## Chapter 5

## Responsive Library Website Design and Adoption of Federated Search Tools for Library Services in Developing Countries

Michael Opeoluwa Fagbohun (Covenant University, Nigeria), Nwanne Mary Nwokocha (Covenant University, Nigeria), Victoria Itsekor (Covenant University, Nigeria) and Oyeronke Adebayo (Covenant University, Nigeria)

Source Title: E-Discovery Tools and Applications in Modern Libraries

Copyright: © 2016 | Pages: 33 DOI: 10.4018/978-1-5225-0474-0.ch00

## **Abstract**

Library attention has been shifted away from only physical services, since much of its operations are now going virtual, and almost everything about library activities now compete for online attention. Librarians have no choice than to conform to the trend since the major concern of library is to meet the need of its clienteles at all cost. Moreover, the paradigm shift in information ecosystem is now e-discovery tools. Responsive website design and federated search tools are part of the tools adopted to meet and satisfy information needs of library users in this era of information exploration. This chapter looks at the concept of responsive website design and federated search, components of responsive websites design, need for adoption of responsive website design for libraries in developing countries, federated search products and vendors, benefits of federated search technology, dichotomy between open search and federated search, adoption of federated search tools in developing countries, issues to consider with the federated search tool.

## Background

Library and information science have been witnessing a technological development over a long period of time, beginning from the introduction of computers and the first large-scale online catalogues developed at Ohio State University in 1975 and the Dallas Public Library in 1978 (Borgman, 1996). Online catalogues have been in existence long before the development of websites, but according to Borgman (1996), they were difficult to use because their design did not incorporate sufficient understanding of searching behavior. Beginning from the late 1980s to the early 1990s, libraries were faced with transformation driven by information technology; the emergence of the World Wide Web in the mid-1990s was possibly the clearest indication of this shift. At the beginning of the 21st century, libraries were besieged to adopt modernization and to recognize the implications and meanings of transformation (Lynch, 2000). Earlier than the development of the World Wide Web, librarians and information professionals have acknowledged the essence of creating a common interface to navigate diverse information resources with a single search. The global search and retrieval protocol, Z39.50, was initially proposed in 1984 as a standard of interrogating bibliographic databases by the American National Standard for Information retrieval/ National Information Standards Organization (ANSI/NISO). Since then, it has gone through three editions, the newest of which was launched in 1995 (Kumar Sanaman & Rai, 2008).