Use of Internet by the Scientists of CAZRI: A survey

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Abstract

The use of Internet by the scientists and research fellow of Central Arid Zone Research Institute, Jodhpur (Rajasthan) was assessed on the basis of the results of a questionnaire survey in CAZRI, Jodhpur. Further, it also attempted to assess frequency of use, location where used, search engine accessed; purpose of use etc. The study revealed that the respondents accessed Google search frequently (100%) followed by Yahoo (85.29%). It was also observed that equally (97.06%) respondents used Internet for education and research. The strong desire of respondents is that library initiate various functions and services like e-portals, on-line information/abstracts retrieval along with internet.

Key words

CAZRI, Scientist, Internet, Use, User Studies, Survey

Brief account of CAZRI

The Central Arid Zone Research Institute (CAZRI) came in to existence on October 1, 1959. The Institute is a constituent of the Indian Council of Agricultural Research (ICAR), New Delhi. The Institute conducts multi-disciplinary research to seek solutions to the problems in hot arid zone of the country,

Introduction

Internet is a 'network of networks', linking computers using the protocol of TCP/IP, allowing us to share the information, which is stored in some other computer machine located elsewhere remotely. Internet is now a huge source of academic, research and general information. Internet facilitates the sharing of information by millions of people and institutions all over the world. It is like a global library that every one can access at any time. It is a global venue where every one can present their knowledge and information. Earlier library served information in traditional media whereas computers link the information in digital media. In this way Internet is a library that transcends space and media. Internet has become one of the most effective media for selection, collection, storage, management and dissemination of information in the gamut of knowledge. It works round the clock and connects every nook and corner of the globe. It is one of the important services of the information storage and retrieval process, which has reached millions of people. Both scientific and non-scientific communities make use of this knowledge to a large extent in their socio-economic research. Keeping in view, the multi dimensional features and application of Internet a comprehensive attempt has been made to assess use of Internet by Scientist in Central Arid Zone Research Institute, Jodhpur, Rajasthan. CAZRI is an institute having multi discipline area for research, therefore, a study was undertaken at this institute to find out the use of Internet for various research and other activities.

Objective

To find out the use of Internet for various research, education and extension activities among the scientists and research fellows of the institute.

Previous Studies

Studies have been conducted on the use of Internet by various workers. In a study conducted at two U.S. Universities, major percent (92%) of faculty have used e-mail for scientific communication Chu (1994). Alexander (1995) conducted a study on use of Internet listservs as post teleconference support to faculty at Community colleges and Two-year institutions and found that 47% of community college teleconference participants accessed Internet and 30% know how to use e-mail.

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On a survey, Perry (1995) found that (55%) respondents have been using Internet for less than one year and 25% of that group had used Internet for less than six months, while 17.9% have been using the Internet for 13 to 18 months and an equal number of respondents have used it for more than two years. When they were asked to rate the difficulty they found in the use of Internet, the majority (57%) of them felt that it was somewhat difficult. Another comprehensive Study of Zhang (2001) on scholarly use of Internet based electronic resources showed that e-mail was the most frequently used tool. All respondents indicated that they used e-mail at least once in a week, while 93.6% of them used it almost every day. Web browsers were the second most frequently used Internet tool. Nearly 94% of respondents used web browsers at lease once in a week. Next to e-mail and web browsers, mailing lists and Internet search engines are third and fourth most frequently used Internet tools.

Leah and Takis (2003) discussed the results of a survey on how college students react to information on the Internet. The Internet is revolutionizing research methods at colleges and universities around the world. The Internet has gained a primary place in research methods, and it is vital that students become able to critically evaluate the information it provides. Several solutions have been suggested to determine accuracy in Internet research. A six question survey was developed which was administered to students of 180 Wellesley College, Wellesley, Massachusetts, during the 2000-2001 academic year. Students' responses to this survey helped explain how college students, from different backgrounds, class years and majors, react to information on the Internet. Participants in this study were students from the "Computers and the Internet" class. Students were told the purpose of the survey was to understand how students conduct searches. The findings were remarkable. Regarding students reliance on the Internet, it became apparent that students are very eager to use the Internet. The finding emphasizes the importance of teaching good Internet research skills, as students rely so heavily on the Internet. Students consider the Internet a primary source of information.

Birdar and Kumar (2005) conducted a study on Use of Internet by Physicists in Universities of Karnataka state, and found that majority of responded 87.83% (166 out of 189) used the Internet, while 82.5% of respondent used e-mail to communicate scientific information. The study gives an indication of purpose of use of Internet and showed that research scholars and faculty members used the Internet to full extent for research & teaching.

Franz (2006) present analysis looks at how scientists use the Internet for informal scientific communication. It investigates the relationship between several explanatory variables and Internet use in a cross-section of scientists from seven European countries and five academic disciplines (astronomy, chemistry, computer science, economics, and psychology). The analysis confirmed some of the results of previous U.S.-based analyses. In particular, it corroborated a positive relationship between research productivity and Internet use. The relationship was found to be nonlinear, with very productive (nonproductive) scientists using the Internet less (more) than would be expected according to their productivity. Also, being involved in collaborative R&D and having large networks of collaborators is associated with increased Internet use. In contrast to older studies, the analysis did not find any equalizing effect whereby higher Internet use rates help to overcome the problems of potentially disadvantaged researchers. Obviously, everybody who wants to stay at the forefront of research and keep up-to-date with developments in their research fields has to use the Internet.

Manimekalai and R Amsaveni (2006) revealed that the use of Internet is an inevitable part and there is increasingly centered effect on the part of Government, Education Ministry to fulfill the special needs of the students. The extent and pattern of usage of the Internet amongst students in Annamalai University is the primary focus of this study. This study investigates the relationship between motivational variables (intrinsic and extrinsic), demographic variable and the Internet usage activities (messaging, downloading, browsing and purchasing). The finding also shows that

perceived usefulness is an important driver of Internet usage.

Lohar and Kumbar (2008) conducted a survey at Jawaharalal Nehru National College of Engineering Library, Shimoga (Karnataka) to find out the use of CD-ROMS and Internet resources and services. The study also covers the impact of these resources on the student academic work/study. Also describes the problems faced in using the electronic resources. Hence, A survey of 110 undergraduate and post-graduate (BE) Students of different disciplines was conducted through questionnaire. Finally, it is concluded that the main intention using CDs and Internet resources and services has been the academic interest of the student community.

Sharma (2008) examined the status and use of the Internet in Punjab Agricultural University and Haryana Agricultural University. A well structured questionnaire was distributed among the 200 teachers and research scholars of both the agriculture universities under study. Findings of this study show that Internet is being heavily used for e-mail and research purpose and also highlight purposes and frequency of use of the Internet by the teachers and research scholars, their method of locating, accessing and using information on the net. The study also discusses the problems that are preventing wide use of the Internet in both the universities.

Riahinia and Azimi (2008) conducted study among 80 respondents and found that there is a significant relation between academic females' use of the Internet and their social ranking. As social ranking increases the use of the Internet grows. The findings also revealed that as users navigate more through the Internet they would find more hidden threats and vague content.

Methodology

The study comprised of scientists and research fellows of Central Arid Zone Research Institute, Jodhpur and restricted to the use of Internet facility. Data was collected using questionnaire as an instrument from different divisions/ sections of the institute. 90 questionnaire were distributed among the user, out of which, 68 duly filled questionnaire were received back. The method of questionnaire was based upon survey. The questionnaire comprised of six questions and performa of the same is presented in appendix-A. The statistical analysis was carried out on the basis of the data received as the response of questionnaire.

Analysis of Data

The analysis was done on the basis of percentage. The rating expressed by all the respondents in each category, all of these response has been presented in tabulation along with percentage of their totals and the results of the same has been discussed below:

(i) Frequency of Use

Table 1 revealed that the frequency of use of Internet facility diverges widely in all the groups. Most of the respondent used Internet facilities daily (94.12%) followed by at least once a week (48.53%), at least once a fortnight (36.76%) and at least once a month (39.70%) whereas (29.47%) respondent used the facility rarely. Most of the scientists are daily user of Internet because lease line facility is available in the Institute.

On the basis of over all study (35.94%) respondent of all the category reported "Much" use internet daily followed by (30.30%) indicate "More" use internet at least once a week, while (46.15%) at least once a fortnight and (51.85%) at least once a month reported "Very less" use of internet facility. While (80%) respondent reported "Very less" that they are rarely use Internet facility. According to above table higher percentage given by the respondent over "Very less" in terms the rarely user of Internet facility because Internet is gamut of knowledge and respondents use these sources for their day today information so they are use these sources with much emphasis on daily.

(ii) Location where used

Data regarding place of Internet use is presented in the table 2 and it clearly indicates that the majority of respondents availed the facility of Internet at their office desk (94.12%) followed by equal percent (85.29%) at institution library and home. As per the table shown most of the scientist are like to surfing Internet at office desk because connectivity of net is given to almost every scientist. While (82.35%) respondent reported that they are availed the facility of Internet at computer centre and only

a few (70.58%) reported that they are availed the same at cyber cafe. As per the percentage shows respondent are not much like to surf Internet at cyber cafe. It is observed that the findings of the present study are almost in line with the findings of (Biradar and Kumar, 2005). From the study significant difference could be found regarding place of Internet use between respondents. Large Number of Scientist reported that they used Internet at the Office desk as well as at the home. It is also found that respondent not so much like to use Internet at commercial places.

(iii) Source of information

As table 3 demonstrates, significant difference could be found regarding locate information from the web among respondents. The table illustrates that (69.12%) respondent locate information from the web through URL followed by (36.76%) from Portal while (35.29%) from pathfinder.

It can also be seen from the over all that (34.04%) respondent "Regularly" locate information from URL followed by "Frequently" (28%) from portal while (33.33%) respondent "Rarely" locate the same from pathfinder. As per the percentile shown most of the respondents locate information through URL for their day today need and also use portal and consortia to locate information for their specific satisfaction of their subject need.

(iv) Search engine accessed

Respondents were asked to indicate which search engine they are accessing frequently for information. As shown in table 4 (100%) respondent accessing google search engine frequently followed by yahoo (85.29%), while (50%) accessing MSN. The Google search engine is mostly used because it is fast in access, regularly updated and links are provided to web sites in the world (Asemi, 2005).

Other search engine is not so much popular but when we are talking about Indian Search engine there are two search engine first India123 (51.47%) and second Indiatimes (36.76%) search engine also access by respondents.

(v) Frequency of use e-mail

The most important and most often used facility is e-mail, which revealed its use mainly for scientific communication among resarchers. The responses summarised in the table 5 shows that (47.06%) respondents "frequently" used e-mail for scientific communication followed by (22.06%) "Regularly" and "Occassionaly" used the same. The results indicate that over all (100%) respondents used e-mail for communication.

(vi) Purpose of use

The major objective of this survey is to identify the purpose of Internet use by the scientific community. Thus the survey respondents were asked to indicate the purpose of Internet use. The data given in table 6 gives an indication of purpose of use of Internet and it shows that equally (97.06%) respondents used Internet for education & research and browsing literature followed by browsing e-journals with (83.82%) and (82.35%) respondents used Internet for search latest innovation & technology change.

It can also be seen from the table that the respondents used Internet for browsing abstracts from research journals. Only (63.24% of respondents reported that they used it for entertainment & sports. Since all the respondents are working in the research environment, their foremost priority to use Internet for education & research.

Conclusion

The survey finds that majority of scientists and research fellow indicated that they used Internet for education & research, browsing literature and also they have shown attractiveness of electronic mail as a mode of communication. Their strong desire is to initiate various library functions and services like e-portals, online information/ abstracts retrieval along with Internet. Hence library should offer a variety of services to the scientific community with the use of the latest gadgets of information technologies.

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