THE ROLE OF RECORDS MANAGEMENT IN THE IMPLEMENTATION OF ISO 9001:2OO8 QUALITY MANAGEMENT SYSTEM AT THE KENYA POWER AND LIGHTING COMPANY LTD, NAIROBI

BY

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DEDICATION

To my beloved wife, Hellen and sons, Gibson and Kennedy, for their understanding for many months I withdrew technically from regular family undertakings to pursue the Master of Philosophy in Information Science (Records and Archives Management) programme and especially when I was conducting the research and writing this thesis. Their patience, understanding and moral support was a great boost and contribution towards realising my dream.

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ABSTRACT

Records Management (RM) is one of the six mandatory procedures required in implementation and maintenance of ISO 9001:2008 Quality Management System (QMS). There were RM gaps at the Kenya Power and Lighting Company Ltd (KPLC) even after certification in QMS in 2006. The aim of the study was to investigate the role of (RM in the implementation of QMS at KPLC, Nairobi, and to develop a framework to guide implementation of RM requirements in support of QMS. The objectives of the study were: to determine how records are managed during their continuum; to establish how current RM environment affects implementation of ISO 9001:2008-QMS; to find out the critical success factors in implementation of RM in support of QMS; to investigate the role of information communication technology (ICT) in implementation of RM in support of QMS at KPLC; to investigate the challenges faced by KPLC in fulfilling RM requirements in support of QMS; and, to develop a framework to guide implementation of RM in support of QMS at KPLC. The study was informed by triangulation of ISO 15489:2001-Documentation: Records Management Standard and Frank Upwards' (1996) Records Continuum Model. Purposive sampling was used to select a sample of ninety-two (92) respondents who were involved in the study. The data collection instruments comprised interviews and observations. The data is presented, analysed and interpreted using descriptive method supplemented by tables and figures. The study established that RM plays a pivotal role in implementation of QMS and that ICTs have an essential enabling role in implementation of RM in support of QMS at KPLC. Nonetheless, it was revealed that KPLC faced myriad RM challenges in implementation of QMS because the organisational culture does not mainstream RM in the implementation of QMS. The study recommends organisational culture change where top management mainstream prudent RM in support of QMS, application of QMS requirements to RM processes, automation of RM to boost implementation of RM in support of QMS at KPLC and to adopt the proposed RM framework to guide implementation of RM in support of QMS at KPLC.

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LIST OF ABBREVIATIONS AND ACRONYMS

BPRM	-	business-process-driven RM
BPs	-	Business Processes
CER	-	Centralised Electronic Repository
CRO	-	Chief Records Office
DCS	-	Distribution Control System
DRIM	-	Document and Records Identification Manual
EAP&L	-	East African Power and Lighting Company
Et al	-	and others
HRD	-	Human Resources Department
ICS	-	Integrated Customer Service System
ICT	-	Information Communication Technology
IRMM	-	Integrated Records Management Program
ISO	-	International Organisation for Standardisation
ISP	-	Institutional Strengthening Project
IT&TD	-	Information Technology & Telecommunication Division
KEBS	-	Kenya Bureau of Standards
KETRACO	-	Kenya Electricity Transmission Company of Kenya
KPC	-	Kenya Power Company
KPLC	-	Kenya Power and Lighting Company Ltd
MR	-	Management Representative
NCST	-	National Council of Science and Technology
NSE	-	Nairobi Stock Exchange
PDCA	-	'Plan, Do, Check, Act'
PFCD	-	Procedure for Control of Documents
PFCR	-	Procedure for Control of Records
QAD	-	Quality Assurance Department
QAO	-	Quality Assurance Official/Officer
QMS	-	Quality Management Systems
RCM	-	Records Continuum Model
REA	-	Kenya Rural Electrification Authority
RM	-	Records Management
RMD	-	Records Management Department
RMO	-	Records Management Official/Officer
RMP	-	Records Management Program
SCADA	-	Supervisory Control and Data Acquisition
TM	-	Top Management
TMS	-	Transport Management System
u.d.	-	undated

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

This chapter provides background information to the study. It presents the statement of the problem, the aim and objectives, research questions, significance of the study, assumptions, and scope and limitations of the study. It concludes by presenting chapter summary and definition of operational terms.

1.1 The Conceptual Setting

The term records and RM are defined differently by different authorities and scholars (Wamukoya 2009), The National Archives and Records Administration (2001 and Kemoni and Ngulube (2007) . For the purpose of this study, a definition by ISO 15489-1:2001 (ISO, 2001) was adopted: that is, a record is a document, regardless of form or medium, that is created, received, maintained and used by the Company in pursuance of its legal obligations or in the transaction of business, of which it forms a part or provides evidence. In addition, ISO 9000, states that,

> ... a record is a type of document. Records provide evidence that activities have been performed or results have been achieved. They always document the past. Records can, for example, be used to show that traceability requirements are being met, that verification is being performed, and that preventive and corrective actions are being carried out (ISO, 2005).

In Quality Management Systems (QMS) language a record is a special kind of document that provides objective evidence on how QMS processes perform in a given organisation. Therefore, it is an important tool in quality auditing. On the other hand, ISO 15489:2001, defines‘ RM as “a field of management responsible for the efficient and systematic control of creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records” (ISO, 2001).

For the purpose, of this study, the term RM refers to a dualism (*dualism because RM management is defined from both RM profession and QMS perspective which* explain the way records should be managed in a given organisation in order to fulfil the requirements of QMS. In this case, RM can be defined as a framework that defines how quality records should be created, identified, retrieved, stored, and protected from perils of destruction, and how their retention periods and disposal actions should be determined. It should include records being kept as objective evidence and as corporate memory of how QMS processes in a given organisation occurred within the regulatory and QMS requirements as spelt out by the procedure for control of records within the context of Clause 4.2.4 of ISO 9001:2008. It is noted that a record provide evidence of how the business transactions in a given organization were carried out. This corroborate why in Systems QMS language, a record is a special kind of document that provides objective evidence on how QMS processes perform in a given organisation.(ISO 9001: 2008). Therefore, it is an important tool in quality auditing.

Ambira and Kemoni (2010), citing (ISO 15489-1:2001 and Wamukoya (2007), have stated that, the objectives of RM are to:

- set policies and procedures;
- assign responsibilities for RM at various levels within the organization;
- set best practice standards;
- process and maintain records in safe and secure storage;
- implement access policies;
- implement a records retention and disposal policy;
- integrate RM into business systems and processes;
- assign, implement and administer specialized systems for managing records; and
- Provide a range of services relating to the management and use of records.

RM in support of QMS processes must meet all these objectives, failure to which they impact negatively on QMS. RM is therefore an important QMS enabler, without which its implementation may be challenging. This is why the Procedure for Control of Records (PFCR) is one of the six mandatory requirements under clause 4.2.4. of ISO 9001:2008 QMS.

RM is a globally recognised requirement and hence the issuing of ISO 15489:2001 by the ISO (2001). ISO 15489:2001 is a standard for developing a RM programme (University of Wisconsin, 2008). This standard was meant to guide organisations in addressing RM requirements in the implementation of, among others, the QMS.

The importance of RM can be attested by the fact that:

> Organisations face an increasing demand to retain, preserve and produce records and information in a timely and effective manner. The failure to

> properly manage business records can compromise an organisation's ability to meet legal, regulatory and compliance obligations and can create significant unnecessary costs for the company. Regulatory fines and legal sanctions for non-compliance with record retention regulations, discovery mishaps and the inability to produce support for key financial and operational decisions, can present significant business risk. Regulators and the courts have levied fines and sanctions for ineffective RM and poor e-discovery practices. Similarly, retaining records past their legal retention requirements can increase exposure and discovery costs in litigation. A strategic RM program can help an organisation reduce costs, demonstrate compliance, protect its rights, defend claims and improve operations (Ernst & Young, 2009).

RM is an important resource that is used to manage all other assets. It is an enabler that supports all programmes in an organisation, including QMS. It is therefore worthwhile to present some of its benefits independent of QMS from the outset in order to appreciate its importance in all businesses.

National Archives of the United Kingdom (2006) summarises the purpose and/or benefits of RM by stating that organisations with good RM practices benefit in many ways. These benefits include the following: staff time is saved both in filing records and in retrieval when they are needed; decision-making and operations are properly supported and informed by relevant records; record storage is more cost-effective because redundant records can be removed from filing and server space; records are created and managed in compliance with and as required by legislation, standards and regulations (for instance, ISO 15489:2001); accountability is demonstrated because

records provide reliable evidence of policy, decision-making and actions/transactions; duplicates and versions are removed as soon as possible; records that an organisation judges to be no longer required are regularly and securely destroyed; and, the details documented.

According to the United States Environmental Protection Agency (2007) RM has various other benefits, which include the following: to control the creation and growth of records; to reduce operating costs; to improve efficiency and productivity; to assimilate new RM technologies; to ensure regulatory compliance; to minimise litigation risks; to safeguard vital information; to support better management decision-making; to preserve the corporate memory; and, to foster professionalism in running the business.

ISO 15489:2001 states that effective RM enables any organisation to do the following: conduct business in an orderly, efficient and accountable manner; deliver services in a consistent and equitable manner; support and document policy formation and managerial decision-making; provide consistency, continuity and productivity in management and administration; and, facilitate the effective performance of activities throughout an organisation.

All the above benefits imply that RM assists organisations in providing quality service delivery to its customers within the set standards, regulations and legal requirements. Having discussed RM and its benefits, it is prudent also to explore QMS separately before exploring its nexus with RM.

1.2 Background Information on ISO 9001:2008 Quality Management System

According to the KEBS (2005), ISO 9001 has evolved significantly since its inception and is currently more applicable to all types of businesses than before. It is among the ISO: 9000 family of standards for QMS.

The Standard ISO: 9000 is owned and maintained by the International Organisation for Standardisation (ISO) which is based in Geneva, Switzerland. It is administered by accreditation and certification bodies in respective countries. Its rules are revised and updated, as the requirements motivate changes over time by standing technical committees and advisory groups. These bodies receive feedback from those professionals who are implementing the standards.

KEBS (2005) further states that the standard owes its origin from BS5750 which arose from the production line method manufacturing, which was the predominant industry in the United Kingdom around 1987. However, there were many problems with its use and interpretation when trying to apply it to businesses in the service industry, a sector that has expanded over the years.

From the United Kingdom, the Standard thereafter spread to many other industrialised countries due to the increasing demands by governmental organisations and contractors that their suppliers be ISO9001 registered in order to guarantee quality. However, quality was not guaranteed at all times because the Standard did not support business improvement per-se, including addressing the issue of customer service. It was basically a method of controlling conformity and the presumed non-conformities (KEBS, 2005).

Some of the development of the Standard up to the current 2008 version has undergone various modifications since inception in 1987 (KEBS, 2008). For instance, in 1987, the BS5750 name was replaced by an international standard called ISO 9000, which is a generic convention. This 1987 version, however, was styled as BS5750 (essentially meant to make it acceptable as an international standard) with three 'models' for QMS, namely:

a) ISO 9001:1987 *Model for quality assurance (QA) in design, development, production, installation and servicing* was for companies and organisations whose activities included the creation of new products.
b) ISO 9002:1987 *Model for QA in production, installation and servicing* had basically the same material as ISO 9001 but it did not cover the creation of new products.
c) ISO 9003:1987 *Model for QA in final inspection and test* covered only the final inspection of finished product, with no concern for how the product was realised.

ISO 9001:2000 combined the three standards – 9001, 9002 and 9003 – into one ISO Standard called ISO 9001:2000 QMS-Requirements. This 2000 version introduced some radical changes:

- It introduced the concept of process approach in the management of the QMS. The "process management" brought about the element of monitoring and optimising organisation's tasks and activities, instead of only inspecting the final product and services.

- It introduced the involvement of top management (TM) in the implementation of QMS in order to inject quality into the business system and, therefore, do away with the act of delegating quality functions to the junior staff in an organisation.
- It introduced the concept of continual improvement, which brought about improvement in the effectiveness of the processes through process performance metrics.
- It introduced the tracking of customer satisfaction.

RM is one of the mandatory requirements in all the standards (ISO, 2000). According to Quality Works (1996):

> All standards require a process for control of records. QMS standards call this system control of quality records and environmental standards refer to it as environmental records. Specifically, element 4.2.4 of ISO 9001 Standard, Control of records, requires a system for management of records.

This implies that there is a nexus between RM and ISO standards, including the ISO9001:2008-QMS. Many organisations worldwide are motivated to obtain certification in ISO 9001:2008 because it is the representation and/or model for QA. QMS overly depends on documentation and RM from the preparation, implementation, monitoring and controlling of the processes, quality auditing, control of non-conforming products/services, corrective actions, and preventive actions to the overall continual improvements (ISO, 2008). The tenets, objectives and overall benefits of both RM and QMS are geared towards improving efficiency, effectiveness and good governance in service delivery in public and private organisations intended

to achieve customer satisfaction (ISO 9001:2000/ & 2008 and ISO15489:2001). They are a fulcrum to each other; RM is re-engineered by QMS and in addition drives the QMS. Kenya Power and Lighting Company (KPLC) implemented QMS to appropriate the gains that accrue from the system.

1.3 The Nexus between RM and the QMS

A symbiotic relationship exists between RM and QMS; they have complex interaction/interdependence such that any attempt to implement QMS separately without due regard to RM is tantamount to announcing the failure of QMS at its formative stages. As the subject of this study relates to the nexus between the two, it is essential that the relationship between them as service delivery enablers should be discussed from the outset.

The symbiotic relationship between RM and QMS in Business Processes (BPs) is an epitome of knowledge transfer occasioned by globalisation that resulted in various changes and approaches in the way countries and organisations deliver services to their clientele in a competitive environment. The focus is on customer satisfaction and continual improvement using the process approach. QMS is one of the prime drivers towards improving BPs in terms of aligning them with what it takes to realise customer satisfaction.

The intention of this study was to examine the interaction of QMS and RM at KPLC's Business Process and ultimately to develop a framework for implementing RM in support of QMS. KPLC became an ISO 9001:2000 certified organisation in 2006 and was recertified in ISO 9001:2008 in 2009 in which RM is one of the mandatory

requirements. The catalyst role of the information communication technology (ICT) as a tool that brings together QMS and RM in BPs at KPLC is discussed as a one of the critical system drivers.

Various forms of documentation are required by ISO 9001:2000/2008. The documentation includes mandatory documented procedures and clauses, such as procedure for control of documents (4.2.3), records (4.2.4), internal quality audit (8.2.2,) non-conforming products/services (8.3), and corrective actions (8.5.2) and preventive actions (8.5.3). All these procedures require that proper documentation and resultant records be kept.

The documents required by the organisation to ensure effective planning, operation and control of processes include quality policy (4.2.1a), quality objectives (4.2.1.a), and quality manual (4.2.1b).

There are additional documents where an organisation could add value to its QMS and thus provide conformity through such documentation (KEBS, 2005). These include process maps/flow charts/descriptions, organisational charts, specifications, work/tests instructions, production/service schedules, approved suppliers lists, tests and inspection plans, quality plans, and the specific records. Table 1 shows the mandatory records according to the requirements of ISO 9001:2000/2008.

Although ISO 9001:2008 QMS does not require records of all the BPs to be kept (KEBS, 2005), the above 21 categories of records required by the Standard, clearly touch on the backbone of QMS and therefore justifies further why it is impracticable

to disassociate RM from QMS. The Standard recognises that even the records that are not explicitly required can be maintained as they add value to the QMS.

QMS requires some document to be developed and controlled. The significance of documentation in QMS needs to be discussed because it has a bearing on RM. KEBS (2005) provides the main objectives of an organisation's documentation, irrespective of whether or not it has executed a formal QMS as communication of information – it is a tool for information transmission and communication. This contention is supported by the Records Continuum Model (RCM), which states that records of business activities are created as part of business communication processes within the organisations (Xioami, 2001), as evidence of conformity – provision of evidence that what was planned has actually been done – and as knowledge-sharing to disseminate and preserve the organisation's experiences. Information is captured and fixed in records and therefore the essence of RM is underscored in the purview of QMS.

According to the ISO (2005), QMS requires documentation to support its operation. It points out clearly that documentation has various benefits in the QMS, which include, among others, enabling communication of purpose and steadiness of accomplishment. Its exploitation contribute to achievement of conformity to customer requirements and quality improvement, provision of appropriate training, repeatability and traceability, provision of objective evidence, and evaluation of the effectiveness and continuing suitability of QMS.

Table 1: Mandatory records required by ISO 9001:2008

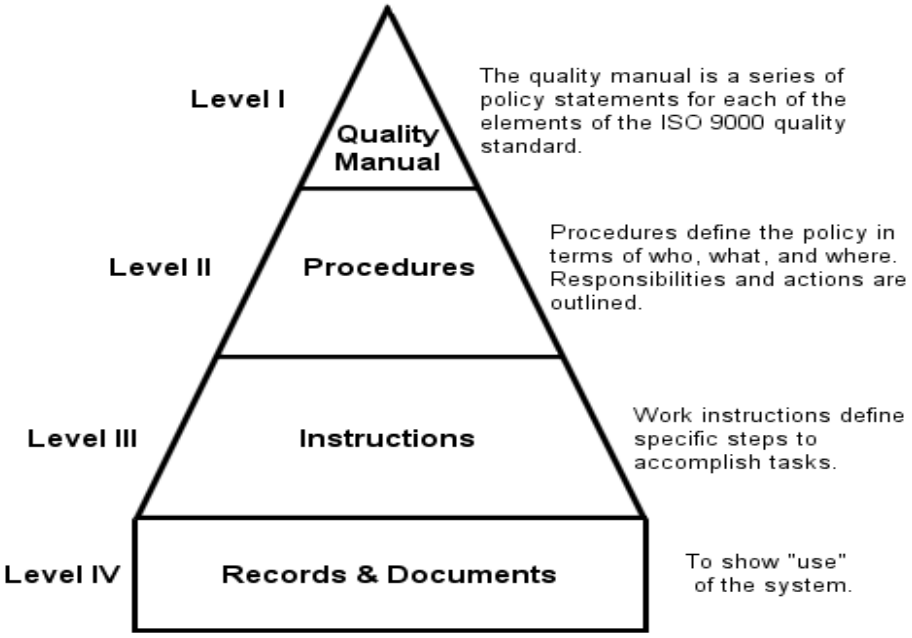
No	Category of Records	Clause
1	Management reviews	5.6.1
2	Education, training, skills and experience	6.2.2 (e)
3	Evidence that the realisation processes and resulting product fulfil requirements	7.1 (d
4	Results of the review of requirements related to the product and actions arising from the review	7.2.2
5	Design and development inputs relating to product requirements	7.3.2
6	Results of design and development reviews and any necessary actions	7.3.4
7	Results of design and development verification and any necessary actions	7.3.5
8	Results of design and development validation and any necessary actions	7.3.6
9	Results of the review of design and development changes and any necessary actions	7.3.7
10	Results of supplier evaluations and any necessary actions arising from the evaluations	7.4.1
11	Records required by the organisation to demonstrate the validation of processes where the resulting output cannot be verified by subsequent monitoring or measurement	7.5.2 (d)
12	The unique identification of the product, where traceability is a requirement	7.5.3
13	Customer property that is lost, damaged or otherwise found to be unsuitable for use	7.5.4
14	Basis used for calibration or verification of measuring equipment where no international or national measurement standards exist	7.6 a)
15	Validity of the previous measuring results when the measuring equipment is found not to conform to requirements	7.6
16	Results of calibration and verification of measuring equipment	7.6
17	Internal audit results and follow-up actions	8.2.2
18	Indication of the person(s) authorising release of product	8.2.4
19	Nature of the product nonconformities and any subsequent actions taken, including concessions obtained	8.3
20	Results of corrective action	8.5.2e)
21	Results of preventive actions.	8.5.3 d)

Source: ISO (2008). Guidance on the documentation requirements of ISO 9001:2008- Document:ISO/TC 176/SC 2/N525R2 October 2008

Organisations should embrace value adding activities. RM is a value adding activity since one cannot disconnect RM from documentation. The quality of documentation determines the quality of records created as a result of respective processes. This is why Clause 4.2.3 of ISO 9001:2000/2008 terms records as special kinds of documents.

There are four tiers (levels) of documentation required by QMS. It is structured from general to specific; the volume increase as one get to the actual activities within the processes.

Figure 1: QMS documentation structure



Source: Iowa State University (2008)

QMS approaches documentation by first defining policies and guidelines that enable organisations to accomplish their processes in a structured manner. Therefore, if this process is properly followed, it results in objective evidence in terms of records and documents.

It is argued that this approach, although it does not explicitly provide the methodology for capturing, identifying, storing, accessing, preserving, retaining and disposing records, it is no doubt that it can only materialise when records and documents are organised in a methodical approach. This methodical manner of managing records

could not have been achieved without standardisation, hence the ISO 15489:2001, which was promulgated in 2001 one year after the promulgation of the ISO 9001:2000-QMS. The Standard is meant to provide guidance on RM in support of a quality process framework to comply with ISO 9001 and ISO 14001, ISO 15489 (2001).

Documents are the tools that assist to capture the activities within respective processes, which make them a representational trace items that facilitate capture of records as evidence of the transactions. In effect, they are authorised and approved for use in business transactions. This relates to the procedure for control of documents in clause 4.2.3 of ISO 9001:2008; it is in this clause that authorisation and approval of documents is reflected.

Records should be organised in the records-keeping regime mentioned in dimension three (Pederson, 2004). Fundamentally, Clause 4.2.4 of the ISO 9001:2000/2008 categorically requires records to be managed/controlled in a certain fashion. In addition, procedure for control of records is a compulsory tool that should be developed. Thus, it is clear that ISO 15489(2001)-Documentation-RM came into force in 2001, probably to fill the gap of this procedure for control of records. It is this nexus that underpin the contention that QMS and RM systems are intertwined.

As mentioned earlier, the procedure for control of records is mandatory in the ISO 9001:2008, advocated for in Clause 4.2.4 of the Standard. Quality Works (1996) provides some insight about the importance and relevance of the procedure for control of records in relation to all standards. It states that,

> All standards require a process for control of records. QMS standards call this system control of quality records and environmental standards refer to it as environmental records. Specifically, element 4.2.4 of ISO 9001 Standard, Control of records, requires a system for management of records. As soon as we approve and release our first documents, this Documentation Change Record becomes our first record. What do we do with it? Element 4.2.4 requires a system to ensure that records are properly controlled.

The connection between the procedure for control of documents and the procedure for control of records is implied where, once the documents are approved and authorised for use, they translate into records. These can be said to be the control of metadata in the QMS.

The procedure for control of records addresses the following elements: identified – this implies that records are properly classified and provided with unique identifiers to ease their retrieval; appropriately stored – it shows that the Standard values proper storage of records to protect them from perils of destruction and also implies that proper storage should facilitate access to information stored in records; retrievable – records must be useable and therefore retrievable; retained for a defined period of time – this calls for proper scheduling of records; and, appropriate dispositional – disposal of records is an important aspect of the records management programme and therefore the procedure for control of records envisages a situation where processes and methods of disposal are defined from the outset.

QMS applies a process approach model in its implementation and focuses on customer satisfaction (KEBS, 2005; ISO, 2008). Equally, the major concern in RM under the continuum model is that it is a purpose-centred process and is customer driven.

There is integration of BPs and recordkeeping processes whenever tasks are carried out, and can happen in almost any sequence, by any professional group. This contention was asserted by Xiaomi (2001). The essence of this comparison is to show that RM and QMS are practices that share many attributes and therefore have a multifaceted correlation.

Kennedy and Schauder (1998) made clear that the four propositions that Frank Upward applied in his theory of the continuum model where they stated among others, that the model categorises accountable operations that produce trustworthy evidence of such business activities by capturing records supporting transactions. QMS requires records to provide objective evidence of the performance of the processes and more importantly to evaluate customer satisfaction (KEBS, 2005).

One purpose of documentation in QMS is communication (KEBS, 2005). Xie (2007) pointed out that records of conducting business are generated as part of business communication processes within the organisation. This correlation of the RCM and QMS shows interdependency of the two management schools: QMS and RM. It is apparent that RM and QMS have a lot of principles to share and that they are both interdependent as far as implementation of QMS is concerned.

1.4 Benefits of Implementing the Quality Management System

There are numerous benefits accruing from certification and/or implementation of QMS. Some of the benefits mentioned by ISO (2009) are that customers and users will benefit by receiving the products that are conforming to the requirements, that the products are dependable and reliable, that the products are available when needed, and that the products are maintainable. People in the organisation will benefit by realising better working conditions, increased job satisfaction, improved health and safety, improved morale, and improved stability in employment. Others include: stability, growth, partnership and mutual understanding. Society will benefit by the fulfilment of legal and regulatory requirements, improved health and safety, reduced environmental impact, and increased security. Another benefit of implementing QMS includes competitive advantage where the surveillance process guarantees that the business objectives constantly feed into respective processes and where working practices ensure maximisation of organisational assets (KEBS, 2008). Other benefits include attraction of investment, enhanced brand reputation, and removal of barriers to trade.

Certification to ISO 9001 boosts an organisation's brand reputation; it is a useful promotional tool because it clearly communicates to all interested parties that an organisation is committed to high standards and continual improvement (KEBS, 2009). It also leads to increased customer satisfaction: The 'Plan, Do, Check, Act' (PDCA) or Deming Cycle structure ensures that the customer requirements are articulately considered and met in a continuous basis (KEBS, 2009). It also allows business continuity because documented procedures are easier for new employees to

follow. While commenting on the 2007 ISO certification survey, ISO Secretary-General, Alan Bryden said that the certification,

> ... illustrates in a very concrete manner the extent to which ISO management system standards are meeting the organisation's strategic objective of 'global relevance' – in other words, adding value for the organisations that use them all over the world (ISO, 2009).

These benefits are comparable to the benefits stated in ISO 15489:2001-Part 1, Clause 4. It is emerging that directly or in directly, organisations find themselves concentrating on improving their RM in the process of preparing for ISO 9001:2008 QMS certification due to the anticipated and/or realised benefits.

According to Mnjama (2000), QMS is a tool that brings about international standards acceptable in both developed and developing countries. In this case, goods and services produced in developing countries are therefore made acceptable in developed countries when respective industries in developing countries have their processes certified in ISO standards. Thus QMS remove trade barriers as stated by KEBS (2008) above.

1.5 Background Information on KPLC

According KPLC (2010), the company has a long history dating back to 1875 when Seyyid Barghash bin Said, Sultan of Zanzibar, acquired a generator to light his palace and nearby streets. In 1908, Harrali Esmailjee Jeevanjee, a wealthy merchant in Mombasa, acquired the generator and transferred it to the Mombasa Electric Power and Lighting Company. In the same year, an engineer, Clement Hertzel, was

granted the exclusive right to supply electricity to the then district and town of Nairobi, which led to the formation of Nairobi Power and Lighting Syndicate. In 1922, the two utilities in Mombasa and Nairobi merged to form a company incorporated as East African Power and Lighting Company (EAP&L). EAP&L extended its mandate in Tanganyika in 1932 and then Uganda in 1948. In 1954, the Kenya Power Company (KPC) was created to be managed by EAP&L for the purpose of transmitting power from Uganda through the Tororo-Juja line. After independence, EAP&L operated as separate power utility companies in Kenya, Uganda and Tanzania. With its operations confined only to Kenya, EAP&L was renamed Kenya Power & Lighting Company Ltd (KPLC).

In 1997, the functions of power generation were split from transmission and distribution. This saw the formation of a new company called the Kenya Electricity Generating Company (KenGen) and took over the generation function. In 2007, the Kenya Rural Electrification Authority (REA) was hived out of KPLC to spearhead the supply of power to rural areas. In 2008, the Kenya Electricity Transmission Company of Kenya (KETRACO) was established to undertake the transmission function, leaving KPLC with the function of distribution and retailing electric energy. The process of separation of assets is ongoing.

1.5.1 KPLC's Organizational Structure

Figure 2: KPLC's Broad Organizational Structure

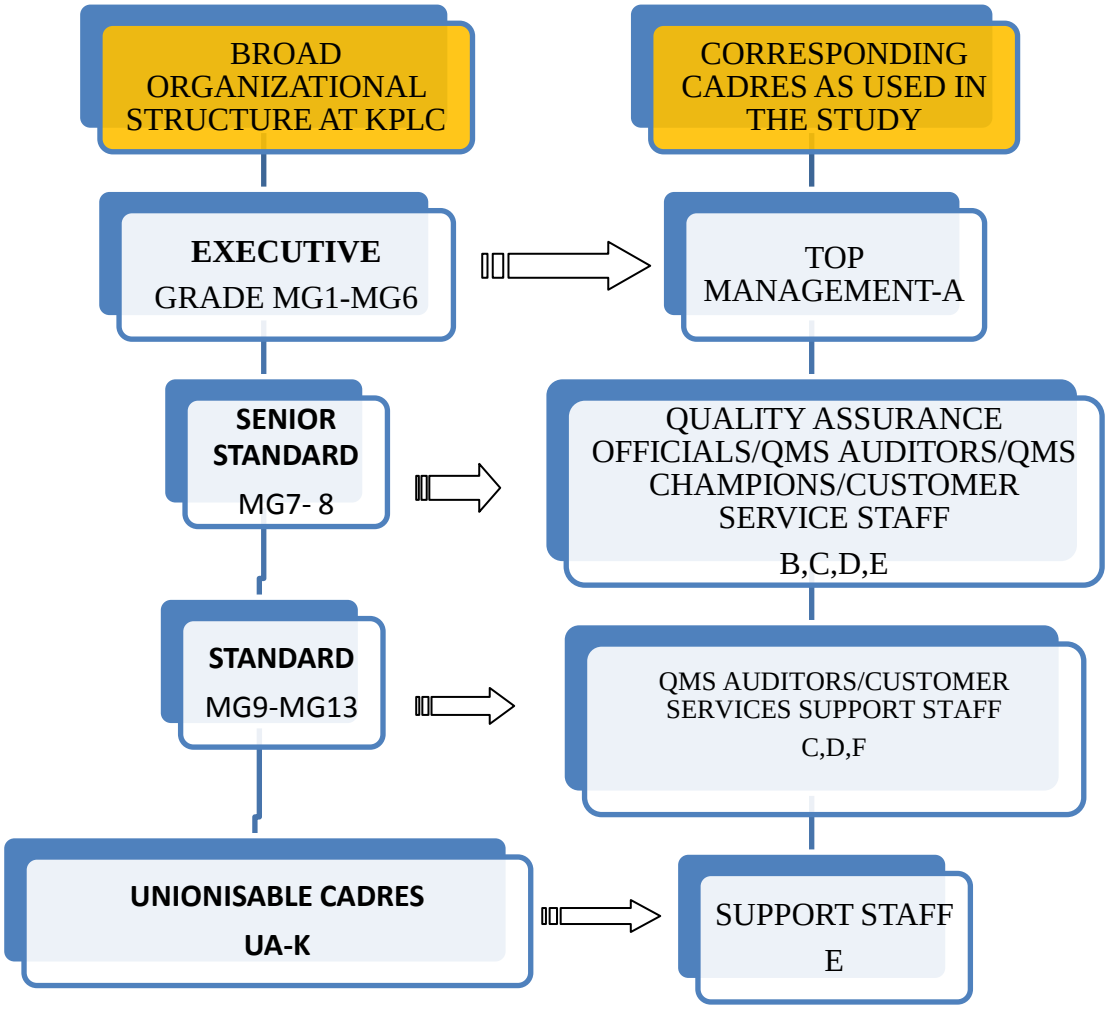


Figure 2 shows an overview of the broad category of cadres at KPLC as used in this study. (This corresponds with the sampled population in Chapter 3. The cadres in the right column reflect the category of respondents).

1.5.2 KPLC's Quality Management System

According to KPLC (2011), the company is a limited liability public enterprise with a legal mandate to transmit, distribute and retail electricity to customers throughout Kenya. It is listed at the Nairobi Stock Exchange (NSE).

With KPLC having been incorporated in 1922 as EAP&L, there is no evidence to show that there was a defined RM function in its formative years through to the 1990s. It is only human resources and administration division where there is a registry system. Two records officers were employed in 1999 and 2000 respectively, and work independently under two different functions. In essence there was no elaborate RM programme in the company.

In 2005 the company started mainstreaming RM because it was a mandatory requirement under clause 4.2.4 of the QMS, which the company was about to implement. The company was certified in ISO 9001:2000 in 2006 and recertified in ISO 9001:2008 in 2009. However, there were issues on RM.

Owing to the non-conformities revealed by numerous internal quality auditing, the RM section was created in April 2006 under the Company Secretary Division to streamline RM. Despite this administrative development, the company has not perfected RM. However, due to the continuous quality and surveillance audits by the certifying body, RM function continued to register continual improvement.

Owing to the foregoing, it can be argued that there is a proportionate change in RM practices in line with the changes made to improve QMS, but there were gaps that needed to be addressed. The company's Quality Policy reads:

> KPLC is committed to providing high quality customer service by efficiently transmitting and distributing high quality electricity that is safe, adequate and reliable at cost effective tariffs. The Board, Management and staff of KPLC

> are committed to effective implementation and continual improvement of the QMS that complies with ISO 9001:2008 in order to consistently meet its customers and other stakeholder's requirements and expectations.

Other statements read:

> Vision: "To provide world class power that delights our customers"
>
> Mission: "Powering people for better lives"
>
> Core Values signify: "Customer First; One Team; Passion; Integrity; Excellence"

The QMS at the KPLC is managed by the Quality Assurance Department where there are the Management Representative (MR), deputy MR and four regional MRs. There are five regions, namely Central Office, Nairobi, Mt. Kenya, Coast and West. Functionally, the QMS is broken into 10 divisions where there are QMS champions. The works of the QMS champions include the following: review of the departmental ISO 9001:2000; QMS documentation; identification of resources for implementation of the same; auditing of the departmental/functional processes; carrying out of corrective actions arising from audits; mapping and documentation of new processes; harmonisation and ratification of the processes; and, the liaison with the departmental head and the MR on the recommendations from the above.

In order to ensure continued utmost effectiveness of the QMS, internal quality auditors perform regular performance assessment/auditing. This is carried out twice per year. In conducting these audits, records are used to provide objective evidence.

The Records Department work together with Training Department and the Quality Assurance Department to ensure that staff is trained on proper records management.

1.6 Statement of the Problem

The prevailing RM practices at KPLC owe much from the implementation of QMS. The RM challenges, though they have been addressed, are still noticeable. For instance the internal quality audits reports (KPLC 2006; 2007; 2008; 2009) revealed a substantial number of non-conformities related to RM.

The ISO 9001:2008 QMS gives some general guidance under Clause 4.2.4 to the effect that there shall be a procedure for control of records. It states that:

> Records shall be established and maintained to provide evidence of conformity to requirements and of the effective operation of the quality management system. Records shall remain legible, readily identifiable and retrievable. A documented procedure shall be established to define the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records (ISO, 2000).

It further states:

> Records established to provide evidence of conformity to the requirements and of the effective operations of the quality management system shall be controlled. The organisation shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposal of records (ISO, 2008).

Therefore, it is the prerogative of KPLC to device methods for managing their records. Although it is stated on the scope of ISO 15489-1(2001)-Documentation-RM that it was established to provide guidance on RM in support of a quality process framework to comply with ISO 9001 and ISO 14001 (ISO 15489-1 2001), on the contrary, ISO 9001:2000-QMS does not make any reference to ISO 15489, not even in the revised 2008 version. And although the value of RM in QMS certification and/or compliance is manifested in the ISO 9001:2008, it appears that KPLC, its QMS consultants and certifying body were not aware of the ISO 15489:2001 because it was not applied while developing the procedure for control of records. At no time did the consultant (KEBS, 2005) and/or the certifying body (Bureau Veritas) made reference to ISO 15489:2001 while in the process of training and/or certifying KPLC in ISO9001:2000/2008.

Moreover, in spite of having established a procedure for control of records, RM challenges were evident. They did not refer KPLC to any other standard that would guide them in developing the procedure for control of records. The certifying body gave KPLC a leeway to design the procedure the way it suited them; maybe on assumption that KPLC had qualified records management officers to handle the matter. Also, in the process of training for implementation of QMS, the consultants and the certifying body never mentioned and/or referred to ISO 15489:2001 as an important tool in meeting RM requirements in implementation of QMS nor any other RM tool.

In view of the above, the study sought to investigate the role of RM in implementation of QMS and propose a framework to be used to guide in the implementation of RM in support of QMS at KPLC.

1.7 Aim of the Study

The aim of the study was to investigate the role of RM in the implementation of ISO 9001:2008 QMS at KPLC, Nairobi, and to develop a framework to guide in the implementation of RM requirements in support of QMS.

1.8 Objectives of the Study

The specific objectives of the study were to:

1. Determine how records are managed during their continuum at the KPLC.
2. Establish how current RM environment affects the implementation of QMS at the KPLC.
3. Find out the critical success factors affecting the implementation of RM in support of QMS at the KPLC.
4. Investigate the role of Information Communication Technology (ICT) in implementation of RM in support of QMS at the KPLC.
5. Investigate the challenges faced by the KPLC in fulfilling RM requirements in its support of QMS at the KPLC.
6. Propose a framework to guide in the implementation of RM requirements in support QMS at the KPLC.

1.9 Research Questions

The study was guided by the following research questions:

1. How are records managed during their continuum at the KPLC?
2. To what extent has RM at the KPLC met requirements of QMS?
3. What are the critical success factors that are affecting the implementation of RM requirements in QMS?
4. What is the role of ICT in the implementation of RM in support of the QMS at the KPLC?
5. What RM challenges are experienced by KPLC in the implementation of QMS?
6. What framework can be proposed to guide the implementation of QMS at the KPLC?

1.10 Assumptions of the Study

Assumptions are very essential in research because they enable the researcher to conceptualise the relationship between variables from the outset (Mugenda and Mugenda 1999; Smyth 2004); for example, in the case of QMS and RM. This study was guided by the following assumptions:

1. Although RM requirements are mandatory in the implementation of ISO 9001:2008 QMS at the KPLC, these have not been fully incorporated in the QMS processes and therefore, they impact negatively in the implementation and maintenance of QMS
2. Although KPLC has invested heavily on business process automation, it has not properly exploited ICT as an important enabler in implementation of RM

requirements in support of QMS, and so makes implementation of both RM and QMS processes ineffective and inefficient

1.11 Significance of the Study

The study has made original contribution to knowledge. It has contributed to the body of knowledge on the nexus between RM and QMS and underpins the development of the policy, practice and theory of RM as a fundamental component of QMS in the electricity supply industries. The study enriches cross-disciplinary studies on the role of RM as an important enabler to all other disciplines/professions, including QMS at KPLC.

The study is expected to assist KPLC in overcoming RM challenges in support of QMS in a more systematic manner. It underscores the importance of embedding RM processes into other BPs and not to approach RM as a standalone programme because this is the surest way to market RM and make it acceptable to the TM, thereby introducing the change management required to bring about organisational culture change that supports mainstreaming RM in support of QMS at KPLC.

The study has prepared suitable recommendations that may be invaluable in supporting implementation of QMS and has proposed a RM framework that could promote effective implementation of RM in support of QMS at KPLC.

1.12 Scope and Limitation of the Study

Mugenda and Mugenda (1999) have stated that there is no research which has no limitations. The study was carried out at KPLC head office, Nairobi, and not the regional offices. (There are four regions, namely Nairobi, Mount Kenya, Coast and Western.) It also targeted six categories of staff from the ten (10) divisions of KPLC.

It was noted that there was limited literature relating to the scholarship on the cross-disciplinary studies on the relationship between RM and QMS. Therefore, this somewhat limited the availability of relevant data; the available literature overly addressed QMS certifications, challenges, accreditation, training, consultancy, auditing, etc, without stressing the essence of other disciplines that play and/or ought to play a significant role in the implementation of QMS. For instance, RM and ICT have a central role to play in driving QMS at KPLC and other organisations.

There are limited or no literature relating to RM and implementation of QMS in Kenya. However, there is pertinent literature relating to RM in support of the implementation of QMS at the Botswana Meat Commission (Mnjama 2000 and Sebina 2000) It was noted that many institutions and organisations in Kenya are in the process of implementing QMS and/or have received certification in the recent past... What is available mainly from the Internet and print media is the information given by the certifying bodies and the organisations that are being certified in QMS. However, this study endeavoured to bring convergence of the literature under RM and those in QMS which were otherwise not blended together to address the shortfall and further collaborate few other pioneer studies carried in other countries (Brumm 1995; Mnjama 2000; Sebina 2000; Duff 2011, among others).

The study did not interview the external customers because this would have increased the cost of conducting the research.

1.13 Definition of Operational Terms

Audit evidence: Includes records, factual statements and other verifiable information that is related to the audit criteria being used (ISO, 2005).

Document: Information and its supporting medium (ISO, 2005).

ISO: A standards development body that was formed in 1947. National standards bodies from represent respective member countries (Cambodia Trust, 2005); for example, in Kenya, the Kenya Bureau of Standard is the representative (KEBS 2009).

Management Representative (MR): The standard requires that the MR must be "a member of management" serving primarily as the "eyes" and "ears" of TM to monitor how well the quality system is developed and implemented (Dawson 2006).

Objective evidence: Data (records) that shows or proves that something exists or is true (ISO, 2005).

Process: A set of interrelated or interacting activities which transforms inputs into outputs (ISO, 2005).

Process approach: A management strategy. When managers use a process approach, it means that they manage the processes that make up their organisation, the interaction between these processes, and the inputs and outputs that glue these processes together (ISO, 2005).

Procedure: Specified way to carry out an activity or a process. (It should be noted that, according to ISO, a procedure may either be documented or not.) (ISO, 2005)

Quality: Degree to which a set of inherent characteristics fulfils requirements. The term "quality" can be used with adjectives such as poor, good or excellent. "Inherent",

as opposed to “assigned”, means existing in something, especially as a permanent characteristic (ISO, 2005).

Quality Management: Coordinated activities to direct and control an organisation with regard to quality (ISO, 2005).

Quality Management Systems: Management system to direct and control an organisation with regard to quality (ISO, 2005).

Record: Document, regardless of form or medium, created, received, maintained and used by the Company in pursuance of legal obligations or in the transaction of business, of which it forms a part or provides evidence (ISO, 2001).

RCM: A record-keeping concept referring to a consistent and coherent process of records management throughout the life of records, from the design and development of record-keeping systems through the creation and preservation of records, to their retention and use as archives (International Records Management Trust, 2009).

Records management (RM): “... a field of management responsible for the efficient and systematic control of creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records” (ISO, 2001).

1.14 Summary

The chapter has provided background to the study, including the statement of the problem, aim and the objectives of the study. It has also provided the assumptions of the study. The chapter has further stated the significance of the study and its scope, and concludes with definitions of key terms used.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The purpose of a literature review is to sharpen the theoretical foundation of a study, obtain what has already been done by other scholars to avoid duplication, provide variety of approaches of addressing research issues, and assist in developing an analytical framework (Kombo and Tromp, 2006; Kemoni, 2008). According to Kemoni (2008), citing (Stilwell, 2000), an excellent literature review has to specify varied views, conformity, divergence and inclination of thinking on the topic of research and be correctly acknowledged in the text.

This chapter presents the theoretical framework and its relevance to the study, specifically using Frank Upward's (1996) Records Continuum Model and ISO 15489:2001-Documentation-Records Management. It reviews literature under six themes based on the study objectives, namely: 1) how records are managed in their continuum, 2) the environment of RM and how it affects the implementation of QMS, 3) challenges affecting implementation of RM in support of QMS, 4) critical success factors in implementing RM in support of QMS, 5) the role of ICT in implementing RM in support of QMS, and 6) the strategies to implement RM in support of QMS at KPLC. The chapter summary is also provided.

2.1 Theoretical Framework

Kemoni (2008), citing Zeidler (n.d), contends that a theoretical framework responds to two questions: What is the problem? Why is the suggested approach a viable solution? This is what justifies the importance of reviewing the literature relevant to this study (i.e., in an endeavour to answer the two questions).

It is postulated that theories provide some explanations of observed regularities (Braman, 2004), for example, why QMS depends on RM and vice versa. According to Upward (2001), "Models are ways of seeing things. Their acceptance or otherwise in an area like RM depends on how much contact they make with the practical consciousness of those who undertake tasks that are considered to be part of that activity".

Various RM models/theories, are presented in the literature review, namely

1. The life cycle theory,
2. Integrated Records Management Model (International Records Management Trust, 1999), and
3. Records Continuum Model (Mckemmish 1997; Upward, 1996/2001; Xioami, 2001; Perderson, 2004). The two main RM models are the life cycle and the RCM.

2.1.1 Records Life Cycle Model and Integrated Records Management Models

According to Indiana University (n.d.), the life cycle model suggests a separation of RM responsibilities whereby records undergo three stages – current, semi-current and

non-current (Mutero, 2011).). This model separates the work of the records managers and the archivists. In this case, archivists appraise, describe, and preserve records at the end of the life cycle.

The life-cycle model presents records as existing in a linear and declining level of usage moving from current to semi-current and non-current stages (Mutero, 2011).. Their life cycle ends up with the decision of whether they would be destroyed or preserved; this is the phenomenon that occurs when respective records are no longer valuable to the creating organisation. However, the RCM postulates that records exist in a continuum space-time, where their value does not diminish with time because they are in continuous change of usage, which varies and shifts from inactive to active at any instant. The life cycle model has its basis on paper-based recordkeeping, while the RCM has its basis on both paper-based and electronic recordkeeping.

On its part, the Integrated Records Management Model was advanced and supported by the International Records Management Trust with a prime purpose of preserving records and archives in an accessible, intelligible and usable form as long as they are useful and/or valuable, and to avail information in the right format, to the right people, at the right time.

According to Information Solution Group (2000), there are six key stages in developing an Integrated Records Management Program (IRMM).

1) Restructuring existing systems
2) Organising and controlling records
3) Providing physical protection for records

4) Managing records in records centres

5) Managing archives

6) Supporting and sustaining the programme.

This model aims among other things to establish records and archives management systems that provide a continuum of care for paper and electronic records through the records' life-cycle and to facilitate the automation of records and archives management systems (Information Solution Group, 2000). Therefore, the IRMM carries the baggage of the records Life Cycle Model. Xiaomi (2001) presented the weaknesses of this model; hence it has been disqualified from being considered in this study. Table 2 presents the major contrasts between the two models.

Table 2: Contrast between the Life Cycle Model and RCM

Variables in perspectives	Lifecycle model	RCM
Origins of the model	Evolved from the need to effectively control and manage physical records after World War II (half a century ago)	Evolving from the more demanding need to exercise control and management over electronic records for digital era (today)
Elements of records definition	Physical entity	Content, context and structure
Major concerns in records management	• Records-centred, product-driven; • Focus on records as tangible physical entities, the physical existence of records and records themselves; • Paper world	• Purpose-centred, process and customer driven; • Focus on nature of records, the recordkeeping process, the behaviours and relationships of records in certain environments; • Digital world
Records movement patterns	• Time-based stage: records passes through stages until they eventually 'die', except for the ' chosen ones' that are reincarnated as archives • Time sequence: records processes take place in a given sequence	• Multi-dimensional: records exist in space-time not space and time • Simultaneously: records processes can happen at any point in the record's existence, or indeed precede it
Recordkeeping perspectives	• Exclusive • Single purpose • Organisational or collective memory • Current or historical value	• Inclusive • Multiple purposes • Can be organisational and collective memory • Can have current, regulatory and historical value from the time of creation simultaneously not sequentially
Recordkeeping process	There are clearly definable stages in recordkeeping and creates sharp distinction between current and historical recordkeeping.	There should be integration of recordkeeping and archiving processes
Criteria for selecting archives	Currency or historical value	Continuing value including current and historical value
Time of archival appraisal	End of records movement	From beginning to the end
Role of recordkeeping managers	• Passive and reactive • Locked into custodial role and strategies	• Proactive post-custodian lists, • Recordkeeping policy makers, • Standard setters, • Designers of recordkeeping systems and implementation strategies, • Consultants, • Educators/trainers • Advocates, • Auditors
Undertaking records management tasks	• Things are done to the records in fixed stages, in a given sequence by particular professional group • Records managers and archivists have no business in directing what records an organisation creates; are relegated to receiving the physical objects once created • Fragmented and disparate accountabilities of creators, users, records managers and archivists	• Integration of business process and recordkeeping processes, the tasks can happen in almost any sequence by any professional group • Records managers have accountabilities to ensure not only the maintenance, but also the creation of evidence of the purposes and functions of organisations • Integrated framework for the accountabilities of players and partnerships with other stakeholders

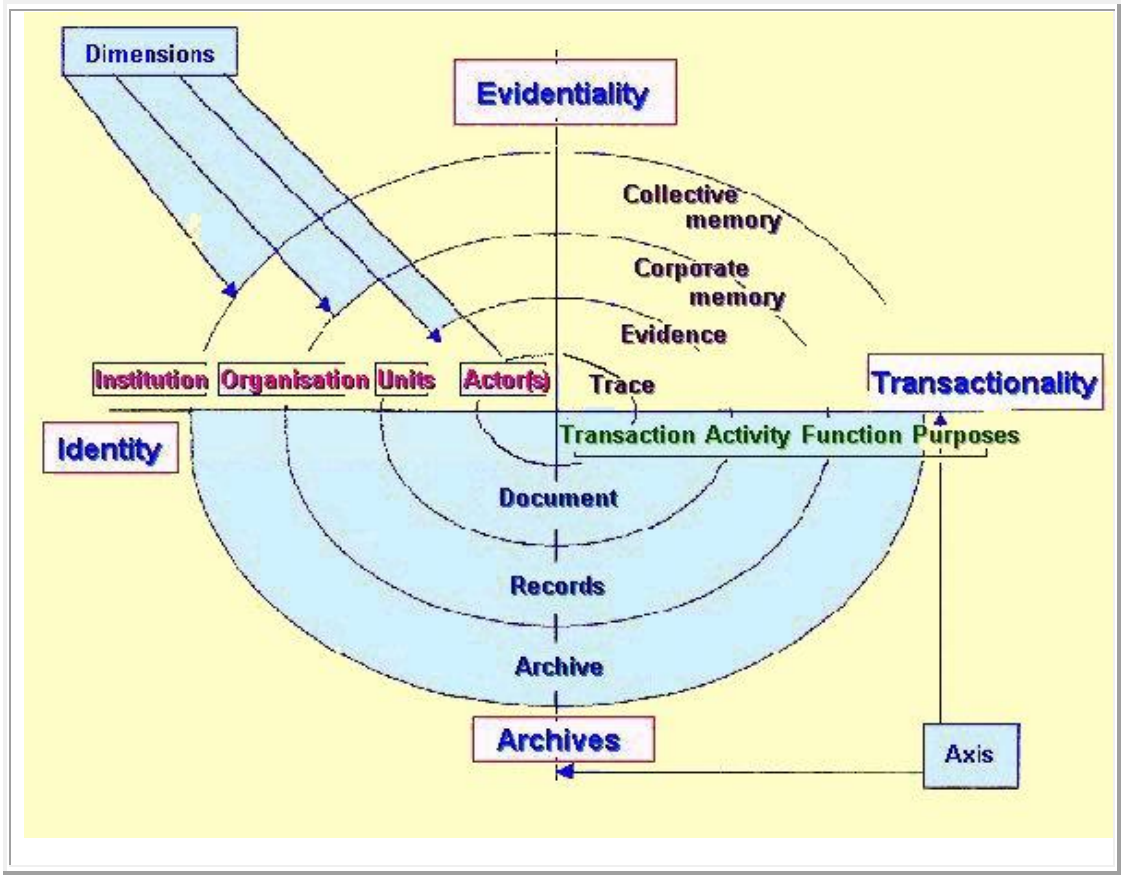
Source: Xioami (2001)

2.1.2 The Records Continuum Model and its Application to the Study

The Records Continuum Model views RM as a process and coherent regime of management processes from the time of creation of records (and before creation), in the logical design of record-keeping systems, through to the preservation and use of records as archives (Mckemmish, 1997; Xioami, 2003) based on functional progression in an organisation. It is the whole extent of a records' existence that refers to a consistent and coherent regime of management processes from the time of creation of records (and before creation, in the logical design of record-keeping systems), through to the preservation and use of records as archives (Pederson, 2004).

According to Mckemmish (1997), Upward (1996/2001) and Xioami (2001) the RCM presents a useful framework for the exploration of the continuum of responsibilities that relate to recordkeeping as more particularly epitomised in the following diagram**.**

Figure 3: The Records Continuum Model



Source: Upward (2000: 123); Xioami (2001)

Mckemmish (1997), Upward (1996/2001) and Xioami (2001) further state that the model gives an approach for conceptualising the records continuum and for thinking about recordkeeping in organisations and the society in general. It pinpoints the core evidential, recordkeeping and contextual elements of the continuum and places them in relationship to each other, it represents the multidimensional nature of the recordkeeping function, it maps the evidential, recordkeeping and contextual features of the continuum against the dimensions of the recordkeeping function, and it is itself placed in a broader socio-legal and technological environment.

McKemmish (1997) contends that the continuum is holistic and multidimensional in orientation; it can be ‘refracted’ and separated into its constituent layers as explained in the dimensions of the records continuum below:

Dimension 1 – Create: This encompasses the players who carry out the act, say the doers of work (employees) in an organisation (the work relates to decisions, communications and actions), the acts themselves, the documents which record the acts, and the trace, the representation of the acts.

Dimension 2 – Capture: This involves the personal and corporate recordkeeping systems, which capture documents in context in ways that support their capacity to act as evidence of the social and business activities of the units responsible for the activities.

Dimension 3 – Organise: This is the organisation of recordkeeping processes. It is concerned with the manner in which an organisation and/or individual defines their recordkeeping regime. In so doing, they constitute/form the archive as memory of their business or social functions.

Dimension 4 – Pluralise: This covers the methods in which the archives are brought into an encompassing (ambient) framework in order to provide a collective social, historical and cultural memory of the institutionalised social purposes and roles of individuals and corporate bodies.

Dimension 3 and 4 can be thought of as the control, regulation, standardisation and auditing dimensions – where recordkeeping professionals operate with steering roles. In the third dimension, the concern is with 'insider' issues – forming, managing and providing access to the corporate memory. In the fourth dimension, it is essentially on the 'outside' looking in; it is concerned with the constitution of collective memory in a way that crosses organisational and jurisdictional boundaries.

The records continuum approach and practice focuses on logical records, their association with other records and their contexts of creation and use. Therefore, the Model can be said to be "a map of a dynamic, virtual place – a place of 'logical, or virtual or multiple realities' – and it always has been, even in the paper world" (McKemmish 1997).

According to Pearce-Moses (2005) the records continuum can be said to be a model of archival science that emphasises overlapping characteristics of recordkeeping, evidence, transaction and the identity of the creator. This model deemphasises the time-bound stages of the Life Cycle Model and therefore contrasts it. It provided records managers and archivists with the approach of integrating recordkeeping and archiving processes as opposed to the life cycle theory.

A continuum-based approach recommends integrated time-space dimensions. This implies that records are 'fixed' in time and space from the moment of their creation, but recordkeeping regimes carry them forward and enable their use for multiple purposes by delivering them to people living in different times and spaces.

As explained in Table 2, it is apparent that the Life Cycle Model is not suitable to manage records in the contemporary environment where automation of RM in support of QMS at KPLC is ongoing. This justifies the use of the RCM as opposed to the Life Cycle Model.

This study was informed by a triangulation of the RCM and the ISO 15489:2001; triangulation refers to the application of a blend of diverse methodologies in a study on the same phenomenon and/or the employment of multiple theories in tandem to study a single phenomenon. Therefore, it mixes theories, methods and multiple data sources to strengthen the credibility and applicability of findings (Ambira and Kemoni citing Hoque, 2006). The benefits of triangulation of the RCM and ISO 15489:2001 is that it brought to the study convergence of different RM tools that aligns both QMS and RM in respective BPs (i.e. in KPLC) in support of the service delivery to the customers; the bottom line of both QMS and RM.

One of the objectives of the study was to find out how records are managed in their continuum at KPLC and therefore make the RCM appropriate to inform the study. McKemmish (1997) presents the four dimensions of the records continuum and pointed out that, “The dimensions of the continuum are not time-based. Records are both current and historical from the moment of their creation”. McKemmish (1997) underscores the very essence of the partnership between professionals dealing with different subsystems within a system (organisation). If the system is to operate effectively and efficiently, there must be a successful collaboration of respective professions/functions.

In addition, the RCM looks at RM as a process based on functional progression in an organisation (McKemmish, 1997). Xiaomi (2001) also contends that records are a product of business processes. As such, records provide an objective evidence of how business processes were conducted. This evidence is critical in auditing of QMS.

The implication of this contention is that, for QMS to work effectively and efficiently, all mandatory procedures as stipulated in the ISO9001:2008 Standard should be implemented. The procedures include among others the procedure for control of documents and the procedure for control of records. Should organisations fail to develop and implement these procedures, then not only would QMS be put in jeopardy, but also more equally RM structures of subject organisation may be adversely affected, and hence the BPs that constitute a system in an organisation.

It can also be argued that the four dimensions of the RM model as put forward by its proponents (Upward 2001; Xiaomi 2001; Mckemmish, 1997; Perterson, 2004) are an outfit of the process approach advocated by the ISO 9001:2008. It means that QMS can appropriately be applied to the RM function not only as part of QMS, but also as a tool to improve RM in an organisation since QMS can be applied to any function.

Mckemmish (1997) contends that the RCM provides an avenue for different players in a system/organisation to interact in order to shape the RM regime. The players in this study included the records managers, ICT specialists, decision-makers and QMS champions (consultants, certifying bodies and MR). They require transfer of knowledge from/and to each other in order to produce a system mix that is required to establish a mechanism of propelling BPs in the right direction in accordance with the

requirements of the QMS and respective regulatory requirements, and to document the implementation in accordance with the RM standards so as to provide objective evidence that the required quality is maintained.

Therefore, QMS and RM cannot be analysed as separate entities, but as inseparable part of the whole KPLC system. For the purpose of this study, effective management of KPLC's BPs calls for prudent management of interaction of its parts; that is, QMS, RM and ICTs. Thus, any meaningful study should endeavour to align the parts within KPLC and apply synthetic thinking accordingly.

2.1.3 ISO 15489:2001-Documentation–RM Standard and its Application to the Study

ISO 15489:2001-Documentation–RM Standard was developed by the ISO in 2001, one year after ISO 9001:2000 QMS. It is stated in its scope that it was meant to provide RM guidelines in support of implementation of QMS. The Standard therefore operationalises the requirements of Clause 4.2.4 of ISO 9001:2008, which provides for the procedure for control of records – to define how QMS records are identified, stored, retrieved and protected, and the establishment of the retention period, and how disposal will be done.

ISO 15489-2001 comprises eight steps that should be used in designing a records keeping system in an organisation:

Step a - Preliminary investigation

Step b - Analysis of business activity

Step c - Identification of recordkeeping requirements

Step d - Assessment of existing systems

Step e - Identification of strategies for recordkeeping

Step f - Design of a recordkeeping system

Step g - Implementation of a recordkeeping system

Step h – Post-implementation review

This standard stipulates that, it is not critical to implement these requirements in a linear way; for instance, organisations may decide to start with Step b (analysis of business activity), move on to Step c (identification of recordkeeping requirements) and then jump to Step f (design of recordkeeping systems) and/or may be having a specific need on which it is seeking advice. Therefore, organisations are advised to use the section of the manual that suits their respective requirements because ISO 15489 is meant to be a very flexible process. Depending on the nature of the project at hand, it may also make sense to work through some of the steps simultaneously, other than taking them as self-contained, fixed points in a process.

In order for any organisation preparing to obtain certification in QMS and particularly to properly fulfil the requirement of Clause 4.2.4, they should apply the concepts advanced by the ISO 15489:2001, which actuate and/or are set to guide in the fulfilling of the stated requirements. Conversely, RM can be greatly improved across KPLC offices if the requirements of Clause 4.2.4 are properly and systematically implemented and maintained.

One of the objectives of this study was to develop a framework to be used as a guide in the implementation of the RM in support of QMS at KPLC because of the existing RM challenges. The prime reason of ISO 15489 is to design and put into practice recordkeeping system suitable to a given organisation. It is pertinent that in developing a suitable framework, KPLC requires some guidelines and therefore ISO 15489 becomes helpful for the purpose due to its innumerable benefits. Records officers, in consultation with the QA officers at KPLC, should use ISO 15489 standard as a code of best practice in developing own suite of recordkeeping products, including the procedure for control of records for the following reasons:

- ISO 15489 was designed to guide ISO 9001:2008 QMS in meeting RM requirements contained in it;
- ISO 15489 is an international standard that has been developed, analysed and evaluated to meet the generic recordkeeping requirements of all organisations; KPLC should benefit from applying its requirements;
- An international standard is more likely to be taken seriously by TM and therefore increase RM acceptance at KPLC;
- Compliance with the standard will generally mean compliance with RM requirements as required by ISO 9001:2008 standard because ISO 15489 provides platforms and identification of levels of information required in recordkeeping (how to title a file, what metadata should be captured at file creation, file tracking, security, etc); and,
- One of the objectives of this study was to develop a framework to be used as a guide in the implementation of the RM in QMS at KPLC's BPs because of the existing gaps. According to (Macintosh, 2007) records managers using ISO 15489

to develop a new programme or evaluate an existing one should familiarise themselves with the eight-step implementation process and, like the RCM, this standard supports modern RM regime which seeks to embed RM processes into the BPs and also support implementation of electronic RM in respective organisations.

2.2 Managing Records in their Continuum in the Realm of QMS

There are no universal strategies that can be employed in all organisations alike. The strategies used depend on various variables that include the following: availability of skilled RM personnel, organisational culture, financial resources, and regulatory and legal requirements. The most important buy-in strategy involves aligning organisational culture with the RM requirements.

The organisational culture is shaped by the TM and it is a key factor in selecting RM strategy (Shepherd and Yeo 2003). Capturing the TM support for the RM programme is very critical. It is opined that the entry point for introducing and sustaining robust RM in support of QMS must ensure convincing the TM about the benefits accruing from RM with regard to the business management point of view (AIIM, 2008)

The ISO 9001:2008 QMS gives some general guidance under Clause 4.2.4. It states that:

> Records shall be established and maintained to provide evidence of conformity to requirements and of the effective operation of the QMS. Records shall remain legible, readily identifiable and retrievable. A documented procedure shall be established to define the controls needed for the identification,

> storage, protection, retrieval, retention time and disposition of records (ISO, 2000).
>
> Records established to provide evidence of conformity to the requirements and of the effective operations of the quality management system shall be controlled. The organisation shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposal of records (ISO, 2008).

This means that an organisation seeking certification must establish a procedure for the control of records enumerating such element as identification, storage, protection, retrieval, determination of retention period, and eventual disposal actions on QMS records. The standard does not elaborate on this matter, but in its scope ISO 15489:2001 states that it was designed to guide in the implementation of RM requirements in support of QMS. It should be used to design the procedure for control of records as required by Clause 4.2.4 of ISO 9001:2008 QMS and, more particularly, expounding on the elements cited in the clause.

According to the ISO (2001), in order to implement proper RM, organisations that are seeking certification in ISO 9001:2008 QMS should use ISO 15489:2001 which specifies eight steps that would see successful implementation of RM programme is support of QMS. (These steps have been discussed and listed in 2.1.3). The steps can be applied selectively and/or entirely depending on the resources, the level of RM at hand, or on what the implementer aims to achieve.

The ISO (2001) and the National Archives of Scotland (2005) present some principles of good RM which aim at ensuring that information is available when and where it is

needed, in an organised and efficient manner, and in a well-maintained environment. Therefore, one of the strategies to be adopted in implementation of RM in support of QMS is to ensure that these RM principles are applied to the RM programme. They include ensuring records are authentic, accurate, accessible, complete, comprehensive, compliant and effective.

QMS is a service delivery programme based on the process approach (ISO, 2009). Xioami (2001) contended that the RCM is a RM regime that sees RM as part of the business processes to which they relates. In the circumstance, the best strategy to fix RM within the purview of QMS is to apply business-process-driven RM (BPRM) which entails embedding RM into a business process to create a symbiotic relationship (AIIM, 2008). The benefits that can accrue from adopting BPRM include: better usage and acceptability within the user community, formalised relationship between business processes and records, ability to capture record information during the information currency/creation and not at the end of it, easy adaptability as business processes change, lower cost of ownership, and better compliance and auditing. It is pertinent to mention that RM plays a pivotal role in QMS auditing.

2.3 How RM Environment Affects Implementation of QMS

The National Archives of Scotland (2005) has stated that business records should be stored in a well-maintained environment. The environment in which QMS records are stored affects their availability when needed by users as mentioned in 2.2 above. QMS is about customer satisfaction through improved service delivery. The way records are kept affect service delivery and that is why RM is part of the mandatory requirements under Clause 4.2.4 of ISO 9001:2008 QMS Standard.

There are certain RM environments that affect implementation of any programme in a given organisation, including QMS. Adequate management of official records is not widespread in many organisations. According to the Government of Southern Australia (2002), some of the environments that affect business RM programmes include:

- Lack of consistent policies and guidelines for the management of official records.
- staff not fully aware of their responsibilities with regard to official records (*ISO 9001:2008 and ISO 15489:2001 stresses the need to clearly define and distribute RM responsibilities*);
- lack of the strategic management of official records, as well as sufficient corporate planning and resourcing;
- official records of permanent value being at serious risk; and,
- Official records not being fully and effectively utilized as part of the corporate knowledge.

If these issues come into play during the process of implementing QMS, then poor audit trail and objective evidence of QMS processes operations may be difficult to audit. Moreover, confirming continual improvement and customer satisfaction in the absence of credible records could be a nightmare. It is incumbent to establish if these issues feature within KPLC and, more particularly, to what extent and how they affect its implementation of QMS.

Another environmental issue that affects implementation of RM in support of QMS relates to lack of TM support. For instance, "…there are two groups who need to be convinced… senior managers are…likely to be impressed by arguments about efficiency, compliance and costs…other colleagues are …likely to be persuaded by practical demonstrations that your activities will make a difference in their working situation, even if there is some short-term hassle" (Northumbria University, 2009). This implies that there must be a good climate that enhances prudent RM in an organisation, including during the implementation of QMS. Hence, the climate setting would start with marketing RM strategies to the key stakeholders, notably the TM. Conversely, the TM's view and support of RM in support of QMS is an important organisational culture that needs to be confirmed or refuted in the study.

According to the Northumbria University (2009) once the need for RM is acknowledged by the TM, the respective organisation should take the following steps to nurture the RM implementation environment: recognise RM as an important corporate responsibility and give it the appropriate level of priority and authority; assign overall line management responsibility for RM to a senior member of the management team; introduce RM audit and structure within the organisation – this may involve the use of external consultants unless the skills already exist within the institution; develop an Information and RM strategy for the institution which ensures that there is an integrated approach to RM, data protection and other information management functions and procedures; alternatively, ensure close practical liaison between them (in some cases RM will be seen as part of a wider Information Management Strategy); and, appoint or train a person to turn the strategy into detailed

policies for the institution and give them sufficient seniority to be credible throughout the institution.

The RM officials are responsible for drawing up guidance for good RM practice and ensuring compliance with the overall policy. The guidance should deal with the following: records creation; filing classification schemes; retention schedules; storage and maintenance of records; final disposition of records (historical archive or destruction); responsibility for maintaining the audit trail of all records destroyed; and, addressing of the codes of practice and legislation (Northumbria University, 2009). One needs to establish the role of RM staff at KPLC and evaluate the environment under which they operate, including the RM tools in place and whether they are appropriately used.

AIIM (2008) postulated that, "...far too many good RM programmes are suffering from lack of user acceptance and one way of solving the puzzle is by developing a programme that is tightly coupled with the underlying business processes". Again, this study was tasked to prove to what extent RM has gained user acceptance at KPLC because failure to attain this acceptance, implementation of QMS at KPLC may be jeopardised owing to the symbiotic relationship that RM and QMS have as presented in 2.2 above.

Moreover, failure to mainstream RM in many organisations means that it is somewhat managed as a distinct process separate from the mainstream business processes. The result is that it is viewed as a foreign practice, which affects user acceptance especially with the introduction of a computerised business environment where users

manage records without the control of the RM professionals as was the case during the registry system operations. The practical and acceptable approach or environment would be the one where RM is taken as a natural part of the business process by adopting a BPRM approach (AIIM, 2008).

2.4 Critical Success Factors Affecting Implementation of RM in Support of QMS

The critical success factors are the key determinants that controls how the RM programme is implemented in an organisation irrespective of whether it is within the realm of QMS or not. The most important buy-in strategy involves aligning organisational culture with the RM requirements; as mentioned earlier (see 2.2), the organisational culture is shaped by the TM and it is a key factor in selecting RM strategy (Shepherd and Yeo, 2003).

Capturing the TM support for the RM programme is very critical (Northumbria University, 2009). It is opined that the entry point for introducing and sustaining robust RM in support of QMS must ensure convincing the TM about the benefits accruing from RM from the business management point of view (AIIM, 2008). It is therefore incumbent upon the persons charged with the responsibilities of implementing RM and/or QMS to ensure they bring out vividly the benefits accruing from implementing the programmes.

Unless these benefits are articulated and made acceptable to the TM, all other efforts may turn out to be a nightmare. It is opined that once the TM buy into the importance

of RM in tandem with the project at hand (i.e., QMS), it will be easy to implement the desired RM programme.

Associated with the TM support is the acceptance of the RM programme by the users, especially the TM. AIIM (2008) postulated that,

> ... far too many good RM programmes are suffering from lack of user acceptance and one way of solving the puzzle is by developing a programme that is tightly coupled with the underlying business processes.

As mentioned earlier in 2.3 above senior managers and other colleagues in the organisation need to be convinced about the activities (Northumbria University, 2009), which will ultimately result in acceptance of the programme. Since QMS is about improving efficiency in service delivery to customers, then convincing the staff on the importance of RM as a QMS enabler is a key undertaking. It is for this reason that RM is one of the mandatory requirements in QMS (KEBS, 2005).

For the RM to be successful, it requires the *active involvement* of all staff, but not only the RM professionals. "This introduces a tremendous change management challenge, one that involves a widespread transformation of business processes and practices" (Robertson 2004). One of the ISO 9001:2008 QMS principle relates to the involvement of people because; people at all levels are the essence of an organisation and their full involvement enables their abilities to be used for the organisation's benefit (ISO, 2005). It would therefore be prudent to establish if all staffs are involved in RM programme while implementing QMS at KPLC.

According to Shepherd and Yeo (2003), there is need to define initial responsibilities because when a RM programme is introduced, responsibility rests at several levels. TM support is essential to the accomplishment of the project. Consequently, it is necessary to engage the chief executive or management board from the onset so that they support the programme, endorse the policy and provide resources.

At the formative stages, key stakeholders should be brought together in a RM policy committee. The membership of the committee should include among others, business unit managers and senior computing, information management, financial, legal and corporate governance specialists. The essence of such a committee is to direct the project and assist in decision-making and subsequent implementation. It is therefore implicit that RM responsibilities in QMS must be properly defined as required by ISO 15489:2001 (ISO, 2001).

Planning of the project implementation is also an important success factor in implementing RM in support of QMS. RM should be part and parcel of the QMS project planning. Markham (2005) has stated that RM projects fail because they are plagued by complications and inadequate resources. To lower the risk of failure, project implementers should define RM policies before implementing an RM system. In addition, they should do the following: create a dedicated, multidisciplinary project team; select appropriate RM technologies like message archiving, electronic RM and enterprise content management (ECM); conduct awareness training for end users and administrators; implement consistent document declaration; monitor the quality of compliance and legal risk mitigation; and, conduct independent audits of users' access

rights, file plan and document declaration methods. These seven elements will dramatically improve the success of RM efforts by KPLC.

Incorporating RM auditing as part of QMS auditing can be a big stride towards improving RM in the realm of QMS processes. For instance, Gatei and Sevilla (2010) have stated, in reference to Strathmore University, that: "... we have focused on the following aspects in past audits: documentation, records management, customer communication and also effectiveness of processes".

ISO 15489:2001 requires full and accurate records of QMS operations to be kept to support traceability and overall monitoring of the performance of the QMS. According to Salakpetch (2007):

> …growers must keep up-to-date records available to demonstrate that all activities … are applied. These records will help trace the history of a produce from the farm to the final consumers. The records must be kept for a minimum of three years. Thailand's QMS has already prepared a ring for the trace back activity to hook up so that the whole chain of QMS and trace back will be completed…All corrective actions must be recorded.

Besides, all the 21 categories of records required by QMS must be kept (ISO, 2008). These records are critical in assisting to monitor how QMS processes are implemented in an organisation.

2.5 The Role of ICT in the Implementation of RM in Support of QMS

According to Mishra (2011) modern businesses are ICT-driven; hence, ICT is also applied to quality management where it aids numerous quality management chores such as quality planning, inspection and quality control. Gardner (2009) has stated that,

> ...there can only be positives from implementing a computerised QMS. The main objectives of QMS documentation are communication of information, evidence of conformity and knowledge sharing. An organisation is just as likely to meet these objectives using a computerised QMS. Communication via e-mail is one of the great benefits of a computerised QMS. Given the appropriate access to the computerised QMS all personnel can benefit from greater knowledge sharing. A computerised QMS can provide evidence of conformity in the same way as a paper-based system…A computerised QMS should be more effective than a paper-based system…To ensure documents and records are being maintained, procedures will be needed to check the back-up systems. Computerised QMS document control procedures including document identification and revision level will need to be in place. Control of computerised QMS records will need to be addressed in the system procedures. Details of how information from the physical processes is applied to the computerised system should be documented…Methods of electronic communication with customers, suppliers and other interested parties should be described in the system procedures. Policies and procedures for the authorisation of computerised quality management system documents and records will need to be applied.

Volschenk (2007) confirmed that computerisation reduces paperwork in QMS and therefore reduce cost in terms of reduced storage space. Dodge (1999) has also stated that computerised records reduce paperwork and improve productivity.

There are various types of software to manage QMS processes. According to Gael Ltd (2011) Q-Pulse is being used at the Cambridge University Hospitals NHS Foundation Trust to maintain their compliance with ISO 9001:2008 and to continually improve the QMS processes. It allows more users to access the system at the same time thereby allowing everyone to work on the same system for compliance documentation. Ultimately this reduces the reliance on paper documentation and tracking and monitoring of the processes is made easy. It is said to reduce time, effort and cost in maintaining compliance with QMS requirements including RM.

In addition, Q-Pulse allows more control over documents throughout the document management process. It has the ability to identify outstanding actions and automatically notify appropriate personnel. This enabled the staff to enhance the accuracy of controlled documents and their associated records:

> ….we are now able to track and monitor our documents at each and every stage of the change control process… Being able to identify at-a-glance which documents are due for review, which are being revised and which have been approved, has enabled us to reduce the time and effort that we spend … in managing our controlled documentation… By allowing interlinked departments to centralise their QMS information, the Hospital has also been able to standardise the management of their QMS, which has enabled them to

> streamline their management of compliance with regulations and standards including ISO 9001 (Gael Ltd, 2011).

Unlimited Learning Resources (2008) said that Q-Pulse enables quality workflow management by providing integrated control facilities for the following QA and quality improvement functions: document control, auditing, non-conformity, corrective and preventive actions, customer management, analysis and improvement, control of suppliers, asset management, training and competences, etc. All these QMS activities generate records that are centrally managed in an electronic environment. Control of documentation enhances the quality of QMS records. Q-Pulse also enhances retrieval and usability of records through shared platform.

Another type of software that is used to manage QMS documents and records is called SharePoint, which is:

> a single, computerised document repository which houses all existing documents relating to ISO quality processes, including control documents and records, internal audits, training documents and corrective/preventative… action requests. On an individual basis, the system monitors each employee's training records to ensure they are adequately instructed for their particular assignment instead of relying upon an e-mail approval process to physically update the training records. Nucor Steel Memphis benefits from updates made in real time. Changes made overnight at a plant are available to personnel the next morning… Having access to the most current documented process is key to maintaining quality management standards, something that has become especially complex inside of Nucor Steel Memphis where the number of

> documents has grown exponentially…Now anytime a teammate needs a work instruction or process, they can go to this portal and get the most current information … SharePoint is just a better, more efficient tool (Abel Solutions 2011).

Computerisation of RM in pursuit of QMS is an important undertaking since it reduces duplications and paper work. It also ensures easier control of QMS documentation including RM. Gatei and Sevilla (2010) point out that,

> ...an innovative approach was … taken on the presentation of the quality manual in the University. The manual is online with various controls set in place regarding access and update. This allows for ease of update and also distribution and availability of the manual to all staff... Downloads and printouts are also possible as and when required.

The above statements shows that ICT has a great role to play in managing RM in QMS processes and overly brings about efficiency and effectiveness as well as cost reduction.

2.6 Challenges Facing the Implementation of RM in Support of QMS

There are myriad RM challenges that may affect the implementation of QMS. Abel Solutions (2011) point out that QMS brings about much documentation which must be reliably controlled. Such documents include procedures regarding quality and safety, and must be in accessible format.

In 2.4 above, some RM challenges affecting implementation of RM in BPs have been presented as forming an environment under which records are managed. It is vital to mention other RM challenges as well and to mention from the outset that there is limited and/or no specific literature pertaining to the actual challenges. However, it is important to present some of the general challenges experienced in some organisations because they are generally the same irrespective of the project that is being implemented.

According to the World Bank (2003) "…in many developing and transitional countries the recordkeeping problem is a massive one. Existing record keeping systems – if they exist at all – are inadequate and unable to cope with the growing mass of unmanaged papers. Administrators find it ever more difficult to retrieve the information they need…" One of the RM elements that is required to be part of the procedure for control of records in QMS is the explanation of the mechanisms of retrieving records. It implies therefore, that if records are not retrievable, then they are not useable, and this can affect decision-making and auditing of QMS processes.

The World Bank (2003) has summarised some RM challenges as follows: There is/are:

- a low level of awareness of the role of RM in supporting organizational efficiency and accountability;
- Absence of legislation to enable modern RM practice;
- Absence of core competencies;
- Overcrowded and unsuitable storage of paper and electronic records;
- Absence of purpose-built record centres;
- Absence of a dedicated budget for RM;

- Poor security and confidentiality controls; and,
- Absence of vital records, disaster recovery and preparedness plans and limited capacity to manage electronic records.

Many organisations make a mistake of computerising RM in haphazard ways, thereby compounding the problem. The World Bank (2003) describes this scenario as follows:

> Electronic recordkeeping systems can compound the problem. Computerised information systems may be set on top of inadequate paper filing systems and the two systems never merged. Automating a chaotic system will not solve the chaos – it will only create more chaos. If the paper-base systems are collapsed it is futile to layer an electronic system over top without seriously compromising existing and future recordkeeping capabilities even further. Or there are no methods for the long-term preservation of records which have been created in electronic form. The rapid obsolescence of software and hardware only compounds the problems Current solutions require highly specialised techniques that are out of the technological and economic reach of most developing countries.

If the design of the computer usage is not proper, there can be challenges; for instance, Gatei and Sevilla (2010) have said that application of ICT in the management of QMS at the Strathmore University is wanting because, “though the idea of the manual on the intranet is good, the design is still very basic and rudimentary and plans are underway to improve it to allow for ease of navigation…”

Computerisation of RM is said to be a solution to many RM problems. However, an electronic RM has its own challenges that need to be understood and even so the process of computerising QMS records. Patterson and Sprehe (2002) have mentioned some of the challenges, which include managing e-mails as records because the e-mail architecture is not dedicated to RM platform and is not an integral component of information technology planning, systems design and architecture. Other problems include the challenge of updating conventional RM, integrating ERM with other ICT systems, phased implementation, end-user training – sometimes it is very basic and inadequate – business process reengineering, website RM and auto-categorisation**.**

The literature here forms the background upon which to contextualise research findings.

2.7 Issues in Developing an RM Framework in Support of QMS

The essence of the RM framework is to provide an avenue to make it acceptable and an important QMS enabler. Therefore, this would make the implementation of RM in support of QMS articulate.

Various authorities have written on the best approaches to implementing RM in business processes. In the realm of QMS, application of the requirements of ISO 15489:2001, which was designed to guide in meeting RM in support of ISO 9001:2008 provides the eight steps implementation methodology (discussed in 2.1.3). This methodology can form part of the RM framework in support of QMS. It will therefore be invaluable to determine the extent to which the standard is applied in the implementation of RM within QMS processes at KPLC.

According to AIIM (2008) the RM implementation strategy must adopt BPRM where RM is made to fit into a business process. The mechanism should include the following aspects: determining the right business processes to address; determining input and output records by making inventory of critical business records; determining record metadata; mapping record to record series and types; determining records risk, including business, legal, operational, and financial; determining the retention schedule; updating associated procedures to reflect record management steps; and, socialising the process and procedures with all business unit users.

AIIM (2008) has stated the key guidelines to follow when developing a BPRM policy: keep it simple and manage expectations — keep the business process and record relationships simple and easy to understand. Managing expectations among stakeholders and users means ensuring that there is a business value first — i.e., document-specific benefits to users and business units prior to rollout. One should communicate that these benefits are real and will actually help business users by making their jobs just a little bit easier. One should focus on user acceptance—this is the central theme—no RM programme is ever going to be successful if end users are unhappy or, worse, unwilling to use their records system.

By focusing on the eventual end user there is a better chance of success. One should obtain senior management buy-in — a key objective of any records programme is to obtain senior management buy-in at the start of the programme and, more importantly, during the implementation and deployment phases. One should also start small and use the pilot approach — i.e., should conduct a pilot with a mid-size business process to prove that the records management process works and that all

systems and controls work as designed. A BPRM programme should bring RM into the mainstream to ensure user acceptance (AIIM, 2008). This shows that the RM framework should be rich enough to capture allays of elements that would jumpstart proper RM in an organisation seeking ISO 9001:2008.

2.8 Summary

Chapter Two has discussed the theoretical framework where triangulation of the RCM and ISO 15589:2001 was adopted to inform the study. Their relevance to the study has been enumerated. The chapter has also presented some literature related to how records are managed in their continuum within the realm of QMS, the environment under which records are managed and how it affects the implementation of QMS, the critical success factors in the implementation of RM in support of QMS, the role of ICT in the implementation of RM in support of QMS, and the challenges facing RM in the processes of managing QMS processes. The chapter ends with the presentation of pertinent issues in the development of a RM framework in support of QMS.

The reviewed literature confirmed that ineffective RM practices can impact negatively, not only in QMS processes, but equally, in all other BP enablers and the core business of a given organization. This collaborated the research assumptions as presented in chapter one (see 1.10), and therefore assisted the researcher to articulate the methods of investigating the phenomenon at KPLC to see whether the theory and findings by other scholars were confirmed by the study.

The literature review shaped the research methodology adopted in the study, while the aspects discussed in the chapter provided a basis for formulation of the research design which is discussed in the chapter three.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter describes the research design that the study adopted. It presents the study population, sampling techniques, data collection instruments, and data presentation and interpretation.

According to Kothari (2004), research design refers to the arrangement of conditions for collecting and analysing of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is a blueprint for the collection, measurement and analysis of data. This chapter, therefore, specifies the source of data, types of data relevant to the research problem, and pinpoints the approaches used in the gathering of information and also the methods used in data analysis

3.1 The Case Study Approach

This study inclines towards qualitative approach. There are different types of qualitative research designs (Patton, 2002). These include the case study, ethnography, grounded theory, phenomenology and participatory research. In this study, a case study research design was applied to describe in great details the nexus between RM and QMS at KPLC's BPs. In a case study research design, the interest is in an individual case rather than in a method of inquiry. A 'case' may be simple or complex (Patton, 2002). The data may be quantitative or qualitative and the focus is on what can be learned from the individual case.

The case study research design is a useful tool for investigating inclinations and specific situations in scientific disciplines because it narrows down a very broad field of research into one easily researchable topic and thus provide an in-depth study of a particular situation (Shuttleworth, 2008). This study investigated how and why RM is instrumental in implementation of QMS at KPLC.

Moreover, this method of study was found invaluable for testing whether scientific theories and models actually work in the real world (Shuttleworth, 2008). It was informed by the RCM and ISO 15489:2001 RM Standard and, therefore, the need to test how they are applicable to the study because Yin (1994) postulated that in a case study method, the type of research question typically endeavours to answer questions like “how” or “why”

Qualitative methods helped to explain the factors that influenced the relationship between RM and QMS, and how KPLC staff understood the subject of the study.
A case study is an empirical inquiry in which the focus is on a present-day phenomenon within its real-life context; boundaries between phenomenon and its context are not clearly evident (Yin, 1994). This makes the research design fit the study because RM and QMS are contemporary phenomenon and their boundaries are not clearly defined; the context and boundaries needed to be expounded through this study.

Schell (1992) stated that the case study is the most flexible of all research designs because it allows the researcher to maintain the holistic characteristics of real-life events while investigating empirical events. Besides, it allows multiple sources of

evidence to be used. In this study, interviews, observation and document reviews were the sources on information that shows the role of RM in implementation of QMS at KPLC and, therefore, attest to the reason why case study design was chosen.

3.2 Study Location

The study was carried out at KPLC Head Office because it has representation of all the ten functional divisions, unlike in the regional offices. The head office is situated along Kolobot Road, Nairobi, within Parkland Area. It is a limited company with Government of Kenya being a majority shareholder. It operates under the Ministry of Energy and it is charged with responsibility of transmitting, distribution and retailing electricity throughout Kenya (KPLC, 2010).

3.3 Study Population and Justification

The study population consisted of ninety two (92) respondents who were drawn from six categories of KPLC staff as shown in Table 3 below.

The study population was drawn from the 10 divisions in KPLC and grouped into six (6) categories (A-F). Virtually all members of KPLC staff are partakers in QMS, but not all are directly involved with its implementation and hence the justification of the study population, which is purposely selected. Since this is a qualitative research that aimed at obtaining in-depth information from the respondents, it was justifiable to select only 92 respondents who are knowledgeable in QMS and/or participate in its implementation. (The summary of the population sample size is as tabulated below.)

Table 4: Study population, sample size (n=92)

Category Name	Total population	Number sampled
A-Top Management	10	10
B-QA Officials	2	2
C-QMS Internal Auditors	75	24
D-QMS Champions	90	30
E-Support Staff Handling records (Secretaries)	15	15
F- Customers Service Staff	11	11
Total	**208**	**92**

**At KPLC, other than Human Resources & Administration Division, all other divisions have no registry system. Secretaries are the custodian of respective records and therefore double up as records keepers.*

3.3.1 Category A: Top Management

The top management includes the chief managers who are the divisional heads, Departmental Managers and Sectional Heads. They constitute the top decision and policy making organ of QMS at KPLC. They also provide the required resources and policy direction to the implementation of QMS since they are the members of the management committee. They hold invaluable information on the overall TM perception and support required to drive QMS. It is therefore pertinent to include them purposely in the study. Their involvement touched the interest and views of all KPLC divisions.

3.3.2 Category B: Quality Assurance Officials

It is the requirement of ISO 9001:2008 QMS that organisations implementing QMS must have an MR who is QMS process owner. At KPLC, the MR is the functional head of the Quality Assurance Department, at Senior Standard (Refer to Fig.2 in Chapter One). The MR has no other duties other than management of the QMS function). There is also one assistant MR and regional MRs.

The functions of the MR in KPLC are to drive the QMS process entirely. Some of the key roles and which necessitated their selection as key informants in this study were: coordinating with the Certifying Body (Bureau Veritas); representing the management during certification and surveillance audits; promoting awareness of customer requirements to the KPLC fraternity; preparing, updating/revising corporate QMS documents (Quality Manual, Quality Policy, the mandatory six procedures and other documentations); ensuring the compliance of all the functions as per the ISO 9001:2008 Standard; preparing management review meeting schedule and conducting management review meetings; preparing audit schedules, conducting internal audits preparing audit reports, writing non-conformity reports; communicating to the TM on quality issues/non-conformities and audit reports; measuring and monitoring the process performance across the company; initiating necessary corrective and preventive action; creating ISO/Quality awareness for the associates by internal trainings; periodically reviewing of Quality policy; reviewing from time to time all the functions to check on the effective implementation of QMS; linking between the Certifying Body/QMS consultants and KPLC; and, keeping registers and copies of all QMS documentation, including all procedures and work instructions. Therefore, they

hold key information that is vital to the study; hence, it justified their selection through purposeful sampling.

3.3.3 Category C: QMS Internal Auditors

The main tasks of staff in this category are to carry out internal audits to ensure that KPLC maintains the QMS processes as planned. These auditors were found to have been trained and routinely attend refresher courses to sharpen their auditing skills. They investigate the performance of QMS and prepare internal quality audits reports as assigned by the MR. They constantly peruse QMS procedures and work/instruction manuals and tally them with the actual performance to see if their requirements are implemented as documented. They also corroborate the findings with the records, which provide objective evidence that the processes are effectively and efficiently being implemented in the respective offices in KPLC. Since they were the one who prepared internal quality audit reports, they provided objective information from an outside point of view as opposed to the TM, QMS implementers, coordinators, support staff and staff handling customers all of whom provided their insider views.

3.3.4 Category D: QMS Champions

This category of informants included ten (10) divisional QMS representatives and twenty-five (25) functional heads from each of the ten divisions of KPLC. The divisional QMS representatives are the coordinators of QMS in each division and are the liaison between respective divisions and the MR/QA Office. They are trained in implementation of QMS and actually participated in preparation of QMS documentation and their standardisation. They developed various QMS procedures and work instructions which were adopted by respective offices across KPLC. They

developed these QMS implementation tools based on respective QMS processes and activities in their area of jurisdiction. Therefore, they are knowledgeable of their BPs and able to translate them into QMS processes.

QMS Champions comprise staffs that hold pertinent information on how preparation and implementation of QMS was done in their divisions. At the time of the study, they kept copies of divisional and departmental quality objectives, procedures, work instructions and register of all QMS documentation in their divisions. It is this background that justified their being key informants in the study.

Functional heads are the line managers who are charged with responsibilities of supervising implementation of the QMS in their divisions. They supervise implementation of QMS in their offices as they supervise implementation of QMS processes which are actually their respective core business. They keep records of implementation of QMS, especially the audits reports and internal routine audits which depicts their performance. They are knowledgeable of QMS implementation challenges and respective remedial measures in terms of corrective and preventive actions. They were therefore better placed to provide relevant data required in the study.

3.3.5 Category E: Support Staff

Other than the Human Resources & Administration Division, all other divisions have no registry system. Secretaries and clerks are the custodian of records in their divisions/departments and therefore an important support staff in so far as records

keeping is concerned. Their experiences were invaluable to the study. The registry staffs in the Human Resources & Administration Division was equally important to the study since the research wanted to discern the extent to which the procedure for control of records was put into practice by staff directly handling records in their offices.

3.3.6 Category F: Customer Service Officials

The Corporate Communication Staff is the link between KPLC and the general public; therefore, it provided data on how the public perceived KPLC after certification in ISO 9001:2008 QMS. Customer Relations Staff handles customer relations issues, including customer complaints.

It is important to point out that the essence of QMS is customer satisfaction. The two offices – Corporate Communication and Customer Relations – receive information from other KPLC offices in order to respond to the public/customers complaints and other matters. The staffs in these functions was therefore significant to the study as they provided information on the status of customer satisfaction in tandem with availability of complete, accurate and timely records in support of discharging of their duties. This justifies why they were incorporated as informants in the study.

The members of the marketing, customer service and distribution staff were also construed to form part of the customer service officials for the purpose of the study because they interact with customer in different aspects of supply of electricity.

3.4 Sampling Techniques

Oser (1997) states that to study a population, the researcher has to select a small group called a sample because it is not possible to cover the entire population (O'leary, 2005). Lancaster (2005) asserts that when doing a research, there is need to ensure that the sample is sufficiently large and representative of the population because the integrity of the findings largely depend upon these factors, and hence the need for appropriate sampling techniques.

There are two types of sampling techniques, namely probability and non-probability sampling techniques (O'leary, 2005). In probability/random sampling, there are simple random sampling, systematic sampling, stratified random sampling, cluster sampling, etc. In non-probability sampling/non-random sampling, there are purposeful sampling/handpicked sampling, snowball sampling and volunteer sampling. This study used purposeful sampling methods that focused on a limited number of informants, who were selected from the 10 divisions of KPLC so that their in-depth information could give optimal insight (International Development Research Centre, n.d.). Care was taken to ensure that the informants were drawn from the 10 divisions of KPLC subject to their being knowledgeable about QMS as epitomised in the six categories of informants discussed above (*See Table 2).*

Purposeful sampling is one of the non-probability sampling techniques used to select informants in a qualitative research where a researcher purposely selects those informants that are relevant to the study irrespective of whether they are representative of the population or not. In this case, their knowledge of the subject of the study (QMS) played a key role in determining the criteria for their selection. The

researcher identified the subject and location of the study and then identified those with key information on the subject. Therefore, purposeful sampling is not haphazard sampling technique since it is designed to help researchers pick information-rich cases like the subject study. The steps involved in applying purposeful sampling as used in the study were (Tongco u.d)**:**

1. The first step was to deciding on the research problem; which was to bridge the RM gaps in implementation of QMS at KPLC.

2. The second step involved determining the type of information needed. Information from every respondent in at KPLC was potentially valuable, but it was noted that information related to QMS at KPLC is held by only certain members of staff

3. The third step related to defining the qualities of the respondents. The researcher wanted respondents who has some degree or knowledge and experience in implementation of QMS at KPLC, either by approving, providing resources, managing, auditing, custodian of QMS documents and records and/or users of such documents.

4. The fourth step entailed finding respondents based on defined qualities as in step 3 above. The researcher asked for assistant from the MR to identify the right respondents basing on the criteria in 3 above.

5. The fifth step involved drawing of the categories of respondents basing on the criteria in 3 above. Therefore, six categories of respondents were identified as enumerated in table 4.

6. The sixth step saw the researcher identify a total of 208 respondents at KPLC's head Office. The researcher then decided to obtain 20 or about 30% respondents from each category to make total respondents to be 120. It was however, noted that some respondents in some categories were less than 20. Thus all of them were selected into the sample. For the two categories (QMS Auditors and QMS Champions) which had more than 20 staff, 30% of each category was selected using simple random sampling.

The advantages of purposeful sampling (Patton, 2002) were that:

- It made the process of sampling relatively easier since the issue of representation was not crucial.
- It provided the researcher with criteria for selecting the sample population subject to their being knowledgeable of the subject.
- It afforded the researcher to select the appropriate people to participate in the study.

The disadvantages of the purposeful sampling were that:

- It somewhat limited the chances of QMS players being selected to participate in the study.
- It may have brought about researcher's biasness in selecting the study population. However, the researcher was able to avoid such challenge by a way of ensuring proper steps were followed at the time of sampling.
- The right individuals may have been left out of the study and thus some of the information that may have been crucial to the study may have not been captured.

3.5 Data Collection Instruments/Methods

The study inclined towards a qualitative approach and therefore the researcher used interviews, observation and document analysis as the data collection instruments. For the purpose of getting in-depth information about the nexus between RM and QMS in KPLC's BPs, various data collection tools were used to augment each other and also to ensure validity and reliability of both the data collection process and the data themselves.

3.5.1 Interviews

According to Kothari (2004), interviews involve presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. Interviews were used to collect data because they are predominantly helpful for obtaining the story behind a participant's experiences (McNamara, 2006) with the following: QMS and RM, effectiveness and usefulness of RM, ICTs and QMS in BPs in KPLC; informed decision-making, strategic planning and resource allocation; and, sensitive topics which people may feel uncomfortable discussing in a focus group. They also added a human dimension to impersonal data.

The researcher pursued in-depth information around the nexus between QMS and RM and interviews were used to gather information from QMS representatives, especially those handling/managing records. They were also used to gather information from MR and also from the management staff, and to obtain data as follow-up to ascertain gathered information from various sources.

Before designing the interview questions and processes, the problem (what need to be addressed) was clearly articulated using the information to be gathered by the interviews. This helped to keep clear focus on the intent of each questions.

The interviews were conducted in an appropriate environment. Both unstructured and semi-structured interviews were conducted. Appropriate preparations were made before the interview, including explaining the purpose of the study/interview to the informants, confirmation of confidentiality and independence of the participants, among other pertinent research ethics.

3.5.1.1 Advantages and Disadvantages of Interviews

The major advantages of interviews were that they:

- Were invaluable in gathering detailed information about personal feelings, perceptions and opinions about the study topic because interview questions opened intensive engagement with respondents in an endeavour to clarify pertinent statements from them;
- Allowed more detailed questions to be asked. The interview conducted in this study attested this, because the researcher had an opportunity to ask more questions beyond what was written as interview checklist.
- Achieved a high response rate. 87% of the sampled respondents responded;
- Informants' own words were recorded. In this study, substantial quotation of the respondent's real statement is evident.
- Ambiguities were explained and incomplete answers followed up via e-mails and telephone interviews. One has an opportunity to engage respondents to ensure all vague statements were clarified.
- Precise wording were tailored to informants and precise meaning of questions clarified; and,
- Interviewees were not influenced by others in the group and some interviewees were less self-conscious in a one-to-one situation (Kothari 2004; McNamara, 2006).

3.5.1.2 Disadvantages of Interviews

Interviews had some disadvantages:

- They were time-consuming (with regard to setting up, interviewing, transcribing, analysing, feedback, reporting, etc);
- They were costly in terms of time and commitment to ensure rescheduling of the interview, in case where respondents could not be available as earlier been scheduled,
- Different interviewers (i.e. in case of research assistants) may have understood and transcribed (recorded) interviews in different ways (McNamara, 2006). However, every effort to clarify all questions and answers were properly addressed. The pilot study, use of tape recorder during the interview, induction and routine consultation with the research assistants assisted to ensure that as far as possible, the questions in the interview checklist were understood prior to the onset of the interview and during the actual interview. Besides, follow-up clarifications were made even during the time of writing the report.

It is pertinent to point out that the triangulation of data collection instruments, preparing simplified interview questions and pre-testing them greatly assisted in overcoming some of the disadvantages mentioned above.

3.5.1.3 Conducting the Interview

To ensure that the interviews were conducted prudently, the researcher confirmed from the outset that anonymity was to be preserved. The researcher also described the ground rules and reiterated the purpose of the study. Besides, the researcher recorded all interviews where possible/appropriate which allowed greater interaction between the interviewer and the respondent.

Telephone interviews were used in extreme cases where it was difficult to meet some respondents, especially the TM. It was used also on follow-up cases to clarify information collected from the field. This was used to interview three (3) TM and to make thirty seven (37 follow ups clarification.

On the part of planning, the informants lined up to be interviewed were identified from the outset, including their offices. The preferable time of the interview was also agreed upon from the outset. The researcher kept time all through and where there were unavoidable delays/deviations informants were advised on time and rescheduling of the interview time agreed upon.

The informants were told that the research was solely intended for scholarly work and confirmation was made to the effect that the result would be available for their scrutiny once the research was completed in case they wished to have a look at it. This approach was informed by McNamara (2006).

3.5.2 Observation

In most cases, all the data collection methods were used simultaneously, especially interviewing and observation. According to ’Leary (2004) observation is a systematic method of data collection that relies on a researcher’s ability to gather data through ones’ senses like seeing, hearing and feeling. The researcher continuously understood how to control inherent biases that may have coloured the observation and hence have

a potential impact on the observed. Therefore, observation as a tool of data collection was planned to coincide with the interview.

Observation was used to capture what respondents do and not what they said they did (O'Leary, 2004). The researcher was able to observe, among others, how requirements of Clause 4.2.3 (Control of documents) and Clause 4.2.4 (Control of records) of the ISO 9001: 2008 were applied in real work situation at KPLC to see if they exhibited connection with the guidelines provided in ISO 15489:2001 and the procedure for control of documents and the procedure for control of records. The researcher also made an attempt to see how identification, storage, retrieval, protection, retention time and disposal of records were done by the operators in real working environment.

The purpose of observation included describing of the setting, observed first-hand experience, which assisted with analysis of the data, vitalising what was normally taken for granted or not easily spoken about, and also confirming some perceptions of respondents (Patton, 2002). Recording and reviewing of the observed subject were planned and done in a methodical way using an observation checklist (see Appendix 7).

3.5.3 Documents Reviews

Documents review entails collection, reviewing, interrogation and analysis of reports as primary sources of research data (O'Leary, 2004). Internet, newspapers, books, standards, reports, quality manual, procedures, work instructions from KPLC and outside the organization were extensively reviewed to gather more information and

insight into the research topic and also to corroborate information obtained from interview and observation.

3.6 Pilot Study

Validity refers to the accuracy and meaningfulness of inferences that are based on the research results and/or the degree to which the findings gotten from data analysis represent the phenomenon under study (Mugenda and Mugenda, 1999). According to Golafshani (2003), reliability in qualitative research means credibility, neutrality or conformability, consistency or dependability, and applicability or transferability, all of which are to be the essential criteria for quality. It implies that the research instruments and the data they collect are credible, unbiased, dependable, etc. In addition, validity in qualitative research implies trustworthiness (Golafshani, 2003).

To verify the reliability of the research instruments to used, they were tested through triangulation of methods and pre-testing by a pilot study for one week before commencement of the study. This was to ensure that they provided credible and reliable data. Two research assistants were hired to assist the researcher pre-test the research instruments. Besides, triangulation of data collection instruments to increase the credibility of the findings was used, i.e., multiple data collection methods were used to check the authenticity of the results; hence, interviews, observation and document analysis were used concurrently in order to regulate reliability and validly of both the data collection methods and the data themselves.

Further, all the research questions, especially the semi and structured interviews were tied to the research objectives to limit deviation from the scope of the study. In a case

where the researcher found some elements of the data vague, follow-up telephone interviews were conducted to clarify the issue at hand. E-mails communication was also used to follow up.

3.6.1 Construction and Pre-testing of the Interviews

To ensure that the interviews subscribed to the ethical issues, the researcher constructed and pre-tested the intended interviews so that the questions were easily understood, were not biased, were appropriate to the study, informants were willing to give required information, questions were applicable to all the informants, allowed interviewees to offer their opinions/expand on basic answers, determined where follow-up questions were needed, and determined whether it was to be easy to analyse the gathered information (McNamara, 2006; O'Leary, 2005). All the interview questions were designed to respond to respective research objectives as a control against digressing.

Three research assistants were coached by the researcher and commissioned to conduct dummy interview to ten (10) KPLC staff (respondents). The pre-test interviews were not conducted with the actual sampled respondents and not in greater details as was the case with the actual interview. The feedback enabled the researcher to modify some interview questions and anticipate the likely challenges when conducting the actual interviews.

3.7 Ethical Consideration

Conducting any study, calls for integrity and trustworthiness, besides expertise and due diligence. Various ethical considerations were adhered to while carrying out this study.

Permission (either written or verbal) to conduct the study were sought and granted in outset, A written permission was granted by the National Council of Science and Technology (Appendix 10) and the KPLC management (Appendix 11). Verbal permissions were granted by the respondent's supervisors. The researcher officially wrote to the respondents and requested for their consent to participate in the research (Appendix 12). Telephone calls and/or e-mails were used to make follow-up to ensure that the participants were properly guided and assured of confidentiality and ethical standards to be followed during the process of conducting the research. They were informed that the research was for academic purpose and that they will incur no cost and any other risks since they were at liberty to withdraw any time without any hindrance/strings attached. Respondents were informed about the method of collecting data. In addition, they were informed that the researcher would want to tape-record some of the important interview, and those who refused had their rights honoured.

Anonymity and confidentiality was guaranteed to respondents and therefore those who wished not to state their names were not pushed to do so. Moreover, respondent's names were not indicated in the report. In addition, the researcher ensured that the information is not presented in a way to suggest the persons who may have revealed them. The researcher provided respondents with his contacts in case they may want to contact him in future.

Respondents statements were recorded during the interview and/or tape recorded. Clarification were sought to ensure information reflect the actual meaning as opined by the respondents. Lastly, all the literature used was appropriately acknowledged, including those which were paraphrased.

3.8 Method of Data Presentation, Analysis and Interpretation

The data presentation, analysis and interpretation of this study entail description and assertions/affirmation of the emerging themes since this is a case study research (Creswell, 1998). According to Gibson (2006),

> ...thematic analysis is an approach to dealing with data that involves the creation and application of 'codes' to data. The 'data' being analysed might take any number of forms – an interview transcript, field notes, policy documents, photographs, video footage… there is a clear link between this type of analysis and Grounded Theory, as the latter clearly lays out a framework for carrying out this type of code-related analysis.

The next step in thematic analysis involved combining and cataloguing related patterns into sub-themes (Aronson, 1994). According to Aronson (1994), when gathering sub-themes to obtain a comprehensive view of the information, it becomes easy to observe definite emerging patterns. After patterns emerged during the process of data collection, the researcher endeavoured to obtain feedback from the respondents during the interview by asking the informants to provide feedback from the transcribe conversations.

Themes related to the relationship between RM and QMS that emerged from the collected data were put together to form a comprehensive picture of their collective experience and therefore presented a relative position of RM in the implementation of QMS at KPLC. The processes in qualitative data analysis used in this study, as postulated by Patton (2002), include:

- Coding: According to Gibson (2006), "'Coding' refers to the creation of categories in relation to data; the grouping together of different instances of datum under an umbrella term that can enable them to be regarded as 'of the same type". Coding in the study involved checking the data for emerging themes and began to attach labels or codes to the texts that represented the themes.
- Displaying the themes (all information): This process involved developing premises, questioning and verification, and reducing – from the displayed data – the main themes. It involved the following: capturing the variation or richness of each theme; noting differences between individuals and sub-groups; and, returning to the data and examining evidence that supports each sub-theme.
- Developing premise, questioning and verification, which involve extracting meaning from the data, checking if the categories developed make sense, verifying what pieces of information contradict the emerging ideas, checking what pieces of information are missing or underdeveloped, what other opinions should be taken into account and establish how own biases influence the data collection and analysis process.
- Data reduction – this entailed distilling information to make visible the most essential concepts and relationships, getting an overall sense of the data, distinguishing primary/main and secondary/sub-themes, separating essential from non-essential data, and using visual devices – e.g. matrices, diagrams, etc.

- Interpretation of the data involved identifying the core meaning of the data while remaining faithful to the perspectives of the study informants, but with wider social and theoretical relevance in order to obtain credibility of attributed meaning, consistency with data collected, verifying with respondents; does it present multiple perspectives (*convergent and divergent views*)? It also involves checking whether the data collection went beyond what was expected to be found.

The data is presented in a descriptive manner, where the link between all the informants is brought together in a coherent report in form of a thesis (Cassell, 2005). However, where appropriate, triangulation of the data presentation by way of using tables, figures and other methods of data presentation is also presented in form of a framework that should be used in implementing RM requirements in QMS at KPLC.

3.9 Summary

This chapter discusses the study location and the study size population, which was arrived at through purposeful sampling technique. The sampling method is justified. Three data collection methods, namely interview, observation and document analysis have been highlighted together with the presentation of the validity and reliability of the research instruments. The chapter pinpoints the data collection procedures and concludes with the data analysis, interpretation and presentation structure.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents analyses and interprets data that was collected through the use of interviews and supplemented by observation. The data presentation is based on thematic analysis where themes were derived from the study objectives which were the following: to determine how records are managed during their continuum at KPLC; to establish how current RM environment affected implementation of ISO 9001:2008 QMS at KPLC; to investigate the challenges faced by KPLC in fulfilling RM requirements in QMS; to find out the critical success factors affecting implementation of RM in QMS at KPLC; to investigate appreciation of ICT in implementation of RM in QMS at KPLC; and, to propose a framework to guide the implementation of RM requirements in QMS at KPLC.

Within each theme, presentation, analysis and interpretation of data is organised around the six categories of respondents, namely Top Management, QA Officials, QMS Auditors, QMS Champions, Support Staff Handling Records, and Customers Service Staff.

4.1 Characteristics and Status of Respondents

The characteristic encountered include interview response rate, categories of respondents, years of service, and education/qualification level of respondents.

4.1.1 Interview Response Rate

Table 3 presents the six categories of respondents who were interviewed (n=92) and the response rate per category.

It is evident that the overall response rate was 87%. The high response rate is attributed to various factors at play during the time of the study:

- KPLC was in the process of rebranding and culture change. This made KPLC staff more motivated to receive the researcher positively.
- The company sponsors its employees in their academic pursuit as part of its staff development programme; many members of staff, especially those engaged in post-graduate, undergraduate and diploma studies were aware of the academic research requirements having gone through or being in the process of carrying out their research. They were therefore receptive to the researcher.
- KPLC having been ISO 9001:2001 certified in 2006 was then in the process of recertification and therefore the study was relevant to them and/or coincided with the process of recertification.

Table 4: Interview response rate

Category Code	Category Name	Interview Response Rate			
		No.	No.	Variation	Response rate

		Sampled	Interviewed		in %
A	Top Management	10	10	0	100
B	QA Officials	2	2	0	100
C	QMS Internal Auditors	24	24	0	100
D	QMS Champions	30	22	-8	73.3
E	Support Staff handling records	15	11	-4	73.3
F	Customer Service Staff	11	11	0	100
TOTAL		**92**	**80**	**-12**	**87**

Table 4 affirm that the response rate was good (87%), and therefore enough objective evidence to support the conclusion reached in the study.

4.1.2 Respondents' Years of Service

Table 5 shows the years of service distributed in five-year blocks. The five categories of respondents are covered within the intervals.

- Most of the respondents who were interviewed had served the company for a period of between 11 and 20 years; out of 80 respondents, 39 (49%) of them were in this range of service.
- Twenty-six (26), say 33 per cent had served between 1 and 10 years.
- There were 15 (19%) respondents who had served for over 20 years.
- This implies that most respondents had a wealth of experience in KPLC's operations, including implementation of QMS.

Generally, it is evident that majority of them had wealth of experience in terms of the number of years worked. This can be construed to imply that they had interacted with various processes in KPLC over time to command knowledge and experience on how business transactions were carried out prior to the introduction of QMS and after, including the evolution of RM, especially as it relates to implementation of QMS. This can also be argued to reflect the quality of data obtained from the interview conducted since respondents responded from the point of knowledge and experience.

Table 5: Respondent's Length of service

Category	Range of Service in Block of 5 Years						
	1-5	6-10	11-15	16-20	21-25	25+	Total
Category A	0	0	1	2	3	4	10
Category B	0	0	1	1	0	0	2
Category C	8	6	5	5	0	0	24
Category D	4	2	5	6	3	2	22
Category E	0	2	3	5	1	0	11
Category F	1	3	3	2	2	0	11
Total	13	13	18	21	9	6	80

4.1.3 Qualification/Education Levels of the Respondents

Table 6 shows the education level of the respondents, including specific category of respondents.

Table 6: Qualification/education levels of the respondents

	Numbers per Category						
Qualification / Education Level	**Category A**	**Category B**	**Category C**	**Category D**	**Category E**	**Category F**	**Total per Category**
Certificate	0	0	0	0	0	0	0
Diploma	0	0	0	0	9	2	11
Under graduate	0	0	6	4	2	3	15
Post-graduate	10	2	18	18	0	6	54
Total	**10**	**2**	**24**	**22**	**11**	**11**	**80**

Table 6 shows the education and qualification of the respondents who participated in the study. The lowest level of education is a diploma which implies that other than being partakers in QMS, they were well educated to understand the interview questions properly. This ensured that there were no language barriers and that the interviewed staff commanded proper understanding of KPLC's BPs, including QMS ones.

4.2 Records Management during Their Continuum at KPLC in the Realm of QMS

The study sought to find out how KPLC manages records in their continuum in the realm of QMS and respondents' views are presented below.

4.2.1 Response from the Top Management

Six (60%) respondents in this category stated that RM is a very important functionality in KPLC business, including QMS and that is why the company

employed two professional records officers. They mentioned that the Board of Directors approved and promulgated RM policy guidelines in 2006 (KPLC was certified in QMS in 2006 according to the date of ISO 9001 Certificate) to assist in improving recordkeeping practices since the TM appreciates that availability of right information at the right time is a prime mover in service delivery to KPLC customers. One respondent stated that,

> We invest in RM because they are a source of information that is so precious not only in protection of legal and financial rights, but also more so, in order to make informed decisions about customers that require our services... records capture the business transactions and one can only resolve customer complaints when evidence of what transpired during transaction of business is readily available.

Clause 4 of ISO 15489-1 states that one of the benefits of RM is that it enables organisations to deliver services in a consistent and equitable manner. This therefore validates the contention of the respondents.

Ten (100%) respondents pointed out that there is an RM department under the Company Secretary Division who coordinates RM in the entire company. However, observation showed that the current RM establishment is inadequate to address rising demand for prudent RM in the company, especially at this time when QMS is being implemented at KPLC. It was observed that there are two RM units in the company which work independent of each other thereby resulting in duplication of some equipment like microfilm cameras, microfilm readers and scanners. KEBS (2005)

pointed out the need to avoid silos in business undertakings. This phenomenon existed in RM functionality.

Six (60%) of the respondents stated that RM is overly automated at KPLC. Nevertheless, it was observed that about 75 per cent of KPLC business processes/transactions are automated: These automated systems are overly transactional workflows that are meant to transact core KPLC business (SCADA for energy transmission, DMS for the management of distribution system, TMS for management and monitoring of motor vehicles and motor cycles, ICS for manage Customer Service issues, IFMS for managing company finances, and IHRS for managing human resource matters) and not dedicated RM systems per se. It was also observed that majority of vital records are exceedingly paper-based. For instance, contracts and agreements, tender documents and staff personal files are in paper records. All the offices visited exhibited numerous shelves and cabinets for physical records. Other paper records were found on top of these storage facilities. (Note that KPLC's Head Office operates an open floor office plan and one could therefore observe finer details positively because there were no barriers such as partitions.)

Four (40%) respondents stated that the RM department had its own recurrent and capital budget. They opined that RM was given two floors at Electricity House, Nairobi, to ensure that there was enough storage space for semi-current and non-current records. They also mentioned that, through the Tender Committee, which had membership from the TM, procurement of various RM equipment that included mechanical shelving, and microfilming and digitisation infrastructure, had been approved. They said that the Chief Records Officer had prepared a number of proposals on improvement of RM at KPLC to the Management Committee which

have since been approved for implementation. It was observed that although there is modern infrastructure for managing semi-current and non-current records, which is under the control of the RM department, the same is not replicated for the management of current records in offices.

Five (50%) respondents stated that a records officer had travelled to Manitoba Hydro International in Canada to find out how they were managing their records, especially in the area of automation of RM and archiving. They said that a records officer had also travelled to USA on the same mission. In their opinion, the benchmarking was bearing fruits.

A visit at the RM Department showed that there were inadequate professional RM staffs. Other than the two records officers, all the remaining 115 staff had joined the company, not as professional records management staff, but as general clerks. It was noted that the staff was sponsored by the company to pursue diploma in records and archives management in the local institutions. There is need for additional professionally trained staff to champion automation of records because it was evident that RM depends on IT staff to manage the newly installed records and content management system.

Eight (80%) respondents pointed out that administration of closed files had improved from worse to satisfactory with the employment of records officers from the year 2000. One respondent stated that they used to lose cases in the law courts due to lack of documentary evidence, but the situation had now improved drastically. This respondent also mentioned that with the procurement of the Q-Pulse and Case 360

software in 2010, the company was looking forward to improving document and the RM program through their automation. It was observed that the software was being implemented by the QA and RM departments respectively. QMS at KPLC is managed and driven by the QA office. There were a lot of collaboration between the two offices in training and implementing the requirements of the two systems.

The interview conducted with the TM showed that, generally, top managers appreciate the need to properly manage business records as a tool of accountability, legal and financial compliance, and improved service delivery. Seven (70%) stated that QMS and RM appears to share the same platform since the later was formed in 2006 to address some major non-conformity in QMS processes which related to poor RM practices. They however argued that the RM capacity building was wanting, including the need for additional staff.

Three (30%) respondents stated that the company wanted to reinforce the department by employing three more records officers (to make them five), open records centres for every region and merge the two existing RM units under one department; they said the Optimal Establishment Review Committee, which was established in 2009, had made their recommendations to that effect. Recommendations from the aforesaid committee were reviewed and it was found out that they included the automation of the RM programme, outsourcing of some RM processes, additional staff and routine RM training. However, there were no timeline when these recommendations would be implemented.

4.2.2 Response from the Quality Assurance Officials

The two (100%) QA officials stated that RM is part and parcel of QMS since it is one of the mandatory requirements in the implementation of QMS under Clause 4.2.4 of ISO 9001:2008 and that the QA Department relied heavily on the RM department on the administration and management of QMS documents and records. They mentioned that auditing of QMS always included auditing of how quality records were kept, which provided objective evidence of how QMS was performing. Hence, the MR stated that they worked together with the RM office to develop and guide the company in the implementation of various RM tools, which included the procedure for control of records (this is a mandatory procedure under Clause 4.2.4 of ISO9001:2008 QMS) and DRIM (Document and Records Identification Manual) which provides corporate documents and records identification protocols. It was observed that this document was issued by the Chief Records Officer and approved by the MR. Moreover, the identification of all QMS documents and records derived their numbering and coding/referencing system from this document which is styled along the guidelines provided by ISO 5489:2001, especially using the clause on classification.

It was observed that there are various RM tools (policy, procedures, work instructions and forms) developed and maintained at every KPLC office in support of QMS processes. The RM office maintained a copy of ISO 15489 and ISO 9001:2008 besides procedures and work instructions on RM. various statutes that relates to RM, like the Public Archives and Documentation Service Act, Evidence Act, the Limitation of Action Act, and The Communication Amendment Act were used in discharging legal requirements in RM. There were also a lot of RM literature from the International Records Management Trust, International Council on Archives and the

World Bank (document of external origin as they are known in QMS language). It was, however, observed that implementation and application of these RM tools is somewhat hampered by shortage of professional RM personnel.

Perusal of quality records from QA Office showed that there were symbiotic relationships between QA and RM departments in the management of KPLC quality records and that there are gaps in RM practices. These gaps were captured in previous QMS audit reports, which showed that about 30 per cent of the total non-conformities for the years between 2006 and 2010 related to poor RM issues.

4.2.3 Response from QMS Internal Auditors

Twenty four (100%) QMS auditors stated that records were the major tool of their trade because without it, it was almost impracticable to carry out effective QMS audits, hence the reason they participated in RM audit during their routine audits. Audit reports showed that non-conformities related to poor RM featured prominently in QMS reports prepared by the auditors. Twenty two (92%) of the QMS Auditors stated that RM audits were carried out at KPLC, not as an independent practice, but as part of QMS auditing. The latter is carried out twice a year.

Twenty (83%) QMS auditors stated that the RM department at KPLC is a creation of QMS. Before 2005, RM was just a function under the Legal Department. During the process of implementing QMS, the need to create an RM department was felt due to the shortcomings that was realised in documentation of QMS and RM generally. It is evident that QMS is part of the RM continuum and vice versa.

Fifteen (63%) of the QMS auditors recommended that proper planning for the professional RM auditing need to be introduced where the RM officials should develop and train QMS auditors on the application of the requirements of ISO 15489, which was unknown to about 90 per cent (only 3 out of 24 QMS auditors knew about ISO 15489) of the QMS auditors who rely heavily on Clause 4.2.4 of the ISO 9001:2008. The clause is inadequate to provide all RM requirements (ISO15489 was among others developed in 2001, one year after ISO9001:2000, to assist organisations that are implementing ISO9001 to meet RM requirement).

Sixteen (67%) QMS auditors stated that it was only staff records that were centrally managed in the Human Resources Registry at the Stima Plaza, Nairobi. Observation showed that all other records in all the ten divisions were stored in either open shelves or the four drawer cabinets, and that there were no closed rooms to store them. Besides, 24 (100%) of the respondents stated that the culture of pseudo registry system had resulted in over-decentralisation of records keeping where there were no staff assigned specific duties to manage records at KPLC. This contravened the requirements of Clause 6.3 of ISO 15489:2001 and Clause 5.5.1 of ISO 9001:2008 which require that responsibilities and authority be defined, delegated and promulgated across an organisation. They said that secretaries and clerks were assumed to be custodians of records in respective offices among other duties, yet there were noticeable non-conformities related to records keeping at KPLC where the staff handling records stated that the responsibility for records was not communicated to them, but had been assumed (refer to what respondents in this category opined).

Thirteen (54%) of the auditors pointed out that the company had a target to connect on average over 200,000 new customers every year which resulted with the creation of overwhelming commercial records. This explained why a records officer was employed in 1999 specifically to handle commercial records. It was also observed that this explained the reason behind the existence of two parallel RM units in KPLC. One auditor explained that those divisions that felt the adverse effects of poor RM sought the services of a records officer, but the need for a companywide RM programme was never appreciated until the time the company was in the process of certification in QMS in 2005.

It was observed that in KPLC, everybody participated in RM directly or indirectly due to the practice of pseudo registry system; moreover, RM was embedded to the business processes overly. Xioami (2001) states that in an RCM, RM processes are so much interwoven in business processes that the boundaries are negligible. This explains why fifteen (63%) auditors stated that the company had been multi-skilling and multi-tasking secretaries and clerks through RM training where there was a permanent annual programme under the Training Department.

Records from the Training Department showed that one month in a year was dedicated to RM training. Supervisors, secretaries, clerks and technicians had been attending such training. The interviewed auditors said that after introduction of the Institutional Strengthening Project (ISP) in the mid-1990s, many automated systems were introduced which killed the concept of registry system. This automation of business processes was aimed at realising a paperless office, a dream that never materialised. They said that individual staff members who found themselves

generating or receiving paper records were forced to keep such records on their own, leading to over-decentralisation of records storage at KPLC.

4.2.4 Response from QMS Champions

Fifteen (68%) RM champions contended that it was the responsibilities of the RM officials to assist in developing and updating the procedure for control of records, developing the DRIM, which addressed identification of all quality documents and records across the company, and guide all offices to properly manage their records as they were important QMS assets that assisted in the monitoring and auditing of the QMS processes. Eighteen (82%) of them stated that the role of QMS champions in RM was to supervise the records clerks who were vested in RM in their respective offices. However, 20 (91%) mentioned that there was no defined RM roles in the company since there were no registry system except in the Human Resources Registry. They said that even their performance contracts and delegation of authority did not include RM in spite of the fact that they took some time to see to it that records pertaining to their core business were properly kept. This was because there were no registry staffs.

Moreover, three (27%) champions stated that there were no support staffs to handle records because the secretary in place handled only the boss's records leaving the rest to be kept by officers. They said that often they were verbally informed and/or assumed RM responsibilities especially when they continuously failed to retrieve records required in decision-making and servicing customers. This implied that RM function had not fully been developed at KPLC.

All the 22 (100%) QMS champions stated that the RM Department handled disposal of semi-current and non-current records and archiving of permanent records, but was not very much involved in managing current records apart from training the records handlers. However, 19 (86%) mentioned that RM training for the supervisors and support staff had been effective since 2006. It was observed that 2006 was the time KPLC obtained certification in QMS and, therefore, there was some correlation between implementation of QMS and the journey towards improved RM at KPLC. However, it is opined that the company's quest to retain certification necessitated that some measures be retained to improve RM, not in its own right, but more importantly to meet the mandatory requirements in QMS. As one respondent observed:

> …to be honest, I think the management through the Quality Assurance Department tries to enforce RM in order to fulfil requirement of ISO 9001:2008 Standard….the way I see it is that they did not intend to propel RM as an entity but rather to fulfil QMS requirements….when you tell the bosses the need to improve RM, they say it is not a priority…on the contrary, if you tell him or her that we need to improve RM because it is the source of non-conformity in QMS, they immediately swing into action…

4.2.5 Response from Support Staff Handling Records

All the support staff interviewed acknowledged that they were custodians of records kept in their respective offices. However, 95 per cent of them stated that this was not their real work since there was no official communication to that effect. In case of any dysfunction in RM, nobody could be held exclusively responsible. One respondent said during the interview that:

> ... if there is any problem in records keeping, they cannot hold us responsible because every officer here open and keep some records relating to what they do without making reference to us in terms of provision of file references. This is why in some instances some files are not found in our index though they exist in real sense. In one of the previous QMS auditing, this problem was found and I said I am not responsible...

All respondents interviewed stated that the RM department, in conjunction with the Training Department, facilitated annual RM training where they were trained on various RM issues like correspondence management, file classification and referencing systems, storage, security, retrieval and tracking systems. Therefore, capacity building in RM was a planned annual programme at KPLC. Moreover, KPLC sponsored external courses for its staff.

Records kept by the Training Department revealed that in every year, there were more than ten members of staff who were sponsored for the RM training. This fulfilled the requirement of both ISO 9001:2008 and ISO15489:2001, which advocates relevant competencies. Whereas ISO 9001:2008 QMS talks about competencies in regard to whatever process an organisation is involved in, which include RM, ISO 15489:2001 is specific about the RM programme being driven by persons with RM knowledge.

Ten (91%) of the support staff interviewed stated that KPLC has automated most of the business processes, which provide storage of information. The data in these systems were obtained from manual records. They stated that if the manual records had problems, then they affected the quality of data in the automated systems.

Eight (77%) of the support staff argued that there were inadequate provision of RM resources. They cited inadequate capital budget to procure RM storage equipment because their bosses were more concerned with the core business and that the RM officials who understood RM challenges had no control over management of current records other than training them on how to manage their respective records.

It is evident that members of the support staff have a crucial role to play in managing records in their offices, but there is need to streamline responsibilities and the provision of RM infrastructure/resources.

4.2.6 Response from the Customers Service Staff

Seven (64%) respondents stated that the only way to improve delivery of service to the customers was through having the right information when addressing respective customers. One of them said:

> KPLC has a very expansive customer base and the market potentials are very rich. We have over 1.4 million customers. To connect them and continue serving them properly, we require elaborate records and information management systems because there are various information vacuums which the company must address sooner than later. Exploring through million of papers to serve a customer and/or to answer a parliamentary question can be a nightmare without good record keeping. It is not only QMS that requires good records, but virtually all KPLC business processes...

Nine (82%) of the staff handling customers stated that through experience, they had come to realise that without good records, it would be difficult to serve their customers properly. They stated that they found themselves organising and arranging customer records to facilitate ease of retrieval when required. One of the respondents stated that:

> … you are very happy when you get the right information to serve the customer at the right time, because customers appreciate your service unlike where I take time to locate the required information… records must be properly organised.

Eight (73%) respondents contended that, initially they thought that with the automated systems in place, they could be able to obtain customer information with ease. However, over time, they realised that electronic records as well as the conventional records needed to be properly organised if they were to be retrieved with ease and also to ensure that they were full and accurate. Indeed, the characteristics of good records as explained in Clause 7.2 of ISO 15489:2001 are authenticity, reliability, integrity and usability. Also, good records systems as described in Clause 8.2 of the same Standard should be reliability, integrity, compliance, comprehensiveness and being systematic.

Nine (82%) respondents commented that the implementation of QMS at KPLC had elevated the impetus for proper RM because QMS auditors normally requested for objective evidence that the customer they served were satisfied with their service. All (100%) QMS auditors asked for the procedures and records to prove the status.

Therefore, maintenance of QMS records for the purpose of QMS audits has somewhat forced the staff to make it their concern to manage quality records.

The above statements from different respondents implies that every KPLC staff handles records in the course of their routine business (as postulated by Mckemmish, 1997) because they enable them make expeditious and informed decisions in the quest to serve their customers. This encapsulates the tenets of the RCM.

The major concern in RM under the continuum model is that it is a purpose-centred process and customer-driven (QMS also advocates a process approach geared towards customer satisfaction). This is what Upward (1996) referred to as institutionalisation of the records keeping profession: "Institutionalisation of the recordkeeping profession's role requires a particular emphasis on the need to integrate recordkeeping into business and societal processes and purposes". There is integration of BPs and recordkeeping processes where the tasks can happen in almost any sequence by any professional group (Xiaomi, 2001). The essence of this comparison is to show that RM and QMS are practices that share many attributes and therefore have a multifaceted correlation at KPLC.

However much KPLC staff appeared to appreciate the importance of RM in implementation of QMS and their effort to portray that record keeping was proper, observation showed the contrary. RM is wanting to a large extent because there seemed to be no goodwill from the TM to improve RM coupled with lack of interest by staff. For instance, observation revealed that QMS audit reports are regularly

tabled by the MR for discussions under the management review meetings, but nothing much appears to significantly arrest the myriad RM challenges for many years. More details are given in 4.4 which present and analyse the challenges KPLC faced in the processes of implementing QMS.

It was noted from the records from the Training Department that there were several RM training across the company and that the degree of automation of business processes was very high, yet there was haphazard management of unstructured records (paper-based records). It was noted that ICT was more recognised and appreciated than RM.

Another fact that was noted was that the staff trained in RM issues attempted minimally to implement what they learnt, overly because they were more responsible for other businesses than records. It was found that only staff in Human Resources Registry and the RM Department somewhat used their skills and knowledge to manage the records in their custody. One secretary who was sponsored by the company to pursue a diploma course and whose RM keeping were found with wrong reference contrary to the requirements of the DRIM stated:

> You know RM is not my profession, but because I wanted to elevate by CV, I opted for such a training…not because I am interested with pursuing RM as a profession, but to ensure I have an alternative in case the job of secretaries is scrapped…with the introduction of computers, e-mails, mobile communication, etc, there is all indication that the secretarial work is standing on a cliff…

One clerk had this to say about internal RM training:

> Some of us attend RM workshops and seminars because they are the only ones our bosses can allow us to attend irrespective of whether they are useful or not. I attended three such training previously because they were organised outside Nairobi where, besides getting opportunity to be away of the routine and challenging job, I also created a few shillings in terms of travelling allowances…

With this school of thought, RM training seems to be done haphazardly to the wrong staff and this explains why there are issues in RM in spite of the routine annual RM training programme. The RM Department was established in response to QMS non-conformities but not as response to customers' complaints and poor service delivery. It was also observed that only HRA Division maintained a proper registry. Even in this division, only staff records were in the custody of the registry staff; the other records were scattered across offices.

In spite of the fact that the DRIM was established and communicated to all the offices via the intranet, some offices continued using old references for their QMS documents and records. Recurrent non-conformities on RM imply lack of seriousness in the quest to improve RM. Respondents were unable to precisely cite the standards and/or any other RM tool they were introduced to during the pre-certification training to guide in meeting RM requirements in QMS. The fact that the certifying and the consulting firms on the implementation of QMS at KPLC did not refer to ISO 15489:2001or any other standard with regard to addressing the requirements of Clause 4.2.4 imply that that RM was not taken seriously as ISO 9001:2008 Standard.. It can be argued that,

the management of RM in support of QMS at KPLC was a facade, because it was noted to improve albeit at a slow pace.

It was also observed that to a certain extent the management of and use of ISO documentation, including that of managing records, was rejuvenated when QMS auditing was imminent. Had the requirement of the procedure for control of records been applied continuously, most of the QMS challenges, including RM, would have been solved with ease. Besides, the annual reports and accounts for the past five years revealed that KPLC was a profit-making company and, therefore, lack of proper resources to manage records as opined by some respondents does not hold; it can best be explained as a negative organisational culture that does not mainstream RM.

This study being, an investigation of the role of RM in implementation of QMS at KPLC, built the observation checklists in accordance with the six elements of RM mentioned in Clause 4.2.4 of ISO 9001:2008 QMS. The findings were:

a) Identification of records – QMS requires that records should be provided with unique identifiers:
    - It was observed that not all KPLC offices had proper classification scheme as required by the DRIM.
    - Other than the HRAD (Human Resources and Administration Division) most of the other nine divisions at KPLC did not folio-number their files. Even in the HRAD, it was noted that only staff files were folio-numbered, but most of the subject files were not provided with this unique identifier.

- Like the folio numbers, minute sheets, which is an inventory of the papers in a given file and which registers all the folios in a given file, were only found in HRAD, and overly on the staff files.
- It was observed that most of the KPLC offices affixed volume numbers as they opened new files when the previous ones were full.

Document reviewed revealed that identification of staff files and customer records were better than that of the others records This phenomenon could best be explained by the fact that HRAD has a registry system, specifically to handle staff records and that standards for identification of customers were established during the ISP in mid 1990s. Absence of registry system implies lack of responsibility for the subject files because secretaries and clerks who are deemed to handle RM issues are mostly engaged in other core businesses.

b) Storage of records: Table 6 provides an epitome of the status of storage of records at KPLC offices as observed during the data collection exercise.

Table 7: Status of records storage as observed during data collection

	Paper Based Records	**Electronic Records**	**Microforms**
Storage equipment	• Mechanical mobile shelves used in HR	• Dedicated transactional systems	• Roll microfilms

	Registry and RM Departments • Others uses open and lockable metal or wooden shelves	• Networked servers • Personal Computers • External hard drives • DVDs • Digital microforms, etc.	• Unitised microfilms
Adequacy	No – paper records found kept on top of the cabinets, shelves, on floor (closed files)	• No-some business transactions are not automated. • These are workflow solutions but not dedicate RM systems. • However, Case 360 RM system was procured as the researcher was exiting the study location	• Yes – used only in RM Department
Appropriateness	• Only for the HR Registry and RM Department • All other offices have inappropriate storage facilities	Not quite – some business transactions like property management, procurement, etc, are either not fully automated and/or not automated at all. However, usage of computers is widespread	Yes – proper storage in place – rated fire proof cabinets

c) Control and retrieval of records:

- It was noted that some offices had proper classification while others were in the process of developing theirs. Others had no classification but just lists of files in unstructured formats.
- No location guide for physical records was available in all offices that were visited.
- The file movement registers were prominent only in HRAD Registry. However, the registers were not uniform.
- The Bring Up Registers were in place, but were not effectively organised and used. In some offices these RM tools were not available at all.

- There were limited dedicated RM software; about 75 per cent of the business transactions were automated with respective workflow solutions which were more of data storage than RM oriented. It was however observed that new RM software had been procured. These were the Case 360 and Q-Pulse. The challenge would be that automation before restructuring and streamlining RM may be an effort in futility.

d) Protection of records:

- Generally, there was no proper security for the physical records since they were kept overly in open offices with no lockable facilities for records. However, some offices had mobile mechanical shelving where they housed respective records. Such offices included records management office, human resource registry, some finance offices and the procurement department. It was further observed that classified records were to some extent secured, but the protection was not adequate.
- Electronic data and records in dedicated business systems alike were properly backed-up but those in personal computers were more often than not lost when the computer clashed or due to other factors like virus attacks or erroneous deletion.
- It was noted that computer output to microfilm was being used and there was a fire resistant storage cabinet for the microforms. The interface between microfilming and automation created multifaceted back-ups of the vital records. The program was noted to be relatively new in the company.

e) Retention period: It was observed that generally, there was no retention schedule for all records and the RM Department was overwhelmed by assisting other

offices in developing classification schemes. Nevertheless, the Finance Division had some basic old and simple schedule which was outdated.

f) Disposal of records**:** The following were observed:

- Departmental record rooms were available in some divisions/department, but majority of the departments had been dumping closed records at different company premises around Nairobi.
- There was no records centre available; therefore, closed files were either stacked in offices making them congested and/or dumped in un-conducive facilities.
- The Company Archives was located at Electricity House, Nairobi, and was full to the capacity. Some records were on the floor along the archives corridors.
- It was observed that there were overdue non-current records in some offices in spite of the fact that the RM Department had been disposing of ephemeral records over time. Reviewed files established that about 500 tonnes of paper records had been disposed of from the last four years and still more were waiting authority for disposal. Records of disposed records were available at the RM Department. However, the records disposed of prior to the start of the company archives in 2006 were not accounted for.
- It was observed that lack of retention policy for the electronic records had made the company continue procuring more storage devices like servers as offices continued accumulating more information.

4.3 RM Environment in the Implementation of ISO 9001:2008 QMS at KPLC

This study sought to establish how the RM environment influenced implementation of QMS at KPLC. Respondents from the six categories described how RM affected implementation of QMS at KPLC. Their responses are discussed below.

4.3.1 Response from the Top Management

Eight (80%) of the TM respondents stated that RM is a mandatory requirements in QMS. Seven (70%) of them contended that RM and QMS at KPLC seemed to be so much intertwined that QMS could not operate without RM functionalities. It was observed that in all the offices visited during the interview, many staff seemed to associate RM more as part of QMS requirements than an important BP enabler.

Six (60%) of them affirmed that there was a relationship between RM and the implementation of QMS because previous QMS audit reports cited poor RM as one of the recurring non-conformities in QMS processes. Four (40%) respondents stated that QMS forced them to procure more RM resources that were lacking and which QMS champions in their divisions requested for in order to address the non-conformities that were raised. Observation confirmed numerous RM problems that included lack of appropriate and adequate storage space. Details of the RM challenges are discussed in section 4.4 below.

Examination of the overall response showed that the TM underscores the central role that RM plays in the implementation of QMS at KPLC and that without prudent RM, implementation of QMS proved problematic. Five (50%) of the respondents recommended that RMD should be strengthened and that a policy direction should be put in place to provide guidelines on how to improve RM in support of QMS processes.

4.3.2 Response from the Quality Assurance Officials

The two (100%) respondents stated that ISO 9001:2008 QMS had six compulsory procedures which included the PFCD (procedure for control of documents) and the PFCR required under Clause 4.2.3 and 4.2.4 of the Standard respectively. They mentioned that under Clause 4.2.4, KPLC was expected to develop and apply/implement the PFCR. They further mentioned that the RMD played a pivotal role in developing and guiding users at KPLC on how to use this procedure. In addition, the two respondents pointed out that the CRO developed a DRIM which was used to provide guidelines on how to develop corporate records and document identifications as required by Clause 4.2.4 of ISO 9001:2008. The MR (respondent) stated that this manual was used to map QMS documentation in the Q-Pulse (Q-Pulse is an automated system to manage QMS processes) which could have been otherwise difficult without a hand from a RM professional.

The respondents also stated that there were twenty-one (21) categories of quality records that must be kept as specified in Appendix B of ISO 9001:2008 Standard. Moreover, the MR observed that the QA Department always worked together with RMD to develop, review and train KPLC staff on the identification, retrieval, storage, protection, retention and disposal of quality records. The respondent said that the PFCR, which addresses these QMS requirements, was developed by the CRO and adopted by the QAD.

The two respondents contended that identification of how QMS was performing required regular internal and external QMS auditing. They observed that auditors used

quality records as part of objective evidence to confirm if QMS was performing according to the procedures and work instructions in place in the respective offices. For this reason, they said that RM processes could not be separated from QMS processes. This contention correlates with that of Xioami (2001), Mckemish (1997) and Shepherd and Yeo (2003) that that RM is embedded into BPs.

It was further observed that there were so many QMS documents and records kept by the QAD that were classified and scheduled in accordance to the best practice in RM. The two respondents confirmed that they depended on RMD to obtain guidelines on how to manage quality records.

The data above can be interpreted to imply that RM is critical in the process of implementing QMS at KPLC and that the situation of RM affects it either positively or negatively depending on the quality of RM practices in place. It also shows that there are RM challenges at play which somewhat affected the implementation of QMS at KPLC. This is why Quality Works (1996) stated that,

> All standards require a process for control of records. QMS standards call this system control of quality records and environmental standards refer to it as environmental records. Specifically, element 4.2.4 of ISO 9001 Standard, Control of records, requires a system for management of records.

The nexus between RM and ISO9001:2008-QMS is evident. The two respondents recommended more records officers to be employed because the two that were in place were inadequate to serve the entire company, taking cognizance of the fact that monitoring of QMS could not succeed without prudent RM practices in every office.

They also recommended the introduction of a registry system in every business area to address the myriad RM challenges which were epitomised in the bulk of QMS non-conformities related RM.

4.3.3 Response from QMS Internal Auditors

Twenty four (100%) of the QMS auditors interviewed provided information on the use of records in providing objective evidence of what had been done in a given office in the process on implementing QMS and stated that records are an important tool for conducting QMS auditing.

Seventeen (63%) of the respondents stated that records collaborated observational findings during the QMS auditing. One respondent said that:

> Records provide the basis for data analysis without which one cannot discern what is happening, how it is happening, who is doing what, where, when and how.

The Standard requires audit records to be kept as mandatory requirements under Clause 8.2.2. This requirement indicates the central role played by QMS records in the auditing of QMS processes. One QMS auditor stated that:

> During the registration audit, the external auditors will be looking for evidence that KPLC is complying with the requirements of ISO 9001 and that this evidence can be found in records that are generated during the process of implementing QMS in the subject offices.

Another auditor affirmed that:

> There is need to follow all RM requirements when setting set up in the QMS because this is an avoidable process.

The respondents also pointed out that:

> KPLC had to run QMS for three months before the registration audit so that there could be sufficient records for the auditors to evaluate.

Fifteen (56%) QMS auditors said that, although there were other means of identifying non-conformities in QMS processes, records and documents stood out prominently because QMS procedures and work instructions provided the methodology of performing each tasks, while records were the final products that showed how the methods were actually applied. Nine (33%) of the respondents stated that there were deficiencies of QMS records which affected QMS auditing.

Thirteen (47%) of the respondents said that records were the source of data used to analyse how the QMS processes were performing. One QMS auditor stated that:

> We cannot provide objective evidence about the status of QMS in a given office without good records. This is why in all the previous audits many auditors zeroed in on records keeping because it is the first step to obtain clues of how effective implementation of various procedures and work instructions are. You cannot just talk or report about continual improvement without checking data analysis reports. If such records are not there, then you are in darkness to know if the QMS is performing as expected or not. If you cannot get other non-conformity because of poor records, you cannot fail to report on

> poor status of records keeping. Why do you think the ISO Standard calls records special kind of documents and further instructs that a procedure for their control must be developed? It is because records are very important not only for measuring continual improvement but more importantly, because carrying out QMS audits without organised records is as difficult as trying to base your audit on assumptions or probabilities... in addition, making informed decision about QMS situation is guided by availability of records.

Another auditor opined that:

> It could have been wise for QMS auditing to start with auditing how records are kept such that if records are found to be disorganized, then the auditees should be advised to clear the mess first because the starting point in auditing in my opinion, should be evaluating the relationship between the procedures, work instructions, forms and then check the records that culminate from respective processes.

One QMS auditor said:

> I think we faulted somewhere when we are doing gap analysis before implementing QMS. Nobody thought seriously about the very important role records would play in QMS auditing and measuring continual improvement. You know; analysis of reported non-conformities, stated root causes, recommended corrective and preventive actions and the actual remedial measures taken by various offices can only be audited when proper records are kept. I know record keeping has become a challenge to many in KPLC, but I think it is the only way to keep QMS alive.

Owing to the above reality, the researcher opines that many KPLC staff has seen the catalyst role records plays in QMS auditing and evaluating performance to determine continual improvement. Otherwise, it may be difficult to disregard prudent RM in the process of implementing QMS at KPLC.

Records of non-conforming products and services in QMS must be kept pursuant to Clause 8.3 of the ISO 9001:2008 where they are used, among others, to identify non-conformities in QMS and therefore play a critical role in the controlling of the processes. This contention was shared by twenty-two QMS auditors (82%). The citation crystallises the fact that no organisation can think about ISO 9001:2008 certifications without thinking about prudent RM.

4.3.4 Response from the QMS Champions

Seventeen (77%) of the QMS Champions interviewed stated that QMS required many records to be kept to provide objective evidence of effective planning, operation and control of processes, including auditing. Some of these records include management review records, calibration records, internal audit records, corrective action records, and training records.

One QMS champion told the researcher that records were the tools of performance monitoring in every KPLC office:

> ... because they enable measurement of continual improvement through analysis of various reports overtime. Clause 8 of the ISO 9001:2008 Standard requires for data analysis in the process of implementing QMS in order to identify non-conforming products/services and thus institute corrective actions and preventive mechanisms to ensure non-conformities do not recur.

The respondent postulated that in some instances poor records keeping affected the monitoring of how QMS is being implemented. Fifteen (68%) of the QMS champions stated that QMS elevated unknown RM to a position where it was now recognised more or less as part of the QMS because of the DRIM and the procedure for control of records. For instance, one QMS champion stated that:

> …I think QMS and RM are so closely related that introduction of QMS appeared as if it was also the introduction of RM in the company. Imagine, I have been in this company for over 15 years and I came to know about the importance of records during the time of implementing QMS where we were told to consult records officers to be assisted to provide codes for our documents and records as required by Clause 4.2.4 of the standard. Moreover, every time when QMS auditors come for auditing, they must cite non-conformities regarding how we keep our records until we came to see no difference between QMS and RM to a certain extent…

This assertion was repeatedly mentioned in different words by the 15 (68%) respondents and it supports the fact that ISO 15489:2001 on RM stipulates in its scope that it was introduced to, among others, provide a framework to support RM requirements in the implementation of ISO 9001:2008 QMS.

The researcher checked the contents of the Training Manual by KEBS (2005) and found that there was no mention of application of ISO 15489 as a guide in developing the procedure for control of records which is a mandatory requirement in QMS. KEBS offered consultancy services to KPLC during the process of implementing QMS (KEBS 2005). They indicated that KPLC should develop this important

procedure without recommending or showing how it should be done thereby creating a vacuum in meeting RM requirements in QMS at KPLC.

4.3.5 Response from the Support Staff Handling Records

Seven (64%) of the support staff interviewed stated that the implementation of QMS at KPLC brought about new methodology of organising records which was previously a challenging task. One of them stated that:

> Before QMS was introduced in KPLC, RM was seen by many as an outdated discipline since many of us thought that with introduction of the automated systems, and the quest for paperless operations, there was no need for RM.

Another support staff said that:

> We thought RM meant management of paper-based records, but after we underwent RM training, we realised that to succeed in electronic environment, we need to streamline paper RM and also integrate principles of RM in electronic RM.

Ten (91%) of the respondents stated that, although QMS rejuvenated RM, the resources required to sustain prudent RM were not forthcoming. One said that:

> QMS auditors have been citing numerous non-conformities related to poor records, but the problem is that we are lacking capacity and resources to manage records. My boss asked me to be in charge of records keeping besides my other duties in order to address the raised non-conformities.

From the foregoing, it is apparent that the environment under which records are managed somewhat affects smooth implementation of QMS at KPLC.

4.3.6 Response from the Customer Service Staff

Eleven (100%) respondents said that they had come to realise that the centre of QMS was customer satisfaction and that all KPLC offices, irrespective of what they did, either dealt with the customers directly and/or supported those charged with the responsibilities to serve the customer. As one respondent stated:

> In QMS, nobody is superior to the other as every stakeholder, may it be within the department or outside the department, are all working to ensure those that require KPLC services are expeditiously provided with what they want. An engineer in construction depends not only on the technician and the casuals, but also the outsourced contractor to put up the lines and thus achieve the targets. They cannot construct the lines on time without the procurement department, procuring the required materials on time and the stores issuing them on time.

One respondent also stated that:

> While servicing the customer requirements, the use of ICTs and accuracy of records are very critical since they enable me to serve them quickly when using ICS than when using a manual system.

This shows how each function in KPLC depends on each other while servicing the customers. QMS can be said to be a tool that realigns the KPLC staff to see a bigger

and final picture – customer requirements and satisfaction. This is the cornerstone of QMS. The only way to satisfy customers is by improving the service delivery.

Seven (64%) respondents stated that there were interaction of QMS processes and activities involved in supplying electricity to the customers, which entailed the operations of different KPLC offices until the customer was connected with power and the meter installed ready to use the power. The offices that were involved are: business development, way leave, design, drawing office, finance, procurement, stores, legal, construction and metering. Five (45%) Respondents pointed out that there must be proper information flow from one office to another if the project was to be expeditiously implemented. Seven (64%) respondents cited the correlation between prudent RM and project implementation. One of them said that:

> With good records about the planning and the scope of the project, the key players are able to identify their roles and therefore avoid conflict of roles which often delays or derails the project implementation plans …you cannot properly implement projects where there is no proper documentation. Delays in some projects are caused by failure to document and/or to follow process documentation accordingly.

The respondent went on to mention that:

> In KPLC, some offices do not implement project requirements properly because they only use QMS documents when audit schedules are issued by the MR instead of using them routinely as part of the normal office work.

According to one of the respondent:

> Information found in records informs the stores and procurement officials to know when materials are about to be exhausted and therefore enables us to monitor the consumption of materials, such that we are able to order for more in time to ensure steady supply of required materials. Availability of line construction materials determines the speed at which the project can be completed.

Expeditious construction of power lines depends on the availability of materials. This is why the respondent continued to mention that routine analysis of records in stores and procurement departments enabled procurement officials to plan when to order for more materials so that service to customers could not be interrupted.

Three customer relations and four marketing officials stressed the need for proper planning for adequate transport to meet service delivery to the customers. In transport, it was said that records enabled transport officers to plan to procure more vehicles, schedule the servicing of the vehicles and motor cycles in order to improve service to the customers who were said to increase in numbers day by day.

The records are also said to be very critical in preventive maintenance of various plant and equipment. Thirteen (87%) respondents said that accurate maintenance of power lines, substations and other plant and equipment minimised breakdowns. One respondent correctly stated that:

> ISO is about continual improvement that entails continuous identification of non-conformities that have occurred or are likely to occur and then devise corrective and preventive actions. You cannot indulge in this exercise without

records because the process entails comprehensive analysis of data. It is an endless cycle.

In essence, the statement shows that there are arrays of QMS activities deriving their synergies from analysis of records. Seven (39%) respondents, mainly from business development, customer relations and marketing departments, stated that records identify and inform the requirements to the electricity supply applicants and enable them to reduce time taken to produce the required documents. One customer service respondent stated that proper and simplified documentations of the processes involved in connecting the applicants enabled customer education to be articulate. The respondents argued that these documents should be forwarded to the provincial administration through the marketing department so that they could be distributed to the potential customers whenever there was public meetings/gathering. The provincial administration should keep such documents as records for reference because electricity was among the key catalyst in poverty eradication and job creation mechanism. This can be construed to imply service delivery innovations where records and documents vital for customer education are shared with the provincial administration who can educate the customers and potential customers about the KPLC services.

Four Engineers, three technicians and one foreman said that good records enabled expeditious decision-making on project implementation, thereby improving the actual implementation processes. This ensured that the construction of the electricity supply lines to customers was done expeditiously, hence customer satisfaction. They stated that when relevant approvals were made and communicated efficiently and effectively

to the project implementers, it made it easy to jumpstart the project. One staff who was involved in line construction told the researcher that:

> Sometimes we are blamed for delaying construction of lines but the actual problem is the delay in communication of official records to the teams who cannot start the work before obtaining the approvals from the authorities. One has to account for the work done and we fear to be accused of having constructed illegal power lines if there is no authority in our possession.

From the statement above, it can be stated that availability of records in form of approvals is very critical in service delivery to the customers. Therefore, movement of records, whether in manual or automated processes, is fundamental and a true service delivery enabler.

Five (33%) respondents stated that implementation of the customer service charter at KPLC required the availability of data/information in order to serve the customers expeditiously. One of them stated that:

> My fear is that the impending customer service charter will not be easily implemented due to various hurdles, including lack of good customer-related records across different departments and divisions that have mandate to serve the customers. We keep different records in different offices, but one requires accessing the entire spectrum of records to properly know the history of the customer's account so that when you are attending to their problems, you are well informed. You know that not all customer information can be available in our automated system. The manual records are not properly linked with the automated systems. This gave us a big challenge because the customer

> assumes that we are intentionally unwilling to serve them as quickly as they would want.

Seven (47%) respondents stated that the only way to improve delivery of service to the customers was through having the right information when addressing respective customers. One of them had this to say:

> KPLC has a very expansive customer base and the market potentials are very rich. We have over 1.4 million customers. To connect them and continue serving them properly, we require elaborate records and information management systems because there are various information vacuums which the company must address sooner than later. Exploring through million of papers to serve a customer and/or to answer a parliamentary question can be a nightmare without good records keeping. It is not only QMS that requires good records, but virtually all KPLC business processes.

From the data presented above, records plays a pivotal role in the implementation of QMS and they provide avenues of delivering consistence and coherent service delivery to KPLC's customers because they make transaction of business efficient, effective and also meet legal and regulatory requirements as required by ISO 15489:2001-1 and ISO 9001;2008. It also shows that business records at KPLC are used to provide objective evidence on the performance of the business. The evidence of how QMS is performing can be said to reflect the evidence and transactional axis in the RCM (Upward, 1996) because the "evidence... axis consists of the trace of actions, the evidence which records can provide, and their role in corporate and

collective memory... continuum approach ...a well constructed recordkeeping system controlled documents".

ISO 9001:2008 requires a procedure for control of documents as mandatory requirements under Clause 4.2.3, as "a trace of an action, aggregated them into an evidential record, and gave organisations a corporate memory..." and,

> … the transactional axis presents the act, activities, functions and purposes as co-ordinates...This axis reflects an emphasis upon records as records of activities undertaken in the conduct of affairs, and upon the way these activities create links between documents. It reflects, in a basic manner, functions of organisations, and the way these are broken down according to subcategories of activity, or built up from the acts themselves. Purpose is the function viewed from a broader societal perspective.

Mckemmish (1997) stated that, "there is the way in which recordkeeping can be understood as a kind of witnessing, providing evidence of both personal and collective identity". ISO 15489:2001-1, Clause 3.15 states that "a record is information created, received and maintained as evidence..."; the evidence which KPLC staff requires to provide proof that the performance of the QMS processes are working correctly.

It is evident that the environment under which records are managed in the implementation of QMS at KPLC was in a quest for improved service delivery to the customers so as to ensure their satisfaction as required by QMS and more so to provide evidence (for auditing purposes) that QMS is working as planned, but not as a purposely designed RM programme. This implies that the importance of RM in QMS

is underscored at KPLC, though not as an end in itself, but as a means to an end. This is the root cause that explains the myriad RM challenges that are discussed in section 4.4 below.

4.4 The Critical Success Factors in the Implementation of RM in QMS at KPLC

This section covers what in the opinion of the respondents are the most important factors that will drive QMS and RM alike in KPLC's BPs and which must be factored to ensure successful implementation of RM requirement in support of QMS at KPLC.

According to the information gathered from all the eighty (80) respondents who were interviewed, there are numerous factors that affect compliance with RM requirements in QMS. They work together to influence the implementation of the QMS processes. RM is so embedded in QMS processes that in their contention, it is hard to separate QMS from RM.

4.4.1 Response from the Top Management

All the ten (100%) respondents mentioned that the provision of the required resources in terms of skilled manpower, infrastructure and budget was one of the major critical success factors in meeting RM requirements in the process of implementing QMS at KPLC. They also opined that TM support was a fine lubricant for driving QMS and associated mandatory requirements, which included RM.

Seven (70%) stated that organisational culture must be aligned to prudent RM by ensuring that the performance contracts and delegation of authorities for all KPLC staff include full and accurate records.

4.4.2 Response from Quality Assurance Officials

The two officials observed that KPLC'S organisational culture change to align the staff with what was envisaged in QMS programme was said to be very critical because the focus of every staff should be on the big picture; that is how to satisfy customers and then all work together as a team to realise this corporate goal. They maintained that identification, rationalisation and provision of adequate and appropriate resources were very crucial in ensuring that all QMS requirements were met. They also said that resources would include skilled manpower, finances and infrastructure (buildings, plant and equipment, time, raw materials, etc.).

Respondents mentioned that provisions of at least the mandatory requirements in every office were very critical. In this respect, there was need to provide skilled RM staffs and associated infrastructure to manage RM not only for the purpose of implementing QMS, but also overly to provide efficient and effective service delivery to the KPLC customers, because "public servants must have information to carry out their work, and records represent a particular and crucial source of information… The effectiveness and efficiency of the public service across the range of …functions depends upon the availability of and access to information held in records*"* The World Bank and International Records Management Trust **(**2000).

The two (100%) QA officials stated that application of Q-Pulse in the management of QMS documentation was one of the critical success factors in implementation of QMS. They confirmed that the automated system was in its formative stages and was

meant to address myriad challenges occasioned by exponential growth of conventional QMS documents and records occasioned by the introduction of QMS.

The MR argued that the company must ensure that QMS and RM were made compulsory/part and parcel of the daily working processes and not something to be activated when audits were due. The MR also said that in most KPLC offices, officers/staff only prepared for the internal quality audit when the MR issued the auditing schedule. Immediately after the auditing, they reverted to the traditional ways of doing things. This explained why there were so many corrective actions that were not attended to according to various internal quality reports for the last four years (2006, 2007, 2008 and 2009).

4.4.3 Response from QMS Internal Auditors

Twenty-two (92%) of the QMS auditors interviewed said that without TM support, QMS and any other project were a mirage because they must approve not only on papers, but also, more importantly, in actions. They said that the TM should issue written directives to guide in the implementation of the QMS and RM programmes. It was also stated that they should empower the MR and the CRO to develop a two or three-year strategic turnaround programme for QMS and RM, identify the resources required, and then seek management committee's approval and support to implement them. One QMS auditor said that:

> It is not enough to be given an approval from whichever source without financial and moral support. The Human Resources Division should be empowered to propose disciplinary actions to be enforced to suppress high

> rate of underperformance in the implementation of QMS and RM…it is the duty of the management committee to ensure the implementation of the proposals that they approve or the directives they give because without their substantive support and follow up, no success can be registered.

Fifteen (63%) auditors stated that to have any serious QMS business in KPLC, the MR should be strategically placed under the office of the MD and should be made a manager, special duties, because QMS is a special programme. One QMS auditor told the researcher that:

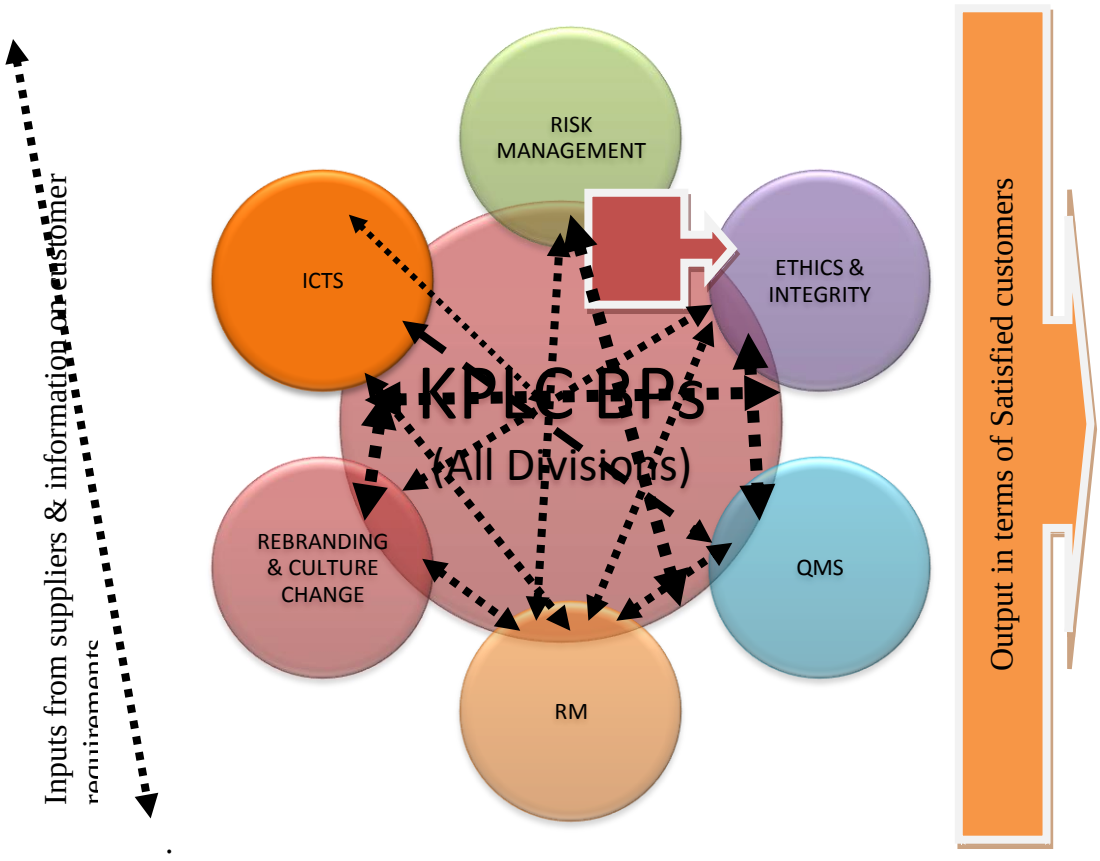
> Nobody will take directive from the MR who is relatively junior and has no teeth to enforce requirements to ensure officers address non-conformities. We know there are so many recurring non-conformities but nobody makes follow-ups on them. We are always given structured reports on non-conformities every other time, but we are never told about the management's effort to resolve the matter. This may be because the MR is not properly placed and empowered or maybe QMS was just another white elephant to meet regulatory requirements.

They also argued that RM, like QA and Integrity Department should be elevated and placed under the MD's Division. Sixteen (67%) auditors said that RM should be a department under IT&TD since it is part of information management and that information technology was highly rated at KPLC.

Eleven (46%) of the respondents from among the QMS auditors suggested that RM, QMS, office automation, rebranding and culture change programme, and the integrity

programme should be enforced in every KPLC office. They said these were the complete dose to deliver integrated, efficient and effective service delivery to the customers. They said each of the above sub-systems had a critical role to play in streamlining service delivery and that one could not substitute, but could complement each other. This implies that the quest for the best approach to ensure success in implementing both QMS and RM at KPLC is not an easy fix that can be done in isolation of the other business process enablers. According to them, the problem is that the proponents of these programmes tend to believe that they can sell and propel their programmes as standalone undertakings. The meaning of this assertion is the removal of silos as summarised in figure 3 below.

Figure 4: Diagrammatical representation of work environment with no silos



Each division is open and works harmoniously to achieve its goals with planned input and output from and to other divisions.

The right training at the right time was seen as one of the critical success factors in managing RM in QMS processes. One QMS auditor said that:

> It is important that all staffs are properly trained in QMS which training should include RM because when we talk about QMS documentation and quality records, we are in other words implying the essence of proper records keeping in our business transactions.

Fifteen (63%) respondents stated that the right and controlled QMS documentation was very important in the administration of QMS because they provided methodology

on implementing the requirements of the procedures. They all concurred in one way or the other that records were important in showing how the system worked. Monitoring of the performance of the system through scheduled internal and external QMS auditing cannot thrive without proper documentation. Some of the documentations they mentioned include: quality manual, quality policy, quality objectives, the six mandatory procedures, work instructions, forms, reference manual/materials for the QMS auditors and champions (e.g. standards, statutes, etc), and records. They further stated that QMS audit reports should be tabled to the management committee who should recommend the necessary actions, especially on addressing non-conformities, corrective and preventive actions. The critical role of records was further demonstrated because it would show the office that registered much non-conformity, thereby devising the best approach to address the problem.

The respondents also mentioned the need for QMS audit reports to be placed in a public folder in the Microsoft Outlook where everyone could see what non-conformities there were in the respective offices. They said that this was useful because it would keep every staff on their toes to ensure that they did not appear in the list of non-conformities; that is, what one auditor referred to as the "*list of shame*". According to fifteen (55%) QMS auditors that were interviewed, the harmonisation of interaction of all KPLC business processes with the four business process enablers – ICT, QMS, RM and Culture Change and Rebranding Programme – was essential because they not only depended on each other, but they also fed the respective processes. Ten (37%) QMS auditors opined that the new core values (customer first, one team, passion, integrity and excellence) encouraged different staff in different function to understand that they worked like body organs to sustain the QMS with

overall service delivery improvement. They said each staff/function played different but pivotal roles in the process without which the system might dysfunction. They said that the four business process enablers should also support each other as they all were geared to support the core business of KPLC.

4.4.4 Response from the QMS Champions

One QMS champion said that:

> It is only through proper training that the company can empower all the staff to implement QMS as required. However, most of the QMS training does not regard RM. We note that the CRO and the MR developed DRIM together which shows that their work is closely related. The DRIM is so good and important, but it is not very simple to understand by those who are not in that line of information management… without investing in the right training, it is difficult to register success in anything.

Nineteen (86%) of the interviewed QMS champions talked about organisational culture change as part of critical success factor in the implementation of RM as required by QMS; for instance, the breaking of silos. One respondent stated that:

> Currently, most departments are concerned with their performance but not in tandem with the overall performance. We are yet to see a bigger picture; a situation where we are all working as a team to deliver quality service to our customers. For instance, procurement and stores departments impact negatively to our effort to construct power line and connect customers expeditiously. We have performance targets to meet, but we are always affected by unavailability of construction materials; yet procurement officials

> seem to take this lightly where they often indicate that they have their priorities, which they should get right before assisting others to meet their targets.

Another respondent stated that:

> QMS should have been introduced after educating all KPLC staff that we are one team and that the fall of one department implies failure in the entire company and, therefore, all should move out of the "box' and embrace other offices as equal partners. I am saying this because some department think that they are very important than others and can survive on their own.

It appeared that this problem had been pinpointed and addressed since the new KPLC core values, which were a product of rebranding and culture change programme, included the following: customer first, one team, passion, integrity and excellence (KPLC, 2010).

Seventeen (77%) respondents stated that the application of ICTs in the administration of QMS and RM was crucial to the success of KPLC's BPs. They praised the critical role that technology could instil in the entire BPs, including QMS and RM. Some of the interview citations, as one QMS Champion said, include:

> We are in the digital era and all our core businesses are automated, e.g. we have systems like DCS, ICS, SCADA/EMS, TMS, IFMIS, IHRS, etc! Why did the management introduce QMS without considering its implication on the growth of manual records? They are taking us back to "stone age".

Fourteen (64%) of the QMS champions mentioned the need to expand and elevate the QA Office and RM departments because they said the two had two officers each, yet the company was so expansive to be properly handled by limited staff. They said the current QMS and RM challenges were directly related to, among others, limited professionals to drive the two pillars/enablers.

Twelve (55%) of the respondents suggested that the power of marketing could not be overlooked or underestimated in elevating RM in the implementation of QMS in KPLC. They said that proper marketing of the importance of QMS and RM in all KPLC offices as an inseparable process might win some support from the TM, QA officials and the entire KPLC fraternity. They observed that once success and benefit realised in one office, there were chances of multiplier effect taking course across the company. They further stated that the marketing strategies for the RM should be done using a multifaceted approach, including opportunistic approach.

The researcher wanted to know what was meant by the opportunistic method of marketing RM in implementation of QMS in KPLC. One QMS auditor summarised this by informing the researcher that:

> You require not to invest heavily in marketing what is lowly rated in the company because return on investment is not assured…the best approach is to entrench RM in the process of implementing those programmes that are appreciated and supported by the TM… if rebranding and culture change is widely accepted, all what we require to tell KPLC staff is that this programme will not succeed without incorporating good RM.

4.4.5 Response from the Support Staff Handling Records

Seven (64%) respondents stated that there was need for appropriate training in KPLC and that all the training, whether internal or external, should include information management and automation of the QMS processes. It was noted that some staff were never trained in QMS and/or the training was so elementary.

Proper and relevant training of all KPLC staff on the importance of RM in implementation of QMS in KPLC's BPs is invaluable. Five (45%) respondents stated that they did not like the way training programmes were organised at KPLC. They opined that QMS and RM training should be done together, but not as a separate programme because, as one support staff said:

> There are a lot of documentation requirements in QMS which requires application of RM techniques. However, when RM training is held, there is no stress put on ISO documentation especially on how they are structured and referenced. On the other hand, during QMS training, which is rare, they only talk about the importance of developing good documentation but they do not tell us how to structure and code these important documents. Why can't they (organisers of the training programmes) factor merging the related trainings (i.e. QMS and RM), to enable the participants appreciates how different part of the training affects and support each other?

Additionally, another support staff quipped: "Training an administration officer to repair a transformer is a big joke and a waste of time and other resources". When asked by the research assistant to interpret the saying, the respondents said that:

> In KPLC, human resources organises very good training programmes, but at times they are administered to the wrong staff. For instance, every year, there

> is RM training across the company. We are properly trained but because this is not our core business, we are left only with the certificate to remind us of the training, but we cannot utilise the skills learned because immediately after training, we go back to our routine work….honestly this is doing disservice to the company….the company should create records offices in every division/department, employ records keepers and then continually provide the training to them because they are the right users of the training. Meeting the training target when actually the skills imparted are not going to be utilised to improve storage of records is unprofessional.

It is the considered opinion of the researcher that the right training for the right personnel at the right time is a critical success factor in implementing RM requirements in QMS at KPLC and other organisations too.

4.4.6 Response from the Customers Service Staff

Nine (82%) of the interviewed respondents emphasised the critical role that ICT can play in strengthening RM in QMS processes at KPLC. One official stated that:

> We thought that QMS will enhance flow of customer information from one office to another. However, this is not always true especially with the records and procedures which are still in paper format. We are expected to have readily available data on our customers to be able to serve them better. Often, even in the automated system, we fail to obtain the right information. I wonder what is so difficult in procuring an electronic system to manage all documents and records in the company.

This was a statement from a rather seemingly frustrated staff. What is coming out clearly is that identification of the right technology to drive any kind of business is crucial. The problem at KPLC was that they invested heavily on business process automation without considering whether they incorporated RM functionalities.

Six (55%) of the respondents stated that both QMS and RM were very important service delivery enablers which ought to be compulsory, but it appears that staff can afford not to perform on these functions and there is no serious reprimand, which lead the staff to assume that they are not compulsory. They therefore opined that the solution would be to integrate the two mutual functions in all BPs and further enforce them with disciplinary actions for those offices that do not adhere to the directives.

In summary, the six categories of respondents have highlighted the following critical success factors to ensure proper implementation of RM requirements in QMS at KPLC: management support; right training for the right staff; right and controlled documentation of QMS; culture change; provision of resources; automation of the QMD/RM processes; integration of QMS and RM in all KPLC BPs; and, opportunistic marketing of QMS and RM.

4.5 The Role of ICT in the Implementation of RM in QMS at KPLC

Over sixty-five (82%) of the eighty (80) respondents from all the categories discussed the importance of applying ICTs in the administration of RM and QMS processes and the entire business processes at KPLC. It was noted that the QMS documents and

records were manually managed. However, two electronic systems – Q-Pulse and Case 360 – were being installed by the time of conducting the study. They were meant to manage all QMS processes and records respectively.

The development of these two systems can be construed to imply the significant of automation of not only the QMS processes, but also more importantly RM at KPLC. Issues raised by the respondents were placed in different themes for the purpose of presenting, analysing and interpreting the data in order to add to the body of knowledge in understanding the role of ICTs in implementation of RM and QMS.

4.5.1 Response from the Top Management

When interviewed, the entire TM pointed out that the RM and QMS challenges alike could be addressed prudently if respective processes were automated. They said that, that was why the management committee of KPLC had approved the procurement of the two electronic systems, Q-Pulse and Case 360, in 2010 to manage QMS and RM respectively.

Observation revealed that these two information management systems were interlinked and borrowed heavily from each other. It was also evident that Case 360 was meant to import data/information from transactional workflows at KPLC. This reality can be said to point to the central role ICT can play in managing quality records in QMS processes at KPLC.

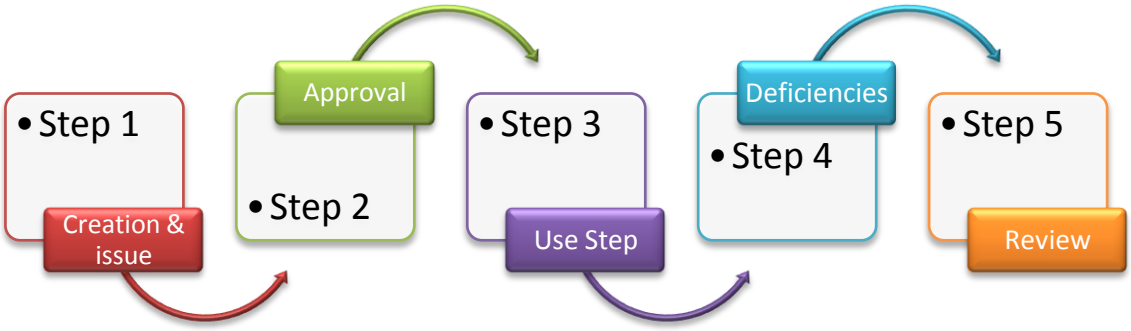
4.5.2 Response from the Quality Assurance Officials

The two QA officials pointed out that the application of ICTs in QMS could make the issuing and approving of QMS documents efficient and effective because the issuer could route the documents to the approvers remotely thereby breaking the distance barrier which was created by the manual QMS documents. They said that the current situation forced the issuers and approvers to be in close proximity to allow signing of the documents.

They further stated that QMS documents in terms of quality manual, quality objectives, procedures, work instructions, etc, were generated in great numbers to be distributed across the company. According to them, this wide circulation could be eased through automation of QMS documentation. They said that the current status where all the QMS documents were manually circulated, the duplication process was expensive, laborious, time wasting and cumbersome.

The two respondents stated that computerisation of QMS documentation would provide a controlled approval of QMS documents because they followed a determined approval process through a workflow architecture which regulated the creation, approvals and review with ease. This linear movement of the QMS documentation in an electronic environment is shown diagrammatically below in Figure 4:

Figure 5: QMS document control workflow in an electronic environment



It is apparent that when a QMS document is created and released for issue, approval, use and review, it moves in a controlled linear progression that enables strict control of the quality of documents unlike in the paper environment. The MR informed the researcher that automation of QMS documentation could play an important role in deterring duplication of the processes and documented procedures.

Respondents also stated that the automation of QMS could lead to the standardisation and harmonisation of QMS processes in a given office across the company because different players in different regions, sub-regions and business branches needed not to consult their respective counterparts in other areas because the process would be played in the Centralised Electronic Repository (CER) for viewing and use by all the stakeholders and therefore avoid unnecessary duplication and wastage of stationery.

4.5.3 Response from the QMS Auditors

Seventeen (71%) QMS Auditors said that good quality records make QMS auditing smooth, speedy, consistent and systematic because objective evidence in terms of

records when availed becomes a mirror to the hidden transactions that would otherwise be very difficult. One auditor said that:

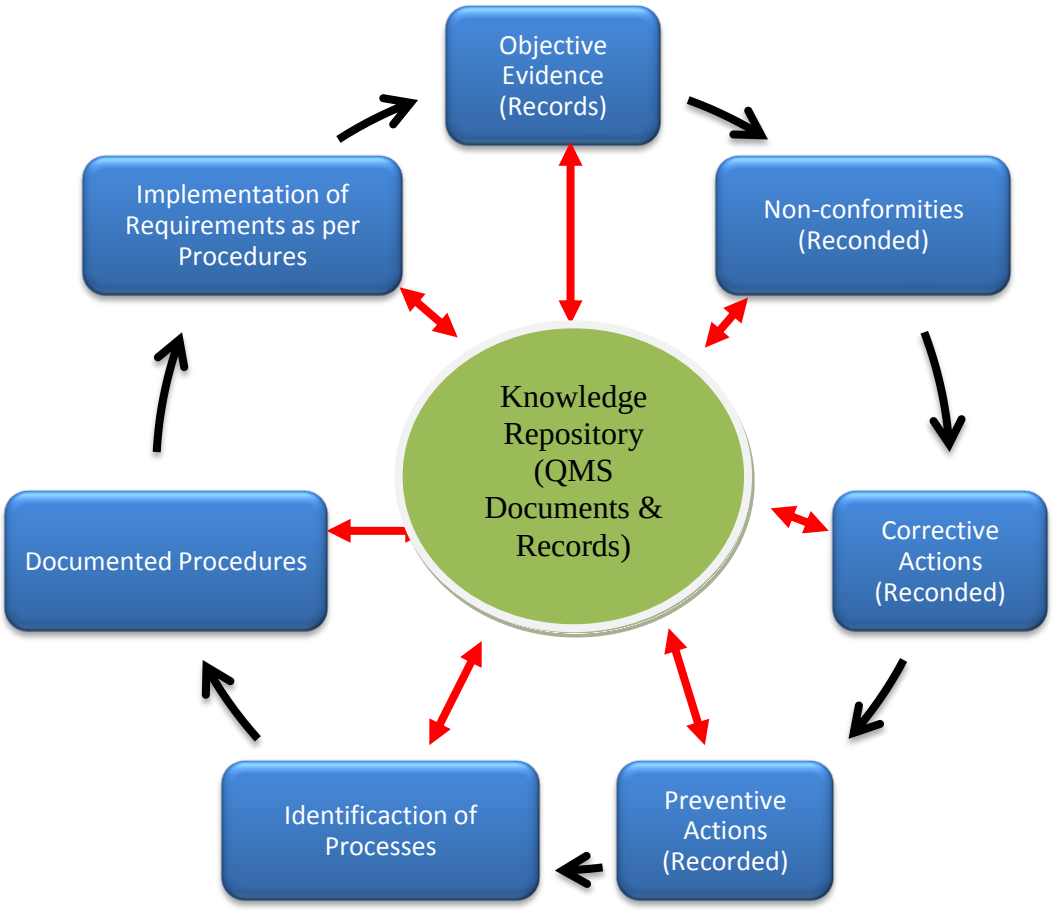
> When procedures and the work instructions are available in an automated environment, they point to the records which are likely to be generated by each procedure and work instructions, the records establishes the extent to which the auditee subscribed to the requirement of the standard and the procedures. You can easily verify whether the records are genuine or not by counterchecking the requirements stipulated by the procedures. This makes quality records a central tool of auditing QMS.

Another auditor stated that:

> Computerization of all the QMS documents and records enables tracking and verifying objective evidence in a very systematic and expeditious approach.

From the aforesaid statement and discussion with a number of auditors, it was noted that auditors use QMS documentation to the larger extent in conducting QMS audits where objective evidence on the performance of QMS is vested. If these practices are automated, then auditing would become robust. The concept is depicted diagrammatically below in Figure 5:

Figure 6: The QMS Evidence Cycle



The QMS Evidence Cycle that auditors use during the auditing process is watertight and if one element in the cycle is removed or malfunctions, then it makes QMS auditing laborious and cumbersome. At the centre is a knowledge repository in form of manuals and automated information systems that auditors should use to make informed decision about the performance of QMS in the subject office.

This implies that automation of QMS processes can trigger early signals of malfunctioning of the QMS system and remedial measures would be instituted on time. This is why one auditor stated that:

> In an automated system, it is easy to detect even the miniature non-conformity as opposed to a manual system. Besides, in KPLC, many automated systems like SCADA, DCS, ICS, TMS, IFMIS, IHRMS, etc, are already in place.

> What is required now is to provide an automated QMS documentation system that can be integrated into the existing systems, that it can import information from these systems and prepare monthly performance reports that can be used to determine if QMS procedures are adhered to.

One QMS Auditor stated that:

> When QMS processes are automated, then it will be very easy for the MR, process owners and auditors to keep track of how processes are implemented. Non-conformities or clues of non-performance can be detected because the procedures used are customised to send signals when certain fields within the workflows are improperly completed.

From the above presentation it is clear that ICTs are very critical in driving QMS processes and managing QMS documentation which includes RM.

4.5.4 Response from the QMS Champions

Fifteen (68%) respondents stated that application of ICTs in the management of QMS could reduce paperwork in a great deal. One QMS champion stated that:

> We appreciate introduction of automation of QMS process documentation; otherwise these many volumes of ISO procedures and quality records are making me hate ISO because many a times my officers misplace the documents and finding them when auditors ask for them is a big challenge and an embarrassment. Auditors like citing non-conformities on unavailability of

> documents and records at the point of use. It is only automation which will save the situation.

This assertion underscores the fundamental role that ICTs are expected to play: to regulate creation, approvals, use and disposal of QMS documents, including records, as opposed to the manual system, which is cumbersome, laborious expensive and time consuming. According to Clause 4.2.3 of the ISO 9001:2008 records are special kinds of documents and when respondents are mentioning QMS documents, records are enjoined. To a layman the distinction between a document and a record is almost non-existent.

Eleven (41%) of the interviewed QMS Champions said that good quality records make QMS auditing expeditious and that if they are automated, their retrieval during the auditing process would be almost instantaneous.

Twelve (55%) respondents informed the researcher that automation of QMS documentation would improve the tracking of how each and every process is implemented within QMS.

Eighteen (82%) respondents said that the withdrawal of obsolete QMS documents in a computerised environment could be very judicious as opposed to the manual system which was difficult to control because of the chances of communication breakdown. They said that in an electronic environment, the MR could withdraw all unwanted procedures, work instructions and forms instantaneously.

Since the QMS documentations are supposed to be housed in a computerised environment, it is prudent to advocate for the automation of the QMS and RM processes because there is return on investments as seven respondents postulated.

4.5.5 Response from the Support Staff Handling Records

Although respondents from other categories talked about one-stop access to the QMS documents and records, the support staff handling records, and who are custodian of the QMS documents and records, stated overwhelmingly that computerisation of QMS documentation would provide a state-of-the art one-stop source of QMS documents and hence remove the scenario where KPLC staff were often accused of having QMS documents not available at the point of use during the auditing process. Nine out of 11 respondents mentioned the above.

Six (55%) of the respondents stated that computerisation of QMS documentation would provide multiple access to the QMS documents that were created and stored at the CER.

Five (46%) of the respondents stated that automation of QMS processes could improve RM, which in turn could lead to the prudent operationalisation of the procedure for control of records and identification of QMS documents and records. They stated that currently, the procedures for the control of records and control of documents were in paper format which made their control difficult.

This implies that there is need for KPLC to apply the enterprise/content management system that can avail all QMS documentation online to be able to control the documents and records across the company centrally.

4.5.6 Response from the Customers Service Staff

Like respondents in other categories who participated in the study, nine (82%) of the staff handling customers praised automation of RM and QMS as the only tool to ensure expeditious retrieval of customer records and, therefore, enable improved service delivery based on informed decisions at the right time.

In a nutshell, the following were the benefits of automating QMS and RM processes as seen by KPLC staff who participated in the study: efficiency in issuing and approving QMS documents; wide circulation of QMS documents; reduction in paper documentation; expeditious tracking of objective evidence; one-stop access to QMS documents and records; multiple access of QMS documents and records; controlled approval of documents; improved tracking of QMS process implementation; avoidance of duplication of procedures; ability to control the procedures for the control of documents and records; and, easier withdrawal of obsolete QMS documents from circulation, thereby ensuring that only current QMS manuals, policies, procedures, work instructions and forms are in use.

4.6 The Challenges Faced by KPLC in Fulfilling RM Requirements in QMS

It is noted from the previous sections that the RM programme at KPLC rides on other processes because it was not purposely designed. Numerous RM challenges were mentioned by respondents from different categories. Some hints on the problems affecting RM in implementation of QMS at KPLC have been discussed in passing in the previous sections, but this particular section captures them appropriately.

4.6.1 Response from the Top Management

Four (40%) respondents intimated that the major RM problem pertained to the organisational culture that does not take RM as an important tool in service delivery to customers. Six (60%) respondents stated that the two records officers in place were inadequate to serve the rising needs for better records keeping practices. Five (50%) respondents mentioned that the need for the right information at the right time could only be achieved when there was a purposely designed RM programme at KPLC.

4.6.2 Response from the Quality Assurance Officials

Like the TM, the two officials in this category also mentioned the challenges posed by organisational culture, which they said did not nurture prudent RM. They believed that computerisation of work processes was a replacement of RM. They stated that most of the KPLC staff thought that RM was the same as registry, which they equated with the management of paper records.

The MR said that in spite of the vastness of the Company with offices across Kenya and over 10,000 employees, and the importance that RM played in KPLC's business,

there were only two records officers to serve the entire establishment. They suggested additional records officers and introduction of registry system across the company.

4.6.3 Response from the QMS Auditors

Thirteen (54%) respondents stated that files without references were so prevalent. One QMS auditor said that:

> QMS audit reports showed that there were various files with no reference numbers and/or defective references.

It was noted that the RM office had designed and developed a comprehensive document that showed the codes to be applied in every office to identify it with a unique code – the DRIM. However, it was noted that not everybody was skilled to apply the requirements of the DRIM due to lack of RM staff.

Eighteen (67%) of the auditors opined that there were no dedicated RM staff and that clerks and secretaries who were assumed to be records keepers, more often than not were engaged with other chores such that RM needs were neglected.

Fourteen (58%) of the auditors affirmed that they found some files not recorded in the classification scheme, and which were treated as missing records. They attributed this phenomenon to lack of accountability and/or responsibility for RM. In effect, one QMS auditor stated that:

> In the absence of registries at KPLC, management of physical records is very challenging. The training and advice given by the RMD is an effort in futility

> since there is no ownership of RM processes in many offices in spite of the fact that every office creates and keeps records pertaining to their business transactions…we take the wrong staff for RM training and that is why it takes time to improve RM practices.

Observations showed that it was only HRD that operated a functional registry system. Even at the HRD, not all human resources records were kept in the registry. Only staff files were kept there. This left the bulk of the records over-decentralised; they were found adjacent to the users.

Nineteen (79%) of the interviewed auditors, stated that there was an acute shortage of storage for records across the company. Observation ascertained this contention because with open office plan the researcher was able to see current records kept askew on top of cabinets, shelves and also, in some offices, on floors.

4.6.4 Response from the QMS Champions

Nineteen (86%) respondents in this category said that poor storage for manual records was caused by lack of an all-inclusive planning; all players were not invited to contribute to what would have constituted a good building plan. They said they were sure that records officers were not there during the time when the company shifted offices to the current headquarters – i.e., Stima Plaza. They further stated that the solution to the above problem was to rethink how to accommodate registries by working optimal utilisation of the available space and more so include records officers

whenever plans to lease or build new offices were muted so that they could provide the space required for storage of records.

Eleven (50%) respondents mentioned that the introduction of the ISP Project in the mid-1990s introduced the automated processes for many core BPs. This move was thought to have diminished the manual systems; therefore, the need for registries was thought to have been replaced by the server rooms under the Information Technology and Telecommunications Division. One respondent who had witnessed the introduction of computerisation project had this to say:

> We were so thrilled because we were told, or we believed, that the end of the registries had come since we were expecting a paperless office. We were haunted by a nightmare of even more papers during the computerised era than in the typewriter era. Worse of it all is that we have no place to house them yet their disposal is challenging owing to the long retention period or other variables.

The observation made by the researcher was that there was no specific space exclusively set aside for the storage of records. Many offices have over-decentralised filing cabinets distributed around the space available. This supports the proposition that running a hybrid system is the appropriate remedial measure because it will ensure that the space for the registries will be factored on a serious note. This is what seven (32%) of the QMS champions interviewed said.

4.6.5 Response from the Support Staff Handling Records

Ten (91%) respondents in this category said that realising 100 per cent paperless environment was not feasible. Therefore, the solution was to plan for the hybrid system and apply the integrated RM programme that would factor in the registry concept at least in medium term. One secretary indicated that:

> However much we try to over praise computers, it does not imply doing away with the registry. We like borrowing from the developed countries without piloting the new system to see if they carry with them the real benefits they were said to provide. Believing any untested programme is dangerous because that is why we have storage problems for the paper records.

Nine (82%) respondents in this category pointed out that some files were not given titles and also some titles were not reflecting the content because of poor filing practices. One clerk said that:

> You know that filing is an added duty yet it is not recognised by my boss and, therefore, I concentrate on those jobs that my boss appreciates, leaving filing to be done whenever my core jobs reduce. Often, I find myself mixing papers in one file. In such a case it becomes difficult to provide a file title.

Observation showed that files in storage areas were oversize where additional fasteners were added to allow additional papers in a file, making them voluminous and difficult to handle.

4.6.6 Response from the Customer Service Staff

Ten (91%) respondents stated that the major challenges in handling RM in the implementation of QMS at KPLC related to lack of dedicated records handlers in most of the offices due to lack of a registry system. They said that the company assumed to be overly automated where RM was assumed to be automated which was not essentially the real case.

The researcher noted that most of the business transactions were automated, but such automations as the ICS System were a workflow that managed customer service transactions where they maintained data on respective transactions. It was further observed that the actual customer records, like electricity supply agreements and associated documentation, was manually kept as part of the vital records programme dubbed as Commercial Records Section. The problem here is that there is only one records officer to manage the entire range of customer records across the country. Majority of the rest of the staff are either on three months contracts or day casuals.

It was also noted that the profile of RM was comparatively very low in the Commercial Services Division, which made it difficult for the records officer to articulate RM requirements effectively. One customer relations officer pointed out that:

> We often fail to appreciate RM practices because we tend to think that it is an unimportant function because it is a section with only one junior records officer and many temporary employees. The company seems to place officers according to the importance they attach to the functions they perform". "…TMs perception of RM is lukewarm if not negative".

From the presentation above, it is evident that RM challenges at KPLC are more apparent, but implementation of QMS has created some impetus to address these myriad bottlenecks. As pointed out above, it is a considered opinion of this study that the RM challenges are overly related to the organisational culture that does not mainstream RM as a key QMS and other KPLC's BP enabler. This phenomenon compounds other RM problems.

It was observed that ICT is assumed to replace RM and, hence the degeneration of RM. For instance, one customer relations officer pointed out that:

> We often fail to appreciate RM practices because we tend to think that it is unimportant function because it is a section with only one junior record officer and many temporary employees. The company seems to place officers according to the importance they attach to the functions they perform". "…TMs perception of RM is lukewarm if not negative".

Unless the problem of organisational culture is tackled, all other efforts to streamline RM in support of QMS at KPLC will not mature. One QMS Audit intimated that:

> Without convincing KPLC staff, especially the TM, about the benefits they are bound to accrue by streamlining RM as a key tool to drive QMS and the fact that ICT requires incorporation of RM principles for it to be beneficial to the service delivery, all other efforts are non-starter.

The contention is collaborated by Indeje and Zheng (2010) who postulated that:

> The structure and culture of an organisation does affect implementation of projects… Without ruling out problems of technological nature, the findings

> suggest that many of the problems in the…implementation may be attributed to organisational factors and that certain issues are related to the existing organisation culture.

It was noted that there were two RM functions working independent of each other, which resulted in duplication of resources including microfilming and digitisation equipment. This should be construed to imply lack of proper stewardship and coordination in handling records as Wamukoya and Mutula (2005) noted citing Mnjama and Wamukoya (2004).

In summation, it is imperative to point out that the major challenges with regards to RM are due to historical, political, cultural, managerial and technological factors (Wamukoya and Mutula, 2005). These challenges must be addressed in full including in QMS environment to ensure successful implementation of RM in support of QMS at KPLC.

4.7 Respondent's Recommendations

Respondents were asked to make recommendations on how to improve RM in support of QMS at KPLC. Some of the key recommendations as they were stated by different respondents include:

4.7.1 Response from Top Management

"We as TM need to lead by example so that those under us can follow suit…if we stress the need to see proper records keeping practices, we should provide the necessary resources".

"The only way to realise better RM in KPLC is to employ more professional records officers and give them the necessary support…without TM support RM programme will never change…"

"Computerisation of RM should be made mandatory to ensure quick retrieval of records especially when serving the customers".

"RM should be made a department in IT&T Division since it is part of information management…IT&T command TM support and therefore resources as opposed to the RM which is seen as an outdated function that cannot stand alone…"

4.7.2 Response from Quality Assurance Officials

"…since RM is one of the six mandatory procedures in QMS, then it should be made mandatory in every KPLC office."

"All KPLC internal training should have a module on RM…"

"RM should form an integral unit of the Quality Assurance function…"

"One of the key critical success factors in aligning RM with QMS is to automate both RM and QMS and establish proper linkage between the two systems".

4.7.3 Response from QMS Internal Auditors

"All QMS Auditors use records mostly to establish that the processes are being followed as documented in respective procedures, works instructions and manuals. This means that there must be proper RM guidelines at KPLC to ensure proper management of records…in support of QMS auditing processes".

"RM Department should be expanded to cover all departments and regions... it is extremely difficult for the two Records Officers to bring sanity in RM at the company which is too expansive…"

"One of the strategies to improve RM is to merge the two RM units and employ more trained staff in RM".

"The challenges with poor RM are caused by the organisational culture change that seems to downgrade RM in spite of the fact that we all see the critical role records play in our business…the remedy is to make RM a compulsory function in every KPLC office".

"RM audit should precede QMS auditing because without proper records, QMS auditing is problematic.

4.7.4 Response from QMS Champions

"It is high time that automation of RM be jumpstarted and fast tracked to mitigate the existing uncontrollable growth of paper records".

"When planning RM training, all the QMS champions should also be trained because in a situation where there is no registry system we are the presumed registry supervisors… the problem is that most of the RM training targets only the secretaries and clerks… we cannot supervise them in terms of RM since we have no RM knowledge… "

"…there is no doubt that the company faces many RM challenges… we require some sort of policy framework to tell us the road map in arresting RM woes in the company…"

4.7.5 Response from the Staff Handling Records

"The TM should make bold decisions to introduce registry systems because we notice that in Human Resource Division where there is such a system, there is proper responsibility and ownership of RM processes. Otherwise, it will continue to be difficult for secretaries and clerks who are charged with other responsibilities to handle RM appropriately".

"Every office must have RM staff specifically to handle departmental records".

"All KPLC staff must be trained on RM because they are partakers in RM processes in one way or the other".

4.7.6 Response from Customer Service Staff

"Every customer service staff should be trained in RM because satisfying customers depends on the availability of required information… quick retrieval of information depends on how best the customer records are organised…"

"RM should be automated like the customer service transactions if the company is to improve service delivery to the customers".

"There must be continuous RM training and auditing if RM and QMS processes are to change for better".

4.8 Summary

This chapter has highlighted the research findings in terms of the research objectives. It has discussed how records are managed in their continuum, and the environment under which they are managed showing how it has affected the implementation of QMS at KPLC. The critical success factor in the implementation of RM in support of QMS has been presented. The role of ICT in implementation of RM in support of

QMS at KPLC has also been discussed. The chapter has also presented the RM challenges in support of QMS at KPLC, and ultimately put forward the recommendations by the respondents based on what in their opinion would improve RM at KPLC.

CHAPTER FIVE

SUMMARY OF RESEARCH FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the study findings, conclusions and recommendations. A proposed RM Framework in support of QMS at KPLC and the areas of further research are provided.

5.1 Summary of Research Findings

The summary of the findings are organised around the research objectives in an attempt to answer the research questions. Data finding revealed that:

- Identification of records: DRIM and records classification schemes are used to develop unique records and documents identification. Subject records are retrieved through use of file reference/titles which are designed as guided by the DRIM. Staff records are identified by unique staff numbers that distinguish between permanent staff and those on contract. Customer and shareholder records are identified by using account numbers while procurement records are identified by tender numbers.
- Storage of records: It was noted that there are many automated business processes in KPLC where electronic records are hosted. However, these are overly transactional workflows that do not address RM issues appropriately. In addition, manual records are stored in mechanical shelving, cabinets and shelves. It was also noted that some records are stored in open since KPLC Head Office practises open office plan architecture. There is a company archive that

houses semi-current and permanent non-current records. Thus, it was observed that records are not adequately stored due to lack required resources.

- Protection of records: For electronic records, passwords are used to deter unauthorised access. The access control is regulated by the IT&TD staff. Different users have regulated access profiles depending on the authorisations given by heads of departments. The vital records are reformatted using scanning and computer output to microfilm technology under the control of the company archives. It was observed that safes and fireproof cabinets are used in some offices that hold sensitive records.
- Retrieval of records: Classification schemes, location guides and identification codes are used to retrieve records from their location, whether manual or electronic.
- Retention of records: Not all records are scheduled. The process preparing a corporate omnibus retention schedule scheme was ongoing. However, all QMS records are scheduled.
- Disposal of records. Disposal of KPLC records was controlled by the Records Management Department which either uses existing partial retention schedules or conducts physical appraisal of records. Semi-current records are transferred to the department for retention until end of the retention period. Ephemeral records are disposed of through sale to the paper vendors after authorisation by the regulator, the Kenya National Archives and Documentation Services, and the internal Disposal Committee. The permanent records are preserved in electronic, micrographic and paper formats.

Concerning the environment under which records are managed; it was revealed that responsibilities for RM are not properly delegated as required by ISO 9001:2008 QMS. According to the observation, and the interview conducted across all categories of respondents, it was apparent that there are shortages of resources that are required to manage records. Therefore, the management of records in their continuum is challenging.

It was established that the current RM environment affected the implementation of ISO 9001:2008 QMS at KPLC because RM is fundamental in demonstrating compliance with various QMS requirements. Top on the range includes monitoring of the performance of QMS processes through QMS auditing and use of information contained in quality records in meeting customer requirements and ultimately customer satisfaction. Insufficiency in RM practices has affected implementation of QMS at KPLC.

The critical success factors cited by the respondents are: TM support; right training for the right staff; right and controlled documentation of QMS; culture change in support of RM programme not only as a means to an end, but also, more importantly, as a end by itself; provision of resources; automation of the QMS/RM; expanding and elevation of the QA & RM Office; integration of QMS and RM in all KPLC BPs; and, marketing of QMS and RM as a joint venture.

It was established that ICT is applied in the administration of RM in QMS processes at KPLC. Besides the transactional business workflows, two automated systems, Q-Pulse and Case 360, were being installed at the time of the study. These systems were meant to manage QMS and RM respectively and were dependent on each other.

Respondents pinpointed numerous envisaged benefits that would accrue from automation of QMS and RM. These were: efficiency in issuing and approving QMS documents; wide circulation of QMS documents; reduction in paper documentation; expeditious tracking of objective evidence; one-stop access to QMS documents and records; multiple access of QMS documents and records; controlled approval of documents; improvement in the tracking of QMS process implementation; avoidance of duplication of procedures; ability to control the procedures for control of documents and records; and, easier withdrawal of obsolete QMS documents.

KPLC faced many challenges in fulfilling RM requirements in QMS; research finding revealed a myriad problems that contravene requirements of Clause 4.2.4 of the ISO 9001:2008 QMS. Such problems included poor identification of records, poor access and retrieval system, shortage of storage space and equipment for records, inadequate protection of records in some offices, and incomplete retention schedule(s) for the records such that disposal is shrouded by numerous challenges. Organisational culture that does not mainstream RM is also a big challenge.

Respondents recommended the following as means to improve RM in support of QMS at KPLC:

a) Automation of RM and QMS processes

b) RM training for all KPLC staff

c) Introduction of registry systems in all KPLC offices

d) Introduction of RM auditing as a precursor to QMS auditing

e) TM support and organisational culture change in support of RM

f) Introduction of policy framework to guide implementation of RM

g) Making RM mandatory in every KPLC function

5.2 Conclusion

This research undertook to study the role of RM in the implementation of QMS at KPLC for the reason that RM is one of the mandatory requirements in QMS and therefore have far reaching effects on QMS. The following are the key conclusion:

The study revealed that business process enablers (ICT, RM, Ethics and Integrity Programme, Risk Management, Rebranding and Culture Change Programme, etc) at KPLC play different and yet important roles, but operates in silos. It is evident that RM is so embedded into all other KPLC processes and programmes that its management is overly influenced by the quest to improve these other processes and programmes than the RM processes per se. The study revealed that identification, storage, retrieval, protection, retention period and disposal of records has unresolved issues and therefore unable to support QMS prudently.

Observation and respondent statements qualifies the study to conclude that the environment under which RM programme at KPLC operates is not conducive to support prudent implementation and maintenance of QMS and hence the need to devise strategies to guide the implementation of RM in support of QMS.

From the opinion of the respondents, organisational culture change is a key factor and it should include TM support and recognising the central role RM plays in all BPs including QMS. Positive TM support beyond moral suasion may attract resources and other pertinent support required to propel RM processes and put them in tandem with QMS requirements. This would also remove the tendency for different functions and programmes to work in silos. Automation of RM and QMS processes are key critical success factors that would enable RM processes to be improved to support implementation of QMS at KPLC.

It was observed that ICT had a significant role to play in the implementation of RM in support of QMS at KPLC. However, it is evident from the study that automation of RM and QMS must be preceded by streamlining RM and QMS processes. The study has revealed that insufficient RM weakens implementation of QMS and can compound other QMS challenges. The major challenge relates to the organisational culture change in order to instil the importance of RM not only in QMS, but also in all KPLC's BPs. Organisational culture that does not mainstream RM as a key corporate resource was identified as a key cause of RM challenges in KPLC's QMS. These challenges, compounded by the organisational politics, demean RM by assuming that transactional business workflows have replaced RM and that RM is an obsolete function.

The study concludes that KPLC requires to design and to implement comprehensive and integrated approaches to guarantee excellent service delivery to KPLC customers by a way of mainstreaming RM in support of QMS. Distinctively, the study revealed that KPLC is faced with various RM non-conformities including those related to the inadequacy of RM to support QMS processes.

The overall conclusion is that the existing RM systems and practices are inadequate and they destabilise the implementation and maintenance of QMS at KPLC. Therefore, there is need for the company to analyse existing RM systems, methods and practices and rejuvenate them to guarantee that they adequately sustain effective implementation of QMS processes. The study also proved right the study assumptions in chapter one. These conclusions therefore, imply the need for a RM framework to support implementation of QMS at KPLC.

5.3 Recommendations

The findings from the study revealed numerous challenges experienced by KPLC in implementing RM in support of QMS. The following recommendations are proposed to enhance implementation of RM in support of QMS at KPLC.

1. **Embedding records management in certain pillars:** Respondents mentioned a number of pillars under which RM programmes should be embedded within KPLC's BPs. These include but not limited to: QMS, business process automation, ethics and integrity programme, implementation of customer service charter and service delivery innovations, culture change and rebranding programme, and corporate risk management programme. RM cannot be a stand-

alone programme as pointed out by various respondents in Chapter Four. RM at KPLC should be anchored in the implementation of QMS overly because it is a mandatory requirement under Clause 4.2.4 of the ISO 9001:2008 QMS. Moreover, RM officials should never work in silos; they should involve other stakeholder, especially the QA officials, functional heads and records liaison officers.

RM training should be made a routine exercise embedded in the pillars mentioned above, especially QMS training.

2. **Application of ISO 15489:2001:** It is recommended that the records officers, in consultation with the QAO at KPLC, should use ISO 15489:2001 Standard as a code of best practice in developing own suite of RM products, including the PFCR for the following reasons: ISO 15489:2001 was designed to guide ISO 9001:2008 QMS in meeting RM requirements within the Standard; ISO 9001:2008 is an international standard which has been developed, analysed and evaluated to meet the generic recordkeeping requirements of all organisations and KPLC should benefit from applying its requirements; an international standard is more likely to be taken seriously by TM and therefore increase RM acceptance at KPLC; and, compliance with the standard will generally mean compliance with RM requirements as required by ISO 9001:2008 because ISO 15489:2001 provides platforms and identification of levels of information required in recordkeeping (how to title a file, what metadata should be captured at file creation, file tracking, security, etc).
3. **Subjecting RM to QMS processes:** It is recommended that RM processes should be subjected to QMS processes at KPLC because QMS is designed to be applied in any function. As part of the policy direction, KPLC should make RM

a mandatory requirement in every office as required by Clause 4.2.4 of ISO 9001:2008 QMS. Every KPLC business unit must maintain and use the PFCR. They should seek guidance from the records officers should in addressing RM issues.

Auditing RM practices as part of routine QMS and Internal System Audits is also recommended. Records officers at KPLC should design and train auditors on requirements of RM audits. This is because, although auditors more often than not address RM problems, it depends on what individual auditor samples during the audit. However, it is recommended that purposeful sampling of RM practices be used whenever system audits are being carried out in KPLC's business. This will go a long way to improve RM practices in support of QMS at KPLC. Besides, the integrity champions can be trained to form part of the RM auditors.

4. **Factoring legal and regulatory requirements:** It is recommended that all legal/ statutory and regulatory requirements in support of RM, including RM in QMS processes must be adhered to since QMS requires organizations to factor regulatory requirements while implementing QMS. At the best, RM at KPLC should meet requirements of various statutes, regulations and policies in force. Such statutes include the Public Archives and Documentation Service Act, Evidence Act, Limitation of Actions Act, Communication Amendment Act, and other acts of parliament.
5. **Organisational culture change:** Organisational culture is very instrumental in designing RM strategies (Shepherd and Yeo 2008). Organisational culture is the personality of the organisation (McNamara, 2006). KPLC's organisational culture is entrenched in the collective implicit suppositions of the company.

These tacit values compel behaviour throughout the company; therefore, it makes available to the staff members stability, consistency and meaning, and any change agent that threatens those three things will meet strong resistance. The change in support of prudent RM is not a simple fix, but can be achieved in modulated steps.

It is recommended that TM support should include a written policy direction in support of proper RM programme. It is recommended that the KPLC Board of Directors, Chief Managers, Managers, Deputy Managers and Chief Engineers/Officers who constitute TM should personally support RM practices by way of talking about RM as a tool of service delivery to customers, protection of legal and financial rights, and interest of the company, staff and other stakeholders. 'They should walk the RM talk'.

From the previous QMS audit reports various non-conformities related to RM were mentioned, and included insufficient resources. Therefore, management should provide RM resources in every office, including, budget, staffs and systems, including introduction of modern automated registry system.

6. **Automation of RM and QMS processes:** It is recommended that the process of automation of RM functionalities which has already taken off be fast tracked to take control of the exponential growth of paper records and further ease the dissemination and retrieval of the required records. Automation of RM in support of QMS should be planned and apply RM principles and practices in electronic environment, be implemented in accordance to the requirements of the project management parameters, and be implemented in a phased out programme to ensure success.

7. Application of the Proposed RM Framework in Support of QMS at KPLC

It is recommended that KPLC adopt the proposed RM Framework in support of QMS at KPLC in order to address recurring RM non-conformities identified in this study

5.4 The Proposed RM Framework in Support of QMS at KPLC

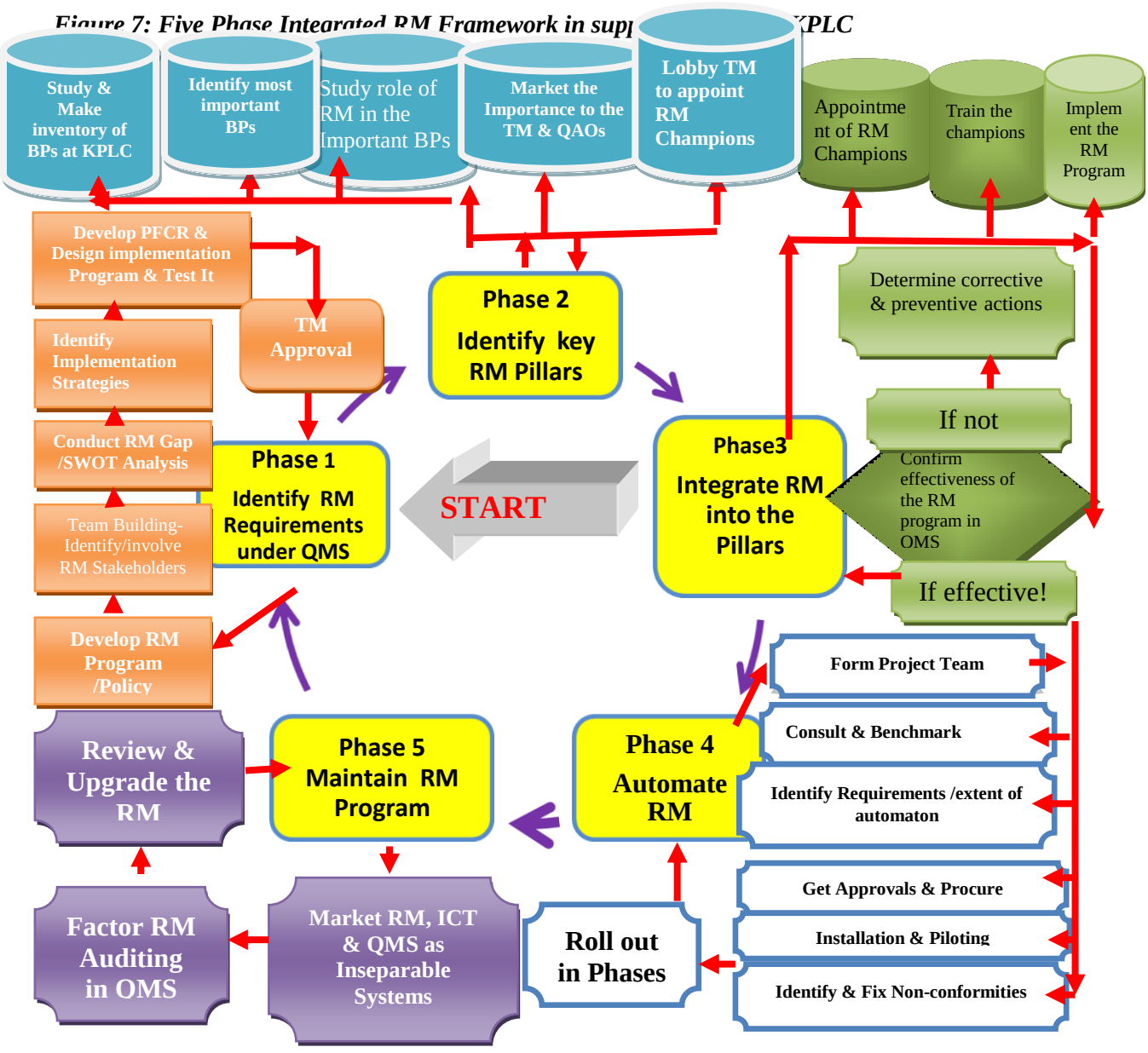
The key output of the study was to design a RM framework to be used in addressing RM requirements in the implementation of QMS at KPLC. According to the information received from the respondents, the framework should address all RM requirements in ISO 9001:2008 QMS since it is a mandatory requirement.

The design and implementation of the RM framework is aligned to the documentation requirements of ISO 9001:2008 QMS Standard using relevant RM Standard and a relevant model. Records continuum refers to the art of "delivering frameworks for accountable recordkeeping regimes that enable access to essential, useable evidence of social and business activity for business, social and cultural purposes for as long as it is of value" (McKemmish, 1997).

The study proposes a framework that could be used to ensure sufficient RM at KPLC to support QMS processes. The framework presents a Five Phase Integrated RM Implementation Programme that KPLC ought to go through to make sure that there is adequate RM to support the implementation of QMS. These stages and the subsidiary activities in the programme are shown in Figure 6.

The study proposes a framework that could be used to ensure sufficient RM at KPLC to support QMS processes. The framework presents a Five Phase Integrated RM Implementation Programme that KPLC ought to go through to make sure that there is adequate RM to support the implementation of QMS. These stages and the subsidiary activities in the programme are shown in Figure 6.

Figure 7: Five Phase Integrated RM Framework in supp KPLC



The diagram shows the proposed continuum of activities involved in the implementation of RM programme in support of QMS at KPLC. QMS advocates a process approach in the implementation of QMS processes. RM is taken as a QMS process and, therefore, the process approach is adopted to develop a flowchart that summarises array of activities that ensures robust implementation of RM in support of QMS at KPLC. ICT is an integral part of the process.

5.4.1 Five Phase Integrated RM Framework in support of QMS at KPLC

Introduction

The requirements of ISO 15489:2001, which is a global RM best practice tool and the RCM appreciates that there are association between BPs and resultants records. Whereas ISO 15489:2001 provides 8 steps that may be adopted in the quest to revamp/reorganize RM processes within a given organization, RMC confirm that records and documents provides a platform for generating traceability and objective evidence of how QMS processes at KPLC are being implemented and/or maintained. However, it is not mandatory that all the proposed phases of the RM framework in support of QMS at KPLC should be implemented concurrently. It should be implemented in a phased-out programme and/or in full, depending on the urgency and RM requirements at hand. Depending on the status of RM programme in a given office, any of the phases, and/or part of the steps within a given phase may be implemented separately, either before or after others in the framework.

Phase 1 - Identify RM requirements under QMS:

It is vital to identify from the outset all the required resources to allow proper planning for the project implementation. It is suggested that resources required in ISO 9001:2008 and ISO 15489:2001 must be blended together to compile a list of all critical resources that would see successful implementation of RM in support of QMS at KPLC. The suggested steps in Phase 1 should include among others, the following:

- Develop RM Programme

  In order to ensure smooth take off, the first priority would be to establish a formal RM programme with clear policies, infrastructure, staffing, guidelines

and clear career path for RM personnel. The policy should clearly define the responsibilities for the RM at all levels. If possible, this should be done when preparations for implementation of QMS are made. A consultant may be hired if the Company have no capacity to handle the programme during the formative stages. The application of some or all the 8 steps suggested by ISO 15489:2001, clause 8.4. should be factored in the programme. Again, benchmarking with progressive organizations would be a value-adding process at this stage.

- Teambuilding-Identify/involve RM Stakeholders – there must be concerted effort to build a formidable team to implement the project at different phases. The team should constitute all relevant expertise.
- Conduct RM Gap/SWOT Analysis – it is critical to identify the existing RM gaps so that methods of fixing them can form part of implementation strategies. Where an embryo RM service already exists, it is often helpful to evaluate it by means of a SWOT analysis (Shepherd and Yeo, 2003).

Figure 8. Example of a SWOT analysis for a records service modulation of

Internal factors	*External factors*
Strengths ❖ **long-serving and committed records staff** ❖ **good relations between records staff and users, i.e. QMS users** ❖ **capacious and well-equipped storage areas for paper records** **established systems for controlling access and maintaining confidentiality.**	**Opportunities** ❖ New constitution and its quest for freedom of information. It highlights the importance of effective RM systems ❖ new senior executive has a more open attitude to RM ❖ outsourcing of support services means that the need for documentation of contracts and service level agreements has a high profile.
Weaknesses ❖ **lack of staff skills, especially in managing electronic records** ❖ **lack of integration between electronic and paper records** ❖ **no coordination between systems in different parts of the organization** **inadequate funding.**	**Threats** ❖ management of electronic record creating systems is driven by information systems provision; software packages and hardware combinations are chosen by computing specialists with little or no regard for RM implications ❖ outsourcing of support services means that there is little in-house access to information technology expertise for advice on electronic records issues.

Source: Shepherd and Yeo (2003)

- Identify implémentation stratégies:

- Organisational Culture Change Management
- Factoring RM in QMS requirements as in ISO 9001:2008 Standard
- Develop the PFCR & Design implementation programme
- The PFCR should cover the following six (6) elements because that is what clause 4.2.4 of ISO 9001:2008 QMS requires: 1) Identification of records within QMS processes; 2) Storage of Records in QMS; 3) Protection of QMS Records; 4) Retrieval of QMS Records; 5) Retention of QMS Records; 6) Disposal of QMS Records
- Devise strategy to implement the PFCR. The success of designing the PFCR rests in its implementation. The QAD and RMD should coordinate QMS Champions in order to align RM with QMS processes.
- Top Management Approval – TM is very essential in ensuring that RM programme in support of QMS at KPLC is successful. This is a critical organisational culture aspect that must not be overlooked.

Phase 2 - Identification of pillars where to anchor RM at KPLC: Respondent

- **Study & Make inventory of BPs at KPLC**

-The first step should involve studying and compilation of an inventory of the entire BPs at KPLC in order to appreciate the extent of the KPLC's BPs.

-The second step should involve listing of the functions of each of the enumerated BP

-Once the inventory of PBs is drawn, the process is now mature to progress to the next stage within phase 2.

- **Identify most important BPs in KPLC**

-Make the list of all BPs in descending order, starting with the most important ones, especially those with big impact at the corporate level.

- **Study the role of RM in the Important BPs**

-In this stage, effort should be made to identify the most crucial role, RM plays in the identified most important BPs, like QMS, Organizational Culture Change and Rebranding, BP reengineering, Integrity and Ethics Programmme, Risk Management Programme, ICTs, etc.

Study role of RM in the Important BPs. These are the benefits of RM.

- **Market the Importance of RM to the TM & QAOs**

-Using the benefits identified in the above stage, then the TM and QAO should be educated on the important role that RM plays in supporting other BPs,

especially the mission oriented ones. The essence of this, is to ensure that the TM understand, appreciates and recognise the RM in support of QMS.

- **Lobby TM to Support Appointment of RM Champions**

Once the importance of the RM in support of other BPs, is publicised and accepted by the TM, the next step would be to lobby TM and QAO to appreciates to have responsibilities for managing records assigned to specific staff, there should be effort to suggest the need for multi-skilling and multi-tasking the staff already in place in order to cut down the cost of employing new RM staff. This move aims at making the concept of RM champions acceptable to the TM.

Phase3- Integration of RM into the key pillars at KPLC:

This phase should address the process of integrating RM into the key pillars including QMS. The steps here should include:

- **Appointment of RM Champions** – QMS Champions should be rebranded as **Records Liaison Officers** and be mandated to implement requirement of the PFCR. In order to ensure acceptance of the new roles, the TM should approve such a move after which a delegation of authority should be issued to them. It is also suggested that the company support the practice of multi-skilling and multitasking to enable the champions not to feel overburden. The company may also introduce some kind of rewards of the staff doing extra chores.

- **Train RM Champions** – Training on how to implement the requirement of the PFCR is vital as it will impart and empower these champions to start the implementation of the RM programme in the realm of QMS in uniformity.
- **Implement the RM programme** – once successful training has been concluded, the next step would be to roll out the programme as planned.

Phase 4 - Automation of RM in the realm of QMS at KPLC:

The study has identified automation (application of ICT) of the RM programme alongside QMS processes as one of the critical success factors.

•Form Project Team: Project management team is very crucial as shown in the literature review. Key stakeholders must be brought on board.

•Consult and Benchmark – depending on the magnitude and scope of the project, there must be either internal and/or external consultation including benchmarking with the other organisations that have successfully implemented the RM automation programme.

- Identify requirements/extent of RM automaton – after consultation, the list of all requirements must be made and priorities established.
- Get approvals and procure – TM approval and support must be sought and granted prior to initiation of the procurement processes.
- Installation and piloting – due to the fact that ICT projects have high failure rate, it is advisable to pilot the project to test it before its implementation.

- Identify and fix non-conformities – in the process of piloting the project, all non-conformities must be identified and fixed in readiness to roll out the project in the entire company.
- Roll out automation of RMP in phases – it is advisable that the implementation should be done in a phased out programme in order to ensure successful control of the scope of the project.

Phase 5 - Maintain RM programme: Phase 5 should include the following three steps:

1) Market RM, ICT and QMS as inseparable systems at KPLC's BPs. This should entail focused induction of all key users and handlers of records in KPLC's BPs whenever there is an opportunity (*i.e. seek permission to give a brief on RM whenever there are departmental meetings, training, and such like opportunities*) and/or tailor made, functional based RM briefs
2) RM Auditing should be included in QMS Auditing – this will ensure continual improvement since non-conformities can be fixed as they are revealed through such routine audits. There are two internal QMS auditing conducted at KPLC per year. The purpose of auditing RM will be to test whether implementation of RM in support of QMS at KPLC is taking place as planned and if not, then remedial measures should be done forthwith. In this regard, a procedure for carrying out RM audit may be established to provide articulate steps and parameters to be followed.
3) Review and upgrade the RM programme in the realm of QMS – there is no programme that is static and, therefore, regular review of the programme must be carried out to keep the implementation tempo where contemporary/emerging

RM issues are included and obsolete practices weeded out to ensure that the relevance of the programme is upheld.

5.4.2 Researcher's Contribution to the Proposed RM Framework

The proposed RM framework is established by blending and modulating ISO 15489:2001's steps in establishing a RM programme, restyling ICT project implementation requirements, incorporating ISO 9001:2008 QMS's process approach and auditing requirements, and factoring the role of organisational culture change in addressing RM requirements in the realm of QMS at KPLC.

The study found that RM is a profession that is either misunderstood by the TM at KPLC and/or is belittled as an outdated chore that have been replaced by ICTs. It was evident also that there are other processes that are appreciated by TM at KPLC and which also require proper RM for support and evaluating their performances, including QMS. Therefore, the need to identify such programme(s) and making them the pillars upon which RM programme should be anchored into is invaluable.

The researchers' contribution in this case relates to the effort to bring different aspects of business reengineering processes into one module that specifically addresses RM in the realm of QMS and pinpointing the way forward in bringing forth RM processes at the top of KPLC's BPs without championing RM as a stand-alone programme. It implies that marketing of RM in business organisations must be anchored into the key programmes rather than trying to justify RM as a separate entity.

The overall conclusion of the study was that, there were RM gaps in implementation of QMS at KPLC and therefore, the essence of the proposed RM framework, which, if implemented as proposed, may assist to address the cited RM non-conformities, thereby maintaining the QMS processes effectively.

5.5 Topics for Further Studies

Some of the suggested areas for further research include the following:

- It was noted that RM plays a pivotal role in the implementation of QMS and that all standards requires RM (Quality Works, 1996). There is need to find out the role of RM in implementing other standards other than QMS
- There is need to carry out a study on the ideal environment under which all BPs enablers, including RM and, can be implemented in a planned, superior service delivery-oriented platform and ultimately design a model for implementing integrated superior service delivery in an organisation.

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APPENDIX 1

INTERVIEW SCHEDULE FOR THE TOP MANAGEMENT

SECTION ONE: GENERAL INFORMATION

Designation_____

Division/Department_____

Years of service at KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO – QMS & RM

1. Why did KPLC decided to implement QMS?

   _____

   _____

2. To what extent does records management affects implementation of QMS at KPLC?

   _____

   _____

3. What resources has KPLC management provided in support of QMS?

   _____

   _____

4. What are the critical success factors in implementing QMS at KPLC?

   _____

   _____

5. What challenges does KPLC face in the process of implementing QMS?

   _____

   _____

6. What recommendations do you suggest to enhance records management in support of QMS at KPLC?

   _____

   _____

APPENDIX 2

INTERVIEW SCHEDULE FOR QUALITY ASSURANCE OFFICIALS

SECTION ONE: GENERAL INFORMATION

Designation_____

Division/Department_____

Years of service at KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO- QMS/RM ISSUES

1. What are the functions of the Management Representative at KPLC?

   _____

   _____

2. What are the major and repetitive non-conformities in QMS from 2005 to date?

   _____

   _____

3. What are the main causes of the non-conformities in QMS?

   _____

   _____

4. What attempts have been made to address non-conformities in QMS?

   _____

   _____

5. Who are the main players in implementation of QMS and what is their contribution to the effectiveness of QMS?

   _____

   _____

6. What are the mandatory requirements of QMS?

   _____

   _____

7. How have you ensured that KPLC comply with the mandatory requirements of ISO9001:2008?

_____

_____

8. How are QMS documents and records controlled at KPLC?

_____

_____

9. How do records keeping affect effectiveness of QMS at KPLC?

_____

_____

10. How effective is the procedure for control of records at KPLC?

_____

_____

11. What are the critical success factors in implementation of QMS at KPLC?

_____

_____

12. To what extent does KPLC use ICT in the management of QMS documents and records?

_____

_____

13. What are the major challenges in implementation of QMS at KPLC?

_____

_____

14. What recommendations do you suggest to improve QMS at KPLC?

_____

_____

APPENDIX 3

INTERVIEW SCHEDULE FOR QUALITY AUDITORS

ONE: GENERAL INFORMATION

Designation _____

Division/Department_____

Years of service in

KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO- QMS/RM ISSUES

1. How would you evaluate performance of QMS at KPLC?

   _____

   _____

2. How would you rate implementation of the six mandatory procedures of QMS?

   _____

   _____

3. How does records management affects implementation of QMS at KPLC?

   _____

   _____

4. How effective is the procedure for control of records?

   _____

   _____

5. What records management challenges do you mostly find in KPLC offices?

   _____

   _____

6. What causes such records management challenges?

   _____

   _____

7. How can these records management challenges be solved?

   _____

   _____

8. How do records management impact on KPLC business?

   _____

   _____

9. How can ICT improve QMS and records management at KPLC?

   _____

   _____

10. What documents of external origin are used to manage records at KPLC?

    _____

    _____

11. What resources do you think KPLC auditors require to be able to conduct QMS auditing prudently?

    _____

    _____

12. How do you audit records keeping practices as you audit QMS processes at KPLC?

    _____

    _____

13. What do you think should be put in place to improve operations of QMS at KPLC?

    _____

    _____

14. How do you evaluate training of QMS auditors at KPLC?

    _____

    _____

15. What should be incorporated in training of QMS auditors make them more effective?

    _____

    _____

APPENDIX 4

INTERVIEW SCHEDULE FOR QMS CHAMPIONS

SECTION ONE: GENERAL INFORMATION

Designation _____

Division/Department_____

Years of service in KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO- SPECIFIC STUDY AREAS

1. Why was there a need to adopt QMS at KPLC?

   _____

   _____

2. What role do you play in implementation of QMS in your division/department?

   _____

   _____

3. How did implementation of QMS at KPLC affect service delivery?

   _____

   _____

4. What challenges are experienced in the implementation of QMS at KPLC?

   _____

   _____

5. How are QMS documents/records managed in your office?

   _____

   _____

6. How important are records in managing QMS processes?

   _____

   _____

7. What QMS training have you attended since 2005?

_____

_____

   7.1 What elements of records management were included in QMS training?

_____

_____

   7.2 What records management standards were you introduced to during the training?

_____

_____

   7.3 How did the implementation of QMS affect records keeping in your office?

_____

_____

8. How do you identify records in your office?

_____

_____

9. What guidelines do you use to manage your records?

_____

_____

10. Who manages records in your Office?

_____

_____

   10.1 What qualifications does the person managing your records hold?

_____

_____

11. How are registry services managed in your office?

_____

_____

12. How do you retrieve your records?

_____

_____

13. How and where do you store your records?

_____

_____

14. How do you protect your records from agents of destruction?

_____

_____

15. How long do you keep your records?

_____

_____

16. When and how do you dispose of your records?

_____

_____

17. How does management of records in your office affect implementation of QMS?

_____

_____

18. How many quality audits were carried in your office from 2005 to date?

_____

_____

    18.1 How many non-conformities were identified by the auditors?

    _____

    _____

    18.2 How many non-conformities were related to records keeping?

    _____

    _____

    18.3 How were the non-conformities related to RM addressed?

    _____

    _____

19. What critical factors determine the success of records management in support of QMS in your office?

_____

_____

20. Why do you think these factors are critical?

_____

_____

21. To what extent are the business processes in your office automated?

_____

_____

21.1 How do you use ICT in the management of QMS & Records Management?

_____

_____

21.2 How important is the use of automated systems in the management of QMS and records?

_____

_____

21.3 How important is the use of automated systems in the management of QMS and records?

_____

_____

22. What challenges did your office face when implementing QMS?

_____

_____

22.1 How many of those challenges were associated with RM?

_____

_____

22.2 Why are there RM challenges?

_____

_____

23. How did you cope with the challenges mentioned above?

_____

_____

24. What suggestions can you give to improve RM in support of QMS at KPLC?

_____

_____

APPENDIX 5

INTERVIEW SCHEDULE FOR SUPPORT STAFF HANDLING RECORDS

SECTION ONE: GENERAL INFORMATION

Designation _____

Division/Department_____

Years of service in KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO: QMS & RECORDS MANAGEMENT

1. What are your core duties?

   _____

   _____

2. How does QMS affect discharging of duties?

   _____

   _____

3. What is your role in implementation of QMS in your office?

   _____

   _____

4. How do you manage records in your office?

   _____

   _____

5. How did the implementation of QMS affect records management in your office?

   _____

   _____

6. What records management problems does your office face?

   _____

   _____

7. What are the causes of these problems?

   _____

   _____

8. How can the problems mentioned above be solved?

   _____

   _____

9. How do records management problems mentioned above affect the discharging of duties in your office?

   _____
   _____

10. To what extent have your office automated records management and QMS?

    _____
    _____

11. What recommendations do you suggest to improve records management in support of QMS at KPLC?

    _____
    _____

APPENDIX 6

INTERVIEW SCHEDULE FOR SUPPORT STAFF HANDLING RECORDS

SECTION ONE: GENERAL INFORMATION

Designation _____

Division/Department_____

Years of service in KPLC_____

Role in QMS_____

Education Level_____

Professional Qualifications_____

SECTION TWO: QMS & RECORDS MANAGEMENT

1. What are the functions of your office?

   _____
   _____

2. How does QMS affect customer satisfaction?

   _____
   _____

3. What are the common complaints from KPLC customers/public?

   _____
   _____

4. How would you compare the frequency of customer complaints before implementation of QMS and after?

   _____
   _____

5. How does availability of records affect resolving of customer complaints?

   _____
   _____

6. What are the critical success factors affecting records management in support of QMS at KPLC?

   _____
   _____

7. What are the challenges affecting implementation of QMS at KPLC?

   _____
   _____

8. What recommendations do you suggest to improve usage of records in support of customer service at KPLC?

   _____
   _____

9. How does availability of records assist in resolving customer complaints?

   _____
   _____

APPENDIX 7

OBSERVATION CHECKLIST

Serial No	Item	Observation Notes	Comments
1	**Identification of records**		
1.1.	Classification scheme in place		
1.2.	Security Classification in place		
1.3.	Inventory of vital records in place		
1.4.	Folio numbering used		
1.5.	Cross-referencing of records used		
1.6.	Volume numbers used		
1.7.	Minute sheets		
2	**Storage of Records**		
2.1	Types of storage		
2.2.	Adequacy-Paper, electronic, microforms		
2.3.	Appropriateness- Paper, electronic, microforms		
2.4	Properly utilized- Paper, electronic, microforms		
3	**Control & Retrieval of Records**		
3.1	Location guide for physical records		
3.2	File movement registers		
3.3	Bring Up Registers		
3.4	Dedicated RM Software		
4	**Protection of Records**		
4.1.	Protection methods in place-physical records		
4.2.	Protection methods in place-electronic records		
4.3	Protection methods in place-microforms		
5	**Retention Period**		
5.1	Records		

	retention/disposal schedules in place-		
5.2	Appropriateness of the schedule		
6	**Disposal**		
6.1	Records Centre Available		
6.2	Departmental Records Rooms Available		
6.3	Overdue non-current found in offices		
6.4	Records of disposed of records available		

APPENDIX 8
THE BUDGET

	Core activities	Items/participants	Total cost
	Equipment and Consolidation of literature	Secondary search – Travel expenses visit other library and Internet search by the researcher and two research assistants	15,000
	Designing and developing research proposal	Typing, duplication, editing of research proposal	15,000
	Research induction and training	Transport for researcher and research assistants	12,000
	Finalising of research proposal typing, editing, duplication and binding	Researcher and two research assistants	30,000
	Main field/ data collection	Telephone expenses and other overheads	10,000
	Data processing/analysis: sorting, coding, classification, etc	Researcher and two research assistant	30,000
	Data Analysis	Finding themes, relating themes with literature review, checking for consistency of the data from different sources-Researcher and two research assistants-	25,000
	Stationery and Others	Books, Reams of papers and Telephone expenses	20,000
	Editing	Procuring editing services	15,000
	10% Miscellaneous & Contingency Costs	Unforeseen and price fluctuations	13,700
	TOTAL		**185,700**

APPENDIX 9

WORK PROGRAM

	Target date	Task to be achieved
1	January to June 2009	Formulate and clarify research topic Read literature Define objectives clearly and finalize objectives
2	July/August 2009	Proposal preparation/Supervisor meetings Defence of research proposal Development of a research instruments
3	September 2009	Correction of the issues raised by the Board/Device research strategy
4	October 2009	Pilot test and revise research instruments/identify research assistance and define their roles/training of research assistants
5	November to December 2009	Data collection- interviews, observation, document analysis.
6	January to March 2010	Data Analysis and drafts preparation Further write up Draft completed
7	April to May 2010	Submission of draft to the supervisors/meeting with supervisors Corrections, print and binding of the work
8	June 2010	Submit the work/Final Defence
9	July 2010	Submission of corrected final copy of thesis.

APPENDIX 10

RESEARCH PERMIT FROM NATIONAL COUNCIL OF SCIENCE & TECHNOLOGY

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss. M[illegible]
AYUB NAIHERIMA
of (Address) MOI UNIVERSITY
P.O. BOX 3900-30100 ELDORET
has been permitted to conduct research in........................Location,
WESTLANDS, [illegible]........................District,
NAIROBI........................Province,
on the topic. RECORDS MANAGEMENT AND ISO 9001:QUALITY MANAGEMENT SYSTEM: A CASE STUDY OF KENYA POWER AND LIGHTING COMPANY LIMITED.

for a period ending 31st December 2010

PAGE 3

Research Permit No. NCST/5/002/R/1095
Date of issue 24.11.2009
Fee received SHS 1000

Applicant's Signature

Secretary
National Council for Science and Technology

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

GPK6055(3m(10/2009

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

(CONDITIONS— see back page)

APPENDIX 11

RESEARCH AUTHORISATION FROM NATIONAL COUNCIL OF SCIENCE & TECHNOLOGY

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Our Ref: NCST/5/002/R/1095/5

24th November, 2009

M'ikiara Ayub Kathurima
Moi University
P. O. Box 3900 - 30100
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Records Management and ISO 9001; Quality Management System: A case study of the Kenya Power and Lighting Company Limited"*** I am pleased to inform you that you have been authorized to undertake your research in ***Westlands and Starehe in Nairobi Province*** for a period ending ***31st December 2010.***

You are advised to report to **The Managing Director Kenya Power & Lighting Company Limited** before embarking on your research project.

Upon completion of your research project, you are expected to submit two copies of your research report/thesis to our office.

PROF. S. A. ABDULRAZAK Ph.D, MBS
SECRETARY

Copy to:

The Managing Director
Kenya Power & Lighting Company Limited

APPENDIX 12

RESEARCH APPROVAL FROM KPLC

The Kenya Power & Lighting Co. Ltd.

The Kenya Power & Lighting Co. Ltd.
Central Office P.O. Box 30099 Nairobi, Kenya
Telephone - 254-20-3201000 - Telegrams "ELECTRIC"
Fax No. 254-20-3514485
Stima Plaza, Kolobot Road

Our Ref: KPLC1/5BA/42D/KK/go

Your Ref:

17th December 2009

TO WHOM IT MAY CONCERN

RESEARCH APPROVAL – AYUB KATHURIMA

Reference is made to the subject matter mentioned above.

Kindly allow Ayub Kathurima, a member of staff who is doing his Msc in Information Science from Moi University to carry out a research project in the Company on ***"Records Management and ISO 9001; Quality Management System: A case study of the Kenya Power & Lighting Company Ltd"***.

This authority not withstanding discretion must be exercised in the use of company information including business strategies and policy documents.

The Research Project should also not disrupt normal working hours and Company's flow of work.

Yours faithfully,
For: **KENYA POWER & LIGHTING CO. LTD.**

Mercy Muchira (Mrs)
For: HUMAN RESOURCE DEVELOPMENT MANAGER