A STUDY OF ENVIRONMENT IN DIGITAL ACADEMIC LIBRARY

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ABSTRACT

As a result of a comprehensive survey, this research attempts to capture the current situation at the libraries of Maharashtra State University in terms of their information and communication technology (ICT) applications and digital environment to satisfy the needs of today's dynamic users. Using a structured questionnaire and subsequent interviews with librarians, we were able to learn that e-journals are the most readily available e-resources and that many of these libraries engage in digitization activity, including the establishment of a digitization lab. When it comes to expanding their collections, the libraries at Maharashtra's state universities favour both print and digital materials.

Key words: E-Resources, Digitization, Automation Software, Digital Collection, Maharashtra State Universities

1.INTRODUCTION

With the advent of the digital age at the turn of the 21st century, the quest for knowledge and understanding gained a powerful new resource. The Internet has unexpectedly emerged as the most effective medium for storing and retrieving information required for a wide range of uses [1]. Given the new reality, universities have been implementing cutting-edge technologies to meet their obligations and meet students' demands. The concept of a digital library, sometimes known as an "electronic library," has recently gained prominence not just in the academic world but also in the corporate sector and government agencies [5]. Learning and knowledge seekers in today's ever-evolving world have access to a wealth of resources. Digital library resources play a crucial role in providing users with quick and easy access to the information they need. [3] Additionally, the digital resource can be used by any user, at any time, from the comfort of their own home or workplace via online access via networks or authentication procedures, removing the need to physically visit a library. However, one must be proficient in the use and exploitation of digital resources in order to make the most of them.

In addition, digital resources can be quickly retrieved with the right tools. Since academic

libraries are primarily focused on fostering academic excellence and research, digital library resources play an important role in these institutions. In light of this, [2] digital resources such as CD-ROM databases, online databases, online journals, online public access catalogues (OPACs), and the Internet are gradually supplanting the significance and usage of print media. Digital reference services offered by academic libraries to both affiliated and external users typically rely on a shared conceptual paradigm. [4] The paradigm facilitates the establishment and efficient operation of various digital reference services in libraries. A conceptual model is a visual representation of a system built from a collection of concepts that may be used to learn about, experiment with, and ultimately gain a better understanding of the system being represented. It's also a mental framework. Conceptual models are models that result from some sort of generalisation or conceptualization. Either "a model of concept" or "a conceptual model" could fit the bill. A conceptual model's primary goal is to convey the underlying assumptions and primary features of the system it depicts. In general [6], the model is made such that its users may easily interpret the system. It gives anyone who wants to create a system based on that paradigm a text to use as a guide. Sharing useful system information is facilitated by a conceptual model as well. It's common practise to use the model as a template during the SDLC process for building computer systems. The implementation of a core system may fail if the conceptual model is incomplete.

College library digital collections

Some Indian academic libraries house extensive collections of records, while others house rare books, manuscripts, maps, letters, theses, special monographs, research papers, and other forms of literature. Learning and research resources are centralised in academic libraries. In the academic world, digital materials, including theses, manuscripts, research papers, and pictures, are extremely valuable. [7]

Justifications for Library Book Digitization:

To protect the integrity of rare or historic materials while allowing users and scholars access to them.

The digitization of historical records increases their availability.

When information is digitised, it may be searched in its entirety, and it can be made available to a wider audience in far-flung areas.

One or more people can access the digitised version of a document at once. Academic libraries are increasingly becoming global libraries, making digitization a crucial part of the modern worldwide information system.

The study will reveal the truth about librarians' overall impression of the necessity to incorporate digital education and training into their expected daily library routine, which is essential in today's technology-driven culture. Knowledge and abilities needed by LIS workers in the modern digital age can be broken down into four categories: personal, generic, general IT, and technical. [8] The ability to work independently, passion, self-motivation, and a thirst for learning are among the personal talents and attributes valued in the Library and Information Science (LIS) field. Life skills, or generic abilities, include things like the ability to communicate and interact well with others, as well as the ability to think critically, solve problems, and work well in a team (Orme, 2008). Libraries rely heavily on people with general ICT abilities for tasks as varied as managing files, browsing the web, installing software, using photocopiers and printers, conducting online research, and retrieving information. [7] Developing digital information, organising it, preserving it through various means, including adopting metadata formats, and exposing it to web crawlers so that it is discoverable through the Internet are all examples of technical skills in the digital environment. The ability to use technology effectively is now fundamental to the profession of librarianship. Expertise in areas such as integrated library systems (ILS) and their inner workings, Web technology, electronic resources management, web page development and its upkeep, discovery services, institutional repository development, openly accessible learning resources, etc. is essential for today's librarians. Librarians, too, need to be familiar with LMS so that they may use it to facilitate information literacy programmes and resources for students [9, 10]. Maharashtra's resources must be looked at as a whole and made available to as many people as possible. [11] Large libraries typically operate their own private networks (local area network, or intranet) within their physical buildings. In order to improve users' access to information, these networks can be extended through consortia, or groups of collaborating partners. Due to poor preparation, inadequate library funding, and indifference on the part of the administration, unaided engineering colleges in Maharashtra are suffering from a severe dearth of information resources. This is accompanied by a rapid shift toward a more heterogeneous student body that includes those who attend either on or off campus. [7] Libraries must have strong community liaisons and share with other institutions in related fields. The goal of digital libraries is to provide unfettered access to content via computer and communication networks, which helps to explain why such a system is necessary for reputable reference materials. In addition to the obvious benefits of greater and more convenient access, digitization may be seen as a persuasive argument for prolonging their lives through preservation. There is a good likelihood that at least one electronic copy will be available on the network for use by posterity in the digital format [8], since users can make an unlimited number of copies and only those copies are being used at any given moment. When an index is included, it is often outdated and missing from many printed items. Having these resources available online, with search engines that are both thorough and user-friendly, will greatly improve the country's ability to manage its bibliography and increase its productivity. [9]

2.MATERIALS AND METHOD

The state of Maharashtra is home to numerous colleges and institutions, many of which specialise in either technology or liberal arts, and each has invested millions of rupees into building out their facilities. According to statistics, most library funds are used to advance digital library resources and services. Because of this, it is essential to assess how the university libraries in Maharashtra have adapted to the changes brought about by the rise of digital technology. Information was collected by questionnaire from university librarians at libraries in the state of Maharashtra. The collected information pertains to the state of the information and communication technology infrastructure and the growth of digital libraries. Libraries at each of the ten state institutions were surveyed via a thorough questionnaire and a personal   visit.

3.RESULT

Table 1. Automation status in Maharashtra State Universities

University name	Automation software	Acquisition	cataloguing	circulation	Serial control	RFID/ BARCODE
SGB Amravati University	SOUL	FA	FA	FA	PA	Barcode
SRT Marathwada University	SOUL	PA	FA	FA	PA	Barcode
North Maharashtra University	SOUL	FA	FA	FA	PA	Barcode
DBA Marathwada University	SOUL	PA	FA	FA	PA	Barcode
RTM Nagpur University	LIBSYS	FA	FA	FA	FA	No
Solapur University	SLIM +	NA	PA	PA	PA	Barcode
Shivaji University	LIBSYS	FA	FA	FA	FA	No
University of Pune	LIBSYS	FA	FA	FA	FA	Barcode

SNDT Women's University	SLIM ++	PA	FA	FA	FA	Barcode
University of Mumbai	SOUL	PA	FA	PA	PA	Barcode

FA- Fully Automated, PA- Partially Automated, NA-Not at all automated

Table 2: Digital Library collection availability

University name	Digital collection	E-books	E-Jrls	E-thesis	CD/DVD	AV materials	Other
SGB Amravati University	Y	300	7800	-	500	-	-
SRT Marathwada University	Y	-	8000+	-	800	-	-
North Maharashtra University	Y	200	8000+	-	700	-	-
DBA Marathwada University	Y	3000	35000	3500	-	1500	-
RTM Nagpur University	Y	-	8045	-	193	-	-
Solapur University	Y	500	38659	-	136	-	-
Shivaji University	Y	124	7600	183	-	-	09
University of Pune	Y	2090	14000	290	-	-	5941
SNDT Women's University	Y	16	23378	-	4904	2000	-
University of Mumbai	Y	350	8000	-	2074	-	-

4.DISCUSSIONS

The library's level of automation is broken down as follows: 90% for the cataloguing and circulation departments, 50% for the acquisitions department, and just 20% for serial control. One of the least automated (by 90%) parts is the serial control. The percentage of students that use bar code technology in Maharashtra state universities is exceptionally high at 80%. [11] It shows the results of an analysis of the availability of digital library collections at US universities. While all these libraries contain electronic journals, the libraries at SNDTWU, SU, and DBAMU subscribe to more than 20,000 electronic journals combined. The digital collections of university libraries include e-books, CDs, and DVDs as the second-largest category (80%), followed by e-theses (30%) and AV materials (20%). The following conclusions were drawn from the data: The cataloguing and circulation departments at Maharashtra State University are totally automated. These libraries provide their services by employing barcode technology. It is possible that the UGC-Infonet digital library consortium is to thank for the widespread availability of both digital collections and e-journal subscriptions across Maharashtra State University libraries. The majority of these responding academic libraries have established a digitization lab, begun digitization projects, and are active participants in the INFLIBNET Shodhganga initiative. Many academic libraries believe that their access to electronic publications and communication tools is excellent [15]. All university libraries have indicated that they are equally interested in expanding their print and digital collections.

5.CONCLUSIONS

The aforementioned data analysis leads us to the following conclusions: The university libraries' Serials Regulation and Acquisition departments need to be fully automated so that they can better manage and control the collection. [12] Currently, all of these academic libraries make use of proprietary library automation software; future implementations may make use of open-source alternatives such as Koha, etc. The library's thesis collection must be digitised so that it can be made available to patrons. [14] There is a pressing need to expand access to audiovisual materials in academic libraries. Since digital library development and upkeep is one of the more costly problems for the university libraries with their shrinking budget, it is recommended that they adopt cloud computing technology with a solid security and mitigation plan, but no libraries in the study have done so as of yet. [13]

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