

UTILIZATION AWARENESS AND EFFECTIVENESS OF SEARCH ENGINES AND KNOWLEDGE PORTALS AMONG THE SCIENTISTS AND RESEARCH SCHOLARS OF CENTRAL DRUG RESEARCH INSTITUTE, LUCKNOW

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Abstract *The main objectives of this study were to access the utilization awareness and effectiveness of search engines and knowledge portals among the scientists and research scholars of Central Drug Research Institute, Lucknow. In order to achieve the specific objectives stated, a researchers, designed questionnaire was distributed on 250 two hundred fifty, respondents (two hundred fifteen respondents from Central Drug Research Institute, Lucknow). The results which were specified to weighted mean and percentages showed that the respondents excellent and very good exposed awareness the ease of navigation/use information available on search engines and knowledge portals with the weighted mean methods. The results on the level Completeness/Adequacy and Quantity of Information Available on Search Engines and Knowledge Portals respondent felt very good. The results of barriers encountered exposed that the most respondents agreed they encountered “lack of reliable information” ranked first barrier, which was followed by “access difficulties (slow c connectivity)”, “lack of knowledge about availability, and “fear of copyright and infringement or plagiarism” giving the rank distinctly for barriers. The option “lack of IT infrastructure facilities (hardware and software inadequacies)” was categorized at lowest fifth situation. Based on the findings, it was recommended that since the search engines and knowledge portals is being very much utilized and effective the scientists and researchers of CDRI, Lucknow required to be exposed advance merchant techniques through information literacy programmes or other awareness and internet, IT facilities should be made available to the CDRI library.*

Keywords: *Search Engines, Knowledge Portals Utilization, Effectiveness, Scientists, Research Scholars*

INTRODUCTION

The awareness and applications of computer technologies specifically Internet has enormously increased the availability of information. The increases in volume of available information as well as the linking of various disparate and diversified information sources is making harder for users to retrieve relevant information based on their specific task related requirement. Search engines are the have been developed to facilitate fast information retrieval. Generally, two methods are used by people to get information from the internet resources. Every resource that a researcher discovers that is useful, generally there are dozen deserted web pages, loads of half-read abstracts and fake lead. Timely and well-organized search needs increased hit-rate of each search. The exponential growth of Internet

has increased the availability of information. It has increased the volume of knowledge resources related to diverse subject fields. Researchers and scholars search and use these diversified knowledge resources for knowledge sharing. But facilitation of faster and effective information retrieval from this association of various disparate and diversified information sources is easier said than done, the reasons are that the subject knowledge resources are indescribable, inadequately designed for access and distributed over a wide variety of websites and are not sufficiently differentiated. Knowledge portal is a doorway that can be customized by individual users to automatically filter information. In particular, a web portal is web page that aggregates and uniformly displays information from disparate sources. Libraries are transforming by developing automated systems and services to satisfy the informational needs of their users.

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In the ICT era users such as, are the intellectuals including the scientists, technologists, doctors, economists, artists and specifically researchers in every field are responsible for innovations and inventions, these inventions are the foundation of growth of that field.

CDRI (Central Drug Research Institute, Lucknow)

CDRI is a leading drug research organization of India. It was inducted on 17th February, 1951 through Prime Minister of India Pundit Jawaharlal Nehru. It operated originally by a vision to support and advance the ground of drug research and growth in the country. CDRI has complete substantial accomplishments in the pursuit of its assignment to New Drugs & Technologies for reasonable healthcare for all age group of knowledge base. CDRI's library now called KRC provides for latest and up-to date information on current R & D in the area of Drug Research's has access towards more than 32 journals of both publishers and the self. KRC of CDRI has open source resources and search engines to provide for ready data. KRC has a reading space on the three floors and can be used by 75 users approximately at a time. The place is calm, pleasant and ideal for studying. It has facilities like: air conditioners, ventilation, good lighting, etc.

LITERATURE REVIEW

Review of literature is a key preliminary point for slightly research procedure supporting the researcher to categorize earlier and current investigation projects, and provides valuable knowledge for the thoughtful of the theoretical and procedural issues surrounding the research topic. Khurshid and Ahmed (2007) studied in their research dynamics of library portals and concluded that Library portals are moving too quickly and the information would be available of date inside limited months. So the money of information is the worth of this paper. Gibson, Goddard and Gordon (2009) studied on administration, public services, and systems of academic libraries, presented in depth coverage of institution's experience while the institution implemented a federated search tool. Zhu, Du, Meng and Sun (2011) developed an assessment measures scheme for search engines consuming the Delphi method and the investigative grading procedure. An experiential study on Chinese search engines was conducted for verification. Basaidi (2012) provides experiential indication for experts and researchers on the supports of a corporate portal in an education organization in Oman. Kerkmann, and Lewandowski (2012) presented findings from web search engine research with relation to the aspects of disability studies. It provided insights into measurements

of several accessibility aspects and as well impertinence of approachability of web search engines for individuals with incapacities. Shiv (2012) explained one of the primary experiential studies, on the impact of user's demographic appearances on the influence of web searching. These appearances have been experimental to absolutely effect upon the influence of network penetrating in some restricted events. Aharony (2012) has analyzed the academic libraries websites within 2000-2010 by keeping in mind the internet archive and recent library websites.

Swapna and Francis (2013) have analyzed websites are supplying more and more valuable information to the library users. It is found that additional perfection in contents and management is required in majority of library websites. The study also gives insight to judge the excellence of the library websites and services supplied by them. Jain and Joseph (2013) providing a elementary academic outline for scheming an actual university knowledge portal. It also generates the consciousness of the reputation of knowledge portals in universities Heo (2013) defined normally; non-profit organizations do not assess customer satisfaction resulting in a hardly any existence of literature which examines factors influencing user satisfaction with cultural heritage portals. Jansen, Blessing, Bach, Oesterle (2014) described the Knowledge portals provide users with the information and functions they requirements. This is done by the portal having uniform, Web-based interface. Coates (2014) performed a novel comprehensive investigation of search engine inquiries used to find a ETDs collection. But then again this might develop irrelevant as enquiry content for the topmost search engines is no lengthier obtainable from Google Analytics, although the remnants was looking for theses and dissertations from precise auburn scholars.

SCOPE AND LIMITATION

The study the researcher has undertaken the case study of CSIR Institute "Central Drug Research Institute, Lucknow" which has well reputable organisations of India. In order to study the implications of search engines and knowledge portals on the library. Only two categories of respondents i.e., Scientists and research scholars included in the study. The study has not considered the non-teaching staff, the miscellaneous users. They also form very important users of the libraries and hence, they must be integrated to formulate the study more wide-ranging.

OBJECTIVE OF THE STUDY

- To find out the awareness of Search Engines and Knowledge Portals by the researchers and scientists of CDRI library.
- To measure the effectiveness of Search engines

and Knowledge Portals among the researchers and scientists of CDRI Library.

- To assess the utilization of Search engines and Knowledge Portals among the researchers and scientists of CDRI Library.
- To know the barriers of using Search engines and Knowledge Portals among the researchers and scientists of CDRI Library.

RESEARCH METHODOLOGY

This is basically a survey research. This study will use questionnaire- grounded survey technique in order to accomplish the objectives; descriptive Research design will

be used to achieve the study. A exhaustive and well-structured questionnaire will be planned and distributed to the selected users of the libraries. Questionnaires are less expensive, convenience, less chance for partiality or errors and provide assurance then other methods. Questionnaires are a constant, reliable and unchanging quantity without Dissimilarity. The use of questionnaires possibilities a broader coverage, subsequently scholar can approach respondents effortlessly than other procedures. Weighted mean methods is used for ranking the most significant and non-significant reason. The investigator visited the referred libraries and approached the librarians seeking permission to distribute the questionnaire to the users and thus also collected back. The investigator also sends online web questionnaire and took the interview with the scientists, research scholar.

DATA ANALYSIS AND FINDING

Table 1: The Ease of Navigation/ Use Information Available on Search Engines and Knowledge Portals

The Ease of Navigation/ Use information available on Search Engines and Knowledge Portals							
Options	Poor(1)	Good(2)	Very Good(3)	Excellent (4)	Total	weighted mean	Rank
Clear and Well Organised contents.	3 1.40%	36 16.74%	155 72.09%	21 9.77%	624	2.90	1st
Well Organized Hyperlinks	3 1.40%	55 25.58%	151 70.23%	6 2.79%	610	2.83	2nd
Customized Search Function	3 1.40%	172 80.00%	19 8.84%	21 9.77%	488	2.26	5th
Ease to Finding Desired Information	17 7.91%	137 63.72%	41 .86%	57 26.51%	531	2.46	4th
Logical Layout	0 0.00%	75 34.88%	123 57.21%	17 7.91%	587	2.73	3rd

Excellent = 4; very good = 3; good = 2; poor = 1.

Table 1 As popular previous studies awareness about the search engines and knowledge portals is the important concern for scientists and research scholars of CDRI library. Table 2 exposed awareness the ease of navigation/ use information available on search engines and knowledge portals with the weighted mean methods. This method is used for ranking the most significant and non-significant reason for awareness about the search engines and knowledge portals among the scientists and researchers of CDRI. The option

“clear and well-organised contents” ranked first, which was followed by “well-organised hyperlinks,” “logical layout, and “ease to finding desired information” giving the rank individually. The option “customized search function” was graded lowermost at fifth place. The undoubtedly precise that the scientists and researchers are well aware of ease of navigation/use information available on search engines and knowledge portals.

Table 2: Completeness/Adequacy and Quantity of Information Available on Search Engines and Knowledge Portals

The effectiveness of search engines and knowledge portals						
Options	Partially Agree (1)	Agree (2)	Strongly Agree (3)	Total	weighted mean	Rank
Makes possible for improving quality of research output	6 2.79%	142 66.05%	67 31.16%	491	2.28	2nd
Enables to increase quantity of research output	7 3.26%	164 76.28%	44 20.47%	467	2.17	3rd

The effectiveness of search engines and knowledge portals							
Options	Partially Agree (1)	Agree (2)	Strongly Agree (3)	Total	weighted mean	Rank	
Gives faster access to current/update information	0 0.00%	131 60.93%	84 39.07%	514	2.39	1st	
Access to wider range of information	136 63.26%	39 18.14%	40 18.60%	334	1.55	5th	
Intend to use the for academic and research work in future	32 14.88%	149 69.30%	34 15.81%	432	2.01	4th	

Strongly agree =3; agree =2; partially agree = 3.

Table 3 revealed that the effectiveness of search engines and knowledge portals among the scientists and researchers of CDRI. The option “gives faster access to current/update information” ranked first, which was followed by “make possible for improving quality of research output,” “enables

to increase quantity of research output, and “intend to use the for academic and research work in future” giving the rank separately. The option “access to wider range of information” was graded las position on fifth position.

Table 4: Barriers to Using the WebSEs and KPs for Academic and Research Purposes

Issues as Barriers to Using the Web SEs and KPs for Academic and Research Purposes								
Options	Strongly Disagree (1)	Disagree (2)	Partially Agree (3)	Agree (4)	Strongly Agree (5)	Total	weighted mean	Rank
Access Difficulties (SlowCo nnectivity)	12 5.58%	0 0.00%	43 20.00%	136 63.26%	24 11.16%	805	3.74	2nd
Lack of Knowledge about Availability	0 0.00%	29 13.49%	33 15.35%	136 63.26%	17 7.91%	786	3.66	3rd
Lack of IT InfrastructureFac ilities (Hardware andSoftwar e Inadequacies	3 1.40%	14 6.51%	149 69.30%	49 22.79%	0 0.00%	674	3.13	5th
Lack of Reliable Information	3 1.40%	15 6.98%	33 15.35%	137 63.72%	27 12.56%	815	3.79	1st
Fear of Copyright and Infringement or Plagiarism	4 1.86%	14 6.51%	125 58.14%	48 22.33%	24 11.16%	719	3.34	4th

Strongly agree =5; agree =4; partially agree = 3; disagree =2; strongly disagree =1.

Table 4 discovered the issues as barriers to using the search engines and knowledge portals for academic and research purpose between the scientists and researchers of CDRI. The option “lack of reliable information” ranked first barrier, which was followed by “access difficulties (slow c connectivity),” “lack of knowledge about availability, and “fear of copyright and infringement or plagiarism” giving the rank distinctly for barriers. The option “lack of IT infrastructure facilities (hardware and software inadequacies)” was categorized at lowest fifth situation.

Table 5 exposed that the characteristics that would affect your choice of the Print Format over Search Engine s and Knowledge Portals by the scientists and researchers of CDRI. The option “familiarity with format” ranked first characteristic, which was followed by “probability,” “physical compare”, and “ability to underline” giving the rank particularly. The option “ability to browse” was graded last position on fifth position.

Table 5: Characteristics That Would Affect Your Choice of the Print Format Over Search Engines and Knowledge Portals

Characteristics that would affect your choice of the Print Format over Search Engines and Knowledge Portals							
Options	Disagree (1)	Partially Agree (2)	Agree (3)	Strongly Agree (4)	Total	weighted mean	Rank
Ability to browse	20 9.30%	145 67.44%	17 7.91%	33 15.35%	493	2.29	5th
Probability	20 9.30%	19 8.84%	155 72.09%	21 9.77%	607	2.82	2nd
Physical Compare	0 0.00%	30 13.95%	21 9.77%	164 76.28%	779	3.62	3rd
Familiarity with format	7 3.26%	39 18.14%	133 61.86%	36 16.74%	628	2.92	1st
Ability to underline	0 0.00%	142 66.05%	35 16.28%	38 17.64%	541	2.52	4th

Strongly agree =4; agree =3; partially agree = 2; disagree =1.

FINDINGS AND DISCUSSION

It is felt that from the analysis the majority of scientists and research scholars of CDRI are well aware the ease of navigation/use information available on search engines and knowledge portals. The first ranking statements is “clear and well-organised contents” with waited mean =2.90. The scientists and research scholars of CDRI institute are mostly found that Completeness/Adequacy and quantity of information available on search engines and knowledge portals “complete information description” ranked in first position with weighted mean=3.38. It is also seen that first ranked statement is “gives faster access to current/update information” with waited mean=2.39 of the scientists and research scholars about the effectiveness of search engines and knowledge portals. It is further found from analysis that the uppermost ranking charatersctise is “familiarity with the format” with weighted mean= 2.92 of the search engines and knowledge portals in CDRI institute. The study identifies that the main barriers faced by scientists and research scholars of CDRI in using search engines and knowledge portals are “lack of reliable information” with weighted mean=3.79.

CONCLUSION AND RECOMMENDATIONS

From the study, it is obvious that the scientists and researchers using search engines and knowledge portals for their academic and research work. For this they too much depend on search engines and knowledge portals.

They are well aware about features and effectiveness of search engines and portals. The scientists and researchers CDRI were know about the Completeness/Adequacy and quantity of information available on search engines and knowledge Portals. This academic library have adopted new technological developments to meet their special users information requirements by providing their advanced and update knowledge.

- Regular training programmes on information literacy programme should be organized for the scientists and research scholars to make them fully aware of search engines and portals resources and services. Awareness and utilization of search engines and portals is relatively less among the scientists as compare to the research scholars.
- Scientists and researchers should be trained in the utilization of advanced search techniques of search engines and knowledge portals.
- IT infrastructure of the libraries should be strengthen to meet information needs of the specially scientists.
- There is need to maintain an active interaction with the academic facility in order to understand their information requirements as well as their awareness of and of the perception about search engine and knowledge portals.
- The library should provide separate well equipped instruction room to deal with the queries of the researchers and scientists.
- Feedback from the scientists and researchers should be taken regularly to determine their specific information needs.

- For the optimum utilization of search engines and portals libraries should increase bandwidth to ensure faster access, to save of time the scientists and to solve the problems slow connectivity and lack of knowledge about availability.

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