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Electronic Records Management Implementation: Factors Affecting Organizational Readiness

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Abstract

This paper discussed the factors affecting the readiness in implementing electronic .records management by organizations. The concept of records examined, and records were regarded as important resources that helped to support and provide evidence of transaction in an organization. Similarly, electronic readiness and electronic records management were looked at in the paper. Electronic records management was viewed as involving the use of Information and Communication Technology in planning, directing, controlling and other managerial activities related to the creation, maintenance, use and disposition of records. The theory of organizational readiness for change was also captured. The paper concluded by examining various factors that could affect the readiness of organizations in implementing electronic records management.

Key words: *E-readiness, E-records, Electronic records Management and Organizations.*

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INTRODUCTION

Records are regarded as important resources that help to support and provide evidence of transactions in an organization. International Records Management Trust (IRMT) (2003) and Kemoni (2008) added that records support effective transparency and accountability in decision-making process thus contributing to national development.

The World Bank (2006) and IRMT (2003) agreed that records are essential for the effective and productive functioning of private and public organizations. They assert that records document decisions and activities of government and other organizations, and serve as a benchmark by which further activities and decisions are measured and that without record, there can be no rule of law and no accountability (IRMT, 2003 and World Bank, 2006). In addition, without good records, organizations are forced to take decisions on an adhoc basis without the benefit of an institutional memory. The significance of records in organizations has been well documented in literature.

Simply put, records are defined as any paper, books, photographs, magnetic tapes, machine readable materials, microfilm, or other materials which document official actions, decisions, policies or procedures taken by an individual or organization. Traditionally, records are known to be paper-based, but the emergence of Information Communication Technologies (ICTs) has revolutionized the concept of records. ICTs' use helps to improve efficiency and effectiveness of administration in an organization, among other benefits. As regards the impact of use of ICTs in information management, many organizations have transformed the way they create, store, disseminate and use information. The result of this effect has now led to what we have as e-information and e-records in which Keakopa (2006) reported that their management (e-records and e-information) has now gained significant thrust in national development all over the world. Many organizations are now conducting their business activities by the use of different ICT platforms. Consequently more records are being created and generated electronically.

Tafor (2003) concurred that the reason for adopting ICTs are based on the advantages associated with modern information technology in enhancing records management in organizations as earlier mentioned. However, IRMT (2003) and Borglund (2006) noted that many organizations adopting ICTs and implementing records information management systems seem not to take record keeping requirements into account by their lack of preparedness or readiness. In spite of this, the need to understand and assess the challenges associated with management of electronic records has heightened the evolution of the concept of e-records readiness.

THE CONCEPT OF E-RECORDS

E-records (an abbreviation for Electronic Records) are the recorded information, documents or data that provide evidence of policies, transactions and activities carried out in an electronic environment (IRMT, 2004). E-records, according to Wamukuya and Mutula (2005), may be categorized as text file (files produced by word processing programmes or by other Software); data files (computer processable files that store numeric and sometimes textual information as quantitative values so that numbers can be manipulated using arithmetic processes); analogue audio and visual records (sound document and images to be played back); disaggregated data (information collected through remote sensing systems); databases (structured collection of interrelated data; machine instruction sets (records created by the action of intelligent machines); image files (records containing computer processable images that generally exist as hard copy before being converted into images) and digital documents (files consisting of numeric data, images, or sound recorded digitally in one uniform structure). Information and Communication Technology (ICT) use has given impetus to the generation of electronic records which help to support the day-to-day operations of many organizations like paper-based records.

According to Bearman and Trand (1997), e-records comprise such things as content, context and structure which are recorded information, document or data that provide evidence of policies, transactions, and activities carried out in electronic environments. Thus, it is implied that electronic records can be stored, transmitted or processed by a computer.

Similarly, Roper and Mallar (1999) viewed e-records as a digital record that can be manipulated, transmitted or processed by the use of computer system. It can therefore be argued that the term e-records may include any combination of text, graphics, data, audio, pictorial, or any other information representation in digital form that is created, modified, maintained, archived, retrieved or distributed by a computer system. Unlike paper records where decisions on their management may be delayed, decision on electronic records, their capture, storage and disposition may have to be taken at the time of their creation.

Mutula and Ojedokun (2001) in their assessment of impact of e-records noted that e-records support business functions and are critical for the assessment of organizational performance in addition to providing essential evidence of organizational activities, transactions and decisions. E-records have introduced many challenges to Archivists and Records Managers many of whom are unaware of the numerous issues pertaining to the creation, storage and retrieval and dissemination of such records.

E-records management, on the other hand, as earlier observed, is newly emerging in parallel with the invention of Information Communication Technologies. It specifically refers to the application of records management principles in an electronic environment. A broader look at the issue of e-records management defines it as the planning, controlling, directing, organizing, training, promoting and other managerial activities/functions related to the creation, maintenance and use, and disposition of records using Information Communication Technologies (ICTs) to achieve adequate and proper documentation of an organisation's policies and transactions and effective and economical management of agency operations (Dearstyre, 2002; Wamukoya and Mutula, 2005).

As earlier observed, records have been used traditionally as documentary sources which have the characteristics of evidence for the applications, providing internal and external communication of the institutions (Kunis, Runger and Schwind, 2007; Rossenfield and Morville, 2002). Today, the utilization of electronic records is increasing swiftly. In a study conducted by Archives and Records Managers and Administrators (ARMA) in 2008, it was reported that more than 90% of the records in organizations were produced in the electronic environment. It is considered that the communication through electronic mail, which started to be used in the 1970s, contributed to this high rate (ARMA, 2008; Sandburg and Wallin, 2007).

Thus, e-records management refers to the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records including the process for capturing and maintaining evidence of information about business activities and transactions in the form of records in electronic format (Roper and Millar, 1990).

E-RECORDS READINESS AND E-RECORDS MANAGEMENT

By definition and scope, e-readiness and e-records readiness are distinct concepts but highly complementary and related terms. In a way, e-readiness can be said to be a precursor to e-records readiness.

Choncri et al., (2003) posited that e-readiness is a relatively new concept that has been given attention due to the dramatic advances in the use of ICTs, more particularly the rapid rate of internet penetration throughout the world in business and industry. E-readiness therefore refers to a society that has the necessary physical infrastructure and a strong legal policy and regulatory framework to competitively engage in the global information age (Bridges, 2001). The term is used to evaluate the breadth and depth of the digital divide between the developed and the developing world's during the later part of the 1990s (Wamukoya and Mutula, 2005). As put by Little and Bose (2004), e-readiness refers to the degree which a country is prepared to anticipate in the networked world by assessing its advancement in areas that are most critical to the adoption of Information and Communication Technologies.

Bridges (2001) reported that an e-readiness assessment tool called Readiness Guide for Living in the Networked World was developed by a public policy advocacy group known as the Computer System Policy Project (CSPP) in 1998. According to Bridges, CSPP defined e-readiness with respect to a community that has high-speed access in a competitive market; with constant access and application of ICTs in schools, government offices, business, healthcare facilities and homes; user privacy and online security, and government policies which are favourable to promoting connectedness and use of the network. Since this period, there have been a number of similar organizations from technologically developed world that developed macro e-readiness assessment methodologies. These include McConwell International (MI), United Nations Development Programme (UNDP) and others. Each of these e-readiness assessment methodologies uses a different definition of e-readiness.

In this regards, Doktor (2002) observed that e-readiness represent the multiple levels of ICT development and the exact definition of what constitutes e-readiness and is still open for debate. As declared by him, there are many degrees of e-readiness and each could include any one or more than one of the following activities: Using e-mail as the most preferred communication method; using a web site for internal and external communications; selling goods/services using the internet, making travel arrangement, using online internet services; funding and purchasing computer equipment and software, supplies and even services through a company website; sending electronic invoices to customers and receiving electronic bills from suppliers and electronically paying and receiving payments. The choice of e-readiness tool depends on the purpose and goals for which a particular assessment is meant to achieve.

Research findings also indicate that there are variations among countries as far as their e-readiness levels are concerned. In African continent, South African is ranked as the most advanced as far as policy and strong leadership with regards to electronic readiness.

Consequently, e-records readiness is viewed as the depth or break or capacity of organizations in having the required institutional, legal framework, ICT infrastructures, achieved on a systematic records and information management programme, International Records Management Tool (IRMT) (2003) reported. According to IRMT, electronic records readiness is simply aimed at measuring the extent to which organizations have e-records management systems towards ensuring that e-records, like traditional paper records counterpart are captured, managed and conformed to the obligatory record keeping best practices so that records are protected for informational and evidential purposes or as reliable evidence.

E-Records Management

Electronic Records Management has emerged in parallel with the evolution of ICT. It is the application of records management principles in an electronic environment. Dearstyne (2002) and Wamukoya and Mutula (2005) described E-records management as the planning, controlling, directing, organizing, training promoting and other managerial activities related to the creation, maintenance, use and disposition of records using Information Communication Technologies. This is to achieve adequate and proper documentation of an organisation's policies and transactions and effective and economical management of agency operations.

At the initial stage of evolution of records management practice, records were purely paper-based. But today, the application of e-records management has upturned the stage in the form of records in electronic format. The importance of E-records management in administration in general has been commended. IRMT (2003) remarked that in an electronic age, sound records management systems are critical to the public sector so as to be accountable and transparent as well as to improve services to the governed. Well-managed e-records systems provide a strong foundation for enhancing accountability, transparency, democratic governance and poverty eradication among others.

THEORY OF ORGANISATIONAL READINESS FOR CHANGE

Organization readiness is a shared psychological state whereby organizational members feel committed to implementing an organizational change and confident in their collective abilities to do so. It is considered a critical cursor to the successful implementation of complex changes in organizational setting. Kotter (1996) noted that there is a suggestion that failure to establish sufficient readiness could account for one-half of all unsuccessful, large-scale organizational change efforts. Change management experts have prescribed various strategies to create readiness by unfreezing existing mindsets and creating motivation for change. According to Weiner (2009) these strategies include highlighting the discrepancy between current and desired performance level, formenting dissatisfaction with the status quo, creating an appealing vision of a future state of affairs, and fostering confidence that this future state can be achieved. Findings indicate that organizational readiness for change has not been extensively subjected to empirical study unlike individual readiness for change. Organizational readiness for change is both a multi-level and a multi-faceted construct.

Readiness, as Weiner (2009) described, can be more or less present at the individual, group, unit, department or organizational level. It can be theorized, assessed, and studied at any of these levels. However, Klein and Kozlowski (2000) observed that organizational readiness for change is not a homologous multi-level construct. That is, the construct's meaning, measurement and relationship with other variables differ across levels of analysis.

Weiner, Amick and Lee (2008) conceptualized organization readiness as organizational members' shared resolve to implement a change (change commitment) and shared belief in their collective capability to do so (change efficacy). Similarly to Bandura's notion of goal commitment, change commitment refers to organizational members' shared resolve to pursue the courses of action involved in change implementation. In implementing a change which is usually a team sport, problems may arise when some feel committed to implementation while others may not. In this regard, Herstovitch and Mayer (2002) observed that organizational members can commit to implementing an organizational change because they want to (they value the change) because they wish to (they have little choice) or because they ought to (they feel obliged). Commitment based on "want to" motives reflects the highest level of commitment to implement organizational change. Implementation of a change requires a collective or conjoint action among interdependent individuals and work units.

Change efficacy, as described by Bandura (1997), refers to organizational members' shared beliefs in their collective capabilities to organize and execute the courses of action involved in change implementation. It can be higher when people share a sense of confidence that collectively they can implement a complex organizational change.

Though it is noted earlier that organizational readiness for change is a psychological term, others, however, describe it in more structural terms, emphasizing the organisation's financial, material, human and information resources (Bloom, Devers, Wallace and Wilson, 2000).

In his own view, Weiner (2009) opined that organizational readiness for change is difficult to generate. However, he admitted that some theories like motivation and social cognitive theories suggest several conditions or circumstances that might promote it. These conditions, according to him, include change valence (value of a change or change as a necessity), contextual factors such as organizational culture policies, structure, resources e.t.c. and informational assessment which include task demands, resource availability and situational factors.

Finally, it is important to note that organizational readiness for change is conceptualized here as a shared team property that is, a psychological state that organizational members hold in common.

FACTORS AFFECTING ELECTRONIC RECORDS MANAGEMENT READINESS IN ORGANISATION

Organizational factors such as governance, culture, and qualities of leadership have a significant impact on the adoption of electronic records management in organization (McGrath, 2006). It is evident that the success of electronic records management depends crucially on complex, multidimensional interaction between the technology and the individuals and the organizational environment where it is situated. In general, organisations that promote collaboration and trust and where autonomy and flexibility are encouraged and are more likely to succeed (Nowinski et al., 2007)

Success also occurs in organisations that are willing to break the rules and are keenly aware of the values of its people, and recognize the need for controlled distruption as motivation to move from how things are to how things will be once the new system is in place (Buckingman and Coffman, 1999). It is important to consider that real change does not occur without disruption. Organisations that successfully implement new systems control the disruption by managing the transition closely along the way, not just at the beginning or at the end.

Leadership style is the foremost organizational factor that shapes organizational ability to accomplish change. Effective leadership is the only antidote to bureaucracy. In assessing an organizational readiness for electronic records management, close attention must be paid to whether the organisation's culture is compatible with electronic records management, whether the organization's leadership demonstrates a competence in responding to the challenges of complex change.

On a general note, many organizations are moving towards widespread adoption of ICT to improve efficiency and effectiveness of their tasks. The literature overwhelmingly support the idea that ICT and Electronic Records Management hold tremendous value for the organizational system. It is recognized that the entire current paper system needs to become electronic to provide the necessary information for quality, in addition to improving access to information and operational efficiencies. Despite this, however, there are some barriers or challenges that militate against readiness by organization for change to electronic records management. The factors are not sharply different from those challenges that hinder ICT implementation. These are briefly highlighted below:

Cost/Finance: The cost of funding a project is a determinant of its successful implementation. It is considered as the number one barrier to smooth transition or change to or adoption of E-records management. Organization may not be able to meet the financial requirement for technology acquisition to adopt electronic records management (Anderson, 2004).

Human factors issues could be another impediment to e-records management readiness in organization. This could be reflected in term of staff resistance to change, unfamiliarity with computers, fear of computer and lower education levels of some personnel. In a similar study carried out by Cherry (2008) on factors determining the adoption of technology in Hospital it was reported that human factor ranked as the third barrier.

Staff training is another potential inhibit to e-records management readiness in organization. This includes issues such as cost and time involved for training, quality of training programme, training temporary staff, on-going training and training for outside entities such as consultants to use the system.

CONCLUSION

Records play vital role in the life of both an individual and corporate organisation or institution. They are better described as indispensable factors in achieving success. Records could be printed manual or digital/electronic. An organisation could employ the use of both formats in its daily affairs. Such a practice would be called an hybrid records management system. The invention of use of information technology, whose advantages surpass manual system, has engendered many organizations to adopt electronic records management. However, some factors are germane that could mar the preparedness or readiness of organizations to shift from paper-based records management to digital records management. Paramount among these factors are human in terms of attitudes and skins and financial requirements.

These have been responsible for lack of interest by some organizations to consider migration to electronic records management. As the literature reviewed indicates, developing countries, except South Africa, are still far behind in implementing e-records management and it is hoped that successful implementation of ICT project will act as a strong foundation for e-records management readiness.

Another major challenge that constitutes a factor in this discourse is the implementation processes. Concerns about implementation processes include choosing the right system, finding systems that are non-complex and user friendly, and converting from paper to electronic data. The compatibility of electronic records system with other systems within the facility could also pose a challenge.

Other barriers/factors identified in literature that are consistent with aforementioned are training concerns (Brookstone, 2004), complex systems that are difficult to navigate either because of hardware or software problems (Smith et al., 2005). Privacy and Safety of records (Bates and Gawande, 2003), difficult

implementation process (Ash et al., 2003), leadership styles, culture, bureaucracy and attitudes (Gichoya, 2005), fear by leadership that technology will break the traditional decision in making barriers, slowness in the adoption of ICTs in general, space problem etc.

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