A STUDY ON THE STATUS OF DIGITAL REFERENCE SERVICE IN ACADEMIC LIBRARY OF ENGINEERING AND TECHNOLOGY INSTITUTIONS IN TAMILNADU USING WEB-CONTENT ANALYSIS METHOD

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ABSTRACT

Digital Reference Service is a very essential component of every Academic Digital Libraries. This study identify the status of Digital Reference Services in the Academic libraries of Engineering and Technology institutions in Tamilnadu. The content analysis method is followed to observe the information available in the official website of each institution under study. This paper discusses the strength and weakness of existing digital reference services being provided by the academic libraries under study, and also concludes with some specific suggestions for improvement of digital reference services in Academic Libraries under study.

Key words: Reference Services, Digital Reference Services, Academic Libraries

INTRODUCTION

Academic Libraries support learning, teaching, research and other educational functions appropriate to the parent institutions. These libraries play at different levels of educational process. Libraries are considered only as the storehouses of knowledge, have got a new outlook in the modern Information Communication Technology (ICT) era. The impact of ICT on traditional libraries results digital libraries, which is consisting of digital materials
and services. In current trends Digital libraries are a key connector to the information resources.

**LITERATURE REVIEW**

Literature review is done based on the Indian experience on ICT in academic libraries. Wan A. Kadir Wan Dollah (2006) determined the status of digital reference services (DRS) in four public university libraries in Malaysia. Salma Khan and J. Dominic (2012) analyze the patterns of internet use, the internet skills of professionals, the perceived impact of the internet on their academic efficiency and problems faced by them in using the Internet among engineering colleges of Moradabad, Uttar Pradesh. The study reveals that the use of conventional document is decreasing and dependency on internet is increasing. It expedite the research process and also improve the professional competency. Neeraj Kumar Singh (2012) identified the status of Digital reference service in the four University libraries in North India. M.Magamma (2013) highlighted the present status of Digital reference service in the engineering college libraries of Visakhapatnam, as well as discusses the strength and weakness of existing reference service being provided in engineering college libraries under study. The study revealed that all the ten selected engineering college libraries are providing online /digital services including Library Websites, Web-OPAC, Subject Portals, Web-Database, Collaboration with National International Network and Links to e-resources. In the case of digital Reference service, the Reference Desk is providing by the ten selected engineering college libraries. Archana Saxena and Dr. T. N. Dubey (2014) discussed the impact of digital technology and role of libraries in the age of knowledge and information societies. This paper also highlights the problems faced by the academic libraries in India in implementation of digital technology. As this paper is based on secondary resources, the findings shows that notable number of digital resources were found in the academic libraries of different states of India such as Tamil Nadu, Karnataka, Rajasthan, Kerala and Uttar Pradesh though still the collections need to be increased in numbers, in this regard this paper concludes with some specific suggestions to increase digital resources in Academic Libraries of India.

Based on the literature in today’s academic library environment the role of reference librarians is totally transformed and need to be more teaching cantered rather than stereotyped service centred. Now a days in academic libraries educating and guiding students in terms of accessing information through digital communication is the primary responsibility of reference librarians. The librarians would not be able to perform their duties well if they do not have sufficient knowledge on ICT and training on appropriate and up to date methods of library instruction and practices.

**NEED OF THE STUDY AND STATEMENT OF THE PROBLEM**

The total number of Engineering and Technology Institutions are around 570 in Tamilnadu state in the year 2015, including Anna University Constituent Engineering Colleges, Government Engineering Colleges, Government Aided Institutions, Self -financing Institutions. The 25 institutions out of 570 are autonomous and affiliated to Anna University Chennai, Tamilnadu. Most of the deemed universities out of 30 deemed universities in Tamilnadu are offering Engineering and Technology programmes. Every year more than 250000 students are joining undergraduate and post graduate engineering and technology
programmes in these institutions in Tamilnadu. According to World Internet Usage Statistics News and World Population Statistics which were updated in June 2014, there are about 3,035 billion users on the Internet. The total number of Internet users in Tamilnadu is 20,416,458, as on 11.08.2014 (Source: Lok Sabha Unstarred Question No. 4636, dated 11.08.2014). There is a huge requirement from the students, research scholars and faculty members to search for references such as articles, e-books, journals, magazines, etc., after the office hours of the institutions academic libraries. This study is the need of the hour to identify the current status of DRS, to find the research gap and to provide suggestions for improvement of Digital Reference Services in the Academic Libraries under study.

SCOPE OF THE STUDY

The scope of this study is to describe the status of Digital reference service with its new features and various forms like Email, Ask a Librarian Web forms, Chatter bots, Simple chat service, Extended Chat service, Web contact service Instant messaging, VoIP Service, Video, Collaborative reference service. The study will include the comparison of digital reference service is being provided by Academic Libraries of Engineering and Technology Institutions in Tamilnadu.

OBJECTIVES OF THE STUDY

a) To identify the existing status of digital reference services in academic libraries of engineering and technology institutions in Tamilnadu
b) Comparative analysis of Digital reference service being provided by the academic libraries of various categories of institutions under study to give suggestions for improvement.

METHODOLOGY

In this study observation method is used where websites of all the selected Institution's academic libraries were explored to identify and determine the present status of digital reference services provided in the libraries of the selected institutions. In this study, engineering and technology institutions in Tamilnadu are categorized in to two categories as follows: a) Autonomy based - Government University / Deemed University / Autonomous Institutions / Affiliated Institutions, b) Year of establishment - More than 30 years / 20 - 30 years / 10 - 20 years / less than 10 years. The relevant and required data are collected by fixing an evaluation criterion such as availability of Dedicated web-site for library, Online Public Access Catalogue, E-mail, Chat, Video Conferencing, Instant Messaging, DSpace Repository, Remote login, Social networking, collaborating networking etc., from the respective websites of the libraries under study. Modes of digital reference service and Online Service criteria are selected for systematic evaluation of digital reference service in the libraries included in the study.

DATA COLLECTION AND ANALYSIS

The data collected from the websites of around 570 engineering and technology institutions (including deemed universities and colleges) in Tamilnadu has been prepared in
the form of Tables and analysed using statistical software. The comparative analysis on Digital Reference Services provided by the institutions under study is made on the basis of various categories of institutions. Following tables and graphs shows the comparison between academic libraries of different categories of institutions under study according to the online services and various modes of digital reference services. Table I shows the comparison of DRS provided by Academic Libraries of institutions under study - Institutions categorised according to the type of the institution and years of establishment. 96 percent of the Universities and Deemed to be universities have published their central library details in their websites, and have their own OPAC system within their intranet so that users can access OPAC within the campus only. All autonomous institutions and all other affiliated institutions have published their library details in their websites and have OPAC intranet service. The dedicated websites for libraries are available in universities/deemed universities, autonomous and affiliated institutions are 52, 48 and 8.9 percentages respectively. Most of the universities and autonomous institutions have Web-OPAC and providing better Digital Reference Services to their users when comparing with non-autonomous affiliated institutions. Universities and autonomous institutions are maintaining Web-Database and DSpace databases as their institutional repository, but very few non-autonomous affiliated institutions are maintaining these kind of databases. Digital Reference Services such as E-mail based references, Real-time references, web-forms references by the non-autonomous affiliated institutions is very less when comparing with universities/ deemed to be universities and autonomous institutions. Table I shows that well established that is more than 20 years of established institutions are having better facilities for digital services and providing digital reference services. This study reveals that most of the new institutions' libraries are not having better digital reference services.
### Comparison of Digital Reference Services provided by Academic Libraries of institutions under study

<table>
<thead>
<tr>
<th>Online / Digital Services</th>
<th>Universities/ Deemed to be Universities</th>
<th>Autonomous Institutions</th>
<th>Affiliated non-autonomous Institutions</th>
<th>Engineering and Technology Institutions in Tamilnadu (Categories) Years of Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of availability</td>
<td>% of availability</td>
<td>% of availability</td>
<td>% of availability</td>
</tr>
<tr>
<td>Library details available in Institution's Website</td>
<td>96</td>
<td>100</td>
<td>97.6</td>
<td>100.00</td>
</tr>
<tr>
<td>Dedicated website for Library</td>
<td>52</td>
<td>48</td>
<td>8.9</td>
<td>78.95</td>
</tr>
<tr>
<td>OPAC (standalone i.e. without online)</td>
<td>96</td>
<td>100</td>
<td>97.6</td>
<td>100.00</td>
</tr>
<tr>
<td>Web-OPAC (link available in institution's website)</td>
<td>48</td>
<td>40</td>
<td>6.3</td>
<td>78.95</td>
</tr>
<tr>
<td>Web-Database/ Dspace</td>
<td>48</td>
<td>40</td>
<td>8.6</td>
<td>63.16</td>
</tr>
<tr>
<td>Collaboration with National and International Network</td>
<td>96</td>
<td>100</td>
<td>87.6</td>
<td>100.00</td>
</tr>
<tr>
<td>Links to e-resources</td>
<td>96</td>
<td>100</td>
<td>56.7</td>
<td>100.00</td>
</tr>
<tr>
<td>E-mail Based Reference Service - E-mail and Ask A Librarian</td>
<td>96</td>
<td>100</td>
<td>24.7</td>
<td>94.74</td>
</tr>
<tr>
<td>Real-time Reference Services - Chat, Instant Messaging, VOIP, Chatter botter, Video conferencing, Mobile</td>
<td>52</td>
<td>32</td>
<td>19.1</td>
<td>78.95</td>
</tr>
<tr>
<td>Web form or query form service - Web form, FAQ</td>
<td>52</td>
<td>32</td>
<td>17.2</td>
<td>68.42</td>
</tr>
<tr>
<td>Remote login</td>
<td>52</td>
<td>32</td>
<td>6.2</td>
<td>63.16</td>
</tr>
<tr>
<td>Web based Reference service - Bulletin Boards, Web contact centre, Search Engine Reference Services, Web based User Education, User feedback from service</td>
<td>56</td>
<td>52</td>
<td>8.6</td>
<td>89.47</td>
</tr>
<tr>
<td>Social Network (Through institutions ID )</td>
<td>16</td>
<td>8</td>
<td>0.9</td>
<td>57.89</td>
</tr>
</tbody>
</table>

**Table I:** Comparison of DRS provided by Academic Libraries of institutions under study
FINDINGS, CONCLUSION AND SUGGESTIONS

The study revealed that most of the universities/ deemed to be universities and autonomous institutions types and well established institutions that is more than 20 years of functioning institutions are providing online / digital services including Library Websites, Web-OPAC, Subject Portals, Web-Database, Collaboration with National International Network and Links to e-resources and also digital Reference services including E-mail based Reference, Chat. In case of Ask a Librarian, DSpace, Web-forms only few universities and few autonomous institutions are providing when comparing with other affiliated institutions. Only around 40 percent of the institutions are providing User feedback service. The details available in the institutions official websites, it is also found that most of the institutions are providing the collaborative reference services through UGC-INFONET: e-journal gate way and DELNET, etc. On the basis of personal observation, results obtained and criteria selected for evaluation of digital reference services, the it is concluded that well established more than 20 years old Universities and Deemed to be Universities and Autonomous institutions' academic libraries are having the best system out of the engineering and technology institutions academic libraries in Tamilnadu in terms of providing digital reference services. It is also concluded that the majority of academic libraries of the institution under study are deeply involved in the organization and management of a large number of e-resources to provide various digital reference sources to their users under intranet but it is not provided in the internet environment. The suggestions for improvement of DRS are i) improve the usage of ICT, ii) follow IFLA and ALA standards and guidelines. In continuation of this study, the other three factors such as accreditation status of the institutions, location of the institution and funding are to be considered for comparative analysis.

REFERENCE