Chapter 6
Towards Arab Digital Libraries:
Opportunities, Challenges, and Requirements

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ABSTRACT

The rapid development of Information and Communication Technologies (ICTs) and the advent of the World Wide Web (WWW) in the 1990s and universally centralized digital media for information storage, organization, retrieval, and management have led to the emergence of the Digital Library, which, while not replacing the traditional library per se, has contributed to the creation of hybrid forms combining the characteristics and organizational structure of both the digital and the traditional library models. This chapter draws on existing literature to highlight the potential opportunities, which digital libraries offer to the countries of the Arab world, and to examine the challenges inherent in their development and how these might best be overcome. The chapter concludes that libraries in many Arab countries are still hindered by a severe lack of resources, trained and experienced staff, and adequate infrastructure, and these problems could severely undermine attempts to move towards digitizing libraries. It is the role of the governments of these countries, along with commercial organizations, information professionals, academic specialists, and other groups to acknowledge the benefits and opportunities offered by digital libraries and work together to make them a reality in the Arab world.

INTRODUCTION

The rapid development of Information and Communication Technologies (ICTs) and the advent of the World Wide Web (WWW) in the 1990s and universally centralized digital media for information storage, organization, retrieval, and management have led to the emergence of the Digital Library which while not replacing the traditional library per se, has contributed to the creation of hybrid forms combining the characteristics and organizational structure of both the digital and the traditional library models. Digital libraries or "hybrid libraries" (Al-Suqri & Afzal, 2007), providing access to both digital and print materials, have become reality throughout many parts of the world, driven by the growth in usage of the Internet and the ease with which information can be stored, disseminated and retrieved from the World Wide Web (Benejelloun, 2007; Bhattacharya, 2004). Moreover, "digital libraries are becoming a necessity in order to keep up the pace with the technological revolutions. Academic, special or public libraries all have to transform their functions, which are mediated by the digitization, so that services can be provided to users according to standards that have been changed because of digitization" (Al-Suqri & Afzal, 2007, p. 44).

There are different definitions of digital library, and most of the definitions have tried to encompass the various functions that are associated with the provision of various services in digital age (Al-Suqri & Afzal, 2007). Borgman et al. (1996) defined the Digital Library as follows:

Digital libraries are a set of electronic resources and associated technical capabilities for creating, searching, and using information. In this sense, they are an extension and enhancement of information storage and retrieval systems that manipulate digital data in any medium (text, images, sounds; static or dynamic images) and exist in distributed networks. The content of digital libraries includes data, metadata that describe representation, creator, owner, reproduction rights, and metadata that consists of links or relationships to other data or metadata, whether internal or external to the digital library.

The digital library as may be deduced from Borgman definition is virtual and its embrace of information and communication technologies entails decreased dependency on physicality. In other words, information no longer resides in a single access point. It also entails increased dependency on IT skills and technological know-how.

Another important definition by the former Digital Library Federation (now merged with the Council on Library and Information Resources). It defines digital libraries as organizations that

provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities.

In the Arab region, the developments in digital libraries have been modest. Elaiess reported in 2009 that although a number of libraries and information services in Arab countries were using electronic resources, "hardly any special library has started the design of digital library services" (p. 1). This mirrors the situation in other parts of the developing world: Kaur and Singh (2005) observed that, in developed countries, 60% to 70% of information is available in digital format whereas in developing countries like India, this availability is 2.5%. This is largely related to the "digital divide" between developed and less-developed parts of the world. It was reported in 2004 that the Middle East had the lowest number of Internet users in the world, at 5.12 million (Wheeler, 2004). This is changing however: by 2008, more than 38 million users in the Arab re-

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