentoring at 286(13%); conferences at 192(9%); communities of practice at 164(7%); training/education/boot camp at 143 (6%); sensitisation at 117 (5%); job transfer at 115 (5%); peer assists at 78(4%); brainstorming at 59(3%); storytelling at 53(2%); workshops at 42(2%); exit interviews at 19(1%); projects at 18(1%); and simulations, games and apprenticeship each at 10 (1%).

4.3.2 Knowledge retention methods

The Middle Level management and Lower Level employees were asked about the method(s) of knowledge retention that they use or have come across while working at Nairobi City County Government. The findings are presented in Figure 10.

Figure 10: Methods of knowledge retention experienced by Middle Level and Lower Level employees

This was a multiple response question where the respondents could choose more than one method of knowledge retention. The total entries were 830. The percentages where calculated out of the total number of entries and not out of the respondents. As shown by Figure 10 above, most of the respondents indicated that Nairobi City County Government retains knowledge through repositories 222(27%) followed by mentorship/job shadowing at 192(23%), job rotation at 156(19%), online communities/blogs 111(13%), after action reviews 56(7%), company procedures/processes manuals 49(5%), and conducting exit interviews and keeping the records 22 (3%) and oral history/storytelling at 22 (3%).

When the researcher interviewed the Top Level management on knowledge retention methods used in Nairobi City County Government, the following themes emerged from the interview: repositories, mentorship, records, reviews, strategic plans, policy documents and trainings.

The codes showing the themes are illustrated as follows:

- Trainings: 18 times in 16 primary documents

- Mentorship: 20 times in 20 primary documents

- Records: 16 times in 14 primary documents

- Strategic plans: 13 times in 9 primary documents

- Policy documents: 8 times in 8 primary documents

- Reviews: 3 times in 3 primary documents

These responses are summarised in Figure 11. The network shows the knowledge retention methods by identifying 6 major themes and their respective relationships.
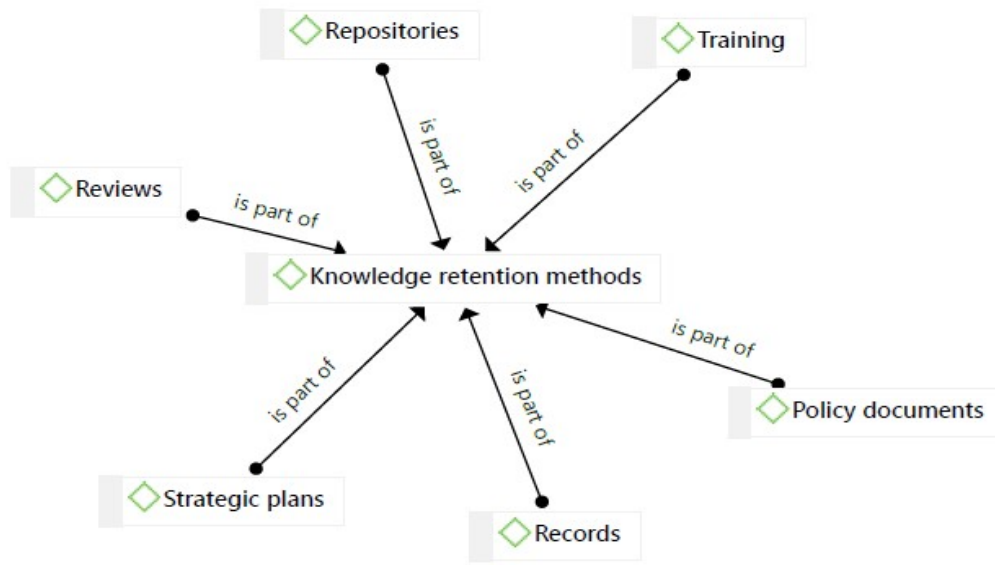
Figure 11: Knowledge retention methods by Top Level management

4.3.3 Rewards/incentives used to encourage knowledge transfer

The respondents were asked to indicate if there are rewards/incentives put in place to encourage knowledge transfer and retention at Nairobi City County Government. The data is presented in Table 5.

Table 5: Rewards/Incentives used to encourage knowledge transfer at Nairobi City County Government

Reward/incentives	Responses	Percentages
Promotion at work	8	1.4%
Pay rise (Salary rise)	5	0.9%
Tangible rewards (trophy)	121	21.5%
Monetary rewards	19	3.4%
Recognition	343	60.9%
Competitive rankings	67	11.9%
Total	**563**	**100%**

The findings in Table 5 indicate that most 343(60.9%) of the respondents are of the opinion that the Nairobi City County Government staff receive recognition as an incentive/reward for

knowledge transfer/retention; 121(21.5%) showed that employees are awarded tangible rewards (trophy); 67(11.9%) of the respondents indicated competitive rankings; while monetary rewards was indicated by 19(3.4%)respondents; promotion by 8(1.4%) of the respondents. The minority 5(0.9%) of the respondents said they get a pay rise as incentive/reward to encourage knowledge transfer and retention at the Nairobi City County Government.

4.3.4 Reward/incentives encouraging knowledge retention

The respondents at the Top-Level management were asked to indicate the rewards/incentives put in place to encourage knowledge retention at Nairobi City County government. The findings are presented in Figure 12.

The respondents indicated the following as the major rewards/incentives used at Nairobi City County Government to encourage knowledge retention. The themes that emerged from the interview of Top-Level management employees are:

- Leave (maternity, study, annual, family responsibility, etc.): 22 times in 22 primary documents

- Retirement work life (work environment): 18 times in 20 primary documents

- Tools for the job (systems, technology): 20 time in 22 primary documents

- Access to latest technology: 15 time in 20 primary documents

- Work-life balance and flexible working arrangements: 24 times in 24 primary documents

- Office environment (facilities and support): 10 times in 7 primary documents

- Leadership support: 19 times in 20 primary documents

- Opportunities for self-directed learning and development: 16 times in 18 primary documents

- Having a clear career path and planning: 7 times in 13 primary documents

- Acknowledgement for achieving organisational goals: 19 times in 22 primary documents.
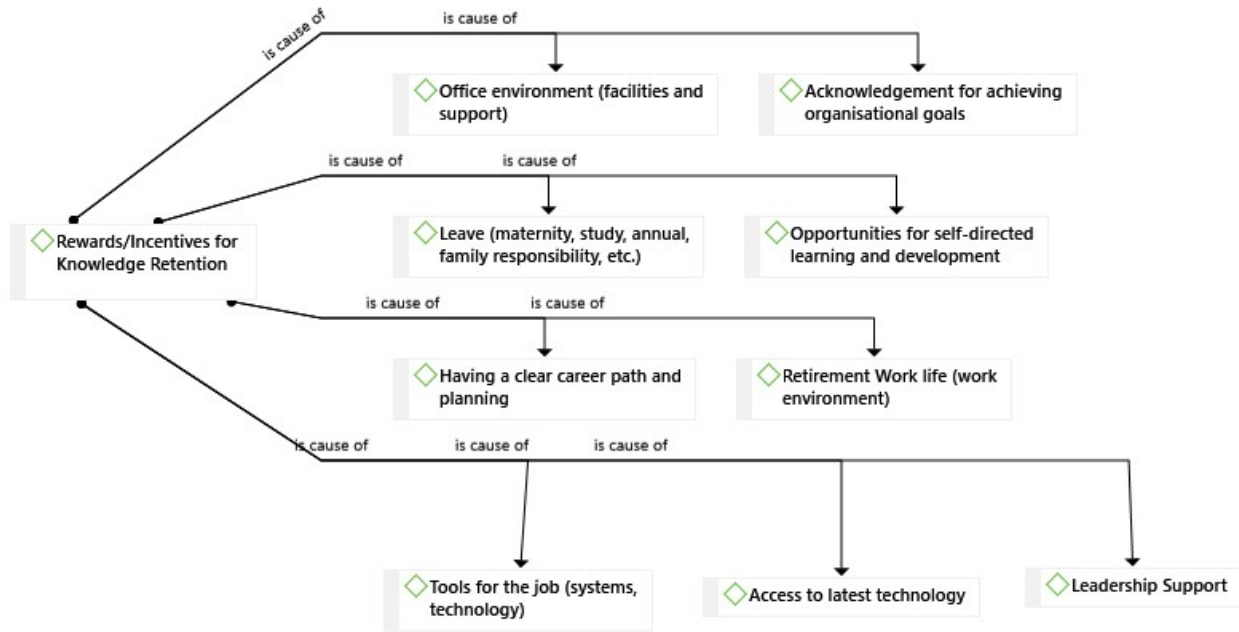
Figure 12: Knowledge retention rewards/incentives at Nairobi City County Government

The following are excerpts from the respondents on rewards for encouraging knowledge retention at Nairobi City County Government:

"Through knowledge retention the organisation is able to give leave of absence and still continue operating normally at the Nairobi City County Government since those in office can use the retained knowledge."

"When the Nairobi City County Government acquires proper tools that can help retain knowledge, it will encourage and act as an incentive for us to retain knowledge."

"I think we have good leadership that encourages the county to retain knowledge"

4.4 Challenges facing knowledge transfer and retention at Nairobi City County Government

The respondents were asked to indicate the challenges they faced in transferring and retaining knowledge at Nairobi City County Government. The themes that emerged from the questionnaires returned by the Middle Level management and Lower Level employees were as follows: fear of job loss when knowledge is transferred, technophobia especially for those who are not competent in the use of social media and computers; inadequate funding; lack of support from Top Level management and performance contracting. The codes below show the challenges faced on knowledge transfer and retention for service delivery:

- Job loss: 316 times in 302 primary documents

- Performance contracting: 31 times in 31 primary documents

- Technophobia: 487 times in 400 primary documents

- Inadequate funding: 410 times in 400 primary documents

- Lack of support from top management: 141 times in 157 primary documents

Data analysed indicated that technophobia was the most highlighted challenge (487 times in 400 primary documents), followed by inadequate funding (410 times in 400 primary documents). The least named challenge was performance contracting (31 times in 31 primary documents). These responses are summarised in Figure 13. The figure shows the challenges faced on knowledge transfer and retention by identifying 5 major themes and their respective relationships.
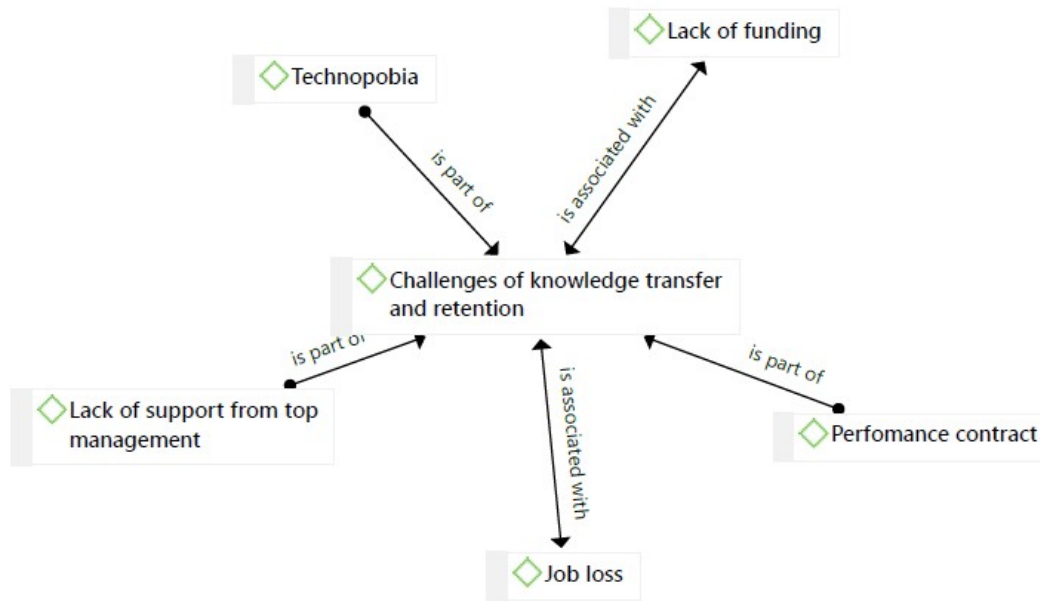
Figure 13: Challenges faced on knowledge transfer and retention for service delivery

4.4.1 Excerpts from interviews on knowledge transfer and retention challenges

Most respondents at the Top-Level management 18(75%) stated that the challenges of knowledge transfer are mostly related to performance contracting. Through performance contracting individuals set target to meet at a specific period and are rated by the outcome they deliver by the end of the period. The concept of performance contracting inhibits knowledge transfer because some employees have a feeling that knowledge shared will be used by the other person for competitive advantage. They further explained that this could be linked to fear of job loss. They indicated that there is inadequate funding to help in setting up infrastructure for knowledge retention. The minority 6(25%) indicated that the organisation provided for most of the items. They said that this was done through trainings and job rotation, thus, assisting in knowledge transfer and retention. They further stated that there are policies being put in place to assist in knowledge retention especially where employees are retiring. The following are

excerpts from the respondents on the challenges of knowledge transfer and retention at Nairobi City County Government:

"The resistance by the staff when transferring knowledge may be attributed to the fear of job losses."

"When we introduced knowledge transfer and retention strategies, there was staff resistance to change at the inception."

"The staff frequently forgot their passwords and there was fear of entering wrong data into systems and technological devices."

"There was lack of orientation."

"Lack of needs assessment and analysis to ascertain the equipment's and tools needed for knowledge retention contributed negatively to knowledge retention here"

4.4.2 Correlation analysis of challenges facing knowledge transfer and retention

From the questionnaires, the Middle Level and Lower Level employees were requested to rate on a Likert scale relationship between challenges of knowledge transfer and retention and service delivery. A correlation analysis of the data was computed using SPSS version 25. The variables to the challenges of knowledge transfer and retention (knowledge hoarding, lack of trust, lack of motivation, inappropriate communication channels, fear of job loss, lack of knowledge on subject and technophobia) were computed and combined using the SPSS version 25 to form the independent variable. This was then subjected to Pearson correlation analysis to show their relationship with service delivery. The Table 6 below shows the correlation analysis.

Table 6: Correlation analysis of challenges facing knowledge transfer and retention

		Accessibility	Timeliness	Quality	Accountability	Efficiency	Cost of the service	Challenges of knowledge transfer and retention
Accessibility	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	536						
Timeliness	Pearson Correlation	.782**	1					
	Sig. (2-tailed)	.000						
	N	536	536					
Quality	Pearson Correlation	.652**	.867**	1				
	Sig. (2-tailed)	.000	.000					
	N	536	536	536				
Accountability	Pearson Correlation	.826**	.802**	.945**	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	536	536	536	536			
Efficiency	Pearson Correlation	.605**	.797**	.755**	.658**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
	N	536	536	536	536	536		
Cost of the service	Pearson Correlation	.069	.274	.569**	.507**	.183	1	
	Sig. (2-tailed)	.547	.162	.002	.002	.367		
	N	536	536	536	536	536	536	
Challenges of knowledge transfer and retention	Pearson Correlation	.647**	.776**	.678**	.605**	.576**	.251	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.009	
	N	536	536	536	536	536	536	536

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The Table 6 indicates that accessibility, timeliness, quality, accountability, efficiency, and cost of service had a correlation coefficient of r= .647[*], r=. 776[**], r=.678[**], r=.605[**], r=.576[**], and r=.251[*] respectively. The significance level is also 0.000, 0.000, 0.000, 0.000, 0.000 and 0.009 respectively. Further interpretation of the findings is given in Table 7.

Table 7: Interpretation of the correlation of challenges facing knowledge transfer and retention on service delivery

Variable	Correlation results	Interpretation
Relationship between accessibility and challenges of knowledge transfer and retention	R = .647**, sig =.000	Strong positive, strongly significant relationship
Relationship between timeliness and challenges of knowledge transfer and retention	R = .776[**], sig = .000	Strong positive, strongly significant relationship
Relationship between quality and challenges of knowledge transfer and retention	R = .678[**], sig = .000	Strong positive, strongly significant relationship
Relationship between accountability and challenges of knowledge transfer and retention	R = .605[**], sig .000	Strong positive, strongly significant relationship
Relationship between efficiency and challenges of knowledge transfer and retention	R = .576[**], sig .000	Strong positive, strongly significant relationship
Relationship between cost of the service and challenges of knowledge transfer and retention	R = .251, sig .009	weak positive, and strongly significant relationship

4.5 Regression Analysis of challenges of knowledge transfer and retention

The researcher used SPSS version 25 to code, enter and compute multiple regression so as to establish the causal effect of one variable on the other. R-square (R^2) is a statistical term used to express how good one term is at predicting another. If R^2 is 1.0 then given the value of one term, you can perfectly predict the value of another term. If R^2 is 0.0, then knowing one term does not

help to know the other term at all. A high value of R^2 indicates that one can predict one variable from another. An R^2 of more than 50 percent is considered significant. The regression analysis for the effect of challenges of knowledge transfer and retention on service delivery was 0.545 representing 54.5%. This implies that the independent variables had a significant influence on the dependent variables at Nairobi City County Government. The Table 8 below shows the regression analysis results.

Table 8: Regression analysis on challenges of knowledge transfer and retention on service delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.691[a]	.545	.5288	.50834	.000

 a. Predictors: (Constant), challenges of knowledge transfer and retention

The Table 8 above indicate that challenges of knowledge transfer and retention greatly influence service delivery at Nairobi City County Government at 54.5 %.

4.6 Relationship between knowledge transfer/retention strategies and service delivery

The variables for knowledge transfer and retention were computed and combined using the SPSS version 25 to form the independent variable. This was then subjected to Pearson correlation analysis to show the relationship between knowledge transfer/retention and service delivery. Pearson correlation was used to establish the degree of association between variables under consideration, that is, independent variables and dependent variable. Pearson correlation coefficients range from -1 to +1. Negative values indicate negative correlation while positive values indicate positive correlation.

A positive *r* value expresses a positive relationship between the two variables (the larger the independent variable, the larger the dependent variable) while a negative *r* value indicates a negative relationship (the larger the independent variable, the smaller/lesser the dependent variable). A correlation coefficient of zero indicates no relationship between the variables at all. In instances where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient >0.5 indicates strong correlation. The Table 6 above shows the correlation of knowledge transfer/retention with service delivery of Nairobi City County Government while Table 9 below shows the correlation analysis.

Table 9: Correlation of knowledge transfer and retention and service delivery at Nairobi City County Government

Correlations for knowledge transfer and retention strategies		Accessibility	Timelines	Cost of service	Service efficiency	Quality	Accountability	Knowledge transfer strategies
Accessibility	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	536						
Timelines	Pearson Correlation	.133	1					
	Sig. (2-tailed)	.772						
	N	536	536					
Cost of service	Pearson Correlation	.534	.323	1				
	Sig. (2-tailed)	.087	.398					
	N	536	536	536				
Service efficiency	Pearson Correlation	.843**	.311	.799**	1			
	Sig. (2-tailed)	.008	.421	.023				
	N	536	536	536	536			
Quality	Pearson Correlation	.933**	.902	.445**	.893**	1		
	Sig. (2-tailed)	.0321	.675	.321	.112			
	N	536	536	536	536	536		
Accountability	Pearson Correlation	.0122	.087	.123	.341	.255	.324	
	Sig. (2-tailed)	.911	.672	.736	.645	.448	.984	
	N	536	536	536	536	536	536	
Knowledge transfer and retention strategies	Pearson Correlation	.691*	.526	.333	.492*	.689*	.754*	1
	Sig. (2-tailed)	.038	.124	.101	.308	.244	.323	
	N	536	536	536	536	536	536	536

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The Table 9 above indicates that accessibility, timeliness, cost of service, efficiency, quality and accountability had a correlation coefficient of r= .691*, r=. 526, r=.333, r=.492*, r=.689*, and r=.754* respectively. The significance level is also at 0.038, 0.124, 0.106, 0.308, 0.244 and 0.323 respectively. Further interpretation of the findings is given in Table 10 below.

Table 10: Interpretation of the correlation of knowledge transfer and retention strategies on service delivery

Variable	Correlation results	Interpretation
Relationship between knowledge transfer and retention strategies and accessibility of services	R = .691*, sig = .038	Strong positive, significant relationship
Relationship between knowledge transfer and retention strategies and timelines of services	R =.526, sig =.0124	Strong positive, significant relationship
Relationship between knowledge transfer and retention strategies and cost of services	R = .333, sig = .106	Moderate positive, insignificant relationship
Relationship between knowledge transfer and retention strategies and service efficiency	R = .492*, sig = .308	Moderate positive, insignificant relationship
Relationship between knowledge transfer and retention strategies and service quality	R = .689*, sig .0244	Strong positive, strongly significant relationship
Relationship between knowledge transfer and retention strategies and accountability	R = .774*, sig .0323	Strong positive, strongly significant relationship

4.7 Regression analysis for knowledge transfer and retention methods on service delivery

This was conducted to further establish the influence of the independent variable on the dependent variables. The researcher used SPSS version 25 to code, enter and compute multiple regression so as to establish the causal effect of one variable on the other. The Table 11 below shows the regression analysis.

Table 11: Regression analysis for knowledge transfer and retention strategies on service delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791[a]	.613	.607	.06310

The findings of regression analysis results in Table 11above shows that it yielded R^2 of 0.613 between significant variables all at 5% level of significance. The regression analysis for knowledge transfer and retention strategies on service delivery was 0.613 representing 61.3%. This implies that the independent variables had influence on the dependent variables at Nairobi City County Government.

Table 12: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Residual	2.785	6	0.711	5.101	.001[b]
	Regression	19.62	142	0.159		
	Total	23.142	138			

A significance level of 0.01 was depicted from the ANOVA calculations (processed information). Thus, the information shown was perfect for making conclusions since the significance value is less than 5%. The critical value being less than the calculated value (2.493<4.903) implied that knowledge transfer and retention strategies significantly affect service delivery. The significance value was less than 0.05, an indication that the model was statistically significant.

4.8 Strategies of enhancing the positive influence of knowledge transfer and retention on service delivery

The respondents from the Top-Level management were interviewed on strategies of enhancing the positive effect of knowledge transfer and retention on service delivery. The following themes emerged from the interview: recognition and rewards; use of project teams; exit interviews; benchmarking; social media; understudy; share point; mentorship; job rotation; after action reviews; and the golden gem.

The codes showing the themes are illustrated as follows:

- Social media: 22 times in 20 primary documents

- Job rotation: 20 times in 20 primary documents

- Mentorship: 18 times in 16 primary documents

- Recognition and rewards: 15 times in 12 primary documents

- Use of project teams: 13 times in 10 primary documents

- Benchmarking: 10 times in 8 primary documents

- Exit interviews: 8 times in 8 primary documents

- Golden gem: 3 times in 3 primary documents

- Understudy: 2 times in 2 primary documents

- SharePoint: 1 time in 1 primary document

From the themes above, the most highlighted strategy for knowledge transfer and retention was social media (22 times in 20 primary documents) while the least strategy was SharePoint (1 time in 1 primary document). Figure 14 illustrates the network view of themes on strategies of enhancing the positive influence of knowledge transfer and retention on service delivery using 12 codes from data and their respective relationship.
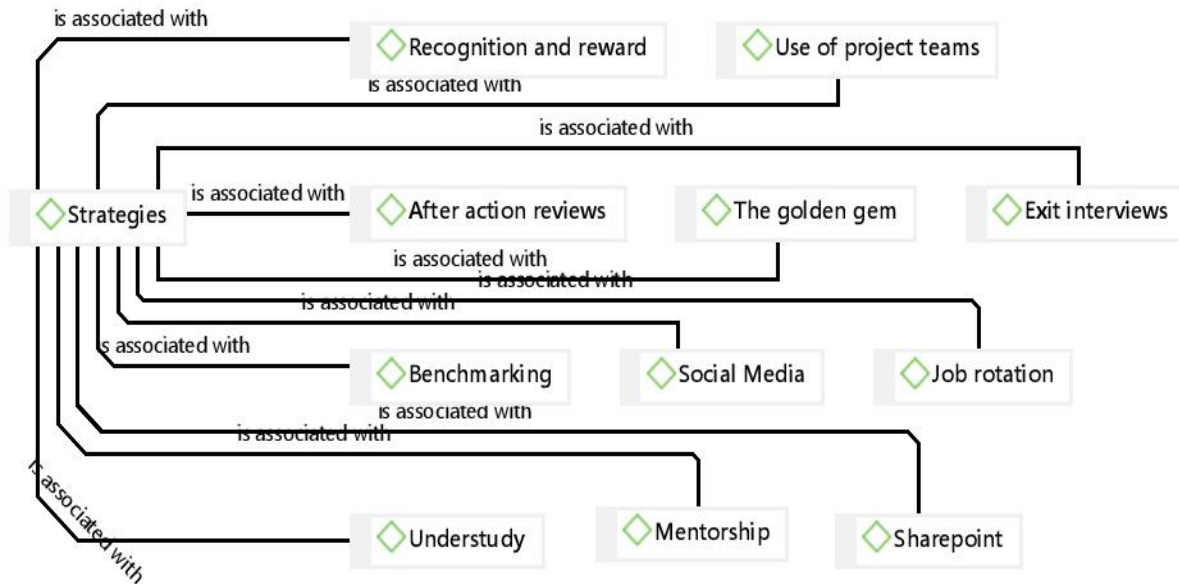
Figure 14: Strategies of enhancing the positive influence of knowledge transfer and retention on service delivery

The Figure 14 above shows that most of the respondents indicated that knowledge transfer and retention strategies have effect on service delivery and that there is need for more strategies than the usual strategies.

4.8.1 Excerpts from the interview on knowledge transfer among employees at Nairobi City County Government

The following are examples of excerpts from the respondents regarding employees at Nairobi City County Government:

"I believe continuous training, benchmarking and looking for best practice can positively lead to knowledge transfer that can be used as a strategy to improve knowledge transfer in our organisation."

"Quality assurance has been guaranteed due to staff strict adherence to the quality charters. This has contributed positively to effective and efficient service delivery"

"I think support from the Top-Level management has created conducive work environment. This is done them providing the funds and equipment's for knowledge transfer and retention"

"One major contributor of knowledge transfer and retention in our organisation is continuous job rotation. We don't allow one to be in the same job station for more than 2 years"

4.9 Chapter summary

This chapter presented the research data and its analysis. There are notable gaps in the way the Nairobi City County Government transfers and retains knowledge in order to improve service delivery. Nevertheless, it was established that knowledge transfers and retention strategies have positive effects on service delivery.

CHAPTER FIVE

INTERPRETATION AND DISCUSSION OF FINDINGS

5.0 Introduction

This chapter presents the researcher's interpretation and discussion of the data presented in Chapter Four. Interpretation is a process by which a researcher attaches meaning to the collected data and findings. The interpretation enables researchers to compare their findings and their meanings with those of other authors (Creswell & Plano, 2011). The purpose of this chapter is to interpret and critically discuss the significance of the findings in regard to what is already known about the knowledge transfer and retention methods and service delivery and to explain new understanding or insights about it. This chapter, therefore, connects the research questions to the reviewed literature and to the findings (Annesley, 2010). The interpretation and discussion are done based on the research objectives.

5.1 Response rate

Out of the 746 respondents sampled for the study, the researcher was able to obtain 587 responses resulting in 79% of the total sample. The response from the questionnaires was 563(79%) while that from interviews was 24(60%). The total response rate of 79% provided a reliable range from which the data was collected and significant findings drawn. This is in agreement with Mugenda and Mugenda (2012) who explain that a response rate of at least 50% is adequate for analysis and 60% response rate is generally good while 70% response rate is excellent. This notion is supported by Kothari (2014) who asserts that any response rate above 70% is very good for data analysis. Based on Mugenda and Mugenda (2012) and Kothari (2014) views the response rate for this research is deemed excellent as it yielded a response rate of 79%.

5.2 Profile of Respondents

Section A of the questionnaire included the background information of the respondents. This entailed their gender and years they have worked at Nairobi City County Government. This section was important because it showed that the findings were not biased in terms of gender and years worked in the county government. The findings revealed that most of the respondents (*see figure 6*) 359(61%) were male whereas 228(39%) were female. Therefore, both genders were involved in this research and consequently, the findings of this study did not have gender bias. The finding also indicated that majority of the respondents, 182(31%) had worked for 20 years and above at Nairobi City County Government while the minority 95(16%) had worked for between 0 to 5 years (*See figure 7*). This is in agreement with Mwaura, (2018) who asserts that most of the employees in county government have worked for many years and only 30 percent are youth,

According to Brčić and Mihelič (2015), by studying the respondent's general background and characteristics a researcher can understand how long the respondents have accumulated knowledge in a particular organisation. Assumptions are generally made that respondents who have worked for fewer years have less experience compared to the experience held by those who have worked for more years. However, this is not necessarily true because individual employees exhibit different level of understanding and knowledge gain or sharing as stated by Connelly and Kelloway (2013) who assert that the number of years an individual has worked in an organisation is not necessarily proportional to the experience gained. They explain further that this is because an individual may have built their knowledge from other organisations where they have worked or interacted with before coupled with personal interest.

5.3 Methods of knowledge transfer and retention in Nairobi City County Government

The first research objective was to establish the methods of knowledge transfer and retention used at Nairobi City County Government. The main goal of this objective was to know whether the Nairobi City County Government was applying any knowledge transfer and retention strategies. Most of the respondents from the interviewed respondents indicated that training (22 times in 24 primary documents) was the preferred method of knowledge transfer and retention. From the questionnaires the majority preferred departmental meeting 517 (24%) followed by social media at 376 (17%).

The findings indicate that apart from departmental meetings that do not necessarily have technological transfer, the other methods of knowledge transfer and retention relied on information and communication technologies. This is in agreement with Allameha, Zamani and Davoodi (2011) who argue that technology is an enabler of knowledge sharing and retention practices in many organisations. This sharing and retention is done through intranets and extranet adopted by organisations as a way of communicating both within and outside the organisation. These findings are also supported by Beazley, Boenisch and Harden (2012) who posit that departmental meetings in organisations facilitate knowledge sharing between experienced members of staff with the new members of staff. Therefore, the new members of staff can acquire new knowledge and skills to operate in the organisation from the skilled and experienced staff.

The least preferred methods for transferring and retention of knowledge were: exit interviews 19(1%); projects 18 (1%); and simulations, games and apprenticeship 10(1%). The explanation attributed to this is that the employees found it difficult to conduct exit interviews with members who were retiring or had resigned. This was because there was no policy that governed the

practice. They also mentioned that it was difficult to imitate their fellow employees while doing their day to day chores. This is because some skills are intangible and are difficult to imitate; they can only be explained for a person learn. The findings concur with Rayan (2016) who found that exit interviews and imitations are great ways of knowledge transfer and retention but face challenges in that the employees may be unwilling or unable to share knowledge and inborn skills are difficult to transfer.

5.3.1 Rewards/incentives encouraging knowledge transfer and retention

The findings of the study indicate that Nairobi City County Government employees receive rewards/incentives in the form of recognition for sharing knowledge as stated by 343(60.9%) of the respondents. In this case, the employee is only acknowledged for knowledge sharing and documentation. The interviewees explained that the major form of rewards/incentives that the Nairobi City County Government provides to its employees in order to encourage knowledge retention was to provide tools and training on how to retain knowledge as indicated by the occurrence of 24 times in 24 primary documents. The interviewees also indicated that there were no clear rewarding systems or strategy set aside to encourage knowledge sharing and retention. This agrees with literature which indicates that for greater knowledge sharing and retention, organisations should ensure that they put in place rewarding system. Jahani, Effendi and Ramayah (2013), opine that there is a relationship between knowledge transfer and retention and rewards provided by an organisation. Oliver and Kandadi (2016) concur with the findings and assert that providing rewards to employees motivates them to share and retain knowledge. Wai, Sandhu and Kishore (2009) also support this notion and explain that the utmost and effective method of encouraging knowledge transfer and retention in organisations is by linking it with rewards and performance appraisal.

5.4 Challenges facing knowledge transfer and retention in Nairobi City County Government

This objective identified the challenges of knowledge transfer and retention and their effect on service delivery. The respondents were asked to indicate the major challenges they face in transferring and retaining knowledge for service delivery at Nairobi City County government. The findings were indicated as follows:

5.4.1 Fear of job loss when knowledge is transferred or retained

Most of the respondents (316 times in 302 primary documents) identified the fear of job losses as one of the challenges affecting knowledge transfer and retention. The findings were further linked to correlation on service efficiency which gave a strong positive relationship (.576). This shows that fear of job loss affects knowledge transfer and retention which in turn affects the productivity of employees. This was in agreement with Weir and Hutchings (2005) who indicate that most employees in organisations fear losing their jobs. When people are fearful they do not contribute to the transfer of critical information that can be of benefit to the organisation since they are already suspicious of the organisations' true intentions. This is corroborated by a study done by Usoro, Sharratt, Tsui and Shekhar (2007) that examined the role that fear of job loss plays within virtual communities of practice. They found that those who experience fear of losing their jobs are usually afraid in contributing to any discussion within a community of practice. Knowledge transfer and retention within a community of practice is built on trust. Studies have shown that trust plays a pivotal role in knowledge transfer. Having trust among co-workers is an element of cultural importance when it comes to successful knowledge management practices (Issa & Haddad, 2008). Similarly, Snowden (2000) regards trust as a fundamental aspect of knowledge sharing, as well as one of the most crucial requirements for knowledge transfer.

5.4.2 Technophobia

Most of the respondents (487 times in the questionnaires) indicated that they were unable to use social media and Information Technology (IT) in their day to day work. This shows that Nairobi City County Government service delivery is affected by the challenges of knowledge transfer and retention. According to Zawawi, Zakaria, Kamarunzaman, Noordin, Sawal, Junos and Najid (2011), the main barriers to knowledge transfer are: failure to integrate IT systems and processes; lack of technical support and not maintaining integrated IT systems; the reluctance by people to use IT systems and lack of training. Because of this, organisations are taking steps to combat loss of knowledge by investing in technologies that facilitate knowledge transfer and retention but this is not the case at Nairobi City County Government. This was also evident from the correlation analysis which indicates a strong and positive relationship between challenges of knowledge transfer and retention on accessibility of services (.647). Accessibility of services in the Nairobi City County Government is currently through digital platforms. The fear of technology presents a challenge to the employees in sharing knowledge especially in this digital era. It also makes it difficult for people to document their knowledge thus affecting accessibility of services. This is because if the employees are not willing to document and use technology which has been provided to them it means that the service that are supposed to be provided will not be offered effectively.

5.4.3 Performance contracting

The respondents indicated that performance contracting is used to measure their job outcome (31 times in 31 primary documents). This was also evident from the correlation that indicated a strong positive relation of the challenges with accountability of service (.605). The employees are accountable for any work they do and this is stipulated in in their performance contract. This affects the knowledge transfer and retention because no one wants to share what they do in order

to remain competitive. According to Liebowitz and Yan (2004), it is difficult to transfer knowledge in public sector organisations since most employees believe that their knowledge may become obsolete once they transfer it. Others associate knowledge with power and their promotion opportunities and as such they do not share it.

5.4.4 Lack of support from top management

A finding that was conspicuous was lack of support from top management (235 times in 243 primary documents) especially regarding the reward systems and infrastructure facilities. This was linked to the correlation of challenges and timelines of service which gave a positive and strong relationship (.776). Similar to the findings of Asrar-ul-Haq and Anwar (2016), rewards motivate knowledge sharing and retention while their absence deters knowledge sharing and retention. Therefore, employees who are not motivated and rewarded tend not to share or retain their knowledge.

The study established that retention of highly skilled and experienced staff was not a priority at the Nairobi City County Government. This is because some employees were fired while some resigned due to political differences. This means that critical knowledge seeped away from Nairobi City County Government due to the resignations. In addition, knowledge loss occurred at Nairobi City County Government through retirements and deaths. Brown and Duguid (2001) linked this unwarranted external movement of knowledge as knowledge leakage. Dewah (2012) noted that quality of services is compromised in such organisations due to the gaps left by the experts leading to performance gaps in the organisations. Halawi, Aronson, and McCarthy (2005) argue that when employees leave organisations like municipalities, the organisation loses valuable knowledge that needs to be retained. This is because knowledge is arguably the most critical asset in an organisation.

5.5 Relationship between knowledge transfer and retention with service delivery

Several factors can be attributed to service delivery in relation to knowledge transfer and retention. The factors are discussed in the sections below.

5.5.1 Accessibility

There was a positive and significant relationship between accessibility and knowledge transfer and retention with a correlation of .691. This indicates that knowledge transfer and retention influence service delivery in terms of accessibility of services. Therefore, it means that delivery of services is made better through knowledge transfer and retention. This can be done through the creation of a public administration based on well organised and technically functional internal processes of knowledge transfer and retention which influences accessibility of service.

5.5.2 Timeliness

The results of findings showed that there is a strong positive and significant relationship between knowledge transfer and retention strategies and timeliness of services (r =526, sig =.0124). This indicates that knowledge transfer and retention have effects on timeliness of services. This linkage can be explained by the fact that when people share experiences, they enable each other to perform an activity faster and timely by sharing best practices and failure stories. The findings agree with that of Heck and Rogger (2004) who observed that knowledge transfer and retention interventions in the public service achieve significant improvement of service delivery in terms of timeliness in the mid and long term and facilitate considerable flow of information and equity in the distribution of responsibilities.

5.5.3 Cost of service

The findings of the study show that the cost of service has moderate positive, insignificant relationship with knowledge transfer and retention strategies (r = .333, sig = .106). This could be due to the fact that most of the services at Nairobi City County Government are free since it is a public organisation hence services should not be sold. In addition, the services offered that require payment are not linked to the knowhow of employees. These findings concur with a study by Cronin and Taylor (2012) on the relationship between service quality, customer satisfaction and purchasing intention in the United States. They found that customer satisfaction has a strong influence on purchasing intention when compared to service quality. This is because customers do not necessarily buy a quality service or a product with high quality instead, they buy based on convenience, price and availability; hence, there is an increase in customer satisfaction without a reduction on perception in the quality of service.

5.5.4 Service efficiency

The relationship between knowledge transfer and retention strategies and service efficiency was moderate (.492) and had an insignificant relationship (.308). This indicates that knowledge transfer and retention does not influence efficiency of services. Efficiency of service is how proficient the employees are able to give a service. This can be determined by other external factors than the knowledge of a person. These factors can be due to failure of technological equipment, work environment and policies governing service delivery. The finding of the study disagree with those of Mosoti and Masheka (2010) who argue that service efficiency is facilitated through knowledge transfer adding that employees will be more proficient and thus, offer services faster by sharing knowledge.

5.5.5 Quality

There was strong positive, strongly significant relationship between knowledge transfer and retention strategies and service quality (r = .689, sig .0244). This implies that there is high quality of service through knowledge transfer and retention. These results support those of Wiig (2002) who posits that knowledge transfer and retention are key concepts in enabling employees to carry out their routine work resulting in quality of outputs. Through knowledge transfer and retention, employees develop and maintain the ability to perform quality knowledge-intensive tasks and, thus, improving service.

5.5.6 Accountability

The findings indicate a strong positive, strongly significant relationship (.774, sig .0323) between knowledge transfer and retention strategies and accountability. This implies that when there is effective knowledge transfer and retention, accountability in the services offered by the Nairobi City County Government will increase. The findings concur with that of Agyemang, O'Dwyer, Unerman and Awumbila (2017) who argue that employees are accountable to the services they provide because the services lead to rewards.

5.6 Strategies of enhancing the positive influence of knowledge transfer and retention on service delivery

The last objective was to identify strategies that the Nairobi City County Government can embrace to leverage on knowledge transfer and retention so as to improve their service delivery. This was also based on the challenges that hamper effective knowledge transfer and retention within Nairobi City County Government. The respondents suggested various strategies that could be adopted to positively influence knowledge sharing and retention on service delivery. These strategies included use of social media to transfer and retain knowledge; job rotation;

mentorship; rewards; use of project teams; benchmarking; conducting exit interviews and understudy. These results agree with Wanyama (2018) who states that strategies like benchmarking, mentorship and job rotation have positive influence on ways of knowledge transfer and retention. Bassett (2017) also concurs with this view and explains that on job training and observation are effective ways of knowledge transfer and retention when compared to basic theoretical training. Organisations, therefore, need to adopt strategies that their employees are willing to take up and experiment with.

According to Kamau (2017) mentorship of employees by having them attached to other employees who perform better can enhance exchange and transfer of knowledge. This is in agreement with DeLong (2014) who asserts that knowledge can be transferred through mentorship between individuals. Islam, Agarwal and Ikeda (2015) suggest initiation of a knowledge retention process that estimates the risk of knowledge loss within an organisation through checking the knowledge at risk. Hayward-Wright (2017) emphasised the implementation and setting of foundations for organisations that actually want to know how to transfer experts' knowledge across organisations.

5.7 Chapter summary

This chapter discussed findings of the study based on the research objectives. This was based on background information; knowledge transfer and retention methods; challenges of knowledge transfer and retention; relationship of knowledge transfer and retention methods on service delivery and strategies to enhance positive relationship between knowledge transfer and retention methods and service delivery.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter provides a summary of the findings, conclusions and recommendations based on the objectives of the study.

6.1 Summary of the findings

The effects of knowledge transfer and retention strategies on service delivery at Nairobi City County Government were examined. The findings of the study based on the objectives of the study are summarised below.

6.1.1 Methods of knowledge transfer and retention for services

The study established that Nairobi City County Government uses the following methods for knowledge transfer and retention: trainings, workshops, mentoring, community of practice, conferences, departmental meetings, use of social media (blogs/Instant Messaging), use of repositories to store best practices, job rotation, after action reviews, the organisation's procedure/process manuals and conducting exit interviews.

The findings of this study indicated that Nairobi City County Government's employees mainly receive rewards/incentives in the form of recognition to encourage knowledge sharing and retention amongst them. In addition, equipment and training on knowledge transfer and retention are offered to the employees as a way of motivating them to retain knowledge at Nairobi City County Government. However, it emerged that there were no clear strategies identified by the Nairobi City County Government to streamline the reward systems to promote knowledge transfer and retention.

6.1.2 Challenges of knowledge transfer and retention for service delivery

The findings of this study identified the challenges affecting knowledge transfer and retention at Nairobi City County Government. These were fear of job loss when knowledge is transferred; technophobia especially for those who are unable to use social media; lack of funding; lack of support; and introduction of performance contracts as tool to measure output. These challenges greatly affect service delivery with a correlation of positive and significant relationships in all the variable of service delivery.

6.1.3 Relationship between knowledge transfer and retention methods with service delivery

The findings revealed that all the variables related to service delivery that were affected by knowledge transfer and retention include accessibility, timeliness, cost of service, service efficiency, quality and accountability. Using regression analysis, the findings demonstrated a strong relationship between independent variable and dependant variables at Nairobi City County Government.

6.1.4 Strategies of enhancing positive influence of knowledge transfer and retention on service delivery

During the study, the key informants and employees at Nairobi City County Government made suggestions that could be used to enhance a more positive influence between knowledge transfer and retention on service delivery. They included the following: recognition and rewards; use of project teams; exit interviews; benchmarking; use of social media; understudy; mentorship and job rotation.

6.2 Conclusion

The study concludes that Nairobi City County Government uses departmental meetings, social media /blogs/instant messaging, mentorship, conferences, communities of practice, training/education/boot camp, job transfer, peer assists, brainstorming, storytelling, exit interviews, and simulations, games and apprenticeship as methods for knowledge transfer. The Nairobi City County Government employees also use repositories, mentorship/job shadowing, job rotation, online communities/blogs, after action reviews, company procedures/processes manuals, conducting exit interviews and keeping the records and oral history/storytelling as methods for knowledge retention.

The challenges facing knowledge transfer and retention in Nairobi City County Government were: technophobia; fear of job loss; lack of funding, lack of support from top management, and performance contracting. In terms of the influence of knowledge transfer and retention strategies on service delivery, all the variables used to measure service delivery demonstrated a positive correlation. This indicates that knowledge transfer and retention strategies greatly affect service delivery. The use of the strategies improves the services at Nairobi City County Government.

6.3 Recommendations

Based on the findings and conclusions of this study, the researcher makes the following recommendations:

6.3.1 Nairobi City County Government should develop a knowledge transfer and retention policy

The study recommends that the Nairobi City County Government should develop a knowledge transfer and retention policy that enables implementation of the strategies that the employees at Nairobi City County Government preferred. These strategies comprise of mentoring

programmes, succession planning, apprenticeship and encouraging community of practice. The policy should allow the identification of subject matter experts, experienced employees and the knowledge they have which needs to be shared and retained.

6.3.2 Develop a clear reward system

Arising from the findings of this study was that there was no clear reward system at Nairobi City County Government. The researcher recommends that the top level management at Nairobi City County Government should develop a clear reward system that stipulates the benefits that employees should receive when they share or retain knowledge. This is because rewards are important promoters of knowledge sharing and retention. They encourage the staff to share knowledge and there is no doubt that giving rewards can act as a factor to more knowledge sharing and knowledge implementation.

6.3.3 Develop an organisation knowledge transfer and retention strategy

Nairobi City County Government should develop a clearly defined strategy that will guide on knowledge transfer and retention. This strategy should act as a guideline on what needs to be done at each specific time and what the deliverable should be. The strategy can help the Nairobi City County Government to realise the potential competitive advantage that knowledge transfer and retention offers.

6.3.4   Training on use of ICTs

The staff indicated that some of them were technophobic. One of the ways of dealing with this is to train them in the use of Information Communication Technologies so as to build their confidence. They will then understand that by using ICTs, it is easier to transfer and retain

knowledge. The application of ICTs plays a major role in ensuring knowledge sharing and retention.

6.3.5 Build knowledge transfer and retention strategies into the core functions of the organisation

Nairobi City County Government should incorporate a culture of knowledge transfer and retention. They should integrate knowledge transfer and retention into their daily processes. This is where each employee knows that when they share knowledge, their performance will not dwindle but instead will improve because of sharing of best practices and failure stories.

6.3.6 Support from top management

The Top-Level management needs to appreciate the importance of knowledge transfer and retention and the effects it has on service delivery. They should provide resources such as Information Communication and Technology infrastructure; offer incentives to employees; and trainings on knowledge transfer and retention.

6.4 Proposed knowledge transfer and retention strategies framework for improved service delivery at Nairobi City County Government.

The researcher in this section makes a proposal that can enhance knowledge transfer and retention. A framework that can be used to improve service delivery at Nairobi City County Government is given by the researcher. This framework was arrived at after analysing the results of the study especially on the preferred strategies for knowledge transfer and retention as well as the challenges that the employees of Nairobi City County Government face for the same. The development of the framework was also guided by the positive relationship between knowledge transfer and retention and service delivery. The framework can be as seen in Figure 15.

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┌─────────────────────────────────────────────────────────────────────┐
│ ┌─────────────────────────────────┐ ┌─────────────────────────────┐ │
│ │ Knowledge transfer methods      │ │ Knowledge retention methods │ │
│ │ *Communities of practice        │ │ *Online communities/Blogs   │ │
│ │ *Meetings                       │ │ *Repositories               │ │
│ │ *Mentorship                     │ │ *Company procedures/ manuals│ │
│ │ *Apprenticeship                 │ │ *Job shadowing              │ │
│ │ *Exit interviews                │ │ *Action review              │ │
│ │ *Job transfer                   │ │                             │ │
│ │ *Peer assistant                 │ │                             │ │
│ │ *Brainstorming                  │ │                             │ │
│ │ *Conferences                    │ │                             │ │
│ └─────────────────────────────────┘ └─────────────────────────────┘ │
│                                                                       │
│ ┌───────────────────────────────────────────────────────────────┐   │
│ │    Enablers for knowledge transfer and retention              │   │
│ │ *Support from top management          *Rewards/incentives     │   │
│ │ *Knowledge transfer and retention strategy  *Training         │   │
│ │ *Knowledge transfer and retention policy                      │   │
│ │ *Information Communication Technologies (Intranet and Extranet)│   │
│ └───────────────────────────────────────────────────────────────┘   │
└─────────────────────────────────────────────────────────────────────┘
                              ▼
┌─────────────────────────────────────────────────────────────────────┐
│                    Improved service delivery                          │
│ *Efficiency of service delivery      *Accessibility of services       │
│ *Timeliness of services              *Cost of services                │
│ *Service quality                     *Accountability of services      │
└─────────────────────────────────────────────────────────────────────┘
```
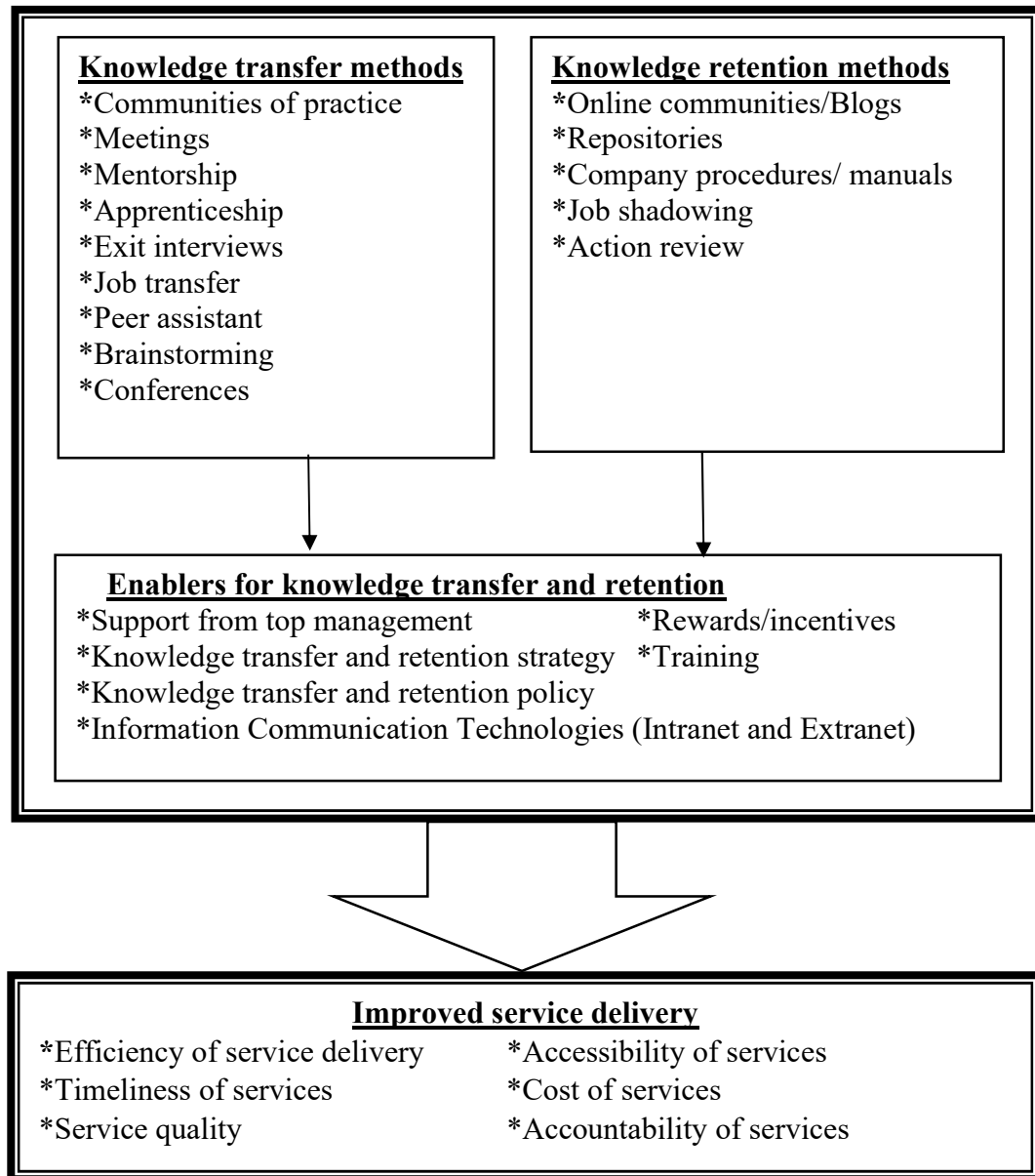
Figure 15: Proposed knowledge transfer and retention framework for improved service delivery

at Nairobi City County Government.

Figure 15 indicates four main sections which entail the proposed knowledge transfer methods. They are knowledge retention methods; enablers of knowledge transfer and retention and improved service delivery.

6.4.1 Proposed knowledge transfer methods

Knowledge transfer methods are strategies that Nairobi City County Government should adopt to enhance knowledge sharing. The study established that the most common type of knowledge that the employees share was tacit knowledge. This study, therefore, recommends to the Nairobi City County Government to strengthen strategies like community of practices, mentorship, meetings, apprenticeship, exit interviews, job transfer, peer assistant, brainstorming and conferences as strategies for sharing tacit knowledge.

6.4.2 Proposed knowledge retention methods

The county government should consider adopting the following knowledge retention methods: developing knowledge repositories, use of online communities/blogs, developing company procedures/manuals documents, job shadowing and action review. These strategies will enable documentation of tactic knowledge at Nairobi City County Government which in turn will facilitate its retention within Nairobi City County Government when employees resign or retiree.

6.4.3 Enablers of knowledge transfer and retention

Enablers of knowledge transfer are simply factors that encourage knowledge transfer and retention at Nairobi City County Government. The proposed factors include:

  i. Support from top management. The top management should provide funds, good working environment and infrastructure that enable efficient knowledge transfer and retention.

 ii. Motivators such as rewards/incentives that encourage knowledge transfer and retention should be incorporated. They include monetary and nonmonetary rewards.

iii. Trainings that build skills that the employees require to deal with technologies which in turn facilitate knowledge transfer and retention should be conducted regularly.

iv.   Develop a knowledge transfer and retention strategy. There should be a clear and well-defined strategy on the role of knowledge transfer and retention on service delivery. The strategy act as a guideline on what needs to be done at each specific time and what the deliverables should be.

v.   Develop a knowledge transfer and retention policy. The policy will ensure that the different knowledge transfer and retention methods that employees in Nairobi City County Government can use to share and retain tacit knowledge are implemented.

6.4.4 Improvement in service delivery

Knowledge transfer methods, knowledge retention methods and enablers of the knowledge transfer and retention if well implement will in return influence service delivery at Nairobi City County Government. Improved service delivery means there is timely and faster accessibility of services, cost effectiveness of services, quality, efficiency, and accountability of services.

6.5 Recommendations for further research

The researcher identified potential areas for further studies that may be beneficial or related to this study. These include:

1.   Similar studies should be carried out on other county governments to determine whether the outcomes of the current study can be generalised across all the county governments in Kenya.

2.   Further research may be carried out to confirm if the use of incentives in county governments can positively influence knowledge transfer and retention in the county governments.

6.6 Chapter summary

This chapter presented a brief summary of results and drew conclusions based on the findings. This chapter also gave suggestions and recommendations that can facilitate knowledge transfer and retention in an attempt to improve service delivery at Nairobi City County Government. The chapter also presents the proposed knowledge transfer and retention framework that can be adopted by Nairobi City County Government to improve on its service delivery.

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APPENDICES

Appendix 1: Work plan

Activity	Start date	Completion date	Reviewer
Corrections of proposal after defense	30th March 2019	23rd April 2019	Prof. Kwanya, Dr. Mwai
Collection of data	2nd May 2019	16th May, 2019	Obwaka M. Eddie (Self)
Data cleaning	17th May 2019	20th May 2019	Obwaka M. Eddie (Self)
Data analysis	22ndMay 2019	29th May 2019	Obwaka M. Eddie (Self)
Data presentation, finding and discussion	2nd June 2019	17th June 2019	Prof. Kwanya, Dr. Mwai
Conclusion and recommendation	20th June 2019	4th July 2019	Prof. Kwanya, Dr. Mwai
Thesis defense	August 2019	August 2019	Postgraduate examination board
Corrections of thesis after defense	August 2019	August 2019	Prof. Kwanya, Dr.Mwai

Appendix 2: Proposed budget

	Item	Cost (KES)
Materials and Supplies	Office supplies specifically for project (printing paper, binding materials, etc.)	45,000
	Questionnaire forms, Interview Schedules	8,000
	Communication	7,000
	Pilot test (Test materials and transport)	55,000
	Voice recorder and video recorder	55,000
	Internet services	25,000
Services	Duplication services (reports, etc.)	5,000
	Publication costs	75,000
	Editorial	30,000
	Data Analysis	110,000
Conference/Travel	Fieldwork	30,000
	Conference in August 2018	55,000
	Total	500,000

Appendix 3: Introduction letter

INTRODUCTION LETTER
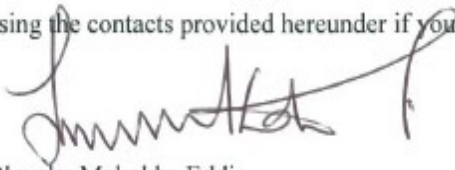
Obwaka Makokha Eddie

Tel.0734311411

obwakaeddie@gmail.com

Dear Respondent,

My name is Obwaka Makokha Eddie. I am a Master of Science in Information and Knowledge Management student in the Department of Information and Knowledge Management, The Technical University of Kenya. As part of my studies, I am conducting a research study on *Effects of Knowledge Transfer and Retention Strategies on Service Delivery in Nairobi City County Government, Kenya*. I humbly request you to participate in this study by responding to the questions hereunder. I wish to assure you that the information you provide will be held in confidence and will only be used for the sole purpose of this study. I also guarantee that your participation in this study is voluntary and you may withdraw at any time without any consequences whatsoever. I thank you in advance. Do not hesitate to contact me or my supervisors using the contacts provided hereunder if you need further information and/or clarification.

Obwaka Makokha Eddie

Supervisors:
Prof. Tom Kwanya
0717318853
tkwanya@tukenya.ac.ke

Dr. Naomi Mwai
Tel.0722469333
mwainaomi2@gmail.com

Effect of knowledge transfer and retention strategies on service delivery in Nairobi city county government, Kenya

RESPONDENTS INFORMATION SHEET

Study title: Effect of knowledge transfer and retention strategies on service delivery in Nairobi city county government, Kenya.

Purpose of the Study: as part of requirement for Master of Science in Information and Knowledge Management, I have to carry out a research study. The study is concerned with effect of knowledge transfer and retention strategies on service delivery.

What is the purpose of the study? The purpose of the study is to investigate the effects knowledge transfer and retention strategies to service delivery in Nairobi City County Government.

Why have you been asked to take part? You have been asked because you are client and/or employee who can be able to measure the effects knowledge transfer and retention strategies to service delivery.

Do you have to take part? No. Participation is voluntary. If you have to withdraw from the study before it commences even if you have agreed to participate it will not receive no negative implication whatsoever. You can withdraw by contacting me on email.

If you decide to withdraw all your data will be destroyed and will not be used in the study. There are no consequences to deciding that you no longer wish to participate in the study.

Will your participation in the study be kept confidential? Yes. You will remain anonymous in the whole process of the study. Any extracts from what you say that are quoted in the thesis will be entirely anonymous.

What will happen to the information which you give?

The data will be kept confidential for the duration of the study.

What will happen to the results? The results will be presented in the thesis. They will be seen by my supervisors and the external examiner. The thesis may be read by future students on the course. The study may be published in a research journal.

What are the possible disadvantages and risks of taking part?

It will take up part of your official time.

What are the possible benefits of taking part?
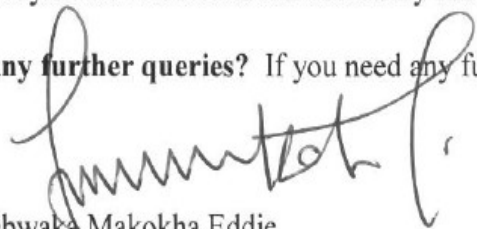
Your contribution will help me generate content to inform the effects of knowledge transfer and retention strategies to service delivery.

Who has reviewed this study? School of Information and Communication Studies, Department of Information and Knowledge Management, Technical University of Kenya.

Who is organising and funding the research?

The research is organised by Obwaka Makokha Eddie Master student at Technical University of Kenya. The research is not externally funded.

Any further queries? If you need any further information, you can contact me:

Obwaka Makokha Eddie
Tel.0734311411
Email:obwakaeddie@gmail.com

If you agree to take part in the study, please sign the consent form.

Appendix 5: The Informed Consent Form

EFFECTS OF KNOWLEDGE TRANSFER AND RETENTION STRATEGIES ON SERVICE DELIVERY IN NAIROBI CITY COUNTY GOVERNMENT, KENYA

<u>INFORMED CONSENT FORM</u>

I……………………………………………………….agree to participate in the research study.

I have read and understand the attached participant information sheet and by signing below I consent to participate in this study.

I understand that I have the right to withdraw from the study without giving a reason at any time during the study itself.

I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.

I understand that anonymity will be ensured in the write-up by disguising my identity.

I understand that confidentiality will be keep at utmost level and the research responses will only be used for the purpose of this research.

Signed…………………………………………...

Date…………………………………………………

Respondents signature……………………………….

Appendix 6: Debrief Form

EFFECT OF KNOWLEDGE TRANSFER AND RETENTION STRATEGIES ON SERVICE DELIVERY IN NAIROBI CITY COUNTY GOVERNMENT, KENYA
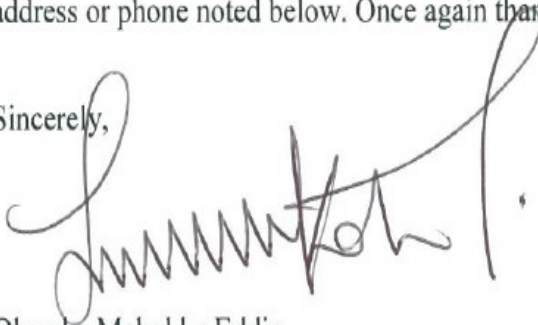
<u>DEBRIEF FORM</u>

Dear Participant:

Thank you for participating in this research study. The purpose of this research is to gain an understanding of the **Effects of knowledge transfer and retention strategies on service delivery in Nairobi city county government, Kenya**. Your participation will help researcher to gain more insight into relationship between knowledge transfer and retention on service delivery in Nairobi City County Government, Kenya as well as establish challenges of knowledge retention and transfer for service delivery in Nairobi City County Government, Kenya.

In the event you have any concerns regarding the questions presented to you in this study, you may want to seek clarifications or discuss any of them with me. You may contact me using the email address or phone noted below. Once again thank you for your participation.

Sincerely,

Obwaka Makokha Eddie

Tel.0734311411

Email:obwakaeddie@gmail.com

Appendix 7: Questionnaire

EFFECT OF KNOWLEDGE TRANSFER AND RETENTION STRATEGIES ON

SERVICE DELIVERY IN NAIROBI CITY COUNTY GOVERNMENT, KENYA

SECTION A: Background information

1. Gender (Tick appropriately)

Male ☐ Female ☐ Prefer not to say ☐

2. For how many years have you worked for the County Government?

☐ 0-5

☐ 6-10

☐ 11-15

☐ 16-20

☐ Above 20

SECTION B: KNOWLEDGE TRANSFER METHODS AND SERVICE DELIVERY

3. Kindly tick the method(s) of knowledge transfer that you use or have come across within your work period at Nairobi City County Government?

☐ Sensitisation ☐ Training/education/Boot camp ☐ Workshops

☐ Mentoring ☐ Exit interviews ☐ Projects

☐ Simulations and games ☐ Story telling ☐ Job transfer

☐ Community of practice ☐ Apprenticeship ☐ Peer Assists

☐ Conferences ☐ Departmental meetings ☐ Brainstorming

☐ Social media /Blogs/Instant messaging

☐ Other (please,

specify…………………………………………………………………

4. Kindly indicate the reward/incentives if any put in place to encourage knowledge transfer at Nairobi City County government (Please tick as many as may apply)

Reward/incentives	Kindly tick(√)
Promotion at work	
Pay rise(Salary rise)	
Tangible rewards(trophy)	
Monetary rewards	
Recognition	
Competitive rankings	
Any other (Specify)	

SECTION C: KNOWLEDGE RETENTION METHODS AND SERVICE DELIVERY

5. Kindly tick the method(s) of knowledge retention that you use or have come across within your work period at Nairobi City County Government

☐ Conducting exit interview and keeping the records

☐ Repositories

☐ Mentorship/ Job shadowing

☐ Oral history/ story telling

☐ After action reviews

☐ Online communities/Blogs

☐ Job rotation

☐ Company procedures/processes manuals

☐ Other (please, specify……………………………………………………………………

SECTION D: RELATIONSHIP BETWEEN KNOWLEDGE METHODS AND SERVICE DELIVERY AT NAIROBI CITY COUNTY GOVERNMENT

6. Kindly indicate the extent to which knowledge transfer strategies affects service delivery on a scale of 1- 4 (where 1- No extent, 2- Less extent, 3- Moderate extent, 4- Great extent) (Kindly indicate with (✓) as appropriate.

	1	2	3	4
Through Knowledge transfer strategies the quality of service delivery at Nairobi City County Government has greatly improved				
Through Knowledge transfer strategies there is timely delivery of service at Nairobi City County Government				
Through Knowledge transfer strategies the cost of service delivery in Nairobi City County Government has greatly reduced				
Through Knowledge transfer strategies the efficiency of service delivery in Nairobi City County Government has greatly improved				
Through Knowledge transfer strategies accountability among employees in service delivery at Nairobi City County Government has greatly improved				
Through Knowledge transfer strategies accessibility of services at Nairobi City County Government has greatly improved				

SECTION E: RELATIONSHIP BETWEEN KNOWLEDGE RETENTION METHODS AND SERVICE DELIVERY AT NAIROBI CITY COUNTY GOVERNMENT

9. Kindly indicate the extent to which knowledge retention strategies affects service delivery on a scale of 1- 4 (where 1- No extent, 2- Less extent, 3- Moderate extent, 4- Great extent) (Kindly indicate with (✓) as appropriate.

	1	2	3	4
Through Knowledge retention strategies the quality of service delivery at Nairobi City County Government has greatly improved				
Through Knowledge retention strategies there is timely delivery of service at Nairobi City County Government				
Through Knowledge retention strategies the cost of service delivery in Nairobi City County Government has greatly reduced				
Through Knowledge retention strategies the efficiency of service delivery in Nairobi City County Government has greatly improved				
Through Knowledge retention strategies accountability among employees in service delivery at Nairobi City County Government has greatly improved				
Through Knowledge retention strategies accessibility of services at Nairobi City County Government has greatly improved				

SECTION F: CHALLENGES OF KNOWLEDGE TRANSFER AND RETENTION FOR SERVICE DELIVERY

10. Kindly outline the challenges faced in knowledge transfer and retention at the Nairobi City County Government.

………………………………………………………………………………………………

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11. Kindly indicate the knowledge transfer and retention methods that can be used to deal with the challenges indicated above

………………………………………………………………………………………….……

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…………………………………………………………………………………………………

Thank you very much for your time in answering the questions

Appendix 8: Interview schedule

EFFECT OF KNOWLEDGE TRANSFER AND RETENTION STRATEGIES ON SERVICE DELIVERY IN NAIROBI CITY COUNTY GOVERNMENT, KENYA

<u>**Section 1: knowledge transfer and retention methods**</u>

1. Which knowledge transfer strategies do you use or have come across within Nairobi City County Government?

2. Which knowledge retention strategies do you use or have come across within Nairobi City County Government?

3. Which challenges do you face in knowledge transfer and retention of knowledge within Nairobi City County Government?

4. How do you intend to mitigate the challenges?

<u>**Section 2: Relationship between knowledge transfer and retention and service delivery**</u>

1. What are the effects of the mentioned knowledge transfer and retention strategies on service delivery?

2. Which strategies are laid down to manage knowledge transfer and retention at the Nairobi City County Government?

Appendix 9: Postgraduate Introduction letter

THE TECHNICAL UNIVERSITY OF KENYA

Haile Selassie Avenue, P. O. Box 52428, Nairobi, 00200, Tel: +254 (020) 343672, 2249974, 2251300, 341639, Fax: 2219689;Mobile Tel: 0723 521644; E-mail:vc@tukenya.ac.ke,Website:www.tukenya.ac.ke

Office of the Director
School of Graduate and Advanced Studies

Our Ref: AIIU/06088P/2016   May 3rd, 2019

RE: LETTER OF INTRODUCTION-OBWAKA MAKOKHA EDDIE

This is to inform you that *Mr. Obwaka Makokha Eddie* is a registered Masters student in the Department of Information and Knowledge Management at The Technical University of Kenya. The title of his dissertation is *"Effect of Knowledge Transfer and Retention Strategies on Service Delivery in Nairobi City County Government, Kenya."*

Any assistance accorded to him will be highly appreciated.

03 MAY 2019

Prof. Joseph Lalah

Director-School of Graduate and Advanced Studies

PROFESSOR OF CHEMISTRY

File copy: Student File
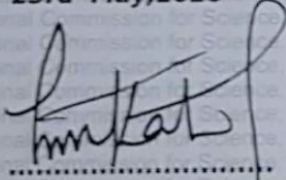
JOL/cmk

Appendix 10: NACOSTI research permit

THIS IS TO CERTIFY THAT:
MR. EDDIE MAKOKHA OBWAKA
of THE TECHNICAL UNIVERSITY OF
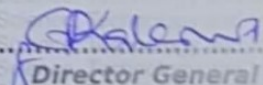KENYA, 0-200 CITY SQUARE,has been
permitted to conduct research in
Nairobi County

on the topic: EFFECT OF KNOWLEDGE
TRANSFER AND RETENTION STRATEGIES
ON SERVICE DELIVERY IN NAIROBI CITY
COUNTY GOVERNMENT, KENYA

for the period ending:
23rd May,2020

Permit No : NACOSTI/P/19/90142/30211
Date Of Issue : 23rd May,2019
Fee Recieved :Ksh 1000

....
Applicant's
Signature

....
Director General
National Commission for Science,
Technology & Innovation

Appendix 11: NACOSTI research authorisation letter

**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No: **NACOSTI/P/19/90142/30211**

Date: **23rd May 2019**

Eddie Makokha Obwaka
Technical University of Kenya
P.O. Box 52428-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Effect of knowledge transfer and retention strategies on service delivery in Nairobi City County Government, Kenya."* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **23rd May, 2020.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

**GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

Appendix 12: Introduction letter to Nairobi City County Government

THE TECHNICAL UNIVERSITY OF KENYA

Haile Selassie Avenue, P. O. Box 52428, Nairobi, 00200, Tel: +254 (020) 343672, 2249974, 2251300, 341639,
Fax: 2219689, E-mail:vc@kenpoly.ac.ke, Website:www.tukenya.ac.ke

FACULTY OF SOCIAL SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATION AND COMMUNICATION STUDIES

DEPARTMENT OF INFORMATION AND KNOWLEDGE MANAGEMENT

30th May, 2018

TUK/FSST/SICS/IKM/SR/15/RES/18
THE CHIEF OF STAFF,
NAIROBI CITY COUNTY,
P.O. BOX 438 -00100,
NAIROBI.

Dear Sir/Madam,

RE: EDDIE MAKOKHA OBWAKA-AIIU/06088P/2016

I am pleased to introduce to you **EDDIE MAKOKHA OBWAKA** who is a final year, semester two student pursuing Master of Science in Information and Knowledge Management in the **Department of Information and Knowledge Management**, The Technical University of Kenya.

Mr. Makokha is conducting a research study on "**Effect of Knowledge Transfer and Retention Strategies on Service Delivery in Nairobi City County Government**". He is expected to complete the study by the end of August 2019.

Any assistance extended to him to enable him to meet this deadline will be appreciated highly.

Yours faithfully,

Dr Lilian Oyieke
Chairperson

Student Contact
0734311411

CC: County Director of Training of Education
        County Commission of Nairobi

Education and training for the real world

ISO 9001:2008 Certified

Appendix 13: Plagiarsim report