Chapter XXXV
An Empirical Analysis of the Utilization of University Digital Library Resources

Hepu Deng
RMIT University, Australia

ABSTRACT

Digital resources are readily available and easily accessible with the rapid development of information and communication technologies nowadays. These digital resources, however, have not been fully utilized as demonstrated in the literature. This chapter presents a study based on an online survey in a university environment aiming to investigate the extent to which digital resources are utilized, and to identify the critical factors for the effective use of digital resources. The study reveals that the usage of digital resources is significant in higher education, and the utilization of digital resources is very much dependent on the users and purposes. The awareness and the quality of information are critical for the use of digital resources. The findings of this study shed light on the use of digital resources and help libraries better understand users’ perceptions and experiences of using digital resources services in university libraries.

INTRODUCTION

Digital resources are usually referred to databases, books, journals, newspapers, magazines, archives, theses, conference papers, government papers, research reports, scripts, and monographs in a digital form (Fox & Logan, 2005; Lesk, 2005). The rapid advancement of information and communication technologies has made digital resources readily available and easily accessible (Adams & Bonk, 1995; Agnew, Gray, Blocker, Ryan, & Smith, 2006; Koh & Kim, 2004; Liew & Foo, 1999; Moyo, 2004). This is, in particular, the case in tertiary education in which digital library resources have become a critical part of an integrated learning environment (Armstrong,
The popularity of digital resources is due to the tremendous benefits that digital resources can bring to individual organizations, as well as to the potential users of the digital resources. These benefits of accessing and using digital resources include (a) accessibility in a timely and multi-user manner; (b) availability free of time, stock, and space constraints; (c) richness and variety of resources available; and (d) easiness of search through latest search engines (Adams & Bonk, 1995; Armstrong et al., 2001; Moyo, 2004). As a consequence, tremendous efforts have been made for the acquisition, management and effective use of digital resources, resulting in a rapid increase in volume and variety of collections of digital library resources (Brenner, 2005; Fox & Logan, 2005; Moyo, 2004; Roberts, 1995; Zhang, Shen, & Ghjenniwa, 2004; Zhang & Haslam, 2005).

There is, however, a widely held view that digital resources are not fully utilized in organizations nowadays (Fox & Logan, 2005; Jain & Babbar, 2006; Rehman & Ramzy, 2004). The inability to effectively exploit the potential of digital resources is generally attributed to the lack of awareness, the lack of competence in using digital resources, the lack of training, and the insufficient time to use the service (Adams & Bonk, 1995; Rehman & Ramzy, 2004; Roberts, 1995; Shuler, 2007). Existing research focuses more on examining and exploiting the potential of providing users with an enhanced integrating access to value-added information (Liew & Foo, 1999; Pancheshnikov, 2007; Xie, 2006). There is, however, little research into the effective use of digital resources from a user’s perspective (Armstrong et al., 2001; Tsakonas & Papatheodorou, 2007). Although it is important for information professionals to provide better services, it is not sufficient to meet the needs of the users if the perception, expectation, experience, and behaviour of the users are not understood well.

This chapter presents an empirical study for investigating the extent to which digital resources are utilized, and identifying the critical factors for effectively using digital resources in a university environment. By conducting an online survey in a university environment, this study aims to understand the perception, expectation, experience and behaviors of users in their use of digital resources. The survey has revealed a number of interesting observations related to (a) the access and use of digital resources, and (b) the critical factors for effectively using digital resources. These findings contribute to a better understanding of the use of digital resources in a tertiary education environment and help libraries better understand the perceptions, experiences and behavior of users, with respect to the use of digital library service.

**RESEARCH METHODOLOGY**

Questionnaires are structured instruments that provide an effective means for gathering data from a potentially large number of respondents (Chauvel & Desprs, 2002; Yin, 2003). A well-designed questionnaire can gather both overall and specific opinions, experiences, and attitudes of its targeted population on a specific research topic. To understand the extent to which digital resources are utilized and to identify the critical factors for using digital resources, this study employs a questionnaire method based on a comprehensive literature on the domain of digital library and information services.

The questionnaire is developed to find out the answers to following questions:

- Who uses digital resources?
- How often do the users use digital resources?
- Where do the users use digital resources?
- What range of digital resources do the users use?