

Challenges of Information and Communication Technology Usage and Accessibility in Managing Public Sector Records in Local Governments in Uganda

Ayias Henry Akra
Uganda Management Institute

Abstract

*For most developing countries, and more specifically African countries, the experience in the application of information and communication technology (ICT) to harness knowledge-based economies is still challenging. Hence, this article examines the challenges of ICT accessibility and usage in managing records in local governments (LGs) in Uganda that has abetted inefficient records management practices. The research design was mainly quantitative, and used a structured questionnaire together with interview and observation guides. The study was conducted in three districts and the line Ministry of Local Government. Of the 108 respondents sampled using simple random as well as probability sampling methods, 84 people participated, representing 77.7% response rate. The results indicate a negative but statistical significant relationship (-.394**) between the challenges of usage of ICTs and Records Management Practices (RMPs); and a negative but statistical not significant relationship (-.108) between the challenges of ICT accessibility and RMPs. This implies that more focus is required on continuous ICT training for LG records staff in appropriate skills and programmes availed to ensure optimal usage of the existing ICT infrastructure to enhance proper RMPs. Even if the relationship between the challenges of accessibility of ICT infrastructure and RMPs was not statistically significant, the infrastructure should be availed and continuously upgraded to avoid obsolescence and inaccessibility to enhance proper RMPs in the LGs.*

Key words: ICT accessibility; ICT usage; Records management practices; Local governments, Uganda

Introduction

Developing countries, and specifically African countries, are faced with very challenging experiences in the application of information and communication technology (ICT) to harness their knowledge-based economies. Yet, according to International Records Management Trust IRMTa (2009), staying abreast with developments in ICT is critical not only to the success of individual jobs, but also the overall success of a company or government.

However, challenges of ICT, particularly relating to availability and knowledge of application due to the faster obsolescence rate and dependency have complicated their long-term accessibility and usage, especially to most developing nations. But now, ICTs have become a reality of life such that records professionals must embrace the opportunities the technology presents to improve records management practices (RMP) in their organizations and governments (IRMTm, 2009). Hence, the intense need for providing ICT systems and skills for Records Management Practices (RMPs) in these institutions.

ICT ushers in numerous benefits including faster communications, increased efficiency and greater accountability and transparency to every level of society - governments and organizations (IRMTu, 2009). However, there are several benefits and drawbacks in accessing and using ICT (especially computers) to create and manage information/records. The benefits include increased access to information, flexibility in the creation and use of information, improved efficiency and effectiveness, increased economic and business opportunities, among others. The benefits outweigh the drawbacks such as high obsolescence rate and dependence that hinder availability, increased costs of hard and softwares that complicate sustainability and continuous updates on ICT skills, among others.

Given the benefits of ICTs, what is required is commitment of institutions to access and use the technologies to enhance effective service delivery to stakeholders. However, it is believed that most developing countries still face the challenges of accessibility and usage of ICTs that has in turn abetted the problems of accessing and using public sector records, especially in local governments (LGs) in Africa in general and in Uganda in particular.

The problem and study objective

Many institutions, especially in developing countries, have not recognized the relationship between effective RMPs and the challenges of accessibility and usage of ICT infrastructure. However, as access to and usage of records is becoming critical for informed decision-making, institutions are increasingly becoming aware of the need to ensure quality information and complete records are available to those who need them and when they need them (IRMTu, 2009). Hence, ICT can enhance the flexibility needed in the creation, storage, use and management of the information/records.

When Uganda government decentralized her system of governance in the early 1990s, automation of the records management systems was part of the records project, implemented as part of the overall decentralization programme (Decentralization Secretariat, 1993). This was meant to improve the decentralized but disorganized government records and it called for the availability and usage of the key ICT infrastructure in the LGs (The World Bank, 2000).

Consequently, each existing LG central registry was supplied with personal computers with installed records management software and in some instances, laser printers and scanners (MoLG, 2003), to provide access to the ICT infrastructure. As the project rolled out, all the records and personnel staff were trained in the relevant skills to use the ICT infrastructure provided. However, despite the elaborate trainings and the records management software provided, most of the staff were not using the system where it exists as they seemed limited in the relevant ICT skills. Similarly, despite the provision of the basic but latest ICT equipment to the existing local governments of the time, the systems either no longer existed, or had degenerated into disuse by the time of this study.

It is against this background that the study investigated the challenges of ICT usage and accessibility on RMPs in LGs in Uganda. The specific study questions were whether the challenges of ICT utilization have a significant relationship on the RMPs; and, whether the challenges of ICT accessibility significantly affect the RMPs in LGs in Uganda.

Records management practices in LGs

According to the Ministry of Justice and Constitutional Affairs (2001:4), a record is “recorded information regardless of form or medium, created, received and maintained by any institution or individual under its legal obligations or in the transactions of its business and providing evidence of the performance of those obligations or that business”. Wikipedia (2011) defines records management as the practice of maintaining records of an organization from creation to their eventual disposal that may include classifying, storing, utilization and disposal. So, the requirement for sound RMPs is for every institution to ensure that records are appropriately generated, maintained and protected as long as they are required for functional, legal and historical purposes (National Archives and Records Service of South Africa, 2007).

Institutional RMPs are the responsibility of a records manager initially, but it actually rests on every staff in an organization. Such practices, according to Read and Ginn (2007), may involve several activities such as planning information needs of an organization; identifying information required to be captured; creating, approving and enforcing policies and practices regarding records; developing short and long-term housing of physical records and digital information storage plan; identifying, classifying and storing records; coordinating access to records internally and outside of the organization; and executing retention policy on disposal of records no longer required for operational reasons, that may involve either destruction or permanent preservation in archival institutions.

Within Ugandan LGs, records are created and used daily to document actions, decisions, identify rights and responsibilities, and communicate information at various levels. Hence, without proper RMPs, the businesses and services of the authorities could not be delivered as effectively as required by policy (Decentralization Secretariat, 1993; MoLG, 2003; Wamukoya, 2000). Thus, records management principles and automated records management systems aid in the capture, classification and management of records throughout their lifecycle. Such system may be paper-based, such as index cards or computer system, such as an electronic records management application (Robek, Brown & Stephens, 1995; Tale & Alefaio, 2005).

The following section discusses the dimensions of RMPs of records generation, classification and indexing, storage, utilization and disposal.

Records generation

This is the first step in a records management programme that aims at creating inventory of all the organization’s records. Penn, Pennix and Coulson (1994) affirmed various ways in which a record is created, and according to Day and Klein (1987), creation of records often occurs at personal level and little consideration is given to whether it is necessary to capture certain information in recorded form or not. However, Read and Ginn (2007) emphasized that before a record is created, thought should be given to the necessity for its existence, if not, it should never be created. This means maintenance and usage issues must be developed from the beginning so that when a record is created, it can be stored and retrieved in an orderly and efficient manner (Kallaus & Johnson, 1992). Therefore, this scenario implies that absence of efficient records generation discipline could lead to tedious RMPs.

Records Classification/Indexing

Records classification is a process that identifies and categorizes records for filing on the basis of their subject matter and subject category for efficient retrieval (Business Dictionary, 2011). Read and Ginn (2007:34) define indexing as a “process of determining the filing name/segment by which a record is to be stored and placing/listing of items in order that follows a particular system”.

The foundation of any good RMP is to develop a consistent record classification/indexing system across an organization (National Archives of Scotland, 2003; Wet & Toit, 2000). These processes are essential because they jointly create an organized file plan that enables an organization to find information easily. Thus, success of an RMP depends on ease and efficiency of retrieval of information as MoLG (2003) observed that indexing information in standard fields makes it easier to find the documents one needs, when one needs them.

Records storage

According to Penn, Pennix and Coulson (1994: 229), records storage is “the housing of records when they are semi-active or inactive, but must still be retained”. Further, Palmer (2000) observes that when files are active, they must be stored in a designated storage facility like registry, and when they become semi-active/inactive, they must be stored in another designated storage facility or records centre.

Therefore, a records storage facility should be seriously considered by organizations because, according to Tale and Alefaio (2005), records are expensive to store and maintain, and if not controlled properly can take up valuable office space. So, unavailability or lack of proper records storage facilities could lead to inappropriate/risky RMPs.

Records Utilization

The essence of proper RMPs in organizations is for users to be able to access/use the information (Palmer, 2000). Users require accurate, reliable, authentic and usable records in order to discharge their duties/responsibilities (Wamukoya, 2000). However, in many companies, especially in developing countries, much of the information required by record users is inaccessible because of inappropriate RMPs (Read & Ginn, 2007; Penn, Pennix & Coulson, 1994). Thus, inadequate utilization of records by users could lead to prevalent fraud, uninformed decision-making and lack of accountability in institutions.

Records Disposal

Record disposal is the final phase in the life cycle of records. According to the National Archives of Scotland (2003), it involves the possibility of either immediate destruction or transfer to permanent archival storage. To ensure timely destruction of records of no continuing value and effective selection of an organization’s vital and important records, the World Bank (2000) recommends regular reviews for all records. Wet and Toit (2000) agree that disposal of records does not always mean destruction of the records, but it includes their transfer to

archival institutions. Thus, Penn, Pennix and Coulson (1994) recommend a proper retention and disposal programme to ensure that organizations maintain only records really needed for functional purposes. Otherwise, improper disposal of records could lead to losing useful information and maintaining unwanted ones that could adversely affect the operation of an institution.

ICT usage and accessibility

According to UNCST (2002), ICT includes computers, software, copiers, phone systems, websites and devices that are used to create, store, manage, and communicate information. Tale and Alefaio (2005) then indicate growing need for ICT usage and ICT accessibility in the public sector due to the importance of the sector for the information economy and organizational productivity.

The importance of computers in supporting business transactions has gained ground with the recognition of the contribution of ICT to efficient and effective delivery of services. HP TRIM (2008) concurs that governments around the world are faced with similar challenges to deliver improved, cost-effective services to the public and other stakeholders, with complete accountability. They further note that to accomplish this, government entities need to provide access to an effective e-document and records management (EDRM) solution.

The following section discusses ICT usage and ICT accessibility in terms of computer hard/software, accessories and application/knowledge of required ICT skills by the LG staff that can directly facilitate computerization of RMPs in terms of records generation, classification/indexing, storage, utilization and disposal.

ICT utilization and RMPs

The Nordic Council of Ministers (2003) pointed out a growing need for ICT usage in public sector due to the importance of the sector in the information economy. Information economy refers to the economic contribution of a number of industries in an economy by the production of goods and services using ICT (Tale & Alefaio, 2005). This is one of the most dynamic and profitable areas of the world economy today and increased use of ICTs has given rise to what translates to the global economy (UNCST, 2002).

Effective ICT usage underpins the international competitiveness of almost every business and industry like education, health care, leisure, and entertainment, among others. ICT usage also presents opportunities for recordkeeping as it translates into records generation, storage and enhanced retrieval systems and online search facilities, among others. Robek, Brown and Stephens (1995) reveal that opportunities for compact storage through electronic and digital storage devices are attractive as they offer alternatives to bulky paper records that need big storage space.

Despite these opportunities, there are challenges to be considered. According to Tale and Alefaio (2005), increased usage of ICT has decentralized and tends to disorganize recordkeeping more. Public officers are now creating official records in their computers and managing them privately, thus inaccessible to everybody else, including records staff. For example, all LGs in Uganda have

computer(s) in varying quantities and officials are generating lots of e-records that need to be properly managed. Likewise, central registries were supplied with computerized records management systems during the early days of decentralization aimed at managing manual and e-records (Decentralization Secretariat, 2002). It is thus essential that procedures like identifying the records, management of e-mails, appraisal and retention of e-records are followed (MoLG, 2003).

Therefore, ICT usage is vital for office computerization that could lead to e-governance and hence, employees must be knowledgeable or skilled regarding various applications if the current explosion of ICT is to be harnessed.

ICT accessibility and RMPs

According to Tale and Alefaio (2005), ICT accessibility refers to the degree to which ICT is accessible to as many people as possible and Council of Nordic Ministers (2003) concurred that it is the ability to access the functionality and possible benefits of some system/entity.

Hence, this study recognizes the increasing ICT accessibility as a tool for commercial growth, just as UNCST (2002) observed that improving ICT accessibility for people expands the customer base of businesses and, therefore, increases their marketability. Similarly, in an automated office environment, both physical and e-documents should be managed and a fully-installed and functional records management solution should realize greater registry productivity and improved accuracy in filing/storage and retrieving information; flexibility and ability to handle large quantities of information; time savings in searching and responding to requests and ability to define searches for information in a variety of ways (MoLG, 2010).

The Uganda government's decentralization process also involved implementing the automated records management systems using TRIM solution meant to improve the decentralized and disorganized public records in the LGs (The World Bank, 2000). Total Records and Information Management (TRIM) is a versatile solution capable, in full application, of e-records registration, version control, e-records access history, e-mail integration, internet/intranet/ corporate information, scanning images, instant search facility, multiple document interfaces and workflow, and more. Accordingly, each central registry was supplied with a computer on which TRIM programme was installed with limited functional modules (MoLG, 2003). The piloted project that rolled out to the rest of the existing LGs started with stand-alone personal computers, laser printers and, in some instances, scanners aimed at increasing ICT infrastructure to enhance the RMPs, (Decentralization Secretariat, 1993). Hence, ICT accessibility is necessary for office computerization, whereby, employees should be able to access CT facilities to improve business process efficiency and increase staff productivity.

However, contrary to these connotations ICT underutilization and accessibility, what is on ground in the LGs of Uganda is lack of a sustained system where initially the latest gadgets were provided, i.e. no functional computer systems and or obsolete ICT infrastructure and programmes in the records sector, if available, and lack of application skills by the staff even where their interests are high, among other challenges. Therefore, the big question here is, "what has gone wrong?" The situation of our records sectors seems to be deteriorating rather than improving. "What is the problem?"

Conceptual Framework

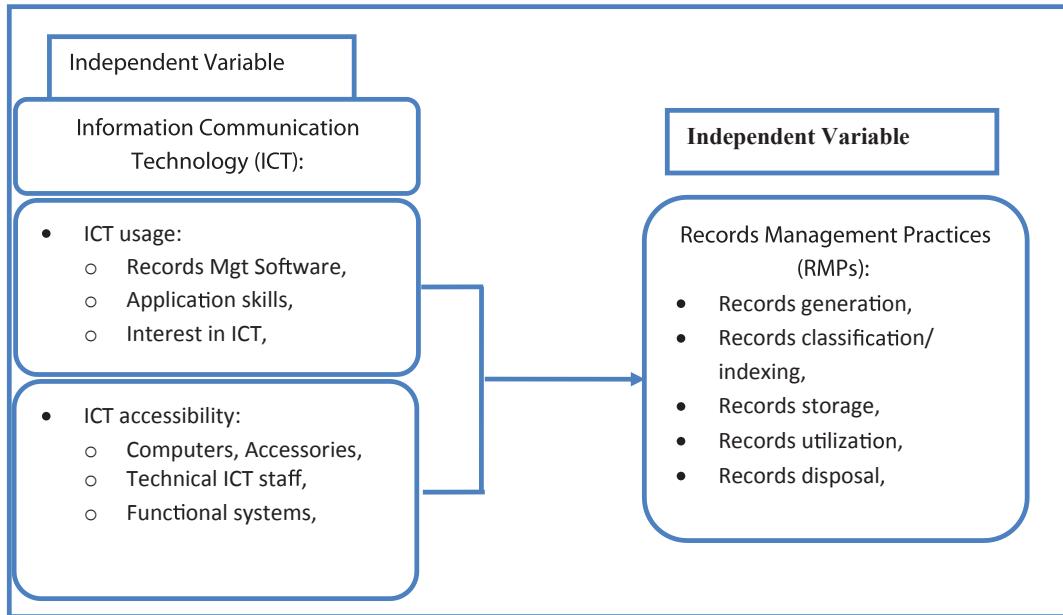


Figure 1: Conceptual relationship between ICT and RMPs

Figure 1 illustrates the relationship between ICT and RMP variables. It considers the challenges of ICT usage (in terms of availability of records management software, application skills and staff interest in ICT) and ICT accessibility (in terms of supply of computers and accessories, support of technical ICT staff and functional systems) that significantly affect the public sector RMP (in terms of records generation, classification and indexing, storage, utilization and disposal). Therefore, it was believed that availability and effective usage of ICT infrastructure in LGs actually influences proper RMPs that in turn would aid effective service delivery and informed decision-making at that level.

Methodology

The study was a cross-sectional survey that covered the period since the onset of the decentralization process in Uganda from 1993 to 2014. There are 112 LGs, but three were purposively selected in addition to the MoLG. Mukono and Mpigi represented the districts that existed and benefited as models during the decentralization process. Wakiso represented the district created after decentralization to establish continuation of the automation process of the RMP, while MoLG was the line ministry responsible for the implementation of the projects in the LGs.

Triangulation of quantitative and qualitative methods of data analysis was used as they reinforced each other's weaknesses (Zikmund, 2003). The unit of analysis was the individuals working in registries, departments and sections (Sekaran, 2003).

Out of 158 respondents, 108 were selected according to Krejcie and Morgan (1970, reproduced in Sekaran, 2003: 294) table of sample size. One hundred (100) respondents were randomly selected from sampling frames from the LGs to answer the questionnaire, while eight (8) respondents, including the Chief Administrative Officers and Principal Personnel Officers were interviewed as key informants because they implemented policies, procedures and supervised records management activities in the LGs. Also, some vital information was captured by comprehending registry layouts, equipment and workflow through non-participative observations.

The questionnaire, interview schedule and observation guides were reviewed by the field guide and two peer professionals for clarity, content and criterion validity. The overall instrument pre-test reliability coefficient was .909 after the comments were incorporated and of the variable specific were all above .80 as shown in Table 1, which proved the instrument reliable.

Table 1: Reliability Statistics

Variable	Cronbach's Alpha	No. of Items	Valid cases (%)
ICT usage	.82	7	87.0
ICT accessibility	.82	8	90.9
Record Management Practices	.93	31	75.3

Source: Pre-test instrument

Quantitative data from the structured questionnaire were examined, coded and the responses were captured and then analyzed using Statistical Package for Social Sciences (SPSS) tool into frequency distributions, cross-tabulations, bi-variate correlations and linear regressions. On the other hand, qualitative data from the interviews and open-ended questions from the questionnaire were edited, examined and grouped to generate common themes related to objectives of the study. The themes were then presented and interpreted in support of or against the outcomes of the quantitative data.

Discussion of results

Response rate and background information

Out of 108 people sampled, 84 responded, giving a response rate of 77.7 percent. Background information captured on the respondents includes gender, levels of education, departments and years in service. While (42) 54 percent of the respondents were male, (33) 43 percent were female, and 02 (3 percent) of them did not indicate their gender. Out of the 84, 28 (36.4 percent) of the respondents had a Bachelor's degree, 16 (20.8 percent) had a Master's degree, 14 (18.2 percent) had diploma education, Ten (13 percent) had a postgraduate diploma, while 03 (3.9 percent) had a certificate and did not indicate their levels of education. On the other hand, one (1.3 percent) of the respondents had ACCA, ordinary and advanced levels of education. Also, according to statistics, 25 (32.5 percent) of the respondents had spent 1-5 years and 6-10 years in service, Eleven (14.3 percent) had worked for 16-20 years, 09

(11.7 percent) had worked for 11-15 years and 05 (6.5 percent) had worked for over 25 years. These statistics therefore justify the involvement of both sexes, various education levels and experiences in the public services in the study. The respondents also worked in departments and sections of administration, community development, education, health, finance, natural resources, production and works, among others.

Effect of ICT on RMPs in LGs

Multiple regression output of the challenges of ICT perspectives (utilization and accessibility) on RMPs shows $R = .448$, i.e. the correlation coefficient after all inter-correlations are accounted for. R^2 , the variance accounted for in RMPs by ICT perspectives was .201. This means that the challenges of ICT perspectives explained only 20.1 percent of the variance on the RMPs while the 79.9 percent variability was due to factors not considered by this study. Thus, the cumulative Beta (β) coefficient between ICT perspectives and RMPs was negative, but statistically significant, $p = .0001$. This means ICT perspectives have statistical significant influence on RMPs in LGs, but may not strongly result into increased efficiency, $\beta = -.300$, $t = -2.117$, $p < .01$

Challenges of ICT usage and RMPs

Descriptive statistics of the challenges of ICT usage dimension is presented in Table 2 and analyzed as under.

Table 2: Challenges of ICT Usage in Local Governments

Questionnaire Items	Frequencies					
	SD	D	N	A	SA	NR
There is software dedicated to management of our records system	22	29	17	23	6	3
Our registry uses the TRIM software for retrieving files	40	27	19	8	-	5
I was trained in the use of TRIM software	40	38	12	6	-	4
I use a computer for official work on daily basis	13	26	14	25	22	-
Every official at least use computer for performing their daily duties	17	31	22	17	10	3
The level of ICT skills is very good among our employees	14	29	19	32	5	-
Existing employees are always eager to use ICT facilities available	9	16	18	39	14	4

Source: Primary data

Where; SD = strongly disagree, D = disagree, N = neutral, A = agree, SA = strongly agree and NR = non-response.

There were no records management systems existing in the LG registries, according to 51 percent respondents, while only 29 percent agreed. Even TRIM solution was not used according to 67 percent of them, while only 8 percent agreed to this. Also 78 percent of the staff were not trained in using TRIM, while only 6 percent were trained. But 47 percent of the respondents were using computers for official work on daily basis, while 39 percent said they

were not, and 14 percent were neutral. Accordingly, 48 percent of them disagreed that every official used computers for daily duties, while 27 percent said they actually did. So, ICT skills among LG employees were not good, according to 43 percent responses, while 37 percent said that they had good IT skills. However, 53 percent of them were eager to use the available ICT facilities, while 25 percent disagreed with this and 18 percent of them were neutral.

Similarly, from observations, there was no records management solution, including TRIM in almost all the LGs except for a tailor-made programme in Wakiso District. Even this was an innovation by the Principal Personnel Officer with rudimentary modules for capturing basic personnel records details. TRIM solution installed in all existing districts during the decentralization process was no more except in MoLG. It was overtaken by obsolescence and lack of funds to sustain subscriptions and licenses that were beyond the scope of the LGs. But at the time of the study, government was rolling out the Integrated Personnel Payroll Systems (IPPS), thus posing the challenge of continuity and sustainability of systems.

Similarly, computer skills at LGs was very low. Despite availability of many computers in offices, knowledge of different applications was poor. Fewer existing staff had knowledge of TRIM as most of the trained records and personnel staff moved on or retired. For example, one interviewee observed, “*ICT skills are inadequate among LG staff*”, and another said, “*We still have big gap in usage of ICT in the districts so ICT training is needed, especially in programs that promote good RMPs, like TRIM and ALICE*”. ALICE in another commonly used records and information management solution.

Regression model between ICT usage and RMPs revealed $R = .394$ and $R^2 = .155$; the variance accounted for in RMPs by ICT usage. This means 84.5 percent variability in RMPs was due to factors outside the scope of this study as ICT usage explains only 15.5 percent. Also β coefficient between ICT usage and RMPs was negative but statistically significant at $p = .0001$. This means RMPs in LGs does not improve due to increased ICT usage, $\beta = -.394^{**}$, $t = -3.687$, $p < .01$

This finding agrees with IRMTa, (2009) that information technologies enhance flexibility in the creation, storage, usage and management of information and records so that policy makers can make informed decisions quickly and efficiently. But it contradicts IRMTu (2009) that ICT improves information handling and allows for the speedy retrieval of electronic records and information through electronic search facilities and thus quality of service. IRMTm (2009) also observes that through ICT usage, organizations are able to economize in terms of storage space, as computer systems can store large volumes of data in small physical space, thus easing office, shelves, filing cabinets and storage boxes spaces. Thus, ICT usage on its own does not warrant proper records generation, classification, storage, utilization and disposal, but professionalism on the part of the records staff combined with appropriate usage of ICT infrastructure does.

Challenges of ICT accessibility and RMPs

Descriptive statistics of the challenges of ICT accessibility dimension is presented in Table 3 and analyzed as under.

Table 3: Challenges of ICT Accessibility in Local Governments

Questionnaire Items	Frequencies					
	SD	D	N	A	SA	NR
Computer(s) are available in the records sector	5	16	18	47	14	-
Computer accessories like printer is available for use in the registry	6	25	22	34	12	1
TRIM software is fully functional in my local government	27	34	23	6	3	6
Skilled IT staff are always in place to give support in case of need	23	26	16	26	8	1
We have computers for every officer in local government/ministry	26	40	18	13	-	3
Our office computers are fully networked	39	40	12	5	4	-
Official records are accessible through our networks	42	40	9	6	1	1
Perceived benefits make it easy for us to buy and use ICT facilities	22	35	26	13	1	3

Source: Primary data

Key; SD = strongly disagree, D = disagree, N = neutral, A = agree, SA = strongly agree and NR = non-response.

The majority 61 percent of the respondents agreed to accessing computers in registries of LGs, while 21 percent said otherwise. Also, 46 percent had printers and scanners in their registries and 31 percent did not have, while 22 percent were neutral. This finding agrees with IRMTu (2009) that today even governments in less developed countries are installing computers in rural communities so that the citizens can keep abreast with government activities and world events. One interviewee observed, “... apart from planning department and few others that reasonably access computers, the rest of LG departments are in dire need of ICT infrastructure”.

Access to functional TRIM solution was not true to 61 percent respondents, only 9 percent accessed it. Similarly, 49 percent of them had no skilled IT staff giving support to the LGs ICT infrastructure, but 34 percent said they had and 16 percent were neutral. An interviewee observed, “TRIM is not installed in Wakiso and ICT equipment may be accessible but officers who use them tend to personalize them.” In fact Wakiso had no TRIM solution because it was a new district, and all the newer districts created after that project suffered the same fate.

On the other hand, 66 percent LGs and MoLG officers had no access to computers; only 13 percent had access and 18 percent were neutral. Also, 79 percent said the computers in LGs were not networked, while only 9 percent noted that the computers were networked. The majority (82 percent) of respondents said official records were not accessible through computer networks, and only 7 percent agreed to this. But 57 percent of them disagreed that the perceived benefits made it easy for LGs to buy and use ICT facilities, 14 percent agreed and 26 percent were neutral.

Similarly, according to my observations, all the registries had computers, some had printers and scanners, the TRIM solution was not available and computers were not networked. TRIM was only available in an obsolete/unused computer in MoLG and ICT support personnel were not available in many LGs, save for the ministry, hence making it difficult to service and support the ICT infrastructure. Since records management services were not automated and computers not networked, it was difficult to share/access official records within and across LGs electronically. An interviewee said, "*ICT facilities are fairly accessible though not networked and no records management system in place.*"

Regression model between the challenges of ICT accessibility and RMPs showed $R = .108$ and $R^2 = .012$; variance accounted for in RMPs by ICT accessibility. So, ICT accessibility explains mere 1.2 percent variance in RMPs in the LGs, while 98.8 percent variability is due to factors outside this study. The β coefficient was negative and statistically not significant as $p = .354$. There was a negative but minimal relationship, meaning that accessibility of ICT infrastructure has negligible effect on the RMPs in LGs that was not statistically significant as $\beta = -.108$, $t = -.932$, $p > .05$

ICT accessibility is important, but the findings revealed a big gap within the LGs. As more computers were provided to them, sustainability and support became a problem. This agrees with IRMTa (2009) that an organization may procure the latest ICT infrastructure, but if it does not implement procedures for ensuring the right RMPs, the money spent on the system is wasted.

According to IRMTm (2009), ICT infrastructures are coordinated technical frameworks that support the use of computers throughout an organization. But in the LGs, IT personnel were hardly available and skill levels were low; therefore it became difficult to service and support the ICT infrastructure as required. Moreover, it is important for the records staff to not only understand the basic fundamentals of computers but also to consider the infrastructures needed to support quality e-records management, including adequate power supplies and networks, bandwidth and connectivity, technical support and backup systems (IRMTu, 2009), i.e. the entire ICT infrastructure and peripherals.

Implication of the Study

Governments should reduce the ICT usage gap by imparting relevant/requisite computing skills through continuous trainings and exposures to its officers in order to enable them harness the various advantages of ICTs applications.

Through the line ministry, government should re-introduce the Integrated Records Management System after exhaustive feasibility survey with consideration to "Open Source Systems" since they require minimal maintenance/adaptation costs. Then it should integrate the existing records management plan for paper documents with e-records in LGs and all sectors of the economy by providing and continuously supporting/upgrading ICTs.

LGs should allocate and sustainably maintain the necessary technological resources such as computers, printers, scanners and digital cameras as key tools for digitization to support records management functions. Then dedicated IT personnel should be recruited to manage and maintain the increasing ICT infrastructure in the LGs.

Conclusions

While the challenges of ICT usage were statistically significant but negatively contributed to RMPs, the challenges of ICT accessibility was not significant but also negatively affected RMPs in LGs.

There is a big ICT usage gap whereby, in addition to very low skills, people create, manage and file their own e-documents. Even though well-structured records management plans exist for paper document, officers do not adopt it for the management of e-records/files and the appropriate records management programme provided was either non-existent or lay in disuse due to outdated functionalities.

Similarly, the ICT infrastructure provided during the decentralization process were either not available, or the existing ones were not upgraded and inaccessible due to lack of technical staff to service or upgrade them in the LGs. Even when the LG staff were willing to learn and use the infrastructure, most of the systems were not functioning because of lack of sustainability.

References

- Business Dictionary (online).* (2011). Retrieved September 2013 from: <http://www.businessdictionary.com/definition/record-classification.html>
- Day, P. & Klein, R. (1987). *Accountabilities: five public services*. London: Tavistock Publications.
- Decentralization Secretariat, (1993). *Decentralization in Uganda: the policy and its philosophy*. Kampala: Decentralization Secretariat.
- Decentralization Secretariat, (2002). *Decentralization in Uganda: trainer's manual*. Kampala: Ministry of Local Government
- HP TRIM. (2008). *Electronic Document and Records Management System (EDRMS)*. Retrieved June 2012 from: <http://h71028.www7.hp.com/enterprise/w1/en/software/information-management-trim.html>
- International Records Management Trust (IRMT(a)), (2009). *Additional resources for electronic records management: training in electronic records management*. London: IRMT
- International Records Management Trust (IRMT(m)) (2009). *Managing the creation, use and disposal of electronic records: training in electronic records management*. (Vol.3). London: IRMT.
- International Records Management Trust (IRMT(u), (2009). *Understanding the context of electronic records management: training in electronic records management*. (Vol.1). London: IRMT.
- Kallaus, N. E., and Johnson, M. M. (1992). *Records management*, 5th ed. Cincinnati, Ohio: Southwestern.
- Ministry of Justice and Constitution Affairs. (2001). *The National Records and Archives Act*. Kampala: Ministry of Justice and Constitution Affairs.
- Ministry of Local Government. (2003). *Records, data collection and management for Higher Local Government: participant's handbook*. Kampala: MoLG.

- Ministry of Local Government. (2010). *A synthesized report on support to the new districts on records and information management*. Kampala: Ministry of Local Government.
- National Archives and Records Service of South Africa. (2007). *Managing public records and the law: What governmental bodies need to know*. Republic of South Africa: Department of Arts and Culture.
- National Archives of Scotland. (2003). *Managing NAS records: a guide for staff*. In records management procedures manual. Retrieved June 2013 from: <http://www.nas.gov.uk/recordKeeping/recordsManagement.asp>
- Nordic Council of Ministers. (2003). *ICT usage in the public sector: a Nordic model*. Denmark: Nordic Council of Ministers.
- Palmer, M. (2000). Records management and accountability versus corruption, fraud and maladministration. *Records Management Journal*, Vol. 10 (2), 2000, pp. 61-72.
- Penn, I. A., Pennix, G. B., Coulson, J. (1994). *Records management handbook*. 2nd ed. Burlington, USA: Ashgate.
- Read, J. and Ginn, M. L. (2007). *Records management*. 8th ed. UK: Thomson Southwest.
- Robek, M. F., Brown, G. F., an Stephens, D. O. (1995). *Information and records management: document-based information systems*. 4thed. New York: Glencoe, McGraw-Hill
- Sekaran, U. (2003). *Research methods for business: a skill building approach*. 4th ed. New York: John Wiley & Sons
- Tale, S. and Alefaio, O. (2005). Records management in developing countries: challenges and threats – towards realistic plan. In *ACARM Newsletter*, Issue 37.
- The World Bank. (2000). *Managing Records as the Basis for Effective Service Delivery and Public Accountability in Development: an Introduction to Core Principles for Staff of the World Bank and Its Partners*. London: IRMT.
- Uganda National Council for Science and Technology (UNCST). (2002). *Status of ICT in Uganda: country report – SCAN-ICT preliminary baseline study*. Kampala, Uganda: UNCST
- Wamukoya, J. (2000). Records and archives as a basis for good governance: implications and challenges for records managers and archivists in Africa. *Records management journal*, Vol.10 No.1 April. London: Aslib, IMI, pp. 23-33.
- Wet, S. and Du Toit, A. (2000). The challenge of implementing a records management system at the national electricity regulator in South Africa. *Records management journal*, Vol.10 No.2, August 2000. London: Aslib, IMI.
- Wikipedia* (online). (2011). Retrieved August 2012 from: http://en.wikipedia.org/wiki/Records_management
- Zikmund, W. G. (2003). *Business research methods*. 7th ed. New Delhi: Cengage Learning.