

# EFFECTIVE MANAGEMENT OF E-RECORDS IN LOCAL GOVERNMENT AUTHORITIES IN TANZANIA: AN ANALYSIS OF IMPEDING FACTORS

Joseph Cassian Pessa

Institute of Social Work Library, Institute of Social Work, Dar es Salaam, Tanzania

## Email address:

[oespessa@yahoo.com](mailto:oespessa@yahoo.com); [j.pessa@isw.ac.tz](mailto:j.pessa@isw.ac.tz)

## Abstract

Although Local Government Authorities (LGAs) in Tanzania are increasingly adopting Information and Communication Technologies (ICTs) in performing their duties, they still experience practical problems with regard to adequate and systematic long-term management of the e-records they generate, capture or receive. This study assessed challenges that LGAs face in the management of the e-records they generate to ensure continued access and use. To collect data, this study used survey. Data were analysed using descriptive statistics. Factor Analysis with corresponding mean value was used to identify the ERM challenges in LGAs. The findings show that, despite the increased use of ICTs, LGAs lack a clear strategy for e-records management (ERM). The study revealed contradictory perception of ERM among the top management, IT personnel, records professionals, secretaries and other staff in LGAs. This has resulted to the development of computerized systems without the involvement of records professionals. Consequently, the e-records generated by LGAs are considered as an integral part of ICT activities and are assigned to IT personnel who are not record management professionals. E-records are left without legal protection, professional and top management support. In many LGAs the management of e-records for continued access and use is accorded low priority and is not guided by ERM policy, professional and legal requirements or standards. Based on the findings, the intervention programmes with involvement of records professionals who are technically well versed in record management, IT personnel and other stakeholders should be undertaken. ERM should have legal, managerial and budgetary support.

## 1. Introduction

Records management is a fundamental activity of public administration. Records generated over time play an important role in preserving the rule of law, in documenting compliance or non-compliance with laws, rules, regulations and procedures and in providing reliable, legally verifiable sources of evidence on policies, transactions, activities, decisions and actions taken [1-7]. The world over, sound management of records, especially electronic records has become a topical issue. It is for this reason that the countries of the world are turning to ICT to improve not only records management but also their access and use over time.

Tanzania is trying to address e-records management through its Public Service Reform and Local Government Reform Programs, which are facilitating the government's transition to e-government. Government ministries, departments and agencies have also computerized their functions. As a result, most of the government, business transactions and communications are conducted electronically through e-mail and networked information systems. Some of the LGAs have also begun to computerize some of their paper based records [8-11] and thus a lot of e-records are generated. Despite more electronic records being

generated every day, their capture, preservation and dissemination and archiving remain problematic. LGAs still experience technical and managerial problems with regard to long-term management and preservation of these e-records due to lack of a clear strategy. In consequence, the management of e-records is not guided by statutory requirements, or national and international standards. In fact, government offices do not have standards to guide the management of e-records [12] and practical tools for e-records management (ERM).

Since and technology keeps changing and becoming obsolete, lack of strategy and ERM tools renders most e-records generated by the emerging technologies inaccessible [12-14]. Ngulube [13] quoting Balas [15], Pace [16] and McInnes [17] observed that the lifespan of magnetic tape/discs is estimated to be five to ten years, and optical disks thirty years. The five- and- a- quarter floppy disks, for example, are no longer in use and data stored on these disks are no longer accessible because they are not compatible with the new generation of personal computers. Sometimes, the technological obsolescence makes it difficult to investigate LGAs and public sector for misdemeanors or hold them accountable in the absence of relevant supporting documents [2] [18]. Although the government has improved the ICT infrastructure and enhanced its ability to deliver services, proper management of e-records which could enable governments to manage, protect and provide timely access to reliable information is often overlooked [19]. Unlike paper- based records, e-records require different management techniques [20-22].

## **2. Problem statement**

In many government Ministries, Departments, Agencies (MDAs) and LGAs in Tanzania, there is an emphasis on adopting the quick but changing Information and Communication Technologies. Some offices have computerised their management functions, digitised their paper- based records and conduct most of their business online through e-mail, Internet and networked computers. As a result, more electronic records are generated every day [12] [23-25]. However, most of these e-records are not properly filed or managed due to lack of a clear strategy. Even though locally-developed software or open source software applications, such as Electronic Document and Records Management System (EDRMS) for managing e-records are readily available on the market, most LGAs have not addressed the question of proper management of e-records to ensure continued access and use.

Previous studies focused mainly on the paper based records, financial and policy issues as well as ICT strategy [5] [26-31]. However, there have been insufficient empirical studies on the management of e-records in Tanzania's LGAs. As such, this study assesses the challenges of e-records management in Tanzania's LGAs under study.

## **3. Literature Review**

### **3.1 Rationale for management of e-records**

The management of e-records is an essential activity of public administration [32-33]. Records provide crucial evidence that a particular action or transaction took place or a particular decision was made. In the absence of accurate and reliable records, governments cannot be held accountable for decisions and actions they make or take [1] [34]. To achieve proper documentation of their decisions and transactions, Governments are obliged to create, maintain, use and dispose of records [35-36]. Generally, there is consensus among scholars that records must be managed efficiently for them to be used for decision-making. Proper e-records management enables governments to be open, transparent and accountable as well as promoting good governance [34] and [37].

### **3.2 Status of e-records management in the world**

Governments, the world over, recognise that ICT has great potential in facilitating the access, retrieval and transfer of information [34] [38]. To streamline their operations, Governments and Local Government

Authorities around the world are computerizing their core functions using ICT [37-41]. Sound management of e-records in developed countries is considered critical in the running of modern government, especially in Australia, Canada, the United States and Britain [42].

According to Cox [43], in the developed world, especially in North America and Europe the management of electronic records can be traced back to the 1980s when they started using computers to manage e-records they generated. Similarly, in Britain the Public Records Office developed guidelines and standards on the management of records in electronic form [44]. In Australia, the Federal Government made notable strides in managing e-records by producing locally made automation packages; automating registry controls and forcing local software developers to conform to the records-keeping procedures [45]. Australia emerged as a world-class records management software vendor [42]. Developing countries also made similar strides in the management of e-records. In Latin America, the Mexican government automated its services [46].

Likewise, countries like Argentina, Chile and Singapore have computerised government services and the management of the resulting e-records [46-48]. The government of the People's Republic of China and India also made similar strides in the computerization and management of records in the central and local governments. By the same token, several countries in Africa have embarked on computerization of government and LGAs functions. Mauritius, South Africa, Botswana, Zambia, Zimbabwe, Ghana, and Kenya have also computerised public records [25] [37] [49] [50-54]. Such computerisation has also helped to improve accounting and financial management, tax collection, monitoring, including access to information and its retrieval. Similarly, some of the Local Government Authorities (LGAs) in Uganda have computerised some of their office functions and e-records management through the World Bank funded records management projects in Mbarara, Lira, Mbale and Kayunga [55-57]. Kabale District, on the other hand, computerised its e-records using TRIM and RecFind software for paper files, electronic documents and imaging. The purpose was to improve transparency and the provision of public information electronically [56] [58]. However, it was noted that there is still a chronic weakness in government record-keeping in Africa [50].

In Tanzania, government Ministries, Departments and Agencies (MDAs), including LGAs use ICTs, especially the Internet and World Wide Web, to perform their functions. In fact, most LGAs have their own official websites and transactions are conducted electronically [19] [59]. The President's Office Public Service Management, for example, uses HCMIS to manage the payroll and details of basic employees' records. In addition, the government has established satellite links to the regions and government offices overseas [19]. Since the 1990s the Local Government Reform Programme (LGRP) has increasingly promoted the use and application of ICTs in LGAs to improve their public administration and management functions. Kinondoni Municipal Council (KMC) was among the LGAs involved in the Local Government Reform Programme (LGRP-I).

Due to LGRP usage of personal computers in some LGAs including Kinondoni has increased [60]. KMC over the past few years has introduced a number of computers based systems to be used at district level, including PlanRep for budget and expenditure, Local Government Monitoring Database (LGDM), Internet and websites. Also, KMC as an urban LGA that has a well-designed ICT plan. The following software exist for KMC namely; Epicor (software dealing with financial aspects), Plan Rep (software for budgeting of rural areas), Property Tax, LGMD (Local Government Monitoring Database, planning tool and database), and Loan Manager DB. Additionally, in Kinondoni Municipality the following software have been developed for the e-Government project; MTUHA, HMIS (Health Management Information System), HRIS (Human Resources Information System), Asset Register System, Business License Information System and Education Information System [26]. As regard Kilosa District Council (KDC), though it is a

rural council [61] has a substantially developed ICT infrastructure and is participating in the LGRP and global electronic environment.

Use and application of ICT has forced LGAs to generate a lot of e-records, including word processed documents and e-mail. The greatest challenge, however, lies in the management and preservation of such records as evidence of business transactions to enable LGAs and governments in particular to capture the corporate memory and retain the national documentary heritage [38]. In many LGAs in Tanzania, there is much concern on the long-term preservation and access to electronic records they generate. This is a reason why this study was conducted to investigate the challenges that LGAs face in the management of e-records they generate given the increased availability of computers.

### **3.3 Objectives**

More specifically, the objectives of this study were:

1. To examine availability of computers in LGAs
2. To identify the challenges LGAs face in the management of e-records

### **4. Methodology**

This study was conducted in Kinondoni Municipal Council (KMC), Bagamoyo and Kilosa District Councils. These councils were selected because they have introduced and implemented several ICT-related projects for financial management and good governance under the Local Government Reform Programme. The underlying assumption is that being computerised, the councils also generate numerous e-records. However, what is not known is how these e-records are managed. This study employed case study design and survey technique. 255 respondents participated in the study and were selected using stratified sampling. In analyzing data, descriptive statistics were run to generate frequencies and percentages as well as mean to measure the most common pattern in the data set. This study used a managerial framework called the Resource Based View (RBV) and a Unified Theory of Acceptance and Use of Technology (UTAUT) to guide the study. RBV was used to determine the LGAs' use of resources or assets such as IT assets, for instance, human asset including ERM skills, industrial understanding, problem-solving; Technology asset e.g. available physical IT or hardware, network infrastructure or software e.g. EDRMS, technical platform, data-bases; relationship asset e.g. relationship with other Departments, top management support etc and related computerized tools to operate at a competitive advantage [64].

A Unified Theory of Acceptance and Use of Technology (UTAUT) by [62] Venkatesh, et al. (2003) was used to guide the study. The model established how acceptance of ICT influenced use of ICTs and management of e-records. Drawing from UTAUT's postulate of Effort Expectancy, this study established how e-records are conveniently accessed and used given the LGAs technical infrastructure and top management support.

### **5. Findings**

#### **5.1 Availability and use of computers in Local Government Authorities (LGAs)**

As pointed out by 223 (87%) of the respondents, the study findings indicate that respondents said the LGAs surveyed had a dramatic increase of computers (See Table 1). A comparative analysis showed that the level of computerization differed from one LGA to another. Relatively, the use of computers was significantly high in Kinondoni Municipal Council (KMC) as pointed out by 163 (64%) of the respondents, followed by Kilosa District Council (KDC) as acknowledged by 74 (29%) of the respondents and Lugoba Village

Council (LVC) as pointed out by 18 (7%) of the respondents. Now Kinondoni Municipality had over 300 computers. This is a great achievement compared to the two office computers that the Council had in the year 2000 which increased to 120 computers in 2006. Later the number of computers increased to 256 in 2011. Variations at the level of computer deployment were also observed among the departments across LGAs with the Department of Accounts in both KMC and KDC ranking high in computer use. The LGAs use electronic accounting system (Epicor), LGMD, PlanRep1 and PlanRep2 software. These correlate with findings by PMORALG [63] which show that the most commonly used Plan Rep Software include; Macro v3.2. Others are the PlanRep2 Micro v7.0.0.5, the PlanRep2 Micro v7.0.0.8a, the PlanRep2 Micro v7.009, the PlanRep2 Micro v7.0.10, the PlanRep2 Micro v7.0.11 and PlanRep2 Meso version. These software are basically designed by PMO-RALG and the Ministry of Finance to facilitate preparation of Budget, reporting and creation of framework of objectives, targets and activities for Planning and Reporting.

**Table 1 Level of computerization in LGAs**

<b>1 High</b>	<b>223 (87%)</b>
<b>2 Moderate</b>	<b>32 (13%)</b>
<b>3 TOTAL</b>	<b>255 (100%)</b>

Several villages through the village governance project supported by COSTECH and UNESCO's Informatics Division commissioned COMNET-IT implement ICT at the village level [60]. This has enabled LVC to have the best appropriate physical infrastructure for ICT notably electricity and telecommunications (mobile and landline). The village is conveniently situated 125 km on the Dar es Salaam to Arusha highway. Also, according to COSTECH's [11] surveys LVC villagers have a positive attitude and are prepared in participating in ICT projects for development. The awareness of District Council authority in Bagamoyo and village government leaders in Lugoba Village Council of the benefits of ICT application is high and this led to the positive support of the ICT project implemented in their village. Realising the importance of ICT, they also financed the upgrading of ICT facilities and infrastructure including village government offices and the installation of electricity, to enable them accommodate computers and thus enable the villages utilize ICT. Drawing from the findings above the study noted that, LGA computerization mainly depended on the respective LGAs' economic ability, donor support and involvement in the LGRP and the e-governance project.

### 5.2 Factors limiting the management of e-records in LGAs

When factors limiting e-records management were classified, it emerged that lack of strategies for management of e-records was pointed out by many respondents. It ranked the first (M=3.96; SD= 1.102). If LGAs do not have proper strategies and policies to guide management of e-records, it is likely that the e-records capture, retention and disposal will not be seriously adhered to in such LGAs. This was followed by inadequate top management support (M=3.96; SD= 1.110). This has rendered most e-records generated not being accorded the right priority and, hence, not being properly managed. Similarly, absence of comprehensive scheme of service which ranked third (M=3.93; SD=1.075) was pointed out as another challenge that LGAs face in implementing ERM. Also, findings show that the LGAs are affected by lack of budgets or continuous financial support (M=3.85; SD=1.152) dedicated for e-record management. The implication is that e-records management is considered only as an afterthought to be integrated when the ICT budget can accommodate it. Finally, to aggravate the situation, LGAs lack technological infrastructure (M= 3.63; SD= 1.361) and training (M=3.80; DS=1.355) on e-records management. This is mainly due to lack of the financial commitment to support training and acquisition of ERDMS.

**Table 2 Factors limiting the management of e-records in LGAs**

S/N	Response	F	Mean	SD	Rank
1.	Lack of strategies for managing e-records	230	3.96	1.102	1
2.	Inadequate top management support	207	3.96	1.110	2
3.	Lack of scheme of service for records personnel	204	3.93	1.075	3
4.	Budget	202	3.85	1.152	4
5.	Lack of staff training	201	3.80	1.355	5
6.	Lack of technological infrastructure	186	3.63	1.361	6
7.	Lack of Disaster preparedness plan & security of e-records	171	3.60	1.418	7
8.	Lack of digital repository	170	3.60	1.420	8

## 6. Discussion of findings

The results of this study show that an overwhelming majority of respondents said that LGAs surveyed had a dramatic increase of computers. The use of computers was significantly high in the Department of Accounts in both KMC and KDC. Electronic accounting system (Epicor), LGMD, PlanRep1 and PlanRep2 software are commonly used. However, absence of policies/legislation is a critical challenge that militates against the proper management of e-records these LGAs generate. As a result, the legislative consciousness on the significance of e-records management is very limited among the senior-level and even IT technicians. E-record management in the design and installation of ICT systems is largely taken for granted. These findings corroborate Melivin's who maintains that record management receives low priority in government agencies due to lack of proper policies, laws and standards [35]. Consequently, there is no clear delineation of responsibilities for the capture, maintenance, use, retention and disposition of electronic records due to the lack of e-records management policy. Thus, staff who generate such records, do not follow proper guidelines in identifying, capturing, maintaining and disposing of these records. LGAs staff generally believe that the official information they create or receive electronically belongs to them. As a result, they can create, alter or delete e-records without seeking prior permission from appropriate authorities, let alone consult the still absent policy guidelines pertaining to the handling of such records in the LGAs. To make things worse, programming changes can make these records irretrievable for a variety of reasons including obsolescence. This brings to question the long-term preservation of digital information, especially non-financial records often overlooked as expendable, which inadvertently are given low priority because e-records management is generally not taken as seriously as it should be. Said otherwise, policies are needed to meet the needs of e-records as in the absence of such policies it is difficult to manage electronic records effectively and efficiently [65]. LGAs are, seemingly, guided by the national records management policy which does not articulate e-records matters. E-record management is often seen as an ICT function and thus assigned to ICT personnel to the exclusion of registry staff and proper records managers [23]. Mazikana [66] noted that registry staff are often not involved from the beginning when information systems are developed, hence making it difficult for their requirements and needs to be taken into consideration in the resultant systems.

LGAs embarked on using ICTs without having proper strategies and budget for ERM. Registries do not have their own budgets and, therefore, sometimes the ICT budget is used to cater for e-record management needs and requirements as well. The oversight of e-records budget in the LGAs in Tanzania means that they cannot afford to procure hardware and software applications for ERM or even train staff.

Because of inadequate top management attention, the records management function in many Departments apart from the Department of Accounts is given low priority [12] [67-68]. This has caused complaints from the registry staff that most of the officers are not concerned about the registries until a key document they desperately need cannot be located [66]. This partly explains why registries in LGAs are in a dilapidated state and the management of e-records is neglected. Basically, registries and ERM in particular are not on the top agenda of management. The future of e-records in LGAs has not been adequately addressed. The majority of Councils have no documented e-records management user procedures or guidelines.

## **7. Conclusion**

Having undertaken this study, the researcher comes to the conclusion that there is increased use of computer technology which has resulted to generation of enormous e-records in LGAs. However, electronic records management remains a neglected area in the public offices and LGAs in Tanzania. LGAs still fail to adequately and in a systematic manner manage the e-records they generate, capture or receive. Thus e-records' continued access and use is not guaranteed. The responsibility of managing electronic records in LGAs is not well-defined. This situation is mostly caused by top management being unsupportive of ERM and assigning ERM to unqualified staff. In many cases, there are no actual records managers and e-records management is often seen as an ICT function. Thus, IT personnel exclude Registry staff when LGAs computerise their activities for lack of basic understanding of computer operations. LGAs have no accepted records management policy, procedures or guidelines, statutory requirements, or standards. They lack ERM budget and disaster plan. As such, valuable records are lost either through negligence, deliberate destruction or technological obsolescence. Nonetheless, management of e-records is key to ensuring their continued access and use for present and future generations. If carried out systematically and comprehensively, e-records management has the potential to support continuous access to information contained in records.

## **8. Recommendations**

On the basis of the findings and conclusions of the study, to improve on the situation later, the following strategies need adopting or paying attention to in LGAs in Tanzania; allocating more resources to ERM, following agreed standards of ERM including their capture, access, use and disposition. Also, the respective ministry needs developing and introducing e-records management policy guidelines and adequate ERM strategies and reviewing the Tanzania's Records Act to address e-records management. Set aside a specific budget for ERM to support e-records management activities including staff training.

## **9. Acknowledgment**

I acknowledge MFR Consult Ltd, the Institute of Social Work (ISW), the University of Dar es Salaam and PMO-RALG for enabling me to pursue this study. The author is also highly indebted to the anonymous reviewers for their critical and constructive comments. Nonetheless, the author remains solely responsible for the article's final content. The author also thanks the management of the Global Scientific Journal GSJ Publisher Publishing House for funding the manuscript and for publication.

## References

- [1] Mohamed, B.M.; Rasheli, G.A. and Mwangike, L.R. (2018) Management of Records in Tanzania: Review and Appraisal of Applicable Theories and Examination of Selected Empirical Findings, *Journal of Public Administration and Governance*, 2017, Vol. 8, No. 1. Available online at <https://doi.org/10.5296/jpag.v8i1.12379> (Accessed 19.01.2019).
- [2] Ngoepe M and Ngulube P (2015) A framework to embed records management into the auditing process in the public sector in South Africa, *Information Development* 1-14, SAGE Publications.
- [3] Lamont J (2014) Records Management: An Expanding Role, *KM World*, Volume 23, Issue 5, Available at: <http://www.kmworld.com/Articles/Editorial/Features/Records-management-anexpanding-role-96372.aspx> (Accessed 27 March 2015).
- [4] du Toit A (2011) An exploratory study on the management of business records by knowledge workers, *South African Journal of Information Management* , 8(3) . Available at: <http://www.actacommerci.co.za/index.php/acta/article/download/163/163> (Accessed 27 March 2015).
- [5] Ndenje-Sichalwe E (2010) *The significance of records management to fostering accountability in the public service reform programme of Tanzania*. D Phil thesis. Pietermaritzburg: University of KwaZulu-Natal (unpublished).
- [6] Yusuf ZM and Chell RW (2005) *Issues in Records Management*. Bangi: Universiti Kebangsaan
- [7] World Bank and IRMT (2000) *Managing Records as the Basis for Effective Service Delivery and Public Accountability in Development: An Introduction to Core Principles for Staff*.
- [8] Cammi E (2006) *Information and Communication Technology Strategy for Local Government in Tanzania: A Case Study of Dar es Salaam City Council*, Master Thesis, Vorgelegt Zur Erlangung Des Abschlusszeugnisses Der Fachhochschule Pforzheim, Hochschule Für Gestaltung, Technik Und Wirtschaft.
- [9] Menda A (2005) *Computerising Local Government in Tanzania: The Kinondoni Experience*. iConnect Online. Available at: <http://www.icconnect-online.org> (Accessed 2 February 2010).
- [10] Nyitambe JE (2002) *Application of ICT for improved governance in Kinondoni Municipal Council*. Available at: <http://www.kmc.go.tz/english/index.html> (Accessed 12 February 2011).
- [11] COSTECH (2002) *ICT for Good Governance*. Available at: <http://www.tanedu.org/costech.asp> (Accessed 28 June 2008).
- [12] Manyambula M (2009) *Public Service Reform, Accountability and Records Management: A Case Study of Tanzania* . *ESARBICA Journal* 28:20–35.
- [13] Ngulube P (2003) “Is The National Documentary Heritage of ESARBICA Member States Safe? Disaster and Security Management in Paper Based and Electronic Environments” XVII Biennial Eastern and Southern Africa Regional of Branch of the International Council on Archives (ESARBICA) General Conference on Archives, Society and Good Governance. Mozambique, Maputo, July 22-26, 2003.



- [14] Keakopa SM (2002) Automated Records Management Systems in the ESARBICA Region. *ESARBICA Journal* 21(1): 41-49.
- [15] Balas, J L (2000) Original Versus Digital. *Computers in Libraries* 20(2):51-53.
- [16] Pace AK (2000) Digital Preservation: Everything New is Old Again. *Computers in Libraries* 20 (2): 55-57.
- [17] McInnes S (1998) Electronic Records: the New Archival Frontier? *Journal of the Society of Archivists* 19(2):211-220.
- [18] Mazikana C (2001) The Cost of Failure of African Nations to Manage Records Effectively. Available at: <http://www.acarm.org/publications/costs.html> (Accessed 23 February 2009).
- [19] IRMT (2007) Fostering Trust and Transparency in Governance. Retrieved from <[http://www.irmt.org/documents/building\\_integrity/case\\_studies/IRMT\\_Case\\_Study\\_Tanzania.pdf](http://www.irmt.org/documents/building_integrity/case_studies/IRMT_Case_Study_Tanzania.pdf)> (Accessed 22.11.2017).
- [20] Meijer A (2001) Electronic Records Management and Public Accountability: Beyond an instrumental approach. *The Information Society*, 17. No. 4, 2001 , 259 – 270.
- [21] Rothenberg J (1995) Ensuring the Longevity of Digital Documents. *Scientific American*, Vol. 272, No. 1 (January), pp. 42-47.
- [22] Dollar CM (1993) New Developments and the Implication on Information Handling. In: *Information Handling in Offices and Archives*. A. Menne-Haritz (Ed.), München: K.G. Saur, pp. 56-66.
- [23] Moloi J and Mutula S (2007) E-records Management in an E-government Setting in Botswana, *Information Development* , Vol. 23, No. 4, Available at <http://idv.sagepub.com> (Accessed 15 June 2011).
- [24] Mlaki TE (2002) ICT Activities and Development. Stakeholders' Workshop on National ICT Policy of Tanzania, Royal Palm Hotel, Dar es Salaam, 25th May, 2002. Available at: <http://folk.uio.no/patrickr/refdoc/mlaki.ppt> (Accessed 19 November 2013).
- [25] IRMT (2002) Evidence-based Governance in the Electronic Age: A Summary of Key Policy Issue, Available at: <http://www.irmt.org/evidence> (Accessed 25 February 2010).
- [26] Cammi E (2006) *Information and Communication Technology Strategy for Local Government in Tanzania: A Case Study of Dar es Salaam City Council*, Master Thesis, Vorgelegt Zur Erlangung Des Abschlusszeugnisses Der Fachhochschule Pforzheim, Hochschule Für Gestaltung, Technik Und Wirtschaft.
- [27] Miller J (2001) *A Country ICT Survey for Tanzania*, Final Report, Nov. 2001. Available at: <http://www.sida/articles/9499/9481/tanrep.pdf> (Accessed 26 March 2009).
- [28] Akotia P (2000) "*Financial Records Management Project: Phase Three*" Submitted to the Government of Uganda, 17-28 January. Kampala: DFID: 1-24.

- [29] Shila H (1999) Effectiveness of Informatics Policy Instruments in AFRICA: A Case study of Tanzania, February 1999. Available at: <http://www.bellanet.org/part>. (Accessed 12 March 2011).
- [30] Mascarenhas O (1998) *National Information Policy in Tanzania attempts at formulation: A practitioners View*. Paper presented in a Regional seminar on National Information and Informatics Policies in Africa. Addis Ababa: Ethiopia, 28 November- 1 December 1998.
- [31] Nkhoma-Wamunza AG (1997) *Information Technology Transfer. Policy Issues and Development in Tanzania. A Case Study*. PhD. Thesis, Chapel Hill, NC: The University of North Carolina, Chapel Hill.
- [32] Dikopoulou, A. & Mihiotis, A. (2010) Records Management: A Key Element for Effectiveness, Accountability and Development in the Greek Public Administration, *International Journal of Public Administration*, 33:5, 262-287, Available online at DOI: [10.1080/01900690903449673](https://doi.org/10.1080/01900690903449673) (Accessed 06.03.2019).
- [33] IRMT (2004) *The E-records Readiness Tool*. IRMT, London.
- [34] Griffin A (2004) "Records Management Capacity Assessment System (RMCAS)", *Archival Science*, Vol. 4, pp. 71-97.
- [35] Melvin VC (2010) *Information Management: the Challenges of Managing Electronic Records*, GAO- 10- 83ST, Washington, D.C.
- [36] World Bank (2006) *Why Records Management? Records Management as a Key Support for Development Effectiveness*. Available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,contentMDK:20033283~pagePK:36726~piPK:437378~theSitePK:29506,00.html>. (Accessed 06.07.2010).
- [37] Moloi J and Mutula S (2007) E-records Management in an E-government Setting in Botswana, *Information Development* , Vol. 23, No. 4, Available at <http://idv.sagepub.com> (Accessed 15 June 2011).
- [38] Moloi J (2009) E-Records Readiness in the Public Sector in Botswana. *ESARBICA Journal* 28.
- [39] World Bank Group (2011). *Management of records policy (English)*. Administrative manual statement ; AMS 10.11. Washington DC ; World Bank. <http://documents.worldbank.org/curated/en/568301468326225648/Management-of-records-policy>.
- [40] Cain P and Millar L (2004) The Implications of Electronic Records. Available at: <http://www.acarm.org/>. (Accessed 29. 11. 2012).
- [41] Nyitambe JE (2002) Application of ICT for improved governance in Kinondoni Municipal Council. Available at: <http://www.kmc.go.tz/english/index.html> (Accessed 12 February 2011).
- [42] Reed B (1997) Electronic Records Management in Australia. *Records Management Journal*. 7(3), 1–13.
- [43] Cox R (1994) *The First Generation of Electronic Records Archivists in the United States: A Study in Professionalism*. New York: Haworth Press.

- [44] Public Records Office (2004) *E-Government Policy Framework for Electronic Records Management*. Available online at: <http://www.e-envoy.gov.uk/> (Accessed on 23.12.2011).
- [45] National Archives of Australia (2006) *Record Keeping*. Available Online at<<http://www.naa.gov.au/recordkeeping/>> (Accessed on 22 November, 2008).
- [46] UNESCO (2003) *Defining E-governance* Retrieved October 8th, 2009 from [http://www.portal.unesco.org/ci/en/ev.php\\_URL\\_ID=4404&URL\\_DO=DO\\_TOPIC&URL\\_SEC](http://www.portal.unesco.org/ci/en/ev.php_URL_ID=4404&URL_DO=DO_TOPIC&URL_SEC)
- [47] IRMT/World Bank (2003). Evidence-based Governance in the Electronic Age Global Forum Electronic Discussions Summary of Discussion One Information Technology, Electronic Records, and Record Keeping 27 – 31 January.
- [48] World Bank and IRMT (2002) Evidence-Based Governance in the Electronic Age: Case Study of the Management of Financial Records in Chile, WB/CS/10.
- [49] Harris V (2005) *The Record, the Archive and Electronic Technologies in South Africa*. South Africa: University of Witwatersrand.
- [50] Wamukoya J and Mutula SM (2005) Capacity-building Requirements for E-records Management: The case in East and Southern Africa. *Records Management Journal Emerald group*, 15 (2), 71-79.
- [51] Lipchak A & McDonald J (2003) *E-government and e-records: e-records readiness and capacity building, discussion paper*. Available at: <http://www.irmt.org/news/invitation.pdf>. (Accessed 22 January 2009).
- [52] Mutiti N (2002) “The Challenges of Managing Electronic Records in the Eastern and Southern Africa Branch of the International Council on Archives (ESARBICA) Region”. *ESARBICA Journal*, 21 (1), 57—61 .
- [53] Mokotekwa MC (2002) Film archives of national archives of Zimbabwe. *ESARBICA Journal*, 21: 56-58.
- [54] 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. Available online at: <http://siteresources.worldbank.org/EXTARCHIVES/Resources/Core%20Principles.pdf> (Accessed on 06.03.2019).
- [55] Van Reijswoud V & De Jager A (2006) E-Governance in the Developing World in Action: The Case of District Net in Uganda, *The Journal of Community Informatics*, Retrieved November 2, 2012, from <http://ci-journal.net/index.php/ciej/article/view/355/408>
- [56] Ssanyu L (2004) *Computerisation of Local Government Records*. A Project Report Submitted in Partial Fulfilment of the Requirements for the Award of the Post Graduate Diploma in Computer Science of Makerere University. Retrieved September 10, 2010 from <http://dspace.mak.ac.ug/bitstream/123456789/509/3/ssanyu-lawrence-cit-pgd-report.pdf>

- [57] The World Bank and IRMT (2003) Evidence Based Governance in the Electronic Age. Case Study Summaries, September 2003.
- [58] Weddi D (2005) *Using Information Systems to Manage Health in Uganda: 2004-2005 Annual Health Sector Performance Report*. Available at: [www.icconnectonline.org](http://www.icconnectonline.org) (Accessed 22 June 2009).
- [59] UNDP and SNV (2006) Localizing MDG'S by Improving Information Demand and Supply in Local Governance: A UNDP-SNV country engagement plan for Tanzania. Retrieved May 15, 2012 from <http://www.tz.undp.org/docs/prodoc%20localizing.pdf>
- [60] TANEDU (2009) Village Computer Project. Tanzania Commission for Science and Technology. The World Bank and IRMT (2003) Evidence Based Governance in the Electronic Age. Case Study Summaries, September 2003.
- [61] Chaligha A, Henjewe F, Kessy, A and Mwambe, G (2007) *Local Governance in Tanzania: Observations from Six Councils 2002-2003*, Special Paper 07.22, Mkuki na Nyota, Dar es Salaam.
- [62] Venkatesh V, Morris M, Davis G, & Davis, F (2003) User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478.
- [63] PMO-RALG (2007) *Local Authority Quartely Financial Report (Revenues and Expenditure):Instruction for Completion of the Reporting Forms FY 2007/08*. Available at:[www.mwanza.go.tz/kurasa/nyaraka.../report\\_instructions\\_0708.pdf](http://www.mwanza.go.tz/kurasa/nyaraka.../report_instructions_0708.pdf) (Accessed 12 June 2012).
- [64] Wade, M. and Hulland, J. (2004) "Review: The Resource-Based View and Information Systems Research: Review, Extension and Suggestions for Future Research," *MIS Quarterly*, (28: 1).
- [65] Lefuma, S. (2004) An Investigation into the Management of Electronic Records in the Public Sector in Lesotho. A Dissertation Submitted in Partial Fulfilment of the Requirements for the Award of the Master of Information Studies of University of KwaZulu-Natal, Pietermaritzburg (Accessed 21.08.2019) from [https://researchspace.ukzn.ac.za/bitstream/handle/10413/1957/Sejane\\_Lefuma\\_2004.pdf?sequence=1&isAllowed=y](https://researchspace.ukzn.ac.za/bitstream/handle/10413/1957/Sejane_Lefuma_2004.pdf?sequence=1&isAllowed=y)
- [66] Moloi, J. (2009) E-Records Readiness in the Public Sector in Botswana. *ESARBICA Journal: Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives*. 28. 10.4314/esarj.v28i1.44399.
- [67] Koontz, Linda D. (2003) ELECTRONIC RECORDS Management and Preservation Pose Challenges. (Accessed 21. 08. 2019) from [https://pdfs.semanticscholar.org/42ec/e237b612c81c3f68df817ffa546f9122556b.pdf?\\_ga=2.214364368.673471138.1566371845-33162235.1564481109](https://pdfs.semanticscholar.org/42ec/e237b612c81c3f68df817ffa546f9122556b.pdf?_ga=2.214364368.673471138.1566371845-33162235.1564481109)
- [68] Stephens,D.O. (2007) Records Management: Making the Transition from Paper to Electronic. Lenexa, Kansas. ARMA International, 2007. xvii, 292 pp. ISBN 978 1 93 1786 29 4. (Accessed on 21. 08. 2019) from [file:///C:/Users/HPUSER/AppData/Local/Packages/Microsoft.MicrosoftEdge\\_8wekyb3d8bbwe/TempState/Downloads/Katuu-DavidStephens\\_bookreview%20\(1\).pdf](file:///C:/Users/HPUSER/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/Katuu-DavidStephens_bookreview%20(1).pdf)