

## Chapter XVII

# Digitization Initiatives and Knowledge Management: Institutionalization of E-Governance in Teaching, Learning and Research in East African Universities

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### ABSTRACT

*Digitization initiatives and Knowledge Management have become a part and parcel of each other in the changing global information society. Where as Knowledge Management (KM) comprises a range of practices used by organizations to identify, create, represent, and distribute knowledge, digitization initiatives refer to either jointly or collaborative efforts to translate existing library holdings whether in print, graphical, audio or combination of all, into digital format commonly known as electronic resources. Digitization initiatives have become a corner stone for KM in today's electronic environment. The term 'digital library' emanates from 'digitization' referring to the libraries where some or all of the information sources are available in electronic format and are made available electronically over the Internet for user access. East African university libraries, through digitization should provide coordinated access to digital information contained within their libraries creating conducive electronic environment in all universities for access to e-resources and provision of universities' generated literature on-line to users outside campuses. Furthermore, incorporating data mining techniques, access to these resources could*

*be improved and the system could be made more efficient in making intelligent decision. The chapter discusses the problems of digitization, challenges and future opportunities for East African university libraries with focus on collaborative efforts and strategies backed up with policies for investments in ICTs training and integration of ICTs into the core university activities for effective Knowledge Management (KM) and information dissemination. It is argued in the chapter that digitization of library information will add value to more effective university KM, information access and use in multidisciplinary fields including local content.*

## **INTRODUCTION**

Knowledge Management (KM) (which according to Wikipedia comprises a range of practices used by organizations to identify, create, represent, and distribute knowledge) activities are worldwide; in industries, organizations, institutions and involve building databases, establishing libraries, building intranet, developing training program fostering collaboration and sharing of resources and best practices among institutions and organizations. The ICTs being the major facilitators in KM, university libraries have undertaken some of the most significant digitization initiatives in the past 25 years (Haule, 2007) for better management and dissemination of resources. The application of ICTs in KM has also been integrated in national strategies, policies and implementations processes as part of e-governance practices. The acquisitions of computers and associated software, faxes and modems, scanners, creation of intranets, and searchable Online Public Access Catalogues (OPACs) particularly in university libraries signified the beginning of advanced knowledge management and implementation of e-governance in higher learning institutions in East Africa. Developments in the aforesaid aspects have enabled the higher learning institutions to implement digitization of both implicit and explicit knowledge in libraries. The intranets for example in many universities have become powerful tools of communication of knowledge and knowledge base. They have become portals for

sharing information among universities, forums for discussions and so on.

As stated above, KM comprises of elements of information acquisition, creation, renewal, archival, organizational, dissemination and sharing. KM in higher learning institutions focuses on the sharing of information among themselves and other institutions and community outside them for the purpose of enhancing learning, research, consultancy and outreach activities. To meet these capabilities ICTs have bridged the gap that existed before in the accomplishment of these tasks. One development that has been made possible in the path to achieve the information sharing has been the possibility to turn implicit and explicit knowledge into electronic formats for easy of archival, processing, dissemination and sharing. This is digitization.

There have been many digitization projects and initiatives running over the world and many initiatives have provided digital information in different formats. There are also private digital collections such as those being maintained by DIALOG<sup>1</sup>, Mead Data<sup>2</sup> and Micro media<sup>3</sup> that could offer a lot of opportunities in information access. East African Universities and research institutions together can explore the potentials of accessing and subscribing to world scientific and social databases offered by DIALOG, Mead Data and Micro media companies. DIALOG offers online information and retrievable databases to private, academic and business corporations. Individually though it is unlikely for East African

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