PURVIEW OF E-RESOURCES AND INFORMATION COMMUNICATION TECHNOLOGY IN UNIVERSITY LIBRARIES OF TAMIL NADU

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Introduction:

Libraries are called as store houses of knowledge. Sometimes back the main collection of the library is print materials. Today is the era of Information Technology, the academics would like to get updated information without spending lots of time, and hence they preferred to use the ICT based sources and services. Nowadays the library authorities fulfil the need of the academics and hence the libraries adopt to implement the ICT based sources and services.

The information field has spread out of the libraries and information centres, and has been transformed into an Industry that sells, organizes, and processes information. In this period of constant change, the library's traditional roles of preserving, cataloguing, classifying, and reference services are undergoing a transformation. Library schools worldwide have confronted technological challenges and adapted their curriculum according to the new developments of ICT based.

Information technologies are being used in various fields since quite some time in education. Apart from making the learning and teaching more interesting the information and communication technology provide opportunity to the teacher and taught to gain information.

Usefulness of information technology can be gauged by way of its usage now in various countries as one of the basic things to make teaching and learning more interesting.

The emergence of the word " information " took place after the Second World War because of the recorded public knowledge affected the quality and quantity control, communication problem and problem relating to development of information institution which in turn gave rise to information storage and retrieval , information network and bibliographical control. The technological revolution in the last three decades has made tremendous impact in the way information is processed, stored, retrieved and disseminated.

The library and information scenario is changing at dynamic pace., there is paradigm shift from print media to electronic media; from ownership of document to access to information ; intermediary to end user model of services; and from location of specific libraries to digital / virtual / hybrid libraries. Similarly there is change in need and interest of readers. Hence the role of library and information professionals has also changed dramatically. To meet the current requirements, library professionals must be also to perform various tasks coping up with the changes in technological environment. Now a days the LIS professionals are having good knowledge in using new technology like ICT.

2. INFORMATION TECHNOLOGY

Now Information Technology has opened new vistas for present and a brighter future for libraries. The thrust of the society is now not on knowledge but bits of information. Libraries are to provide bits of information from their knowledge banks in a more organized manner for this they have to use Information Technology. Their archival value of information must be retained as other information providers may disregard, delete or do away with such information as does

not fit in the competitive and the commercial world. While information is an important function and many databases store information in a variety of ways, the retrieval of information is a more important function of the library in providing right information from the plethora of information available in wide range of formats, as raw information by itself has no value. It has to be targeted information to meet the specific requirements of the users.

Information Technology has changed dramatically during the last two decades. IT has profoundly affected all the aspects of the Library and Information centres.

Information Technology is a broad term that encompasses wide range of sub – technologies. IT refers to the devices and tools used in the generation to gather, process, store, retrieve, communicate and deliver of information. It is the convergence of computers, communication and micro – electronic based technologies. Information Technology includes computers, application software, databases, communication, networks, internet and publishing technology.

Thus polices and opinion for a new information technology society must take into account such interactions, and the existence of past established communication technologies. These will not disappear overnight – only the essentially ephemeral will do that, or where cost changes are dramatically in favour of the new. The mass successes of the microprocessor – video games, pocket calculation, digital watches – have all been in such areas.

According to Viswanathan[1] (1995) Information Technology may broadly be said to be that technology which is used for information management, which involves acquisition, processing, storage, retrieval and dissemination of information. As reprography, printing and

publishing are all activities involved in information management, the corresponding technologies become part of IT.

According to Murthy[2] (1999) the information technologies that are relevant to libraries mainly include; (i) Computer technology, (ii) Telecommunication technologies, (iii) Reprographic technologies, (iv) Library technologies, and (v) Technological communications.

3. INFORMATION TECHNOLOGY IN LIBRARIES

The use of Information Technology has become imperative for the efficient management of modern libraries. Advent of Information Technology the traditional libraries are changed to digital library. The rapid revolutionary developments in ICT have great potential in increasing the efficiency of house – keeping operations and effectiveness of information services in libraries. If the libraries have to manage their operations effectively and to develop effective information services, they have to make most effective use of new technologies of many kinds. Use of IT solutions is so longer a matter of choice but a matter of survival in global information society. Internet could be used to support library acquisitions, technical processing, serials control, reference and information services, and development of digital information resources. Internet has become an effective channel for marketing of library and information products and services at global level.

Rapid advances in IT in the past two decades have brought revolutionary changes in the concept, organization, functioning and management of library and information systems throughout the world. The impact of these changes is pervasive and affecting all the aspects of library operations, information resources and services, staff skills requirements and users expectations. The accelerating pace of technological developments has tremendously increased

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the ability to access, store, and process, communicate and deliver information services in libraries. Worldwide libraries have been exploring new technologies as a means of providing better and faster access to vast array of information resources and efficient information services to their users. IT has a huge potential for providing wide range of new opportunities and offering better solution to achieve greater levels of efficiency, productivity and higher standards of quality services in libraries.

Since, 1960s, worldwide libraries have been using technology in general and computers in particular to automate a wide range of administrative, technical tasks and reference services. During the last decade, it has played an increasingly influential role in library management system as they have immense capabilities in handling and processing huge volume of information held in libraries. A large number of studies investigated the utilization of technological applications in library and information centres all over the world. And also lots of studies conducted for the use of E-resources by the users of university libraries. This study proves the need and purpose of using ICT based sources and services rendered by the library.

The Internet has now become one of the provinces of not only programmers and scientists but of educators, business people, students, and of course librarians. Since the Internet and its transforming role is a totally new form of communication and information dissemination tool, librarians are now faced with a dynamic environment where existing procedures and workflows increasingly don't apply. A familiar range of collection development tools, bibliographical resources and computerized databases, librarians can now be the New Age Information managers.

4. BACKGROUND OF THE PROBLEM

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The developments in information Technology (IT), which has been acquired from, developed countries and their use in India is currently dominating. Indian university libraries are directly affected with the advent of IT. The major technologies like bar coding, scanning, CD-ROM, electronic security system, close circuit TV, multimedia, video and teleconferencing, networking, Internet, electronic publishing, in-house databases, digitization etc, have directly revolutionized the functioning of libraries.

Traditional methods for the information retrieval and dissemination are becoming inadequate, and these are being replaced and information technology is being applied increasingly to provide access to information. Libraries are not operating in isolation now, but are becoming partner of various networks for mutual benefits. The status of the university libraries in India seems of being given priority by the bigwigs without any fore thought for harnessing the richness of the information world.

The objective of IT is to render better services to users by means of transmitting data or messages in the form of written or printed records, electronic, audio or video signals by using wires, cables and telecommunication techniques. Information technology plays an important role in information handling. i.e, reduction in computing time, capabilities of resource sharing, consortia, economic, storage capabilities of files on video discs, use of TV for displaying information, telecommunication and satellite communication facilities for networking, etc. The use of reprographics, micro graphics and other media such as magnetic tapes, microforms and CD-ROMs have brought a radical change in saving space, cost and represent a new era in information transfer.

The success and failure of an organization depends upon three factors, viz., the processes being followed, human resources and the way latest technology is being used to achieve

its goals. In a library also, the aforesaid three factors are the most important determinates of efficiency, effectiveness and success. Library professionals have become a subject of attention in the modern times as a result of the development of information and communication technologies on the one hand and inflow of great amount and variety of information on the other. The modern information society demands more multimedia based information instead of traditional paper based information with the advent of electronic information using modern technologies.

5. REVIEW OF LITERATURE

Abdullah Almobarraz (2009) examined the characteristics of internet that affect its adoption by faculty members of Imam Muhammad Bin Saud University (IMSU) in Saudi Arabia. The framework of the study was the attributes of innovations offered by Rogers. The result revealed that the majority of IMSU faculty members used the Internet for research and academic activities twice a month or less, indicating a low Internet adoption rate. Multiple regression analysis showed that all attributes of innovation individually predicted Internet adoption. The combination of all attributes indicated the model could predict Internet adoption among faculty.

Becker (2008) conducted a study on the Internet use by 2250 teachers from public and private schools in the U.S. The study revealed that 90% of the teachers had Internet access. More than half of the teachers had Internet access at home. A majority of the teachers used Internet to find information resources for preparing their lessons.

Bavakutty and Salih (2009) conducted a study at Calicut University, which showed that students, research scholars, and teachers used the Internet for the purpose of study, research and teaching respectively. The purposes of Internet use were: sending and

receiving e-mails in connection with academic requirements, making a search on library catalogues, downloading images and communication with the peer.

Carita Kiili and Miika Marttunen, (2008) investigated how students evaluate Internet sources in an authentic learning task. Upper secondary school students were asked to look for source material on the Internet in order to write an essay. They were asked to verbalize their thoughts during the material gathering process. Their verbalizations and actions on the Internet were recorded and analyzed. The five evaluation profiles emerged: 1) versatile evaluators; 2) relevance-orientated evaluators; 3) limited evaluators; 4) disorientated readers; and 5) uncritical readers.

Fatima (2008) investigated the impact of internet on reference services by exploring the following areas: user internet access and training in the library use and integration of the internet as an information tool in reference services and the internet training and knowledge of reference librarians. The result showed that all responding libraries have internet access and all but one provided access to their users. On average, users have had internet access for three and a half years on average; reference librarians have had internet access for five years. Librarians reported that the reference process took longer, that user search behavior had changed and expectations had increased while the majority of libraries had websites, only a small number of librarians had individual pages that they updated and maintained. The majority of libraries provided electronic reference via e-mail and the library websites, but these are characterized by low usage. Finally, libraries tended to offer both end user and intermediary searching to online databases.

6. NEED AND SIGNIFICANCE OF THE STUDY

Now a days university libraries play a vital role in higher education especially fulfil the Information Communication Technology related information. Library is a social institution entrusted with the sacred responsibility of collecting, preserving and disseminating knowledge. Developments in Information Communication Technology have revolutionized the modes and the method of information storage and retrieval. In the present day, ICT is a new science for processing, storing and communicating information.

7. STATEMENT OF THE PROBLEM

The study is entitled as "Purview of E-Resource Management In University Libraries of Tamil Nadu".

8. SCOPE OF THE STUDY

The target group of this study includes library users such as faculty members, research scholars and students from 10 State government universities with specialization to Sciences, Humanities and Social sciences in Tamil Nadu have been taken up and analysed. The target respondents in other universities are not included in this study. There is a scope for other future researchers to take this area of the study.

A detailed study of ten universities such as Alagappa University, Bharathiar University, Bharathidasan University,Madurai Kamaraj University, Manonmaniam Sundaranar University, Mother Teresa Women's University, Periyar University, Tamil University, Thiruvalluvar University and University of Madras have been taken up and analysed. The geographical area of this study is confined only to Karaikudi, Coimbatore, Tiruchirappalli, Madurai, Tirunelveli, Kodaikanal, Salem, Thanjavur,Vellore and Chennai cities only.

9. OBJECTIVES OF THE STUDY

The following are the major objectives of the study:

➢ To study the demographic characteristics of library users of universities in Tamil nadu.

➢ To study the frequency of visit the university library by the faculty members, research scholars and students.

➢ To find out the purpose of visit the library.

➢ To study the level of knowledge on ICT products and services.

➢ To find out the purpose of using ICT based resources.

➢ To find out the necessity of training to use of ICT based resources.

➢ To find out the usefulness of ICT based resources and services.

➢ To find out the impact of ICT based resources and services

➢ To find out the level of knowledge in software packages and programming languages.

10. HYPOTHESES

The study is based upon the following assumptions:

1. There is no association between the gender of the respondents and their frequency of visiting the library.

2. There is no association between the residing sector of the respondents and their time spend in library per day.

3. There is no association between the nuclear and joint family respondents and their time spend on ICT sources and services per day.

4. There is no association between the department-wise respondents and their level of knowledge on ICT products and services.

5. There is no association between the residing sector of the respondents and their experience in using ICT based services.

11. SAMPLING TECHNIQUE

For this study Convenient Random sampling method was adopted for collecting Primary data. A sample including library users were chosen from the 10 State government universities with specialization to Sciences, Humanities and Social sciences in Tamil Nadu. Hundred respondents are selected for a sample of the research from each of the following 10 universities and received 910 questionnaires and hence the sample size is 910.

The following table depicts the sample size:

Description of Sample of Respondents (Library Users)

Name of the University Library	Questionnaires distributed to Library Users	Questionnaires received
Alagappa University, Karaikudi	100	71
Bharathiar University, Coimbatore	100	71
Bharathidasan University, Tiruchirappalli	100	88
Madurai Kamaraj University, Madurai	100	84
Manonmaniam Sundaranar University, Tirunelveli	100	84
Mother Teresa Women's University, Kodaikanal	100	80
Periyar University, Salem	100	89
Tamil University, Thanjavur	100	80
Thiruvalluvar University, Vellore	100	77
University of Madras, Chennai	100	86
Total	**1000**	**810**

12. DATA COLLECTION

For this study both primary and secondary data are collected. The primary data are collected from the library users of ten State government universities with specialization to Sciences, Humanities and Social sciences in Tamilnadu using Questionnaire. Secondary data are collected from various Books, Journals, Magazines, Newspapers and records of ten State government universities.

The important facets of the Questionnaire are as follows:

1. Demographic characteristics of students

2. Frequency of use of library

3. Purpose of visit the library

4. Library automation

5. Use of ICT based sources and services

6. Level of knowledge on ICT based products and services

13. TOOLS USED FOR ANALYSIS

Information collected through survey was analyzed by using different conventional statistical tools like tables, figures, percentages, average, chi-square test, ANOVA and Mann-Whitney test are used. After the collection of primary data, they are analysed by using the tool of SPSS (Statistical Packages for Social Sciences).

14. MAJOR FINDINGS OF THE STUDY

The following are the major findings of the study:

USE OF LIBRARY / AUTOMATION

Frequency of Visit to the Library

Time spend in the Library per day

Membership details

Library Automation

Level of satisfaction of the Library ICT based services

15. CHAPTERISATION

The thesis has been organized in six chapters.

1. Introduction

2. Review of Literature

3. Research Methodology

4. Profile of the study area

5. Data analysis and Interpretation

6. Summary of Findings, Suggestions and Conclusion

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