

# Challenges and Opportunities in Building a Successful Digital Library in Developing Countries: Mekelle University, Ethiopia - A Case Study

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## ABSTRACT

The present research work describes the use of the electronic resources by the teaching community at Mekelle University, Ethiopia. The survey was conducted by using questionnaires to collect the data. The questionnaires were administrated to total 1516 on duty teaching faculties of seven colleges. Including the College of Natural and Computational Sciences, the College of Veterinary Medicine, the College of Health Science, the College of Law and Governance, the College of Business and Economics, the College of Language and Social Sciences, College Dry Land Agriculture and Natural Resources as well as nine regular institutes including; the Ethiopian Institute of Technology, the Mekelle Institute of Technology, the Institute of Paleo Environment and Heritage Conservation, the Institute of Pedagogical Sciences, the Institute of Geo-Information and Earth Observation Sciences, the Institute of Environment and Gender Development Studies, the Institute of Population Studies, the Institute for Climate and Society, and the Institute for Water and Environment at Mekelle University. The survey also examines the purpose of use, frequency, difficulties, and availability of electronic information resources subscribed by the Mekelle University Digital Library. Finally, the data was interpreted, concluded, and suggestions have been given for improvement of electronic information resources at library web portal.

## KEYWORDS

E-Journals, Electronic Information, E-Publishing, E-Resources, ICT, Information Services, Information Technology

## INTRODUCTION

Computer and information communication technology has entered in all the aspects of human life. Libraries are not excluded from these transformations. The use of information technology has influenced work procedures and approaches in librarianship. Libraries now use information technology for improved services provision and to satisfy diverse user needs. Libraries have transformed into digital and virtual libraries where books, journals, and magazines have been transformed into e-books, e-journals and so on. As well as reference materials like encyclopedias, dictionaries, handbooks, maps and atlases and so on as well as abstracting and indexing services are also available online. ICT increased global dissemination of information to individuals most especially to researchers at all the branches of knowledge. Electronic resources can now easily be made available and accessible to remote areas. Electronic resources solve storage problems and control the flood of information. There was a great need to study the use of electronic resources and identify factors that hinder their use among academic staff at Mekelle University.

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## BACKGROUND OF THE STUDY

Roberson (2005) defined a library as an institution that manages the intellectual products of society and processes them in such a manner that the individual can readily gain access to them. Access to information through the Internet has changed the role of libraries. Libraries now have both printed document as well as electronic information resources in their collection. The electronic documents can be stored, accessed, and delivered as and when required; therefore, the services of libraries are not confined within the four walls but are integrated into local, regional, national, and international networks. It is widely known that virtually all scholarly and academic journals, electronic databases, online library catalogues, grey literature and other relevant scholarly materials in all fields of knowledge are now accessible on the internet. Information explosion via Internet connectivity has considerably increased the number of electronic information resources available on the web. E-information resources have enhanced accessibility, increased usability, effectiveness and established new ways for information users in using information for more productivity in their endeavors. The value and use of information resources, particularly e-resources, have increased with time. "Therefore, the use of e-resources by users, especially by the Academic staff members of Academic institutions generally depends on the skills of each user to locate discrete knowledge elements."

According to the Final Report of the American Library Association Presidential Committee on Information Literacy, the information learned user skill is being able to recognize when information is needed and can locate, evaluate, and use information resources effectively ACRL (1989). "In the 21<sup>st</sup> century library and information centers are using computer and information communication technology to acquire, store, process, and disseminate and use information resources around the world." "So the preference of the teaching community to use the e-resources led Mekelle University Libraries to subscribe to 70 full text and bibliographic databases." Electronic information resources have become very important for teaching learning and research and development at universities. Thus, the present research has been undertaken to know the level of awareness, use, and availability of e-resources according to the demand of various branches of knowledge at Mekelle University. Thus, the present survey was an attempt to evaluate e-resources awareness, attitude and usability by the academic staff members at Mekelle University and to find out problems encountered by the teaching community.

## LITERATURE REVIEW

Meadow and Yuan (1997) as reported by Popoola (2008) state that, the information is a message that changes the recipient's knowledge base. This means that information increases the existing knowledge of the user significantly. The information resources and services available in academic and research libraries are therefore expected to be able to support the teaching and investigation activities of the parent institutions. Library electronic information resources are expected to be acquired, organized in retrievable formats and made accessible to the academic staff and researchers to conduct teaching and research activities. The ability of the academic libraries to carry out these functions effectively depends on availability and accessibility to information resources such as books, journals, research and technical reports, conference proceedings, theses, dissertations, periodicals, reference sources, microforms, ICT, and staff. Barllan, Peritz, and Wolman (2003) examine that, the most active users of electronic journals are the younger members of the teaching and research staff. Dilek-Kayaoglu (2008) state that, in research on the use of electronic journals by faculty at Istanbul University, revealed that majority of respondents supported the transition from print to electronic resources.

Rosenberg, (2005) states that the libraries are now investing heavily in electronic resources mainly academic libraries where users are exposed to various electronic resources outlets via the Internet. This development is noticeable in the developed nations of the world. African countries and other developing countries are still struggling to bridge the digital divide that is preventing them from the full benefits of the electronic era. However, several efforts have been made to lunch universities into

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