An Analysis of Health Science College Library Web Portals In Karnataka: A Literature Review

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Abstracts - The existing literature has been collected and reviewed with an eye towards evaluation criteria for printed. It is observe that quit a good number of core research articles were found in these areas. The focus of study is to web portals of health science institutions in Karnataka state. The quality issues in the scientific literature being discussed at present paper simultaneously, the platform, which are used to provide information services need to be examined. Many studies had been conducted in this regard. Keeping in mind, this is an attempt has been made to provide a comprehensive review of related literature on the problem of research. For this purpose, the following sources have been used as primary sources of information.

Key words: Web Portals, Health Science, Karnataka, Literature review

Introduction:

Some of the important sources consulted for reviewing the related literature are from online database like LISA, UGC-Infonet Digital Library Consortia (JSTOR, Emerald, Pro-Quest), Science Direct, EBSCO, Shodhaganga ETD and Directory of Open Access Journals (DOAJ) some of prominent e-journals and annals of Library and Information Studies, Library Philosophy and Practices, DESIDOC: Journal of Information Technology, IJODLS, IJIDT, LIBRI, JOALAIS, International Research journals of library and information science, Trends in Information Management. Researcher has consulted the Books, theses and, dissertations, and Reports published in both print and electronic from by the Government agencies. Keeping view of available published literature an attempt is made to review to establish a premise to the present research.

The literature reviewed for the purpose and conceptualization of this study is broadly classified and presented under the four categorized/ facets. They are:

1. Use of Websites

Yong-Mi Kim (2010) used the technology acceptance model (TAM) to investigate university library website resources (ULWR) usage. The study found that they were categorize users based on academic roles and then analyze them as subgroups in order to observe different adoption patterns across groups. A total number of 299 usable responses were collected from four different universities and across three population’s undergraduate, master, and doctoral student/faculty groups. The different library users indeed access ULWR for different reasons,
resulting in a need for tailored managerial efforts. Overall, the extended TAM explains undergraduate students' usage best; the explanatory power of the model is significantly lower for the doctoral student/faculty group.

Kannappanavar B. U. and Biradar S.B (2011) Analyzed the various aspects of the credibility of Dental College library Website in Karnataka. 37 Dental colleges were selected for the study aims to examine the websites, their structures, contents and compare with other colleges. The study concludes that, all the websites differ from each other in many aspects. Library websites need to be developing to provide the significant information and need evaluated periodically.

Rekha and Chandrashekhar (2016) conducted study on content analysis of 43 library websites of medical colleges in Karnataka. The study covers basic information about library, its collections, librarian contact information, services, polices and e-resources provided in the library websites. The final results concluded and suggested that, library websites need to update properly as per the need of the end users, updating the library books, journals and e-resources information and suggested to follow common guidelines for library websites.

2. Use of Library Web Portals:

James P. Frazee (2001) discussed that the World Wide Web made a big plashing higher education and portals sprang up on university campuses before many corporations even saw them as a blip on their radar. This study given the example such the University of California at Los Angeles University of Washington, and University of Delaware which have used their portals to promote communication and build community. Further, the study opined that portals can be costly significant time goes into the process; it can cost a great deal of money.

Sanchez Arce et. al. (2001) have opined that the Internet becomes a means through which Virtual Communities arise, as an evolution of the traditional concept of community and it concerning web portals their main characteristics. The study also explained that the services are studied in the authors conclude about the importance of applying documentation techniques to Virtual Communities projects, and the usefulness of community models for the diffusion of information in our institutions.

William H. Mischo (2001) have the opinion that next generation of library portals are providing enhanced navigation and linking through the rapidly growing number of electronic resources, in particular full text resources and providing the capability of searching multiple information resources such as periodical index databases, the library online catalogue. Web search engines from a single user interface form the technologies that will provide linking between discrete full-text resources and periodical index databases and online catalogs to full-text will become increasingly important.

Thomas Schaeck and Stefan Hepper (2002) were stated that portal applets, are visual components that make up a web page residing in a Web portal typically. When an end user requests a personalized web page, multiple portals are invoked when those pages are created example is a news/financial portal that displays a single page including updated financial news, a report on how the stock market is doing and the latest information on stocks of interest to the end user and each component has its own portal.

Cohen Laura B (2003) stated that a two-tiered model for analyzing website usage statistics for academic libraries. One tier for library administrators that analyzes measures indicating
library use and a second tier for website managers that analyzes measures that aid in server maintenance and site design. The author discussed the technology of website usage statistics, including several caveats about the accuracy of derived counts, and recommends important measures for each tier. In his paper, part 1 describes Web server logs and the challenges inherent in their analysis whereas Part 2 presents recommendations for conducting log file analysis to obtain meaningful information, benefiting administrators and site managers.

Thomas M et. al. (2003) summarized the experiences in building the software that support portal development, portal services. Finally, the experiences in developing the Grid Port Client Toolkit in support of remote web client portals and Grid Web services. This study expressed that the Grid portals and services are emerging as convenient mechanisms for providing the scientific community with familiar and simplified interfaces to the grid and experience in implementing computational grid portals, and the services needed to support them, has led to the creation this system has been successfully demonstrated with the implementation of several application portals.

Jim Cunningham (2004) suggested that the web portals offer new and promising ways to access a variety of campus services including services and resources of the campus library. The authors discussed the implications of campus web portal development for academic libraries. The author urged librarians to get involved in campus web portal development to ensure a library presence on the portal that is both functional and relevant to library patrons. This study opined that many colleges and universities across the country are redirecting their traditional campus web sites toward marketing while developing Web portals for use by their students, faculty, and staff.

Mark Carden (2004) opined that the librarians have been focusing on the transition from the Library OPAC to the Library Portal, institutions are starting to develop enterprise portals, often using techniques, methodologies and technologies that are attempts to clarify these issues and create both an enthusiasm and a justification for librarians to participate in, and provide leadership to, enterprise portal projects unfamiliar to librarians. This paper indicated the significance of library portals

Chris Awre et al. (2005) expressed an opinion that the use of portals as the presentation path for a variety of search tools and a major output from these projects has been the development of a portal interface. Further, this papers discussed that a web site that users could come to in order to make use of the functionality that the portal provided, particularly searching each project, as a key part of its investigations, created its own such interface and web site are tested with end users to establish that the portal was presenting its services in the most useful manner to carried out on portal interfaces has been valuable in understanding better the types of services.

Dreanna Belden and Nancy K. Reis (2005) The study conducted help by information professionals learn about issues and considerations in portal building of University of North Texas Libraries. They further suggested that portal include development of specifications and standards, construction of an application framework, selection of content, production of metadata, and refinement of user interfaces will inform other stakeholders seeking to develop innovative uses of portal technologies.

Large, J. A. Beheshti, (2005) In their study they believed that the development of web portals include young people. They themselves have to say about the design of portal interfaces and specific interface design guidelines are required for young users rather than
simply relying upon general design guide-lines. He suggested that in order to formulate such guidelines it is necessary to actively include the young people themselves in the process of designing web portals. Such Information can be found in print documents, but increasingly young people are turning to the web to meet their information needs in order to exploit this resource, however, children must be able to search or browse digital information through the intermediation of an interface they must use web based portals that in most cases have been designed for adult users.

Mahmoud A. SattarKhalifa (2005) the existence of the Arabic web sites on library and information science in the international portals and directories. It discovered their existence in three categories of the foreign directories; general directories, libraries and catalogs directories, and library schools’ directories

Martin Myhill (2005) found that the use of portal at the University of Exeter Library has made a considerable, positive impact on the recent use of online full-text systems and services and the experiences undoubtedly point to a strong future for such interfaces everywhere.

Norway Maria et. al. (2005) have conducted a study in Norway and found that Norway currently has 362 academic, research hand special libraries, most of which have developed web portals to provide a variety of online services to users, including part time and distance education users while most web portals and most services are provided in Norwegian only. The globalization forces of the information society are pushing institutions to provide an increasing range of services also in english.

Jing-Yu Song et al. (2006) opined that the presentation features of a portal and the interactive web services may be extended to facilitate to provide information. This feature had motivated the selection of the web portals.

Konnur and Kacherki Umeshreddy (2006) have found in their study that the portal offers end user ease of searching many sources at once, integrating results from licensed resources, and local databases and bibliographical descriptions of digitized materials. Equally, familiar portal interface is an option for searching databases that are bring their expertise with content, their knowledge of copyright, their commitment to customer service and their experience in creating customized web based information delivery systems users.

Letha M.M (2006) opined that in the modern digital information environment, a well defined mechanism is neede to organize the access of information and library portal is highly beneficial for this. The use of web enabled information will be limited in the absence of a functional website.web portals are the tools that enhance access to the e-resources by providing visibility to the information. This paper also made an attempt has been made to explain the portal of technical information resource centre of Naval physical and Oceanographic laboratory of defense research and development organization and the services provided through this portal.

Malhan and Shivarama Rao (2006) opined that initiative such as cyber restructure recommended by the NSF foundation provide specifications for accessing data, information support the emerging collaborative processes within sciences and includes several components relevant for libraries This study also found that the library portal is one approach to organize information resources and services in a way that supports the users need.
Michael Chau et al. (2006) have cited a concept that Web portals support information searching and useful for the analysis for scientific knowledge and various content analysis techniques such as document summarization, document clustering, and topic map visualization.

Suresh Jange et.al. (2006) have conducted a study on Library and Information Centers. They found that the libraries are expected to serve the users with information regarding their services and special collections using the World Wide Web. The library managers acting as Content Managers in the Internet world have to design the library webpage to facilitate and supplement access to current information resources and services. They also found that library web portals of academic institutions in Karnataka majority of library portals are very concise and lack the current awareness services and updating policies and considerations that must be made when serving library information over the World Wide Web.

Wingyan Chung et al.(2006) stated that the portals achieved significantly better search accuracy, information quality, and overall satisfaction than benchmark search engines. Subjects strongly favored the portals search and browse functionality and user interface.

David Hook (2007) studied twenty one practitioners in the fields of museums, archives, and libraries. The study selected a purposive sample group consisting of 50 practitioners from the museum, library, and archive fields was invited to participate in a questionnaire evaluating the website.

Jane Cho (2007) discussed a model to link the Korean University Library OPAC with search portals consideration of analysis. This paper sets basic directions about linking library OPAC to search portals proposes a detailed model to link search portals with University Library Union Catalogues and manifestation of Deep link to local University Library OPAC in consideration of technical situation of Korean Library OPACs.

Jane Nichols and Margaret Mellinger (2007) Oregon state university librarians investigated whether undergraduates would gravitate toward subject portals tentatively named as virtual college libraries. This study showed how students approach their information needs, what searching methods and technologies they typically use, and whether they use personalization features.

Zahiruddin Khurshid and Syed Sajjad Ahmed (2007) have discussed major and minor features of the library portal, which empowers users to get access to a wide variety of e-resources with a single sign on the study. It discussed the transition from the library OPAC to the library portal a library portal is an extension of the Web OPAC. It continues to improve with the new features and capabilities, some of which may go beyond the library portal are changing too rapidly growing the information.

Ron Davies (2007) described the experience of developing a library portal to provide integrated access to research information. At the same time as institutional or enterprise information portal was being implemented vertical, specialized library portals alongside horizontal institutional portals. Library portals include reduced risk, faster implementation and reduced maintenance costs seeking to provide integrated access to distributed information resources must consider library portals. This study revealed that in practice there is little risk of overlap between institutional and library portals. Both types of product are complementary.
Andrina Granui etl (2008) That experience concerning the design of a broad reach web portal employees arrange of assessment methods, providing a comprehensive quantitative and qualitative evaluation feedback of number of usability test methods along with specialists inspection of the indicate that chosen research instruments, measures and methods.

Celina M. Olszak and Ewa Ziemb (2008) stated that presenting a web learning portal allows for improving employees competencies in implementation of the internet related technologies in business.

Zenia Barnard and Chris Rensleigh (2008) the study determined the extent to which web portal technology and online communities could be successfully applied by the alumni offices of higher education institutions in South Africa (using the University of Johannesburg as a case study) to create information sharing with and amongst its alumni affinity groups, in order to build and maintain valuable relationships, networks and partnerships using quantitative empirical research. The final conclusion made from this research project is that an online community portal can enhance to a large extent the networking of alumni in the South African higher education sector.

3. Evaluation of Library Web Portals

Mohamed Ridda Laouar and Mathew Miles (2009) the design of a scholarly web portal which provide access to enormous quantities of information facilitated by the web. This study found that portals overcome boundaries between remote and local source and documents become accessible to extreme interest for libraries in Algeria. But the paper also discussed that the local holdings are very limited and outlined conceptual model of library portal architecture. The study also opined that the customized library portal is conceived for an Algerian library, which will ultimately benefit from inclusion in a nationwide network.

Vijayakumar, Kannappanavar et. al. (2009) The study conducted on Indian Institutes of Technology libraries web portals to analyze organization of library information, link provided by the library portals to another web resource, web resources, OPAC and feedback provision, services through library portal. Major observations from the study are, all IIT web portals are different from each other, hence it is suggested to develop unique type of library portal, and give importance to importance to library information.

Yi Jin and Jia Peng (2009) studied web portals which is helpful for libraries that plan to provide services to their users via information portals, or to develop or evaluate portal systems or products. Analyses and concludes methods and functions to meet portal requirements through resource integration and service integration supported by Metalib, and web 2.0 technologies. Portal requirements can be met by resource integration and service integration to achieve cross searching, ways to enhance resource linking, and integration of library, subject and personalization services are analyzed and concluded the service framework is depicted in the research. Since the analysis is not based on an exhaustive list of portals and as technologies are always developing rapidly, the methods and functions to achieve information integration and provision presented in this paper perhaps are not complete and may need to be adjusted and amended.

Wolfram Neubauer and Arlette Piguet (2009) have opined that the Knowledge Portal is an attempt to develop a central access system in terms of a single point of access for all electronic information services and it means that all these sources from the libraries catalogue and full-text in house applications to external, licensed sources should be accessible via one
central web service. The Knowledge Portal is a piece of software and a real library application, an overview of the general idea behind this complex and clearly user oriented project and shows which steps are necessary for its launch and how to organize cooperation between quite different project partners and shows the complexity of setting up a portal as the single point of access.

Panayiotis Koutsabasis et. Al. (2010) reviewed the types of tools and specifications available and proposes a simple and practical methodology for web accessibility evaluation that demonstrates how these tools and specifications could be used to proposed methodology proposes methods and processes for reaching and maintaining web accessibility, and consists of the following phases: (a) identification of user requirements and setting up of accessibility goals, (b) web accessibility evaluation and redesign process, and (c) establishment and follow up of accessibility policy. Further, in order to illustrate step (d), an example of web accessibility evaluation is described, where the domain is contemporary scientific publishing web sites.

Andrew Large et al. (2010) have identified that the web is an important source of information for school projects, but young users do not always find it easy to locate relevant material. The portal through which they search or browse web content and traditionally web portals have been designed by adults with young users in mind, but there is very little evidence that the latter make use of design guidelines are elaborated for such portals that are based upon focus group.

Pal John R et al. (2010) The WWW Pal system and associated languages and tools have been developed to perform systematic analysis of web sites they construct digital library portals to describe a method of obtaining the portal information.

Libo Eric Si et. Al. (2010) Authors tried to develop a prototype middleware framework between different terminology resources in order to provide a subject cross browsing service for library portal systems. The study aimed to collect appropriate knowledge to support the development of a theoretical framework for the research given the large variety of terminology resources distributed throughout the web. The proposed middleware service is essential to integrate technically and semantically the different terminology resources in order to facilitate subject cross-browsing and set of recommendations are also made, outlining the important approaches and features is valuable retrieval provision.

Abdul Amid et.al. (2010) Stated that Nigerian Universities feel pressured to get a portal up and running dynamic, individualized web systems have come essential for institutions of higher learning as a result. Further, the study also found that most of the Nigerian University portals nowadays do not meet up to standard portals was selected and their design evaluated in accordance with the international be practices.

Bringula and Basa (2011) The study analyzed 82 faculty members. The data clearly shows that most of the respondents are young, and they possess the master’s degree in their discipline. They were skilled in using the computer and the internet study also finds that they also access the internet in their home also. They were also committed in using web portals. The respondents were perceived that the different web portals design related factors were modernity evident in the existing web portals.

Abdul Rahim et. al. (2011) stated that evaluation at the system level is importance for systems maintenance and the arrival rate of packets to the portals server service rate of the portals server, and two parameters are important elements measure web portals.
Soo Hyung Joo et. al. (2011) conducted a survey to know three constructs of usability, effectiveness, efficiency, and learn ability, in academic library websites. They are empirically examined based on 147 actual user responses. The survey evaluation tool suggested herein is acceptable in assessing academic library website usability to engender a practical survey tool in evaluating library usability.

Tella Adeyinka et. al. (2012) examined the impact of web portal on e-learning among undergraduate students. It considers the benefits of using the portal and the problems encountered when using the portal. A group discussion method was used for data collection. The study revealed that the generality of the respondents confirm that web portal positively impacted learning. Further, the study also found that overcoming the problem of distance and improving respondents' computer and information literacy skills.

Hassan Behzadi (2012) examined knowledge management (KM) mechanisms in 20 Iranian e-government portals used to provide services to citizens' knowledge access, creation, and transfer. This checklist was then applied to demonstrate its utility for evaluating 20 Persian language official e-government portals in Iran. The maximum score for the knowledge mechanism was 30 for knowledge creation, and the score for KM in Iran e-government portals was 26%. This percentage indicates that e-government portals in Iran are very poor. Iranian e-government portals and Iran governors must consider some features in their decisions about portal design and in addition, planning strategically with key experts to design new models for the adoption of KM in e-government is of high importance.

Naik Nagaraja et al., (2012) found that a portal is one approach to organize information resources and services in a way that supports the users' needs. However, the library portal will not be the only starting point for accessing library websites in fact lies in integration of different effective information management and need-based service modules are seen as positive potential frameworks for achieving order out of chaos. Portals become a primary means for transacting information and commerce.

Joseph M. Dudley (2013) stated that academic library websites have become major service points for both students and faculty in order to contribute to a conversation on the maintenance activity associated with academic library websites and the establishment of best practice guidelines. This paper reviewed the selected literature addressing library website maintenance and then reviewed daily activities associated with the maintenance of the Bryant & Stratton College Cleveland Downtown campus library portals.

Andrina Granic et al., (2013) opined that web portals are a special breed of websites, providing a large and diverse user population with a blend of information, services, and facilities and they reach their aim of facilitating users to access to diverse resources.

Kumara B (2013) found that the development of the semantic web among all the library portals have a special place as key provide a gateway to an institution's resources by listing them for users and creating a direct link to the native interface of each resource. This study also stated that, of university library portals help the users to employ a library portals search interface to search simultaneously or sequentially in heterogeneous sources that do not share metadata schemes or search and retrieval techniques.

Khatri and Baheti (2013) that study conducted on university websites and their web pages. The study was to analyze the various aspects of the credibility of deemed university websites of Maharastra. 21 deemed universities from all over Maharastra are considered for
the study. The analysis of the data represents the extent and level of credibility possessed by these universities. The researcher concludes that credibility of website is a major issue in those days and website and library pages need to be evaluated periodically using established criteria like web design, accessibility and reliability issues.

Chechen Liao et. al. (2014) stated that lack of differentiation in the function and appearance of web portals has led to competition attracting users attention. The study also stated that it is no doubt the most important factor for portal success to combine rational assessment factors and non-rational assessment factors to examine their impact on the intended use of portals participants were individuals who have experience using web portals.

Manisha B. Mane and Mange B.M. (2015) studied the awareness and use of library portal by the students of Savitribai Phule Pune University. Some majority of the students do not use library portal on regular basis. The study also found that the reasons for not using the library portal were lack of awareness, training and guidance, and the lack of contents on the library portal the majority of the respondents appreciated the efforts of Jayakar Library and library staff with regard to portal provision of various e-resources, subject contents and useful links. Majority of the respondents also expressed that they needed guidance and training for the effective utilization of resources on the library portal.

Anup Das and Tanmay Saha (2015) the study described the design and development of a prototype for e-resources search from library website by a single click and to growth of e-resources scenarios aided in designing key system requirements and prototype was then developed using WAMP application the utility of these e-resources will be limited in the absence of a functional website that facilitates the users to exploit these to the maximum extent web portals are the tools that enhance access to the e-resources by providing visibility to these patrons get help and can access easily.

Leonidas Anthopoulos and Kleanthis Sirakoulis (2015) The study emphasized that the quality of web portals is also depending upon the interest of the Government and their E-governance through web portals. This study reflected the government strategic performance, internal efficiency and effectiveness, to upgrade the E-Government portals.

Vladimír Ocennasek, et.al. (2015) evaluated regional web portals which were based on the methods of Digital Governance in Municipalities using 12 parameters in area of content and services. They have focused on the areas of content and services and compared Czech web portals against Austrian and Swiss web portals. This study found that the highest number of points go to obtained full score for immediate updates, searchable databases, newsletter subscription, event calendar and capabilities of GIS evaluation brings insight in matter of increasing attractiveness and website traffic of concerned.

Conclusion:

The researcher has carried out a thorough review on the existing literature from the research works, paper presented in seminar/conference and research articles published in journals. Researcher has also made attempts to obtain a review of existing literature published in few books related to the present research. The present research topic appears to be the first of its kind which concentrates on improvements to be made on the websites of health science colleges in Karnataka in order to improve the quality of health science education and its aspirants.
References:


