



A systems approach to conduct an effective literature review in support of the use of internet resources

Giddaiah D

Assistant Librarian Senior Scale, Mysore University Library, Univeristy of Mysore, Mysore, Karnataka, India

Abstract

The purpose of this paper is to review the literature regarding the use of Internet resources by research scholars in Karnataka universities. The literature suggests that research information is used routinely by the research scholar. Internet resources have also become an effective and efficient mechanism for the retrieval, receipt, transfer of data, information and knowledge. Internet resources have become popular amongst users partly because of their ease of access, and ability to be accessed even from a distance at any time.

Keywords: literature review, library and information science, user study, internet resources, e-resources

Introduction

These Internet-based resources affect internal library use; particularly these resources can be accessed through the Internet. Academic libraries have changed dramatically from the traditional mode of system to Internet-based information sources with the implementation of sophisticated technologies used in the 21st. The investigator has made an effort to review the literature published on the Internet-based information source and has consulted several primary and secondary sources of information for review of literature pertaining to the study. The investigator has collected literature about the topic from various databases like Library & Information Science Abstract (LISA), EISA, Emerald, EBSCO, ISA and other open-source online databases from 2000 to 2014. Most relevant and recent studies on the use of Internet information resources and on related issues were selected and studied in detail; a review has been prepared.

Use of Internet Resources

Davies, K. S. (2011) ^[6] demonstrates that there is an increasing emphasis placed on evidence-based medicine, and the use of relevant resources. She evaluates UK doctor's awareness and use of specified evidence-based medicine (EBM) electronic. Salisbury, L., & Smith, J. S. (2010) ^[15, 16] studies the publications by the campus researchers with an emphasis on the STEM (agricultural sciences, physical science, biological sciences, engineering and mathematics, etc.) disciplines at the macro level. The overall objective of the study was to provide evidence-based data from periodical use to assist with collection decisions and to identify collection strengths at the university level. Asemi, A., and Riyahiniya, N. (2007) ^[2] investigate the relationships between awareness and use of digital resources among students of Medical Sciences. The study finds though more number of students were aware of digital resources, but less number of them have used them and 62 percent were aware of offline databases, whereas only about 19 percent used them. Younger, P. (2010) contends to establish whether there are any significant differences in the ways and reasons why doctors and nurses seek out online. Thelwall, M., Li, X., Barjak, F., & Robinson, S (2008) ^[18] assess the web connectivity of research groups and highlights that Web connectivity seems to be particularly important for attracting overseas job applicants and to promote research achievements and capabilities, and the study contend that it can be useful for national and international governments to use webometrics to ensure that the web is being used effectively by research groups. Rao, M., & Mudhol, M. V. (2008) ^[14] argues that the web is becoming a major source of health information. He says that computer networks in general and the Internet in particular are likely to play more important roles in many aspects of medicine in the future. The study also says that for the healthcare professional and the health consumer, accessing accurate information on the web is not easy. Myers, G., Sunders, S., & Rogers, G. (2002) ^[12] describes that as part of multidisciplinary teaching and design team, the Witwatersrand Health Science Library (WHSL) has set a proactive intranet web based links to e- resources and multimedia that integrated in to the actual e-case studies and it appears that WHSL has designed a truly integrated and interactive web based resources intranet, with direct links from the actual curriculum material to the information resources themselves. Sharifabadi, S., Khosravi, A. A., & Zeinolabedini, M. (2009) ^[17] examine one of the most important factors challenging the issue of "information storage and retrieval" in the Internet environment is the lack of control on authorities, i.e. subject authority control. The study aim at examining the feasibility of subject authority control of Persian medical databases available on the Net and have randomly chosen 50 keywords

utilized by users searching databases for articles. Beck (2014) assesses behaviors and attitudes of young people looking for online health-related information and their level of trust in such information. The study investigates the characteristics of Internet users aged 15-30 years who use the Web as a health information resource and their trust in it, and the effect of such use on French young adults' behavior in relation to their medical consultations. The study concludes that young adults trust online information and consider the Internet as a valid source of health advice.

Use of E-Resources

Smith, B., & Scheuermann, R. H. (2011) ^[16] focused on ways in which ontologies can contribute to breaking down the barriers between different sorts of information relevant to the understanding and treatment of disease, ranging from information deriving from experimental biology and model organism research to clinical trial data and information of the sort contained in electronic health records. Kumar, V. (2011) ^[9] assess the library websites as a primary platform and one- stop portal for information services and how much library websites are effective in providing web-based information services. The study evaluates the library websites of the technological universities in south India on the basis of a relative weight checklist. Liekens, A. M., *et al.* (2011) ^[11] describe that the BioGraph, a data integration and data mining platform for the exploration and discovery of biomedical information. The platform offers prioritizations of putative disease genes, supported by functional hypotheses. They show that BioGraph can retrospectively confirm recently discovered disease genes and identify potential susceptibility genes, outperforming existing technologies, without requiring prior domain knowledge. <http://www.biograph.be> website Li, C., Courtot, M., Le Novère, N., & Laibe, C. (2009) ^[10] investigate the exchanging and sharing scientific results are essential for researchers in the field of computational modelling. BioModels.net defines agreed-upon standards for model curation. The study says that a fundamental one, MIRIAM (Minimum Information Requested in the Annotation of Models), standardises the annotation and curation process of quantitative models in biology and to support this standard, MIRIAM Resources maintains a set of standard data types for annotating models, and provides services for manipulating these annotations. Adler, P., *et al.* (2009) ^[1] describe that the explosive growth of biological data, stimulated by genome projects, has generated a parallel development of efficient computational approaches suitable for several biological research projects and that the continuous increasing of computing power in biological research places a threshold to the single host use and suggests an approach based on distributed computing. The study says that an emerging solution is grid technology, which allows organization to make better use of existing computing resources by providing them with a single, transparent, aggregated source of computing power. Yusuf, D. *et al.* (2012) ^[20] presents the Transcription Factor Encyclopedia (TFe), a new web-based compendium of mini review articles on transcription factors (TFs) that is found on the principles of open access and collaboration. The consortium of over 100 researchers has collectively contributed over 130 mini review articles on pertinent human, mouse and rat TFs. The study highlights notable features of the TFe website includes a high-quality PDF generator and web API for programmatic data retrieval. Vibert, Nicolas., *et al.* (2007) ^[19] explored the information-seeking behaviour of high-level research scientists in the context of ever-developing online bibliographic and documentary information (BDI) resources. The study obtained descriptive data from a nationwide sample of French neuroscience researchers and French neuroscientists often use online BDI resources instead of indexes and other print resources for bibliographic and documentary searches. Bhatt, S., & Rana, M. S. (2011) ^[5] evaluates the use of e-resource and considers the various factors of e-resources usage such as purposes, impact, importance, problems, acceptance, and satisfaction with e-resources; it applies a survey method to ascertain the present status of use of e-resources and study finds many aspects of e- resources use among engineering academics and reveals that academic staff as using many types of e-resources.

Internet Resources of Content Quality Indicator

Khazaal, Y., Chatton, A., Cochand, S., & Zullino, D. (2008) ^[7] evaluated the quality of Web-based information on the use of cannabis and addiction. The study investigated content quality indicators and three keywords ("cannabis addiction," "cannabis dependence," and "cannabis abuse") were entered into two popular World Wide Web search engines. The study assessed Websites with a standardized performa designed to rate sites on the basis of accountability, presentation, interactivity, readability, and content quality and uses "Health on the Net" (HON) quality label, and DISCERN scale scores to verify their efficiency as quality indicators. Of the 94 Websites identified, 57 were included. Most were commercial sites. Kloss, L., & Zhang, Y. (2003) ^[8] evaluate a real-time online interactive reference service and for this three data gathering methods were used. First, general usage statistics were generated electronically from the service provider. Second, patron evaluations were collected electronically. Third, questionnaires were mailed to the librarians who provided the service.

Scholarly Electronic Journals

Moghaddam, G.G. & Talawar, V. G. (2008) ^[12] investigate the use of scholarly electronic journals at the Indian Institute of Science. The study also finds that growing interest in electronic journals among the users at IISc and electronic journals were mostly used for research needs and PDF was the most preferred format. Swain, D. K. (2010) evaluates the level of electronic information services and intends to elicit the barriers in the use of e-information with recommendations for the improvement of services and usage of e-resources and the study finds that students express keen interest in the use of e-journals. Beno, D. (2009) ^[3] presents the extent of use of digital

resources by student's and researchers and the ratio of use between authorized electronic information resources provided by academic libraries, and the Surface Web.

Conclusions

Recent studies show the use pattern of web information resources, the use of web browsers and search engines, web references in the journal literature, the role of librarians in initiating the use of resources, new web technologies in the university library, and search engines for the discovery of resources. Some of the studies show the problems being faced by the users in accessing Internet resources, IT in sharing information, and Internet information-seeking channels. Some of the studies find solutions through going resource sharing and networking and also through consortia based subscriptions. Attempts were also made to show that how WBKMS will support the creation, organization, storage, dissemination and utilization of the institution's digital knowledge management system for university libraries along with their key advantages. On the whole this study is of the opinion on that review of literature gives glimpses of recent development in the use of Internet information resources in general and in particular to Biological sciences and related areas both in India and abroad.

References

1. Adler P, Kolde R, Kull M, Tkachenko A, Peterson H, Reimand J *et al.* Mining for coexpression across hundreds of datasets using novel rank aggregation and visualization methods. *Genome biology*,2009;10(12):139.
2. Asemi A, Riyahiniya N. Awareness and use of digital resources in the libraries of Isfahan University of Medical Sciences, *Electronic Library*,2007;25(3):316-327.
3. Beno D. Internet Use in Israeli Universities: a case study. *IFLA journal*,2009;35(4):313-321.
4. Bhat SVR, Sampath Kumar BT. Web citation behaviour in scholarly electronic journals in the field of library and information science. *Webology*,2008;5(2):15.
5. Bhatt S, Rana MS. E-information usage among engineering academics in India with special reference to Rajasthan State. *Library Hi Tech*,2011;29(3):496-511.
6. Davies KS. Physicians and their use of information: a survey comparison between the United States, Canada, and the United Kingdom. *Journal of the Medical Library Association*,2011;99(1):88.
7. Khazaal Y, Chatton A, Cochand S, Zullino D. Quality of web-based information on cannabis addiction. *Journal of drug education*,2008;38(2):97-107.
8. Kloss L, Zhang Y. An evaluative case study of a real-time online reference service. *Electronic Library*,2003;21(6):565-575.
9. Kumari Adithya H, CM Madhusudhan, Hydar Ali. A bibliometric study of world research output on information literacy in the field of library and information science during 1999-2013, *e-Library Science Research Journal*,2015;3(9):1-10.
10. Li C, Courtot M, Le Novère N, Laibe C. BioModels. net Web Services, a free and integrated toolkit for computational modelling software. *Briefings in bioinformatics*, 2009.
11. Liekens AM, De Knijf J, Daelemans W, Goethals B, De Rijk P, Del-Favero J *et al.* BioGraph: unsupervised biomedical knowledge discovery via automated hypothesis generation. *Genome Biol*,2011;12(6):1-12.
12. Moghaddam GG, Talawar VG. The use of scholarly electronic journals at the Indian Institute of Science: a case study in India. *Inter-lending & Document Supply*,2008;36(1):15-29.
13. Myers G, Saunders S, Rogers G. Beyond the virtual library: electronic curriculum Web resources. *Electronic Library*,2002;20(6):473-480.
14. Rao M, Mudhol MV. Towards Quality of Health Science Information on the Internet. *DESIDOC Journal of Library & Information Technology*,2008;28(6):27-33.
15. Salisbury L, Smith JS. The use of Web of Knowledge to study publishing and citation use for local researchers at the campus level. *Collection Management*,2010;35(2):69-82.
16. Salisbury L, Smith JS. The use of Web of Knowledge to study publishing and citation use for local researchers at the campus level. *Collection Management*,2010;35(2):69-82.
17. Sharifabadi S, Khosravi AA, Zeinolabedini M. A Study on the Feasibility of Subject Authority Control of Web-based Persian Medical Databases: An Iranian Experience. *International Journal of Information Science & Management*,2009;7(2):1-14.
18. Thelwall M, Li X, Barjak F, Robinson S. Assessing the international web connectivity of research groups. In *Aslib Proceedings*,2008;60(1):18-31.
19. Vibert N, Rouet JF, Ros C, Ramond M, Deshouillieres B. The use of online electronic information resources in scientific research: The case of neuroscience, *Library & Information Science Research*,2007;29(4):508-532.
20. Yusuf D, Butland SL, Swanson MI, Bolotin E, Ticoll A, Cheung WA *et al.* The transcription factor encyclopedia. *Genome biology*,2012;13(3):R24.