# Chapter 15
# Global Knowledge Networking (GKN) With Utilizing of Digital Libraries:
## A Proposed Model

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## ABSTRACT

*In Digital Libraries (DLs) as an innovative community environment, knowledge is nutrition, and the environment for knowledge sharing is the essential condition. As the knowledge is the heart of digital libraries, it is imperative for them to promote the innovation activities embodied by teaching and scientific research through an efficient knowledge-sharing environment. In digital environment, the role of knowledge has become even more significant. Moreover, DLs perform many knowledge-based activities, and by nature, the knowledge-sharing process is embedded in DL systems. These modern knowledge management environments need modern technologies in order to perform properly for end users and online researchers. Therefore, the aim of this chapter is to provide a model for global knowledge networking with utilizing digital libraries and artificial intelligence. The specific objectives are to describe a framework of digital libraries and concepts of Knowledge Management (KM). The chapter finds some significant overlaps between DLs and KM and integrates the knowledge-sharing process with DLs and artificial intelligence. The integration of KM and knowledge sharing can add value to develop a global knowledge networking process model so users around the globe can make use of this knowledge transmission.*

## INTRODUCTION

The digital revolution of the past few decades has had a radical impact on library practices in collecting, organizing, storing, retrieving, and disseminating information globally. With the advent and widespread use of computers, expert systems, and new artificial intelligence, libraries are now transforming their information handling activities into digital format. Nowadays, different phrases have appeared in the literature to describe the changing face of a library in the context of the adoption of technological innovations in library practices (Harter, 1997).

Developments in digital technologies and interoperability of systems enable cross-sectoral participation and harvesting of metadata, while the internet provides the delivery mechanism. Nowadays, organizations have encouraged creating digital material and converting existing material into digital format (Kumar, 2010).

On the other hand, digital library provides an excellent opportunity to widely disseminate our documentary heritage and greatly increase access to library collections as well as current research literature (Das, Sen, & Dutta, 2010). However, libraries provide knowledge to people, their role in the progress process is apparent. Libraries, especially digital libraries, plan to meet the information and knowledge needs of communities so; library managers and librarians increasingly accept the importance of knowledge for development. The role of knowledge and information on the day-to-day life of people is distinguished and digital libraries are more required.

The overwhelming growth of DLs has opened up new horizons in library and information science, addressing core requirements of the information age and the world of information technology, as well as new sub-areas like knowledge management. In digital environment, the role of knowledge has become even more significant. These modern knowledge management environments need modern technologies in order to perform properly for end- users and online researchers, so Knowledge sharing is seen as a central concept of KM, which focuses more attention on tacit knowledge. The tacit knowledge can be communicated through interaction, collaboration, and conversations in communities/networks of practice. Many approaches exist on which models of both DLs and KM have been built, but an integrated model of KM process and as a result, global knowledge networking with utilizing DLs and artificial intelligence can rarely be found in the literature. Some works have focused on KM issues in DL, but they do not represent the central theme of the present work (e.g. Chen, 1999; Rydberg-Cox et al., 2000; Hicks and Tochtermann, 2001).

Digital libraries and knowledge management are innovations, the implementation of which is still nascent in developing countries. However, they hold the promise of becoming key technologies for knowledge creation and management in the future (Upadhyay & Moni, 2010).

Bhatt (2010) believes that: "when libraries turn out to be hub of development activities, they cease to be silent, serious reading/learning centers. Librarians alone cannot organize the wide range of extension activities and outreach services. The development of information activities cannot succeed unless people own them. On the other hand, librarians need to be multi skilled. Besides, knowledge sharing has to be promoted in the libraries by outreach activities".

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