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ASSESSMENT OF THE UTILIZATION OF RESEARCH AND DEVELOPMENT LIBRARIES ELECTRONIC RESOURCES BY THE USERS: CHALLENGES AND PROSPECTS

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Abstract *This study was conducted to investigate the problems that hinder the utilization of Information and Communication Technology (ICT)-based electronic resources for the users of Research and development libraries. Four objectives and four research questions guided the study. A sampling technique was used in carrying out the work. The findings from this study on the problems of user's use of ICT-based library resources in their research would be significant in the formulations of ICT-based library resources use policy. It will also show data on the problems hindering the utilization and strategies for enhancing ICT-based library resources in research.*

Keywords: *Research, ICT-based Library Resources, Engineering, Education, Social Sciences, R&D Libraries*

RESEARCH MODEL

The research model adopted for this study is based on the Diffusion of Innovation Theory (DOI). The research model proposes that there exist some relationships and interactions between some variables and utilization of ICT-based library resources users in R&D Libraries in Chennai. It is proposed that Institution status and discipline of study correlate with utilization of ICT-based library resources by Users. Second, it is proposed that the relationship between Institution status and discipline of study would predict utilization of ICT-based library resources by users in located in Chennai.

Analysis of Data Collected from the Users

Questionnaires distributed	500
Questionnaires received	474
	Response Rate: 94.8%

Questionnaires were distributed to 500 respondents and 474 duly filled in up questionnaires were received and the response rate is 94.8%.

Table 1: Demographic Profile of the Respondents

S.No	Gender	Frequency	Percent
1	Male	286	60.3
2	Female	188	39.7
	Total	**474**	**100.0**

The table shows that out of the total 474 respondents, the maximum of 60.3% of the respondents (286) were male and the remaining 39.7% were female.

Table 2: Educational Qualifications

S.No	Educational Qualification	Frequency	Percent
1	UG	85	17.9
2	PG	217	45.8
3	MBBS	69	14.6
4	Doctorate	103	21.7
	Total	**474**	**100.0**

The above table explains the respondents are categorized on the basis of educational qualifications. The highest number of respondents (45.8%) of them was post graduates while 21.7% of them were doctorates. It is also found from the table that 17.9% of the respondents have the qualification of Graduation and 14.6% of the respondents are having the M.B.B.S degree.

Table 3: Designation of the Respondents

S.No	Designation	Frequency	Percent
1	Principal Scientist	85	17.9
2	Scientist	149	31.4
3	Senior Scientist	60	12.7

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S.No	Designation	Frequency	Percent
4	Technical officer	34	7.2
5	Research fellow	9	1.9
6	Scientific officer	8	1.7
7	Student	80	16.9
8	Others	49	10.3
	Total	**474**	**100.0**

The table about the designation clearly shows that 31.4 percent of the respondents were scientists, 17.9 percent of the respondents belongs to the category of principal scientists, 16.9 percent of the respondents are students, 12.7 percent of the respondents belongs to senior scientist, 7.2 percent of the respondent belongs to Technical officer, 1.9 percent of the respondents belong to scientific officer. It is also found that 10.3 percent of the respondents belongs to others.

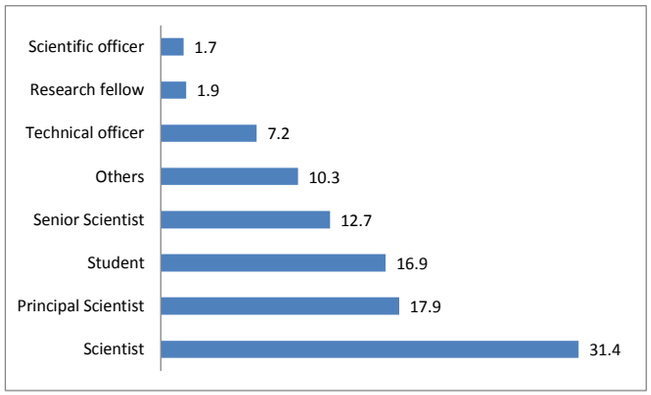

Fig. 1: Designation of the Respondents

Table 4: Research Area of the Organization

S.No	Research area of the organization	Frequency	Percent
1.	Engineering	141	29.7
2.	Medicine	113	23.8
3.	Agriculture	99	20.9
4.	Science	54	11.4
5.	Social Science & Economics	67	14.1
	Total	**474**	**100.0**

The table alone explains the research area of the organization clearly shows that 29.7 percent of the respondents belongs to the discipline of Engineering, 23.8 percent of the respondents belongs to the research area of Medicine, 20.9 percent of the respondents belongs to Agricultural science, 14.1 percent of the respondents are Social science and Economics and 11.4 percent of the respondents belongs to Physical sciences.

Table 5: Frequency of Library Visit

S.No	Often to use library	Frequency	Percent
1	Daily	158	33.3
2	Weekly	38	8.0
3	Twice a week	230	48.5
4	Fortnightly	11	2.3
5	Monthly	24	5.1
6	Occasionally	13	2.7
	Total	**474**	**100.0**

The table about the frequency of library visit of the respondents. It is found that the maximum number of the respondents visiting the library twice a week with 48.5 percent, Next to this 33.3 percent of the respondents are visiting to the library daily. It is also observed that 8.0 percent of the respondents are visiting to the library once in a week. 5.1 percent of the users are visits the library once in a month.

Table 6: Users Level of Satisfaction

Users level of satisfaction	Yes		No		Total
Satisfied with Library collections / resource	415	87.6	59	12.4	**100.0**
Aware of using digital information resources	364	76.8	110	23.2	**100.0**
Provide training for using e-resource	385	81.2	89	18.8	**100.0**

The opinion about the level of satisfaction on library resources, the awareness on digital resources and the requirements of training on e-resources usage were tabulated. It is found from the table that 87.6 percent of the respondents (415) were of the opinion that they are satisfied with the library collections. Moreover, 76.8% of the respondents (364) are opined that they are having the awareness about the digital resources available and they are using them for their academic purposes. It is also noted that 81.2 percent of the respondents (385) are expecting training on use of e-resources to be provided by the libraries.

Table 7: ICT Resources is Frequently Used in the Library

S.No	ICT resources is frequently used in the library	Frequency	Percent
1.	Search Engine	224	47.3
2.	Online database	178	37.6
3.	E-Resource	49	10.3
4.	Offline databases (CD/ DVDs)	21	4.4
5.	Web portal	2	0.4
	Total	**474**	**100.0**

It is observed from the data, the Search Engines are very much useful for accessing the required information by the maximum number of 47.3 percent (224) of the respondents. Next to this, 178 respondents (37.6%) of the opinion that they are accessing Online databases. 10.3 percent of the respondents (49) are of the opinion that they are using the e-resources with proper links. It is also noted that 21 respondents (4.4%) are using CD/DVDs, the offline databases.

Table 8: Reason for Use of ICT Resource

S.No	Reason for use of ICT resource	Frequency	Percent
1.	Easy to acquire information	322	67.9
2.	Easy to process information	106	22.4
3.	Easy to retrieve information	36	7.6
4.	Easy to get latest information	5	1.1
5.	Easy to store information	4	0.8
	Easy to disseminate information	1	0.2
	Total	**474**	**100.0**

Use of e-resources than the print resources in the recent past has its own benefits. While enquiring about the reasons for accessing e-resources, the opinion given by the respondents are quite interesting. It is found from the table, that the maximum of 67.9% of the respondents (322) are of the opinion that the e-resources are 'easy to acquire information' immediately. Next to this, 22.4% of the respondents are of the opinion that the e-resources are 'easy to process the information' for further creation of new information. It is also observed that 7.6% of the respondents (36) are of the opinion that the e-resources are 'easy to retrieve information' in time. Few of the respondents are of the view that the e-resources are easy to get latest information, easy to store information and to disseminate them easily

Table 9: Research Will Not be Effective Without Using the ICT Tools and Techniques

S.No	Research will no effective without using the ICT tools	Frequency	Percent
1.	Strongly Agree	271	57.2
2.	Agree	193	40.7
3.	neither Agree nor Disagree	9	1.9
4.	Strongly Disagree	1	0.2
	Total	**474**	**100.0**

The usage of e-resources in research and development in the digital era is necessary. It is viewed by the respondents in this study. The "Research will not be effective without using ICT tools and Techniques"- the majority of 57.2% of the respondents (271) are strongly agreed this statement. 40.7% of them (193) are agreed this statement and very least portion of the respondents (1.9%) neither agreed nor disagreed this opinion.

CONCLUSION

In this study, the major challenges reported as facing ICT-based library resources were users and student's lack of fund, high cost of internet use, non competent of library staff, lack of access to ICT resources, lack of ICT skills by users and lack of awareness of ICT based library resources.

The study finds the following in order to make use of ICT-based library resources effective in R & D institutions located in Chennai - R& D libraries should make the cost of ICT-based library resources affordable, update the skills of librarians on ICT-based resources, educate the postgraduate research students on the use of ICT-based library resources and make Institutions websites freely available to the users.

REFERENCES

Achonna, A. U., & Yaya, J. A. (2008). ICT register and Internet usage in libraries. In N.E. Achebe (ed). *Library and information literacy for higher education* (pp.164-189). Enugu: NLA state chapter.

Adebowale, T. O., Okiki, O. C., & Yakubu, E. D. (2013). Circulation activities in tertiary institutions in Nigeria: A discourse on circulation transactions of Yaba College of Technology Library. *Information and Knowledge Management, 3*(4), 24-31.

Adejoke, O. S. (2002). The impact of information technology on collection development and management libraries. In E. C. Madu and M.B. Dirisu (eds). *Technology for library schools in Africa* (pp.115-121). Ibadan: Evi- Coleman.

Adekunle, P. A., Omoba, R. O., & Tella, A. (2007). Attitudes of librarians in selected Nigerian university libraries towards the use of ICT. *Library Philosophy and Practice,* 1-8.

Adeleke, A. A., & Olorunsola, R (2006). ICT and library operations: more on the online cataloguing and classification tools and techniques in Nigerian libraries. *Electronic Library, 28*((3), 453-462.

Salau, A. A. (2010). The Nigerian Air Force and information and communication technology development: challenges and prospects. Unpublished NIPSS SEC Project.

Selwyn, N. (2002).*Widening access to ICT via public sites: A research report.* London: Economic and Social Research Council

Shannon, G. (1995). *The Information revolution and national security.* Maryland (U. S.): University of Maryland.

Shidi, H., & Ape, R. (2011). Information and communication technology (ICT) facilities and skills level of library staff of universities in Benue state. *The Information Technologist, 8*(2), 85-92.