ACCEPTANCE OF ICT BASED INFORMATION RESOURCES AMONG LIBRARY USERS' OF MNIT JAIPUR

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Abstract:
        The present article is a study to investigate the awareness and use of ICT based information resources among library users' of Malaviya National institute of Technology, Jaipur. The study is based on questionnaire survey of the Library users'. The article investigates the preference of users' in terms of format, awareness and frequency of use of ICT based information resources. It also determines the satisfaction level of users with regard to digital products. The result showed that though users are aware of library resources and are using it in routine yet library need to employ awareness programs for effective and optimum use of existing resources and services.
Keywords: ICT based information resources, MNIT Jaipur,

Introduction

        The concept of library as a storehouse of knowledge is giving way to the concept based on development of library in a hybrid environment where the resources are either traditional or in electronic formats (Cholin and Karisiddappa, 2006). This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (Young, 2002)

        Today libraries are transforming from traditional information resource provider to the service based digital information resource provider. Library automation, application of ICT and development of digital libraries have tremendously increased because it provides enhanced user satisfaction, rapid responses, cost effectiveness and easier operational procedures. E-journals, CD-ROM databases, online databases, e-books, internet resources and other digital media are replacing the traditional libraries.

        Information seekers are no longer confined to the walls of the library (Vinitha, 2006). The concept of ICT has transformed the technical education also and has insisted for an effective library system, which integrates the use of latest information and communication technology in its functioning.

LITERATURE REVIEW

Literature on the acceptance of ICT based resources and other related issues are given below.
Kwadzo (2015) performed a study on awareness and usage of electronic databases by Geography and Resource Development Information Studies graduate students in the University of Ghana. The study revealed that 96.9% students were aware of electronic databases and were making use of the databases for their studies and research. The study pointed that 68.8% students mentioned that their source of knowledge was their lecturers, whereas 62.5% mentioned that they came to know about e-databases from Library website. The majority of respondents (87.5%) were satisfied with the available electronic databases.

Priyadarshini, Jankiraman and Subramaniam (2015) performed a survey to find the awareness in usage of e-resources among users at Agricultural College and Research Institute, Madurai. The findings revealed that majority of users were aware of e-resources and the subscribed electronic resources were used effectively. The study

demonstrated that 80.6% Postgraduate students and 93.3% Faculty members were making use of freely available e-resources through internet using search engines, whereas 70% Ph.D. scholars preferred the use of e-journals.

Konwar, Uday Krishna and Sinha, Manoj Kumar (2014) in their study discussed the issues and challenges of ICT application and digitization of college libraries of Barak Valley, Assam. The article discussed real problems of the 10 college libraries in terms of ICT implementation and digitization. The study concluded that except few college libraries most of the colleges unequipped with latest information and communication technology. As a conclusion, the scenario can be overcome through collaborative efforts of the regional libraries only.

Castro, Manuel (2015) in his paper has figured that many technologies are influencing the engineering education. A global survey on engineering education technologies was conducted in which each participant was asked to prefer the three learning technologies that will most likely impact engineering education in future. Overall, 375 participants responded to the survey offering the current view of learning technologies in engineering education. The results demonstrated the preference in the following manner - e-learning platforms and architectures (9.69%) followed by 3D printing (8.36%) and E-books and digital libraries (8.18%), simulators (7.91%) and mobile and ubiquitous learning technologies (7.02%).

Husain, Shabahat and Nazim, Mohammad (2015) explained the potential use of different information and communication technologies (ICT) in academic libraries of India. They undertook 15 academic libraries in India, which have been involved in applying traditional solutions for the management of library functions and services. The study discovered that the use of ICT-based tools like web discovery tools, blogs, wikis, Real Simple Syndication feeds and social networking seems uncommon in academic libraries. Lack of training, skills, resistance to change for potential benefits of ICT and outdated ICT infrastructure were found as the major barriers of ICT implementation in academic libraries. Therefore, academic libraries in India are still in the first stage of understanding the importance of ICTs in Libraries.

Foasberg (2011) in his article on adoption of E-Book readers among college students, he discovered that students were using digital devices for leisure purpose and still rely on print media for much of their reading. Students reported exaggerate price is the greatest barrier to reach out to e-readers and it is also difficult to borrow e-reader compatible e-books from the library.

Marchweka, Liu and Kostiwa (2007) in their article on application of the UTAUT Model for Understanding Student Perceptions using Course Management Software, conducted user perception study on use of Blackboard - CMS. In this study they used various methods and found that students observed Blackboard as a good idea but its most features are not being used to their fullest capability because of unawareness.

STATEMENT OF THE PROBLEM

In India there are 31 National Institute of Technology. These are the foremost technical institutions in India, having the national importance, and are grooming global engineers. This study is an attempt to present an overview of acceptance of digital information resources at Malaviya National Institute of Technology, Jaipur (MNIT).

The MNIT, Jaipur was granted the status of Deemed University in 2002, and further in 2007, became Institute of National Importance by an Act of Parliament. MNIT library is developing digital library space and, hence, the present study is envisaged to investigate the factors of awareness and usage of ICT based information resources provided by them.

OBJECTIVES

The main objectives of the study were as under:
1. To determine the format preference of the users' with regard to ICT based information resources available at MNIT Library.
2. To study the awareness of users about the available ICT based information resources at MNIT Library.
3. To know the frequency of use of ICT based information resources of the users'.
4. To know the importance perception of the users' for ICT based information resources.

5. To determine the purpose of use of ICT based information resources.
6. To find out the satisfaction level of users regarding ICT based resources.

METHODOLOGY

The study adopted a simple random sampling method, where the questionnaires were distributed to faculty members, research scholars, postgraduate students and undergraduate students. A total of 150 questionnaires were distributed to users. Ultimately, 125 questionnaires were found to be fit for further evaluation, with an overall response rate of 83.3 percent.

ANALYSIS AND INTERPRETATION

Distribution of Respondents by Status
The questionnaires were distributed among faculty members, research scholars, PG students and UG students. Table 1 below shows that majority of the respondents 97 (77.6%) are UG students followed by 12 (9.6%) PG Students, 7 (5.6%) Research Scholars and 9 (7.2%) Faculty members.

TABLE 1: DISTRIBUTION OF RESPONDENTS – STATUS

Institute	Frequency	Status				Total
		UG Student	PG Student	Research Scholar	Faculty	
MNIT	n	97	12	7	9	125
	%	77.6	9.6	5.6	7.2	100

DISTRIBUTION OF RESPONDENTS BY GENDER
The distribution of the gender can be seen in Table 2 below. The table shows that 84 (67.2%) of the respondents are male and 41 (32.8%) respondents are females. This is because the proportion of female students is less in technical institutions.

TABLE 2: DISTRIBUTION OF RESPONDENTS – GENDER

Institute	Frequency	Male	Female	Total
MNIT	n	84	41	125
	%	67.2	32.8	100

FORMAT PREFERENCE OF INFORMATION CONTENT
Users' were asked to indicate the format preference with regard to information resources. It has come to fore in Table 3 below that the responses are biased towards hybrid library collection only i.e. both (print and digital) type of resources has scored 113 (90.4%) responses in favour of it.Whereas, each, print and digital formats were preferred by 4 (3.2%) and 8 (6.4%) respondents, respectively.

TABLE 3: FORMAT PREFERENCE OF INFORMATION CONTENT

Institute	Frequency	Format Preference			Total
		Print	Digital	Both	
MNIT	n	4	8	113	125
	%	3.2	6.4	90.4	100

AWARENESS OF ICT BASED INFORMATION RESOURCES

Users indicated their choice with regard to awareness of ICT based information resources available through NIT Library. Table 4 shows that out of the given 11 resources the most aware resources were E-Journals, E-Newsletters and Institute Publications each with 124 (99.2%) responses, respectively. The least ranked resources were institute repository with 83 (66.4%) responses followed by CD/DVD databases with 90 (72%) responsesand Factual databases with 103 (82.4%) responses.

TABLE 4: AWARENESS OF ICT BASED INFORMATION RESOURCES

Awareness	Percent	Rank
E-Journals	99.20%	1
E-Newsletters	99.20%	
Institute Publications	99.20%	
E-Books	94.40%	2
E-Theses/Dissertations	94.40%	
Subject Specific Portals	89.60%	3
E-Standards	89.60%	
Indexing/Abstracting Databases	84.00%	4
Factual Databases	82.40%	5
CD/DVD Databases	72.00%	6
Institute Repository	66.40%	7

FREQUENCY OF USE OF ICT BASED INFORMATION RESOURCES

Users' were asked to indicate their frequency of use of information resources on a four point likert scale. Table 5 shows that E-Journals was ranked the highest with mean value $\bar{x}$ = 3.48, σ ± 0.989 followed by E-Books with mean value $\bar{x}$ = 3.42, σ ± 0.542 and E-Newsletters $\bar{x}$ = 2.75, σ ± 0.930. The least ranked information resources were Factual Databases with mean value $\bar{x}$ = 1.54, σ ± 0.809 followed by Institute Publications with mean value $\bar{x}$ = 1.54, σ ± 1.02 and CD/DVD Databases with mean value $\bar{x}$ = 1.58, σ ± 0.873.

TABLE 5: FREQUENCY OF USE OF ICT BASED RESOURCES

Information Resources	Mean	Std. Deviation	Rank
E-Journals	3.48	0.989	1
E-Books	3.42	0.542	2
E-Newsletters	2.75	0.930	3
E-Theses/Dissertations	2.62	0.939	4
Subject Specific Portals	2.32	0.930	5
Indexing/Abstracting Databases	2.14	1.014	6
Institute Repository	1.90	1.113	7
E-Standards	1.72	0.980	8

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Information Resources	Mean	Std. Deviation	Rank
CD/DVD Databases	1.58	0.873	9
Institute Publication	1.54	1.020	10
Factual Databases	1.54	0.809	11

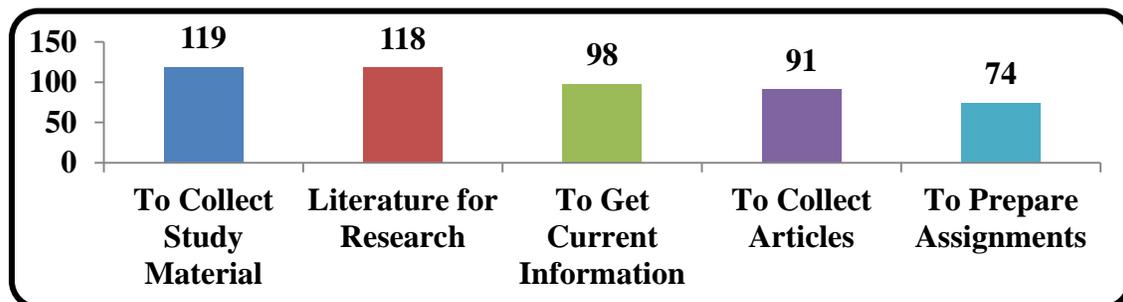**IMPORTANCE PERCEPTION OF USERS FOR ICT BASED INFORMATION RESOURCES**

Table 6 shows that E-Journalswas given more importance upon all other information resources with mean value $\bar{x}$ = 3.73, $\sigma \pm 0.544$ followed by E-Books with mean value $\bar{x}$ = 3.68, $\sigma \pm 0.468$ and E-Theses/Dissertations with mean value $\bar{x}$ = 3.18, $\sigma \pm 0.824$. The least important information resources were Institute Publications with mean value $\bar{x}$ = 2.14, $\sigma \pm 0.939$ followed by Factual Databases with mean value $\bar{x}$ = 2.46, $\sigma \pm 0.828$ and Institute Repository with mean value $\bar{x}$ = 2.53, $\sigma \pm 0.747$.

TABLE 6: IMPORTANCE PERCEPTION OF ICT BASED INFORMATION RESOURCES

| Information Resources	Mean	Std. Deviation	Rank
E-Journals	3.73	0.544	1
E-Books	3.68	0.468	2
E-Theses/Dissertations	3.18	0.824	3
Subject Specific Portals	2.72	0.921	4
Indexing/Abstracting Databases	2.70	0.942	5
E-Standards	2.63	0.946	6
E-Newsletters	2.59	0.814	7
CD/DVD Databases	2.56	0.827	8
Institute Repository	2.53	0.747	9
Factual Databases	2.46	0.828	10
Institute Publications	2.14	0.939	11

USERS' PURPOSE OF USING ICT BASED INFORMATION RESOURCES

Figure 1 explains the users' purpose of using ICT based information resources at MNIT, Jaipur Library. It is noticed that the highest ranked purpose was 'to collect study material' with 119 (95.2%) responses followed by 'literature for research' purpose with 118 (94.4%) responses. Astoundingly, 'to prepare assignments had been ranked the lowest by the users' with 74 (59.2%) responses.

FIGURE 1: USERS' PURPOSE OF USING ICT BASED

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USERS' SATISFACTION WITH REGARD TO ICT BASED INFORMATION RESOURCES

Users' indicated there choice on a four point likert scale with regard to satisfaction with available information resources. Figure 2 shows that majority of the users' were 'partially satisfied' with 76 (60.8%) responses followed by fully satisfied respondents with 42 (33.6%) affirmative responses.
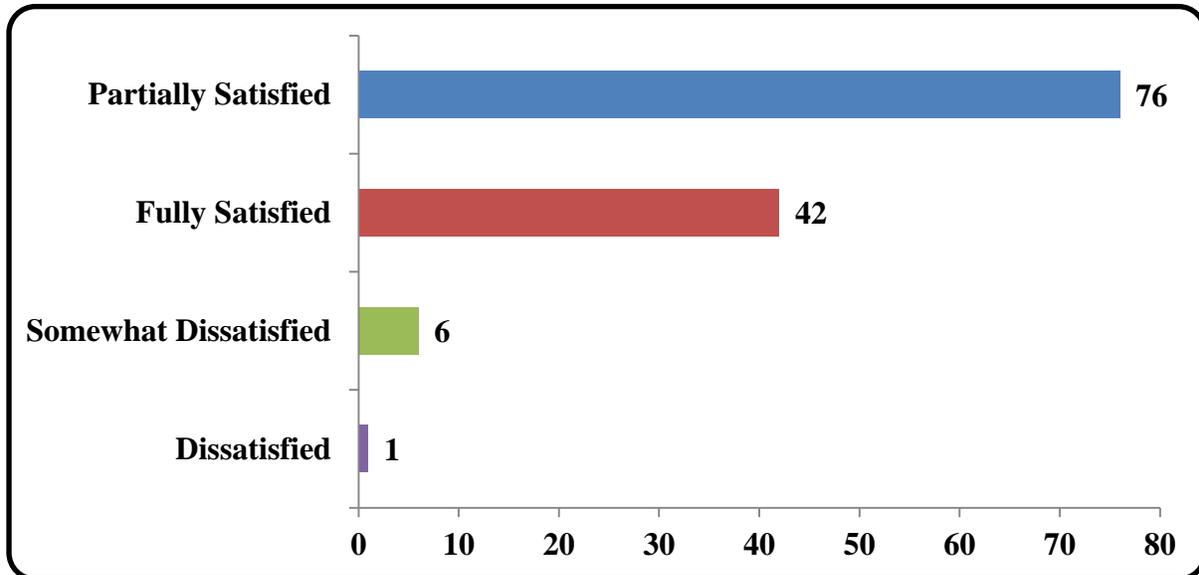
FIGURE 2: USERS' SATISFACTION WITH REGARD TO ICT BASED INFORMATION RESOURCES

Findings and Suggestions

The findings of the present study can be summarized as follows:

- Users' are more inclined towards print as well as digital type of resources. Hence, MNIT library has to develop their collection on a proportionate basis in a hybrid system.
- Looking into the awareness pattern of the users, it is visible that the MNIT, Jaipur users' are well aware of ICT based information resources.
- Frequency of use of ICT based information resources shown in Table 5 shows that the users' had chosen e-journals, e-books, e-newsletters and e-thesis/dissertations, as their prime choice and has shown average preference for other resources like - subject specific portals, e-standards and indexing and abstracting databases.
- ICT based resources can be used optimally with the help of training programs and it should be organised on time to time basis. The study showed that though the resources are available with the library yet users' are not using it optimally. More awareness program should be rendered to the students for better utilization of the library and also accepting new technology in line with global education standards.

Conclusion

ICT has a great importance in each and every sphere of life and libraries are not left behind from its impact. This study sought to examine the acceptance of the ICT based information resources by the users' of MNIT Jaipur. It is evident from the study that most of the respondents are aware and use ICT application in their learning pursuit. Majority of the respondents are using ICT resources to collect study material and to get literature resources. However, on satisfaction level users' were partially satisfied and that can be changed to full satisfaction by altering the resistance to change attitude of the library professionals, by enhancing skill sets of the workforce and by introducing new technology at workplace.

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