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Research Paper

Assessment of Knowledge Management Practises in Reducing Knowledge Loss in Devolved Governments of Kenya: A Case of The County Government of Embu

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Abstract

Knowledge Management (KM) is a relatively new and dynamic branch of management within the domain of knowledge. Its objective is to achieve breakthrough in business performance using the synergy of people, processes and technology. It is meant to utilize individual expertise to get maximum returns for an organization. Researchers and practitioners have already stated that KM should be an integral part of business strategy in order to out manage the competition. The general objective of this study was to examine how KM practices can reduce knowledge loss in the County Government of Embu. Its specific objective was to examine whether records management reduces knowledge loss risk. The study used descriptive survey which is a method of collecting information by interviewing or administering questionnaires to a sample of individuals. The questionnaires were administered to a sample of 42 staff drawn from all the 10 departments based at the County headquarters. Stratified random sampling procedures were applied for this study to overcome the problem of skewed sampling associated with purposive methods where employees from some departments are over represented while others are underrepresented. The study concluded that

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good record management practices can help in reducing knowledge loss risk in the County. The study recommends that the County Government should avail enough resources for purchase of modern equipment for storage and management of records.

Key words: Knowledge Management, Knowledge Loss, Embu, Records Management, Digitization

1.0 Introduction

Knowledge Management (KM) is a relatively new and dynamic branch of management within the domain of knowledge (Hicks, 2007). Its objective is to achieve breakthrough in business performance using the synergy of people, processes and technology. Knowledge management is getting the right information to the right people, at the right time, and helping people create knowledge, share and act upon information in ways that will measurably improve their performance (Warren, 2006). It is meant to utilize individual expertise to get maximum return for an organization. Govil (2007) notes that knowledge management has three fundamental concepts, which include: data, information and knowledge.

Knowledge management practices are aimed at mitigating knowledge loss which occurs as a result of employee exit, lost codified knowledge or knowledge decay. In each case, an organization no longer has access to knowledge it previously had. Lost codified knowledge occurs when knowledge that has been captured in a document, report, database, policy or other written format is no longer available. Quast (2012) affirms that knowledge management practices are becoming increasingly imperative for various reasons. The three foremost motives are to; improve decision-making capabilities, develop learning organizations, and stimulate cultural change and innovation. With an increasing awareness and importance of the "knowledge" residing in organizations, there has been a rise in the awareness of the concept, methods, and tools required to retain and grow this knowledge (Ahmad & Khan, 2008).

Knowledge management practice, therefore, is a critical way of managing knowledge loss risk. Risk is part of everything we do and manage every day- often without realising it. We live in an ever-changing world and the pace of change is increasing,



carrying with it uncertainty and that uncertainty brings new opportunities and risks. Managing risk informs business decisions; enables a more effective use of precious resources; enhances strategic and business planning; and strengthens contingency planning (Cheshire & Manzoni, 2017). Knowledge management is therefore an emerging field which offers a solution to the problems associated with knowledge loss.

Studies indicate that knowledge management is fairly well institutionalized in the South African industry (Neels & Kruger, 2007). In addition, another study in a South African province found that, all organizations approached knowledge management implicitly through knowledge management related practices (Mbhalati, 2010).

In the Vision 2030, Kenya intends to become a knowledge driven economy wherein the creation, adaptation and use of knowledge will be among the most critical avenues for rapid economic growth. However, existing practices of knowledge management are largely driven by international organizations and private commercial companies.

1.1 Statement of the Problem

Knowledge management has become one of the drivers of the economy. Researchers and practitioners have already stated that knowledge management should be an integral part of business strategy in order to out manage the competition (Neels & Kruger, 2007). Over forty percent (40%) of the U.S. economy is directly attributable to the creation of intellectual capital. Likewise, over ten percent (10%) of the gross domestic product (GDP) in developed countries around the world are being reinvested in the development of knowledge (OECD, 2003).

Organizational knowledge loss has emerged as one of the most important corporate risks today (Massingham, 2010). DeLong (2004) identifies five ways that organizational knowledge loss may undermine organizational strategy: reduced capacity to innovate, threatened ability to pursue growth, decreased capacity for low-cost strategies caused by reduced efficiency, give competitors an advantage and increased vulnerability.



Prior research has found knowledge loss has caused loss of organizational memory (Holan & Phillips, 2004), inefficiency and ineffectiveness (Jiang, Baker, & Frazier, 2009), declining capability (Joe, Yoong, & Patel, 2013) and decreased psychological contract (Massingham, 2010). There have also been claims that knowledge loss decreases organizational output (Droege & Hoobler, 2003) and productivity (Osterman, 1987), and that it may undermine organizational strategy and, therefore, increase risk (DeLong, 2004); (Massingham, 2010).

Despite the fact that knowledge management has been extensively discussed by many theorists and practitioners, very few literature and/or information on knowledge management (Riege & Lindsay, 2006) have been found in the public sector and none of the research has examined whether knowledge management practices manages knowledge loss risk in public sector. It is as a result of the aforementioned that our study sought to examine if knowledge management practices reduce knowledge loss risk in public service in a case of County Government of Embu.

1.2 Significance of the Study

The findings of this research will provide better understanding of the factors affecting knowledge loss risk management in the public sector. The study addresses knowledge loss risks and its findings may be used by the Government policy makers to recommend necessary changes in the area of risk management. It is also important to note that most studies in this field of knowledge loss risk have tended to focus mostly on the private sector, mostly in the financial segment with limited focus on the public sector. The study's outcomes are therefore an invaluable resource in building literature in the area of knowledge loss risk management.

It is as a result of the aforementioned that our study sought to examine if knowledge management practices reduce knowledge loss risk in public service, by examining a case of the County Government of Embu.

1.3 Scope of the Study

The study focused on the County Government of Embu which is one of the 47 Counties in Kenya. It was targeted at the head-office personnel in different cadres during the



month of November, 2019. As earlier explained, the field of knowledge management is broad, this study was therefore confined to knowledge management practices in so far as aspects of record management, staff retention and knowledge transfer are concerned in managing knowledge loss.

1.4 Limitations of the Study

The study's focus was limited to knowledge loss risk management practices in the County Government of Embu. To ensure that the quality of the outcome is not compromised, a representative was drawn from all departments in the County headquarters. In addition, the study touches on issues of administration in the County which are normally dynamic due to the political environment. To mitigate this, respondents were limited to staff on Permanent and Pensionable terms who are least affected by political aspects.

1.5 Operational Definition of Terms

County: Refers to the County Government of Embu.

Explicit knowledge (also expressive knowledge): Knowledge that can be readily articulated, codified, stored and accessed. It can be easily transmitted to others. Most forms of explicit knowledge can be stored in certain media.

Knowledge: This is as a result of learning; it is the internalization of information, data, and experience. Collins English Dictionary defines knowledge as the facts, feelings or experiences known by a person or group of people.

Knowledge Loss Risk: This is the expected impact to the organization resulting from the loss of a particular expert or knowledge.

Knowledge Management: This is a discipline that promotes integrated and collaborative approach to the process of information creation, capture, organization, storage, access and use.

Management Practices: These are working methods and innovations that managers use to make the organization more efficient.



Record Management: It is the supervision and administration of digital or paper records regardless of formats.

Tacit Knowledge: Knowledge that is difficult to transfer to another person by means of writing or verbalizing.

2.0 Methodology

This study adopted a descriptive survey research design. This study was carried out in one of the devolved units, that is, the County Government of Embu, and more precisely Embu town which is its headquarters (formerly the Eastern province headquarters). As currently structured, the County Government oversees ten (10) devolved departments hosted in the headquarters. The target population of this study was 138 management staff drawn from the directorates of the 10 departments in the County as shown in Table 2.1 below drawn from the office of Chief Officers in the ten (10) departments and Senior Officers of Directorates in departments. The population was purposively selected targeting members of the County who were at least knowledgeable on knowledge management practices.

Table 2.1: Distribution of staff at the county

Department	Number of management staff
Agriculture	20
Health	16
Public service and Administration	15
Finance and Planning	17
Infrastructure	15
Gender and Culture	12
Education & Youth Empowerment	15
Trade and Tourism	10
Water and Irrigation	7
Lands and Physical Planning	11
Total	138

Source: Embu County Human Resource Manual, 2018

This study took 30%, as stipulated by Borg & Gall (2003), of the accessible population as enough for the sample size, which translates to 42 respondents.



The researchers were also conscious of the fact that staffing levels vary across the different departments. Stratified random sampling procedures were used for this study to overcome the problem of skewed sampling associated with purposive methods where employees from some departments are over represented while others are underrepresented. As such, researchers adopted a mix of sampling designs to obtain the sample. The study's 42 respondents were sampled as indicated in Table 2.2 below.

Table 2.2: Sample Distribution of Staff at the County

Department	Number of management staff	Sample
Agriculture	20	6
Health	16	4
Public service and Administration	15	5
Finance and Planning	17	5
Infrastructure	15	6
Gender and Culture	12	3
Education & Youth Empowerment	15	5
Trade and Tourism	10	3
Water and Irrigation	7	2
Lands and Physical Planning	11	3
Total	138	42

Source: Embu County Human Resource Manual, 2018

In this study, the instrument of data collection and recording was the five (5) point Likert scale questionnaire. It comprised administrative details, a list of questions, space for answers and clear instructions on how to complete it. The reason for using the questionnaire was to obtain the opinions of respondents in a structured manner. The questionnaires were completed at the convenience of the respondents to eliminate the variations in the questioning process.

Validity was ensured by piloting the instruments and making all the necessary adjustments to ensure consistency. On ethical approval, each questionnaire contained a confidentiality statement indicating that responses were voluntary and would be kept confidential.

Both quantitative and qualitative approaches were used for data analysis. Quantitative data from the questionnaire was coded and keyed into excel programme for computation of descriptive statistics. The qualitative data generated from open



ended questions was also categorized in accordance with research objectives and reported in narrative form along with quantitative presentation thus reinforcing it.

Data presentation on the other hand was done descriptively using tables and analytical diagrams that simplified the data for ease of understanding and interpretation. Microsoft Excel was used to produce graphs and carry out a comparative analysis of selected variables.

3.0 Research Findings and Discussion

A total of 42 questionnaires were distributed to respondents out of which 33 were dully filled and returned giving a response rate of 79%. This is considered a good enough response rate and representation of the population and conforms to Mugenda & Mugenda (2002) which stipulates that a response rate of 70% and above is excellent.

3.1 Respondents Gender

From the analysis of the data in Table 3.1 and Fig 3.1 Male respondents constituted 61% of the total respondents while Female constituted 39%. This implies that the ratio of the male to female respondents were almost 3:2 with a very small margin of difference. This confirms earlier studies which have indicated that female respondents in many studies carried out in public sector are much less than that of the male counterparts (Nyaga, 2014). This means that all genders were fairly represented.

Table 3.1 Distribution of The Respondents by Gender

Gender	Frequency	Percentage		
Male	20	61%		
Female	13	39%		
Total	33	100%		



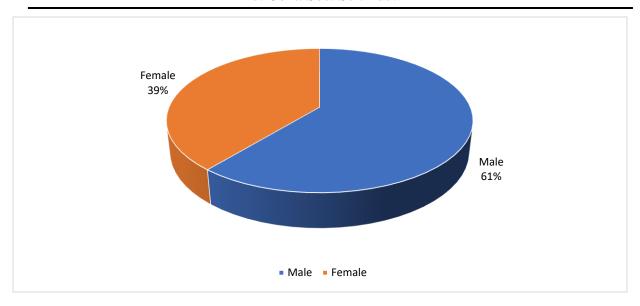


Fig. 3.1: Percentage of respondents by gender

3.2 Respondents by Age

Respondents were also classified according to age. Table 3.2 and Fig. 3.2 indicates that those who are 20 to 28 years constituted 9% of the total respondents, 29 to 37 years constituted 45%, 38 to 46 years constituted 24%, 47 to 55 years constituted 15%, 55 years and above constituted 6%. This indicates that majority of the respondents were 29 years and above, and as such were mature enough to provide correct responses to the questions.

Table 3.2: Respondents by Age

Range	Frequency	Percentage	
20 to 28 years	3	9%	
29 to 37 years	15	45%	
38 to 46 years	8	24%	
47 to 55 years	5	15%	
56 yrs & above	2	6%	
Total	33	100%	



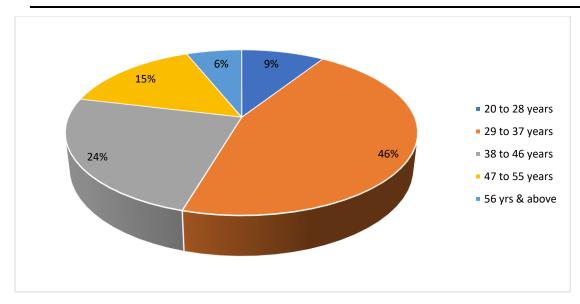


Fig. 3.2: Respondents by age

3.3 Respondents Years on Employment with the County

Respondents were also classified according to the number of years they have worked with the County. From the analysis shown in Table 3.3 and Fig 3.3, 15% of the respondents have worked with the County for 1 to 5 years, 48% have worked between 6 to 11 years and 36% have worked with County for 12 years and above. This means that majority of the respondents have worked with the County for over 6 years hence the information provided is considered reliable.

Table 3.3: Respondents' years on employment with the County

Range	Frequency	Percentage	
1 to 5 years	5	15%	
6 to 11 years	16	48%	
12 years & above	12	36%	
Total	33	100.0	



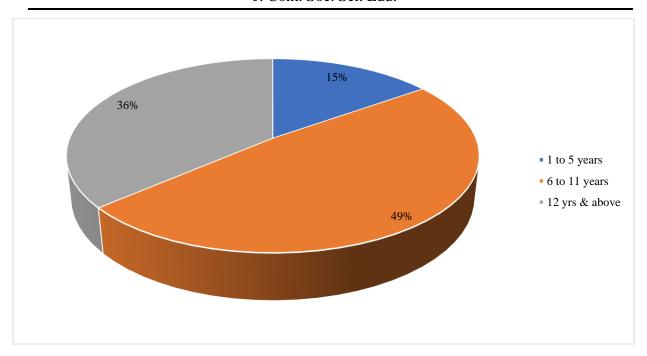


Fig. 3.3: Respondents' years on employment with the County

3.4 Classification of Respondents by Management Levels

Respondents were also classified according to their management levels. Analysis of the data as shown in Table 3.4 and Fig 3.4 indicates that 9% of the respondents were from the top level, 52% were from the middle level and 39% were from the low level. This means that a majority of the respondents were in the Middle level as per the Mintzberg theory which requires middle level managers to have more people cantered skills. The respondents therefore are considered to understand the subject and could give factual responses on whether knowledge management practices can reduce knowledge loss risk.

Table 3.4: Classification of respondents by management levels

Level	Frequency	Percentage	
Top level	3	9%	
Middle level	17	52%	
Low level	13	39%	
Total	33	100%	



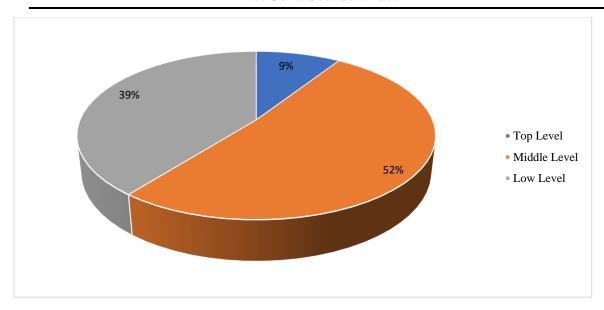


Fig. 3.4: Respondents by management levels

3.5 Classification of Respondents by Education Levels

The respondents were asked to indicate their highest level of education. From the responses shown in Table 3.5 and Fig. 3.5, 6% of the respondents were certificate holders, 42% were diploma holders, 42% were bachelor degree holders, and 10% were master's degree holders and above. This indicates that majority had diplomas and above, meaning that they had enough knowhow to understand the questions asked and provide correct responses.

Table 3.5: Classification of respondents by education levels

Education Level	Frequency	Percentage	
Certificate	2	6%	
Diploma	14	42%	
Bachelor's degree	14	42%	
Master's degree & above	3	10%	
Total	33	100%	



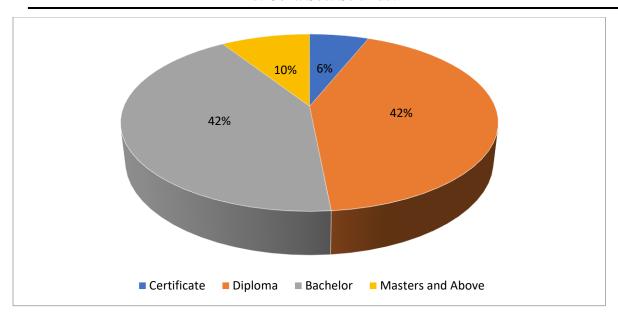


Fig. 3.5: Classification of respondents by education levels

3.6 Records Management

The study sought to examine whether good records management practices helps in reducing knowledge loss in the County. Respondents were requested to answer to a set of questions and their responses are as summarized in Table 3.6 and the descriptions below.

From analysis of the data on whether digital records storage system is reducing knowledge loss, the findings indicates that 12% of the respondents strongly agreed with the statement, 37% agreed, 9% were not sure, 15% disagreed and 27% strongly disagreed.

Findings of the data analysis on whether existence of County registry is reducing knowledge loss also indicate that 40% of the respondent strongly agreed, 33% agreed, 18% are not sure, 9% disagreed while none strongly disagreed.

On whether existence of policy or regulation on record management is reducing knowledge loss the findings indicate that 27% of the respondent disagreed, 46% agreed, 15% were not sure, 9% disagreed and 3% strongly disagreed.



The finding on whether the use of standard operating procedures in record management is reducing knowledge loss indicate that 21% strongly agreed, 49% agreed, 15% are not sure, 12% disagreed and 3% strongly disagreed.

Table 3.6: Responses to questions on records management

Statement:	Strongly	Agree	Not sure	Disagree	Strongly	Percentage
	Agree				Disagree	
			Pe	ercentage		
1 The County uses digital	12	37	9	15	27	100
record storage system which	1					
is reducing knowledge loss						
in the department.						
2. The County has registry	40	33	18	9	0	100
which is responsible for						
record keeping in the						
department and is reducing						
knowledge loss in the						
department.						
3. The county has a	27	46	15	9	3	100
policy/regulation on record						
management and is helping						
in reducing knowledge loss						
4. The county is following	21	49	15	12	3	100
standard operating						
procedures regarding						
record keeping managemen	t					
and it is helping in reducing						
knowledge loss.						

Some of the respondents stated in the comments section that the reason they didn't agree with the statement that record management is reducing loss of knowledge is because there is lack of goodwill from top management in providing resources for capacity building of staff in the registry to learn best practices in record keeping or even purchasing of modern equipment such as computers and back up to help in digitisation. Others said that there is fear that if records are digitised, they are exposed to risk of loss through cyber-attacks. Others noted a lack of awareness by the staff on the existing record management policies and SOPs.

Cumulatively, findings indicate that 66% of the respondents agreed that record management reduces knowledge loss in the County (25% strongly agreed, 41% agreed). Given these findings it is evident that good record management practices



reduce loss of knowledge in the County. This also agrees with the findings of GoK (2012) which stated that well managed records are not only easy to access and retrieve, but also mitigates the dangers of damage, loss and theft. 20% of the respondents were however of the contrary opinion and 14% were not sure, see Fig. 3.6.

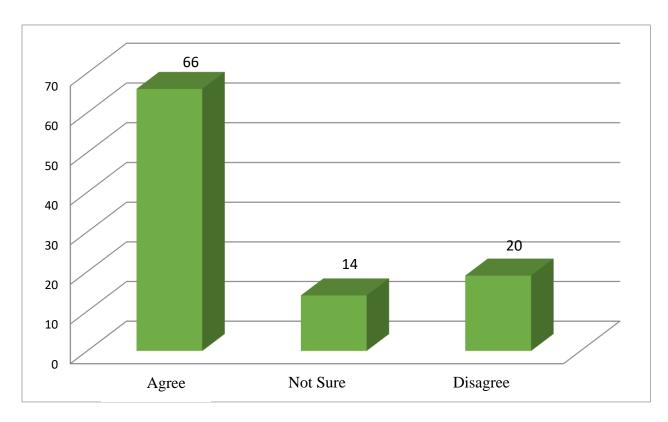


Fig. 3.6: Summary responses on whether record management reduces knowledge loss

4.0 Summary, Conclusions and Recommendations

The main objective of the study was to examine how knowledge management practices helps in reducing knowledge loss in the public service. The study specifically focused on how records management reduces knowledge loss risk in the County Government of Embu. The targeted sample size was 42 respondents. Those who filled and returned questionnaires were 33 respondents giving a response rate of 79%. According to Mugenda & Mugenda (2002), the response rate for this study was excellent as it is more than the stipulated 70% and therefore enough for data analysis



and interpretation. The study found that male respondents were 61% while female respondents were 39%.

The study sought to examine whether good record management practices helps in reducing knowledge loss in the county. Overall finding indicates that 66% of the respondents agreed that record management as a way of knowledge management can help in reducing knowledge loss risk in the County. 20% of the respondents were however of the contrary opinion and 14% were not sure. Some of the respondents stated in the comments section that the reason they didn't agree with the statement that record management is reducing loss of knowledge is because there is lack of goodwill from top management in providing resources for capacity building of staff in the registry to learn best practices in record keeping or even purchasing of modern equipment such as computers and back up to help in digitisation. Others said that there is fear that if records are digitised, they are exposed to risk of loss through cyber-attacks. Others noted a lack of awareness by the staff on the existing record management policies and SOPs.

4.1 Whether record management is reducing loss of knowledge

The study concluded that good record management practices such as digitisation of the records, establishment of the registry, implementation of standard operating procedures (SOPs) in the record management and enactment of new policies and implementation of existing laws and regulations on record management reduces loss of knowledge in the County. This is confirmed by finding from the data analysis which indicated that 66% of the respondents agreed that record management as a way of knowledge management practices reduce knowledge loss risk in the County.

The study also established that there is a mutual feeling of lack of goodwill from the management in availing resources to enable digitisation of the records through capacity building of staff working in registry and purchase of modern equipment in the County. It also established that there is fear among management that if records are digitised, they might be exposed to cyber fraud. It also emerged that the management is not doing enough in formulating and implementing existing policies on record management in the county. This is supported by 20% of the respondent



who disagreed and 14% who indicated they are not sure if good record management practices reduce loss of the knowledge in the County.

4.2 Recommendations

The study recommends that the County should avail enough resources for purchase of modern equipment for storage of records such as computers and servers to fully digitise their records. The staff handling records should be trained on good record management practices. To dispel the fear of loss of information through cyber-attack, the study recommends that the County should explore new best practices of backing up documents such as cloud computing. The study also recommends that County should come up with new policies where there are gaps in existing laws and regulations on record management. Staff should also be trained/sensitized on existing laws and regulations on records management.

4.3 Areas for Further Research

The following areas have been identified for further research:

- i) A similar study can be carried out in other County Governments in Kenya for comparative analysis of results and validation of the findings from this study.
- ii) Additional research can be conducted in the National government on knowledge loss risks and draw comparisons.
- iii) A further study can also be conducted to examine if management of knowledge loss risk may actually create a positive impact on the organization

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Conflict of interest

The authors declare that there are no conflicts of interest



Ethical approval

This study does not contain any studies with human participants or animals performed by any of the authors. Research authorization was sought from the director Kenya School of Government.

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