Chapter 12 New Tools, Gadgets, and Devices in Libraries

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ABSTRACT

The internet explosions, proliferation of online resources, and the advent of free and open access resources in the last two decades provided the much-needed impetus for libraries to inject new energy into providing quality delivery of its services. More and more applications and databases are being provided to the libraries as mobile products. This chapter summarizes, to some extent and expatiate to a large extent, the various new tools, devices, and gadgets operational and adaptable to various aspects of librarianship. After an exploration of how these devices and tools work, and the different types, the author provided a comparison of current popular products, followed by a look at some of the new tools, gadgets and devices that we have available (to and around us). With the awareness that we are in the midst of an ongoing information revolution, the internet and personal computing have tremendous potential to transform library services. All tools, devices, and gadgets will be analyzed with an eye towards the future, cost-effectiveness, performance, and functionality.

INTRODUCTION

The proliferation of electronic information; the dwindling budget for acquisition of library stocks; the desire to access materials in remote locations, the quest for collaboration, partnerships and resource sharing; and the ever increasing cost of preserving analogue materials; and so on, are some of the forces that prompted digitization of archives, records and library services.

New tools, gadgets and devices in libraries are offshoots of this library's digitization process. By definition, digitization of information materials is the process of converting analogue information to a digital format. It is one of the newest methods of managing information in this "information age", whereby information technology has assisted in making information accessible to people even in their homes. Therefore, traditional library materials in form of books, papers, manuscripts, documents, etc. "converted" into electronic formats, images (such as photographs and maps) are converted into digital

DOI: 10.4018/978-1-5225-9034-7.ch012

representation using some type of scanning device(or digitizer) so that they can be displayed and/or manipulated on a screen. (Pandey & Misra, 2014)

Today's hottest web and mobile technologies are offering libraries a new world of opportunities to engage patrons. Ultra-popular social media websites and apps combined with the availability of affordable cloud-based services and the evolution and adoption of mobile devices are enabling librarians to share and build communities, store and analyze large collections of data, create digital collections, and access information and services in ways never thought about before. Libraries have become technology leaders by integrating cutting-edge tools to enhance users' experience. It's not enough to redesign the library website. Best practices mean developing user personas and following usability strategies to produce user-informed designs. New digital collections are stored in the cloud and mobile applications are developed around them. Librarians are claiming their venues on location-based mobile networks, developing bleeding-edge augmented reality applications, and participating in semantic web efforts.

Furthermore, it is a known fact that libraries have witnessed significant changes in recent years. This change which is brought about by information and communication technologies has impacted the mode of providing information services. The traditional methods of information dissemination have given way to electronic means of communication while the developments and application of ICT in library operations have improved and facilitated the dissemination of information and access; it has equally provided new roles in information provision, dissemination and transfer libraries and librarians no longer play a passive role, rather they assume an active role. The librarian is no longer a custodian of books but the gate-way to a myriad of information sources. According to Haber (2011) posits that while providing books was a standalone function for libraries throughout the last few centuries, their offerings have evolved with the digital age to meet the changing needs of their varying categories of patrons.

Specifically, computer technology has created a revolution with new advances, new ideas and new users for machines that were once considered useful for handful of tasks and industries. Thus, with the scope and ubiquity of computer technology, libraries and librarians need to remember that effective and relevant library services are driven by user needs. These technological advances have altered the more traditional forms of information provided by libraries. With the advent of technology, libraries are no longer the way we imagine with books on row upon row in a building with a person sitting in front. The world of library and librarian has changed by digital technology.

Forward-thinking librarians are actively experimenting with and incorporating these new technologies into their digital strategies.

LITERATURE REVIEW

A literature review is a body of text that aims to review the critical point of current knowledge on a particular topic. It seeks to describe summarize, evaluate, clarify and integrate the context of primary reports. For any scientific investigation it is necessary to have information about similar studies carried out earlier. The researcher has also carried our prior art search for the present study. While searching the prior art, the researcher has consulted library and information science abstract (LISA) E-LIS (E-prints in library and information science) an online OA archive for library information science, DLISE (Digital library of information science and technology) and other relevant websites.

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