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## *Emerging and Innovative Services in Management School Libraries in Bangalore University: A Case Study*

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*Abstract: Academic libraries play an indispensable role in the dissemination of information. In academic libraries the college library is only open to members of faculty and students of the college. Higher education has been a process of learning and the students are to be provided with necessary facilities for their self learning process. Hence, library is the first and foremost tool, which is able to help the college library users, students and staff. Adding technology to the concept has revised the way people access information. This paper aims to explore how technology helps in promoting innovative library service in today's digital environment.*

*Keywords: Emerging Technology; innovative practices, Academic Libraries, Management Schools, Library Management*

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### I. INTRODUCTION

Rapid advances in ICT and its applications are dramatically affecting economic and social activities, as well as the acquisition, dissemination and use of knowledge. The use of ICT is reducing transaction costs and lowering the barriers of time and space, allowing the mass production of customized goods and services. In today's society, the Internet has become the most important platform on which to access and locate information. Emerging technologies are now evolving innovative technologies with great market potential. Emerging technologies can help us to forecast the latest developing trends in the theory and practice of science and technology without large-scale commercial application or marketing. Successful emerging technologies have the potential to improve, integrate, and reorganize existing products and industries or to generate new advanced products and new industries. Emerging technologies are evolving from a variety of fields in our modern information society, ranging from artificial intelligence (AI), Biotechnology, computer technology, digital technologies to information technology, medicine, nanotechnology, networking technology, telecommunications, web technology, and so on.

### II. OBJECTIVES OF THE STUDY

1. To identify how technology is adding value to innovate the concept of libraries.
2. To know availability of different types of information sources in Management College libraries affiliated to Bangalore University
3. To know the library and information services offered by the management college libraries to their users.
4. To know the status of ICT facilities the adoption in the administration and organization in the management college libraries under the study area.
5. To identify the various steps to improve the library services
6. To introduce new innovative and emerging library services in order to convert the potential user into a habitual user.

### III. METHODOLOGY

To resolve the objectives of the study the survey method through a well structured questionnaire is adopted in this study. The questionnaire was administered to the librarians of colleges of management Libraries under the study. The purpose was to determine and to collect data of their libraries. In brief the items of enquiry intended through this are; Services offered by the libraries, physical facilities, library automation software, internet services to provide digital library services, Digital library software, Social Networking Sites and the purpose behind using emerging technology.

### IV. NEED AND IMPORTANCE OF THE STUDY

Academic libraries are the backbone for overall progress of the school, college and university education system. At the same time the college libraries play a pivotal role in bringing quality of education. College libraries are required to maintain a need based collection and to provide appropriate services to cater to the needs of the students and the teachers, for their study, course assignment, teaching, extension and extra-curricular activities and so on. Due to impact of information and communication technologies (ICT) many college libraries providing computer and internet based services to cater to the changing needs of present day user's community. In this context the researcher contextualized in the present study to know the availability and effective use of various state-of-the-art facilities, library resources and services to the students and faculties of the college libraries affiliated to Bangalore University. The findings of the study will be of immense help in planning, policies and redesign the plan of work to improve the overall quality of academic libraries.

### V. SCOPE AND LIMITATIONS OF THE STUDY

Management education in India is having long standing history to prepare efficient teachers to motivate, inspire and inculcation of reading habits among the children. In Karnataka there are good numbers of colleges that are functioning to cater to the needs of different levels of programs such as BBM/MBA/M Com. The scope of the study is restricted to Bangalore University. The findings are limited to the secondary sources. The focus is only on management school libraries affiliated to Bangalore University, Bangalore.

### VI. REVIEW OF LITERATURE

A literature review is a body of text that aims to review the critical points of current knowledge on a particular topic. It seeks to describe summarize, evaluate, clarify and integrate the context of primary reports. For any scientific investigation it is necessary to carry out a literature search of the studies carries out in the relevant subject field. The literature search enables the investigator to have information about similar studies carried out earlier. The researcher has also carried out prior art search for the present study. While searching the prior art, the researcher has consulted Library and Information Science Abstract (LISA), E-LIS (E-prints in Library and Information Science), an online OA archive for library Information Science, DLISR (Digital Library of Information Science and Technology) and other relevant websites.

Jantz, R (2012) proposed a theoretical framework and model for study in organizational innovation in libraries and to set forth propositions that can provide directions for future empirical studies of innovation in libraries. Research libraries can be considered members of a class of organizations referred to here as institutional nonprofits. As such, these organizations inherit many of the innovative properties that are associated with the broader sector of service organizations. However, institutional nonprofits have unique characteristics that distinguish them from other service organizations such as government agencies and for-profit service firms. In this paper, institutional theory is used to explain the forces that are acting on the research library. Research from organizational learning, structural contingency theory, and typologies of service organizations are used to establish a more encompassing innovation frame work. Based on the literature review, the theoretical framework, and empirical studies, presents a process and propositions that characterize how the research library might innovate.

Sukula, S K (2009) emphasized on information services in Ch. Charan Singh University, Meerut, India. Network functions as a critical information service platform for any higher education center. Literature reflects need and provision of networked information services that can cater to vast number of users. Electronic library and information systems are becoming an impressive structure of modern academic systems. It discusses academic networked environment, going on strategies and options in Ch. Charan Singh University, Meerut. Now Indian universities are making strategy of encouraging innovation and transformation in higher education by using networks and networked information.

Cervone HF (2010) discussed the issues and impact of emerging technologies and innovation in libraries. He describes overview of the concepts and application of emerging technologies and innovation to library practices. Librarians need to be careful about how terminology such as emerging technology is used as emerging technology in one sector is not new in others and to have credibility, librarians must understand how those differences may play out within their overall organizations. When libraries are situated in parent organizations that value experimentation and innovation, libraries must be willing to experiment and innovate with services and processes.

Chua, Alton Y.K. (2010) explained Web 2.0 represents an emerging suite of applications that hold immense potential in enriching communication, enabling collaboration and fostering innovation. However, little work has been done hitherto to research Web 2.0 applications in library websites. It addresses the following three research questions: (a) To what extent are Web 2.0 applications prevalent in libraries? (b) In what ways have Web 2.0 applications been used in libraries? and (c) Does the presence of Web 2.0 applications enhance the quality of library websites? Divided equally between public and academic, 120 libraries' websites from North America, Europe and Asia were sampled and analyzed using a three-step content analysis method. The findings suggest that the order of popularity of Web 2.0 applications implemented in libraries is: blogs, RSS, instant messaging, social networking services, wikis, and social tagging applications.

Thomas, P (2010) explained unprecedented advances in digital technologies and their concomitant affordances in education seem to be a great opportunity to adequately address burgeoning demand for high quality higher education (HE) and the changing educational preferences. It is increasingly being recognized that using new technology effectively in HE is essential to prepare students for its increasing demand. E-learning is an integral component of the University of Botswana teaching and learning culture, however, teachers who are from a traditional educational system are often ill-prepared to change their role from the all-knowing sage on the stage who operated under the transmission model, to the guide on the side which adopts new technologies effectively for student learning. It argues that one of the ways to achieve substantial pedagogical innovations is to bring a significant change in the understanding of the processes of the scholarship of teaching, and learning (SoTL).

Adams, W R (2009) described the digitization of content generated by those in academia be they professors, lecturers, or administrative staff -- has had a significant impact on the amount of space needed for storage on college and university campuses. What this paper attempts to address is some of the emerging technologies used for the storage of digital content and how these technologies have evolved since their origin with the American Memory Project in 1989, which is widely credited with starting the digital revolution in storage that is commonplace in offices and centers of higher education throughout the United States. The library's role in developing electronic storage for their own archival materials has an ancillary effect in the field of digitization. The advances made by some libraries in creating more expansive storage devices that hold content other than text has benefited those in other fields as well.

Craig, E M (2007) explained how emerging technologies and Web 2.0 services are transforming the structure of the web and their potential impact on managed learning environments (MLS) and learning content management systems (LCMS). Innovative Web 2.0 applications are reviewed in the paper to explore how they incorporate a new paradigm, reshaping the web as an electronic platform for social networks, where users share, edit and collaborate on the publication of content. It also finds that, in this rapidly changing environment, educators need to consider the implications of these developments for the current design of the LCMS. An emerging generation of users influenced by social networking experiences and empowered to create,

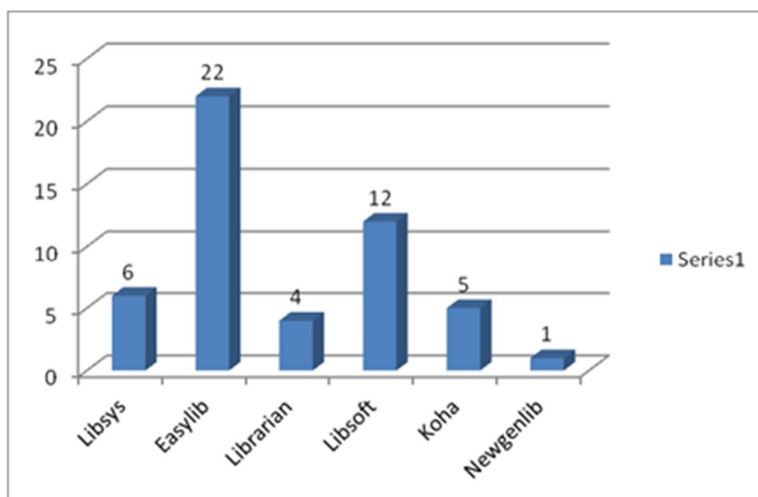
publish, appropriate and redistribute content may find the structures of the LCMS traditional and inflexible in contrast with the user-centered approach of Web 2.0 services. This fundamental shift in the experience of the digital environment in the social world will require innovative solutions, including broad institution-wide dialogues on the role of organizations in a Web 2.0 environment, innovative approaches to faculty training, a new emphasis on the role of faculty as learners in a rapidly changing environment.

## VII. ANALYSIS AND INTERPRETATION OF DATA

The questionnaire has been circulated to the librarians to focus on several issues on Library Automation, digital library, and infrastructure like computer, internet, and library services. Statistical methods were used and the data is presented in the form of charts and tables. MS word, Excel and Power point applications have been used to tabulate and present the data. Out of 70 respondents 50 respondents have responded to this survey i.e. 71% of the librarians of management schools affiliated to Bangalore University, Bangalore.

**Table 1. Library Automation Software**

1	Libsys	6(12%)
2	Easylib	22(44%)
3	Libsoft	12(24%)
4	Librarian	4(8%)
5	Koha	5(10%)
6	Newgenlib	1(2%)



*Fig 1. Library Automation Software*

When the librarians of 70 colleges were asked about their library automation software in the college, 22(44%) colleges had Easylib software, 12(24%) colleges had Libsoft software, and 1 (2%) had Newgenlib software in libraries. It shows that majority of colleges having Easy lib software.

**Table 2. Convenient access to a computer with an internet connection**

1	Yes, at library	38(76%)
2	Yes, at campus	7(14%)
3	Yes, at home	1(2%)
4	No convenient access	4(8%)

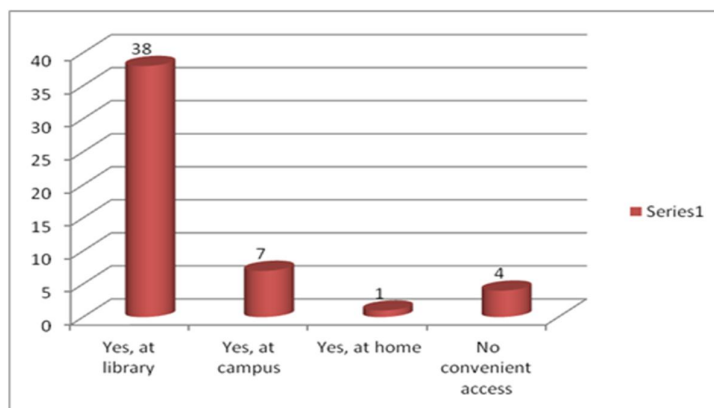


Fig 2. Convenient access to a computer with an internet connection

Data about convenient access shows that, 38(76%) College have their access at library whereas 7(14%) at campus access. 4 (8%) college librarians respondent that there is no convenient to access. But 1 (2%) of them have connection at home. It implies that they are depending upon the college for access.

Table 3. Internet services to Provide digital library

1	Broad band internet connection	17(34%)
2	Wi-fi connection	31(62%)
3	Leased line	2(4%)
4	Internet over satellite	Nil

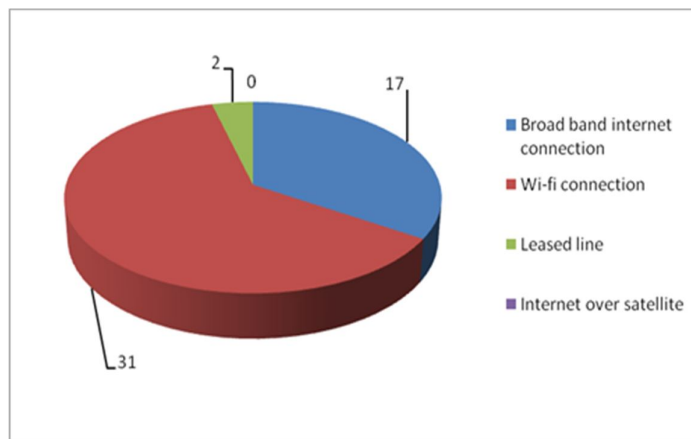


Fig 3. Internet services to Provide digital library

Figure 3 illustrated that data related to Internet services provided by colleges 17(34%) respondents says that Broad band internet connection to provide digital library, 31(62%) college libraries provides Wi-Fi connection, 2(4%) respondents connected via leased line. None of them have connection of satellite.

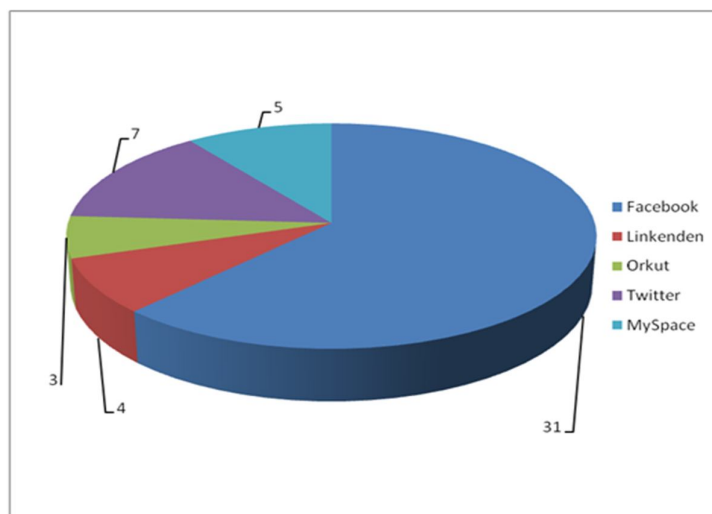
Table 4. Digital library software in the library

1	Greenstone	5 (10%)
2	DSpace	17(34%)
3	E-Prints	2(4%)
4	Fedora	0
5	None	26(52%)

Data related to digital library software shows that 17(34%) college libraries having D Space software, 5(10%)colleges using Greenstone,2(4%) colleges are using E-prints and 26(52%) colleges do not using any software. It shows that digital library implementation not in progress.

**Table 5. Aware of Social networking sites**

1	Face book	31(62%)
2	Linkedin	4(8%)
3	Orkut	3(6%)
4	Twitter	7(14%)
5	My Space	5(10%)

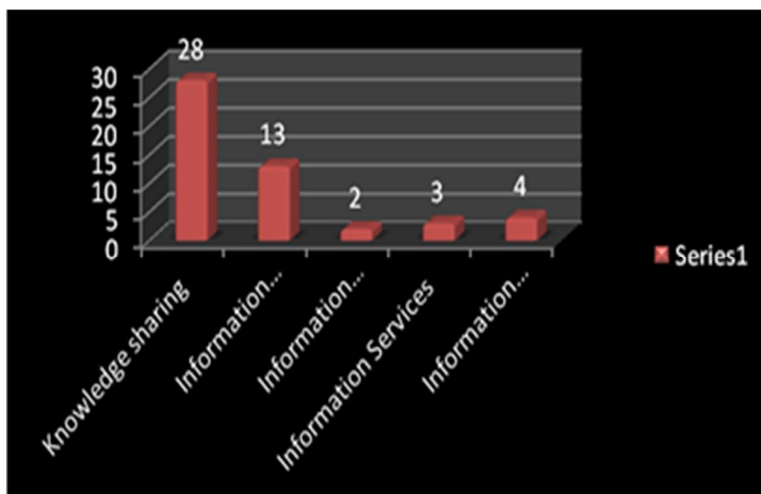


*Fig 5. Aware of Social networking sites*

When asked about aware of social networking sites, 31(62%) colleges aware of Facebook, 7(14%)twitter, 5(10%) MySpace, 4(8%) aware of LinkedIn, 3(6%) Orkut. It shows that majority of them aware of face book.

**Table 6. purpose behind using emerging technologies in the library**

1	Knowledge sharing	28(56%)
2	Information processing	13(26%)
3	Information retrieval	2(4%)
4	Information services	3(6%)
5	Information management	4(8%)



*Fig 6. purpose behind using emerging technologies in the library*

It is found that 28(56%) of the college libraries using emerging technologies to share knowledge 13(26%)are to process information, 4(8%)are to manage information,3(6%)respondents are to provide services, and lastly 2(4%)of them to retrieve information which is negligible

**VIII. OBSERVATIONS AND FINDINGS OF THE STUDY**

One of the objective of the survey is to know the library and information services offered by the management college libraries affiliates to Bangalore University. It also aims to know the status of ICT facilities in the management college libraries under the study area. Based on the results drawn from the data analysis, the following findings have been made.

1. This study shows that 71% of the librarians of Management schools have responded.
2. 22(44%) of the college libraries have Easylib software and 12(24%) of them are using Libsoft software.
3. The data reveals that, 38 (76%) of the college libraries have their access at library and 4(8%) college libraries do not have convenient access to internet.
4. 31 (62%) of the college libraries provides Wi- Fi connection and none of them have connection of satellite.
5. This survey shows that 17(34%) of the college libraries have D Space software for digital library and 26(52%) college libraries do not using any software.
6. 31(62%) of the college librarians are aware of Face book as a social network and 3(6%) are aware of Orkut.
7. 28(56%) of the college libraries are using emerging technology to share knowledge and 2(6%) to retrieve information.

**IX. CONCLUSION**

Significant amount of our time and energy is devoted to creating and managing information. Computers and telecommunication technology have extended our regard for information and are driving changes in how we learn, work, and play. One result of these developments is that skills and strategies for storing and retrieving information have become more essential and more pervasive in our culture. Information seekers have to choose what strategy to apply according to their immediate needs. Such systems may be designed by providing information seekers with alternative interface mechanisms for displaying and manipulating multiple levels of representation for information. Change is inevitable in every field and library is not exception from other. In libraries, new techniques were apprehensive in the beginning of the 20<sup>th</sup> century. Libraries are functioning in a dynamic and complex environment and the importance of librarians has been considerably strengthened both at national and international level.

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