

Measuring Satisfaction of Users from e-Library vis-à-vis selected Libraries of Rajasthan states

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Abstract

Emergence of E-resources has caused a shift in user's perception also. In the changing dimensions, it does not matter what you have but the important issue is to have an access to it. Today, we can have seamless access to any information from anywhere anytime crossing all the geographical boundaries, provided basic infra-structure is available. All those developments are leading to the emergence of digital libraries or electronic libraries in a parallel way. In the present scenario, users are seeking a one-stop shop to satisfy their information needs. This study was conducted in the libraries of Rajasthan. For this purpose the data from 230 respondents of 10 libraries was collected and analyzed with one sample t-test and multiple regression analysis. Study revealed that respondents believed that the variety of e-resources available in libraries are significant and E-Book, Database and E-Journals are the major benefits of E-libraries in Rajasthan state.

Keywords: E-Books, E-Resources, E-Journals, Database, Electronic Library, Digital Library.

1. Introduction

Now a days the technology is improving in a fast pace and the service sector is getting widely boomed. Users who are giving prior importance to quality consider several factors for choosing the service. Among them the services rendered by the libraries also matter a lot because of the growth of electronic libraries. The construct of user satisfaction, a user's self-reported degree of satisfaction with library services, is presumed to be a subjective measure of library performance. It has various services within a library, to measure in general, a given library's overall level of performance with those reported for other libraries.

Electronic resources are the electronic representation of information. There are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and on line test. Because of the effective presentation with multimedia tools, these e-resources have become the source of information. Electronic resources delivers the collection of information as full text databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology etc. E-resources may include e-journals, e-discussions, e-news, data archives, e-mail on line chatting, etc can be called as an e-resources. Electronic information source are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all of them having a common feature of being used and some time modified by a computer. The knowledge of the technologies of information and communication is especially important because it refer to an area of the knowledge generated

by users. The e-resources have provided many possibilities and opportunities for providing faster and quicker access to information.

Background study

The library at present is maintaining two parallel collection of reading materials such as traditional and electronic resources to satisfy the varied needs of the user communities. Further, the Library and Information Centres require availability and accessibility to a variety of information resources and formats (such as digital full-text, sound, graphics, images, multimedia and hypertext). In view of the financial constraints almost all the universities are unable to procure sufficient reading and research materials both in traditional and e-form for teaching and research purpose of the users including academicians. Moreover, the increasing volume of available publications has also created confusions for the library to acquire all the titles within the allocated limited budget which caused immense problems for the users in pursuing their teaching and research work. This revealed that the academic communities including students and researchers to move from print to electronic resources. Mention may be made that now-a-days, the e-resources are profusely available through Internet, World Wide Web and Consortia and subject gateways. The present study, satisfaction and major benefits of electronic resources & their services has been examined and analysed.

2. Review of Literature

A large number of research studies have been conducted on the use of electronic resources focused on different thematic area such as copyright, usability, digital right management, ROI etc. Some of the relevant studies conducted in the domain are cited as under:

Morgan-Daniel and Preston (2017) conducted a case study on the information needs of Masters level Occupational Therapy 5 (OT) students at one English university. A mixed methods questionnaire was used to explore motivators for information-seeking, preferred information resources and barriers inhibiting the satisfaction of information needs. Thirteen recommendations for practice were formulated, focusing on how information professionals can best facilitate OT students' learning and evidence-based research skills in preparation for clinical practice. The study was completed by Jane Morgan-Daniel, who received a Distinction for her work from Aberystwyth University, where she graduated with an MSC in Information and Library Studies in December 2016.

Kwadzo (2015) in the article Awareness and Use of Electronic Databases by Geography and Resource Development Information Studies graduate students in University, Ghana revealed that 96.9% students were aware of electronic databases. The majority of respondents (84.5%) were satisfied with the available e-databases. The students felt that required information can easily be accessed using e-databases.

Zhao and Strotmann (2014) continues a long history of author co-citation analysis (and more recently, author bibliographic coupling analysis) of the intellectual structure of information science (IS) into the time period 2006 to 2010 (IS 2006–2010). A broadening of perspectives is visible in IS 2006–2010, where network science becomes influential and where full-text analysis methods complement traditional computer science influences. Research in the areas of the h-index and mapping of science appears to have been highlights of IS 2006–2011.

Vasileiou, M., Rowley, J. and Hartley, R. (2013) explained that paradigm change in terms of the format of books, and especially textbooks, which could have far-reaching impact, is on the horizon. Based on interviews with a number of key informants across several universities in the UK, this paper identifies a number of challenges associated with the creation of the essential metadata to support smooth access to e-books within universities. These challenges arise both from internal acquisition and cataloguing processes within libraries, and from the nature and quality of vendor's e-book metadata, and variously impact on the location of and access to e-books.

England, R. (2013) in his paper on "An investigation into the move towards electronic journals: a case study of NHS libraries in Kent, Surrey and Sussex," revealed that Electronic journals are so embedded into practice in academic libraries that it is easy to forget that this is not the case everywhere. In NHS libraries, for example, the staff face a particular set of issues. This article is based on Rebecca England's dissertation on this topic, completed as part of the MSc Econ course in Information and Library studies at Aberystwyth University. Rebecca is E-resources Librarian at the Maidstone and Tunbridge Wells NHS Trust. She investigated the momentum towards electronic journals in NHS libraries in the Kent, Surrey and Sussex region and the potential for a regional purchasing consortium.

D'Ambra, Wilson and Akter (2013) expressed that the increasingly, e-books are becoming alternatives to print books in academic libraries, thus providing opportunities to assess how well the use of e-books meets the requirements of academics. This study uses the task-technology fit (TTF) model to explore the interrelationships of e-books, the affordances offered by smart readers, the information needs of academics, and the "fit" of technology to tasks as well as performance. The study used content analysis and an online survey, administered to the faculty in Medicine, Science and Engineering at the University of New South Wales, to identify the attributes of a TTF construct of e-books in academic settings.

Murat and Tamer (2012) explain that physically big libraries designed for the benefits of students attending universities are, the sources they include are more important. Considering the increasing capacities of universities, the problems that libraries encounter with are increasing day by day. The purpose of this study was to determine the needs by revealing the interface features, differences, ease of use, comprehensibility for users and the advantages and disadvantages of the system in the processes of e-library designing. In this respect, it is believed that students will be provided with better services with the increase in the quality of education at universities that will use e-library.

Bellary (2012) in his article presents, how management students and faculty members depend on digital resources. He found that the students and faculty members of Chetana's R.K. Institute of Management and Research, Mumbai, are more dependent on all the digital resources and images, audio-visual materials, online reference resources, digitized documents, research reports & case studies. Such as resources are regularly updated and provide access through Wi-Fi in the institute.

Zhang (2010) reported the recent research in developing a holistic model for various levels of digital library (DL) evaluation in which perceived important criteria from heterogeneous stakeholder groups are organized and presented. To develop such a model, the author applied a three-stage research approach: exploration, confirmation, and verification. During the exploration stage, a literature review was conducted followed by an interview, along with a card sorting technique, to collect important criteria perceived by DL experts. Then the criteria

identified were used for developing an online survey during the confirmation stage. Survey respondents (431 in total) from 22 countries rated the importance of the criteria. A holistic DL evaluation model was constructed using statistical techniques. Eventually, the verification stage was devised to test the reliability of the model in the context of searching and evaluating an operational DL.

Kim (2010) revealed that the University libraries invest a massive amount of resources in digitizing information for the Web, yet there is growing concern that much of this information is being underutilized. The present study uses the technology acceptance model (TAM) to investigate university library website resources (ULWR) usage. The findings show that 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. Some of the findings challenge results reported in TAM research in other fields.

Park, Lu and Marion (2009) revealed that current state of responsibilities and skill sets required of cataloging professionals. It identifies emerging roles and competencies focusing on the digital environment and relates these to the established knowledge of traditional cataloging standards and practices. They found that technological advances increasingly demand knowledge and skills related to electronic resource management, metadata creation, and computer and Web applications.

Talja and et al. (2007) explained that currently, there exists little evidence concerning how various characteristics of research cultures are associated with patterns of use of electronic library resources. The present study addresses this gap by exploring how research-group membership, across-fields scattering of literature, and degree of establishment of research area are related to patterns of digital library use.

Singh (2006) found that in most of the Indian special libraries, features such as Internet resources and other electronic resources, subject gateways and networks and consortia, are fast gaining acceptance. New trends include the development of libraries own websites, the sophisticated application of digital technology, more professional marketing of information products and services which are becoming the growing demand of the day.

Kasproski (2006) revealed that the steps required for managing e-resources are more complex than those for print resources. A process that consisted of selecting, ordering, cataloguing and binding now includes selecting, evaluating, approving, licensing, billing and registering access and is accompanied by a series of technical aspects, such as usability, performance, access technologies, public interfaces, troubleshooting and usage statistics.

Tenopir (2003) has summarized, analyzed and integrated the result of 8 major ongoing research projects and 100 small scale studies on the users of electronic library resources. This report was highly recommended for an in depth understanding of academic users while undergoing the Super Journal Project. The researcher concluded that in order to accommodate the needs of all its users, an academic library e-journals system should include features that enable; Browsing through table of contents; Searching for topics or articles within a designated subject area; Customizing subject of journal or articles & Searching across all subject areas for articles in as many electronic journals as possible.

3. Objectives of the study

The main objectives of this study are as under:

- To measure the difference in the variety of e-resources available in your library.
- To measure satisfaction of respondents from e-library services while accessing e-resources.
- To find out the purpose & utilization of using the e-resources.
- To study the preferred format for using e-resources.

4. Research Methodology

As far as possible the e-libraries covering prominent subjects such as Engineering, Agriculture, Law, Management, Science and Technology, Health & Medical Science etc. are covered to study. These libraries belong to Rajasthan only although some of them are part of reputed national organizations so that a depth analysis & interpretation could be done to arrive at desired goals. A questionnaire survey was conducted to collect the information regarding the use of e-resources. A sample size 230 end user is taken from the 10 selected libraries as per the convenient to convenience sampling. One sample t-test and regression was being used to describe how one variable is dependent on another. Hypothesis testing is being done through one sample and independent t-test using SPSS software. The study utilized statistical techniques such as descriptive analysis to analyse the data. The research applied descriptive statistics which consists of methods for organizing, displaying and describing data by using tables and summary measures.

5. Data Analysis

5.1 Sample Demographics

The sample of the 10 selected libraries was taken on the basis of convenient sample method, from main stream libraries. For the purpose of data analysis the demographic profile of the respondents were analysed first. The respondents profile as per their designation is shown as under:

Table-1: Designation-wise respondents

Designation	Frequency (230)	Percentage
Faculty	05	2.2
Research Scholar	31	13.5
PG Student	74	32.2
Any Other	120	52.2

The distribution of the respondents according to their designation has revealed that the maximum respondent belongs to other category of graduate degree holders followed by post graduate and research scholars.

Table-2: Gender wise classification

Gender	Frequency (230)	Percentage
Male	155	67.4
Female	75	32.6

The distribution of the respondents according to their gender has revealed that the maximum respondent were males (67.4 percent) followed by females. This is because the number of students in the libraries was more males than females. These numbers of respondents were gathered with the best efforts of the scholar.

Table-3: Age wise classification

Age	Frequency (230)	Percentage
40-49 years	6	2.6
30-39 years	35	15.2
20-29 years	189	82.1

The distribution of the respondents according to their Age has revealed that the maximum respondent belongs to 20-29 years were age, since it is the normal age of the college going students. The other age group selected was 30-39 years but very less (only 15.2 percent) a respondent belongs to that category.

Table-4: Marital status wise classification

Marital status	Frequency (230)	Percentage
Unmarried	189	82.5
Married	41	17.5

As per the marital status of the respondents the maximum respondent was unmarried since their age is below the age of marriage and they were continuing their study. The 82.5 percent of the respondents were unmarried while only 17.5 percent those who are of the age category of 30 years were married.

Table-5: Requirement of E-resources

Requirement	Frequency (230)	Percentage
No	5	2.2
Yes	223	97.0
Don't Know	2	0.8

The result of the data analysis on requirement of e-resources have shown that there is requirement of e-resources for pursuing the reader's goals, as 97 percent of the respondents said that they need the e-resources.

Table-6: Visit Frequency

Frequency	Number (230)	Percentage
Regularly	70	30.6
Monthly	67	29.3
Weekly	80	34.9
Rarely	13	5.2

The distribution of the respondents according to their visit of the library has revealed that the maximum respondents were using library on weekly visit (34.9 percent) basis while almost the same percent (30.6 percent and 29.3 percent) are using the library monthly and regularly basis. This means the percent of the library visitors are more if compared with the rarely (5.2 percent only).

Table-7: Number & Percentages of users in different libraries

Libraries	Frequency (230)	Percentage
IIT Jodhpur (IITJ)	23	10.0
Highcourt Library (HLJ)	21	9.1
MBM Engineering College (MBMEC)	21	9.1
Cazri Research Institute (CAZRI)	21	9.1
IIM Udaipur(IIMU)	27	11.7
RNT Udaipur (RNTU)	22	9.6
LNMIIT Jaipur (LNMIIT)	25	10.9
SMS Medical College (SMSMC)	21	9.1
MNIT Jaipur (MNIT)	20	8.7
SKRAU, Bikaner (SKRAU)	29	12.6

The distribution of the respondents according to their Institute name has revealed that the maximum respondent belongs to SKRAU college Bikaner followed by IIM Udaipur, but moreover a very good and less deviated sample was selected as the differences is only 9 between the various libraries, and represents sample in a better way.

5.2 Variety of e-resources available

The data analysis is based upon the objectives of the study, thus first the difference in the variety of e-resources available in your library is measured. The data gathered are listed in table-8 as under:

Table-8: Difference in the variety of e-resources available

Type of e-resources	Frequency	Percent
E_Journals	181	78.70
E_Books	188	81.74
Databases	140	60.87
CD_ROM	103	44.78
E_thesis	152	66.09

It is clear from the above table-8 that the E Books were used significantly and slightly more and followed by e-Journals available for the purpose of the e-resources availability.

5.3 Satisfaction from E-Library services

Measuring satisfaction of respondents from e-library services while accessing e-resources the data collected are presented in table-9 as under:

Table-9: Satisfaction from E-Library services

	Frequency (230)	Percent
Poor	42	18.3
Satisfactory	24	10.4
Good	53	23.0
Very Good	59	25.7
Excellent	45	19.6
No Information	7	2.7

Table-9 revealed that the e-library services provided by the libraries are satisfactory.

5.4 Utilization of e-resources

Table-10: Purpose & utilization of using the e-resources

Purpose & utilization of using the e-resources	No. of respondents	Percentage
Literature searching	117	50.9
Electronic mail	123	53.5
Pursuing Research	81	35.2
Assignments, lectures, research paper & projects	108	47.0

Purpose to use the e-resources includes used for Literature searching (50.9%), E-Mail (53.5%) for pursuing Research (35.2%) and for Preparation of assignments, lectures, research paper & Projects (47%). Thus we can say that the main Purpose to use the internet includes E-Mail and Literature searching.

Since the catalogue is available in the library, it provides the relevant bibliographical data only followed by least information about the e-resources. Thus it is recommended that the use of e-resources must be promoted in the relevant bibliographic format.

6. Findings

The major findings in terms of the objectives of the research have shown that it was found that all the libraries are having the various e-resources in the form of e-journals, e-books and other online material available. Further the respondents were satisfied with the e-resources available in e-library and the purpose & utilization of using the e-resources for all the possible ways including literature searching, electronic mail, pursuing research and assignments, lectures, research paper and projects. As far as the preferred format for using e-resources is concerned the respondents wish to use bibliographic details for the same purpose.

7. Recommendations

The result of the data analysis on requirement of e-resources can be shown in the form of following recommendations:

- Libraries should conduct user orientation/awareness programme to increase the usage.
- Libraries should make the process easy for the users. Catalog only provide relevant bibliographical data only with least information about the e-resources. Thus it is recommended that the use of e-resources must be promoted.
- Library does not offer percent adequate training for the use of e-resources. This is the missing link for the respondents and thus needs to provide the training to users. Libraries should provide adequate training to staff.
- Sufficient number of e-journals is not provided by the libraries. Thus the e-resources need to be increased.

8. Conclusion

E-resource is the best resources for the various activities inside and outside the libraries available to the researchers that provides the latest knowledge. There is a wide scope of e-library for pursuing research and for preparation of assignments, lectures, research paper & Projects. The study further put emphasis on the use of e-resources must be promoted in the

relevant bibliographic format. Implementation of e resources is the best thing that happened to academic institutions because it has facilitated and improved research in the best way possible. In the current study the data was taken from 230 respondents of 10 selected libraries of Rajasthan. The results revealed that three variables E-Book, Database, E-Journal are predicting the benefits and satisfaction from the e-library services offered by the selected libraries of Rajasthan state.

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