



A Study of E-Resources Management & Management Challenges Faced In Engineering College Libraries

Mrs. Manisha Umap^{1*}, Dr. Ravikumar Jani²

^{1*}Research Scholar, Parul University, Vadodara, India. Librarian, Karmaveer Bhaurao Patil College of Engg., Satara. Maharashtra, India. Email: librarian@kbpcoes.edu.in, Mobile-91-9762852817, Orcid ID- <https://orcid.org/0000-0003-0803-0178>

²Research Supervisor, Parul University, Vadodara, India, Email: ravikumar.jani27349@paruluniversity.ac.in
Mobile No. 919925887569, Orcid ID- <https://orcid.org/0000-0001-5637-3293>

Citation: Mrs. Manisha Umap, Dr. Ravikumar Jani, (2024), A Study Of E-Resources Management & Management Challenges Faced In Engineering College Libraries, *Educational Administration: Theory and Practice*, 30(3), 4982-4990
Doi: 10.53555/kuey.v30i5.3737

ARTICLE INFO

Received: 21-03-2024

Accepted: 18-04-2024

ABSTRACT

As technology rapidly grows, all libraries started adopting the technologies as per users' demand and lots of benefits of e-resources. Although adopting technology is beneficial, it has many challenges in managing e-resources in front of library professionals. This theoretical study investigated e-resources management and management challenges faced by Indian library professional. For this study, the researcher collected data through Google Forms from engineering colleges affiliated with Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra and gone through various literatures related to the study. This study received 54 responses out of 73 engineering college libraries; the response rate was 73.97 percent. The data analysis is done through Microsoft Excel, and the results are presented using various graphs. The study finds that most libraries subscribed open-source and commercial E-resources. It is also observed that not a single library implemented electronic resource management system in their library. The study also revealed that library professionals face administration-related challenges in the management of electronic resources.

Key words: - ERMS, lifecycle of e-resources, DBATU, engineering, TERMS

Introduction

The various governing bodies like UGC and AICTE mandated higher educational institutes to provide e-resources access to its users to increase the best quality research among the stakeholders. Many e-resources are made freely available by INFLIBNET, National Digital Library of India (NDLI), Shodhganga, Shodhsindhu, e-pg pathshala, Vidwan Database DOAJ and DOAB. The academic institutes subscribe the commercial e-resources along with these open-source e-resources. This results in a vast collection of e-resources in the library. It is not easy to manage this e-collection compared to the print collection. Library professionals face various electronic resources management issues and challenges while facilitating e-resources to their users. The present study was conducted to know the challenges faced in Electronic Resource Management (ERM) by the engineering college librarians affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere in Maharashtra.

Objectives of the study

- To find out the challenges faced by the library professionals in the management of E-resources.
- To study do the strength of library staff affects management of e-resources
- To study the measures taken by library to promote use of e-resources.
- To study do they use ERMS for the management of e-resources
- To study the criteria in the selection of e-resources.

Design and Methods

The study was conducted among the library professionals of engineering colleges affiliated with Dr.

Babasaheb Ambedkar Technological University, Lonere, Maharashtra. The researchers used the survey method and went through the related literature carried out earlier to collect the data. The researchers circulated questionnaires among the librarians through mail and WhatsApp. The questionnaire comprises three parts.

Section-I: General information,

Section II: Library information,

Section- III: E-Resources information.

This study received fifty-four responses out of seventy-three engineering college libraries; the response rate was 73.97%. The data analysis is done through Microsoft Excel, and the results are presented using pie charts, tables and bar graphs.

Literature Review

(Dhiwar, 2021) studied in her research article the practices followed by management institutes of Pune city in managing their online subscribed databases. The study's main objective is to examine librarians' awareness of the life cycle of electronic resources and how to manage them so that the data in use is relevant. She structured a questionnaire based on managing the life cycle of an institute's electronic resources, as Jill Emery and Graham Stone proposed in their *Techniques in Electronic Resource Management (TERMS)*. It is observed that most librarians do not use any specific electronic resource management systems and need to be made aware of the six steps of techniques for electronic resource management systems (TERMS).

(Joshipura, 2008) studied the total workflow of e-resources, from selection to acquisition. They have mentioned the most important steps, processes, procedures, and issues involved in the selection and acquisition of e-resources, which can be helpful as teaching tools for librarians to learn the best practices to manage the life cycle of e-resources. The chapter mentioned cooperative efforts such as consortia for the collection and development of e-resources. They cover the various facets of the selection process, such as trials and demonstrations by vendors. The evaluation process should include criteria like feedback from users, content, cost, technical support, indexing, impact factor, reputation, and provide a checklist for verifying, ordering, and reviewing license agreements of e-resources.

(Pradhan, 2013) discussed the challenges faced because of the emergence and massive use of e-resources and the inability of existing library management systems to manage these e-resources effectively as they differ from print in how they are acquired, accessed, and licensed. He pointed to the need for an electronic resource management system based on standards to solve issues related to managing e-resources. He emphasized that for the smooth transfer of information from a vendor or an interface to a library, the ERM systems should be designed with standard specifications and discussed the various efforts being made in this regard.

(Subaveerapandiyam et al., 2021) reported issues and challenges in managing e-resources faced by Indian library professionals. The research has been done through the survey method and literature review of related studies. The study collected 156 responses through Google Forms from the esteemed institutes of India. The objective of the research was to find out the various challenges in the management of e-resources faced by library professionals. The researchers used 5 points, the Likert Scale, and SPSS software is used for data analysis. The study found that the significant challenges in managing e-resources are the need for more skilled library staff followed by troubleshooting management, e-resource acquisition and price negotiations. The researchers suggested that library professionals maintain a deep understanding of technology with adequate staff in the library.

(Wadekar & Nagarkar, 2018) In their research article examined current practices of managing online databases used in the universities of Maharashtra. The study's objectives were to reveal the challenges faced by library professionals managing online databases and to study online databases' selection, acquisition, and renewal process. The study selected seven university libraries as it was found that only these seven university libraries subscribed to other online databases apart from databases provided by UGC-INFONET. The study revealed that university librarians are trying most to manage electronic resources and observed some significant challenges, e.g., unawareness about the life cycle of electronic resources, lack of standard systems, collection development and preservation policies, negotiation skills, and unskilled staff. As per librarians, another challenge is that the package of databases consists of some open access or predatory journals, which increases the number of journals, and the quality of journals suffers. Further, it is noticed that participating libraries use MS Excel instead of using open-source electronic resource management systems or have developed their in-house software tool for the overall management of online databases. The study suggested keeping a unique position as an Electronic Resource Librarian in India, and a separate paper on electronic resource management may be included in library science curricula.

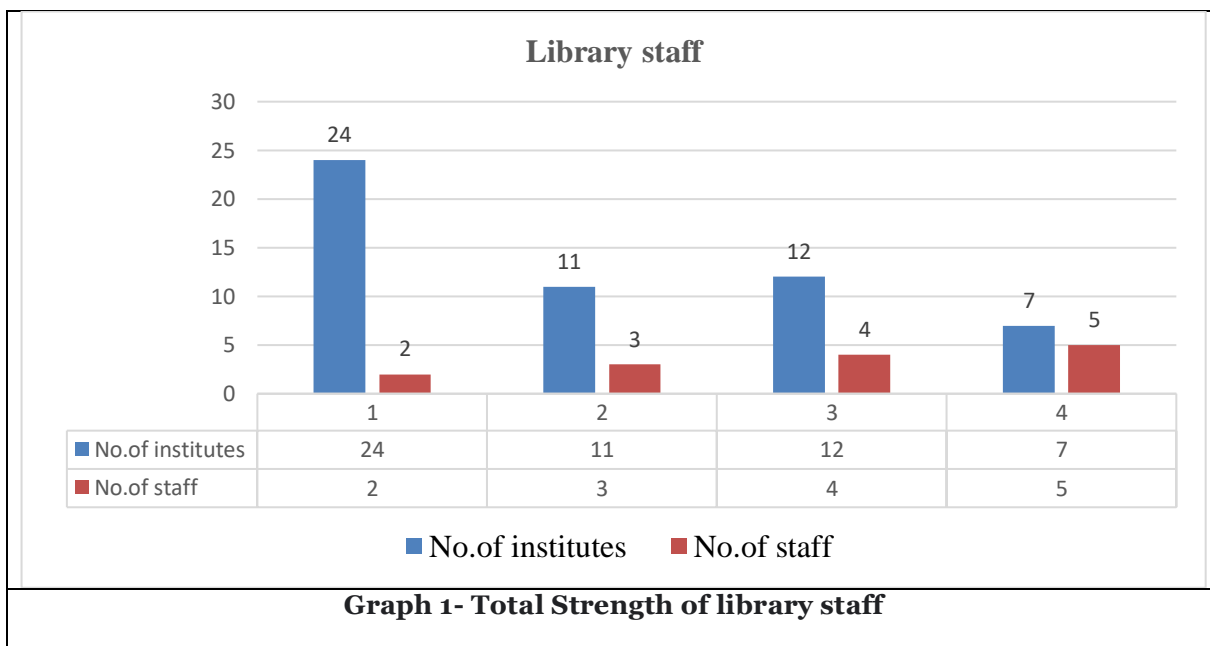
Summary and gaps in the literature: -

The conclusion that can be drawn from the various extensive works of literature is that electronic resource management will be an unavoidable part of any academic library system. Though e-resources are more beneficial yet it is not easy to manage manually. Library professionals face many problems in managing these

e-resources. Past studies suggested implementing electronic resource management systems to overcome these problems libraries of developed countries have been using. The literature also supports more comprehensive views and convincing reasons to effectively implement Electronic Resource Management Systems to manage electronic resources in academic libraries. Still, very few academic libraries in Maharashtra have implemented ERMS, and full-fledged automated their electronic resource management functionality. It shows that there is a knowledge gap in terms of the implementation of electronic resource management systems among these library professionals.

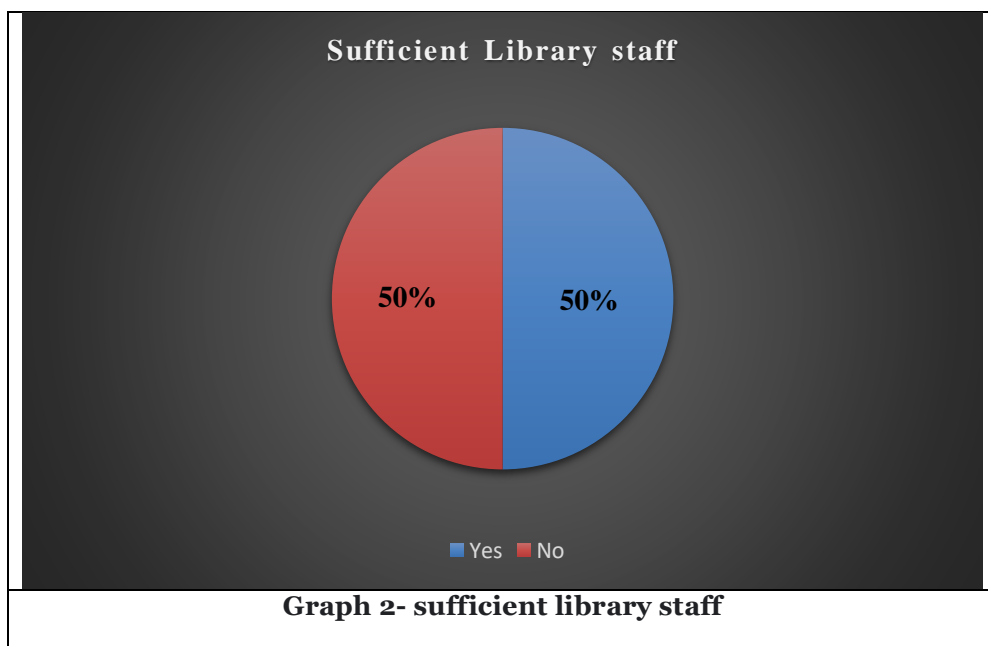
Data Analysis and Interpretation

Que.1 Total strength of library staff.



Graph 1 reveals the total strength of library staff, and it is observed that twenty-four engineering institutes have only two library staff, eleven engineering institutes have three library staff, twelve engineering institutes have four library staff, and only seven engineering institutes have five library staff working in the library. The study revealed that most libraries have only two staff working in the library, and significantly fewer libraries have a good number of library staff available.

Que.2 Is the strength of library staff sufficient?



Graph 2 explains that 50 percent of librarians are satisfied, and 50 percent are not satisfied with the strength of the library staff. However, the study found that most libraries have very few library staff and very few libraries have sufficient library staff. The availability of less library staff is directly affecting the management of e-resources.

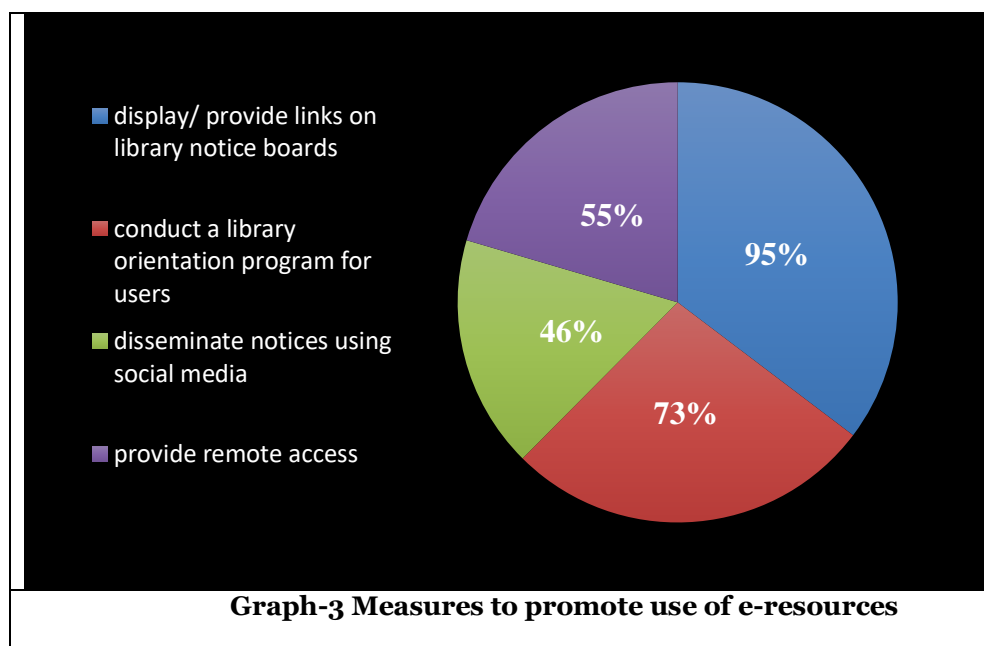
Que.3 Mention Library budget allocated to the library.

Number of Institutes	Budget in Rupees
21	up to 5 lakhs
18	up to 10 lakhs
9	up to 15 lakhs
6	above 15 lakhs

Table 1- Library Budget

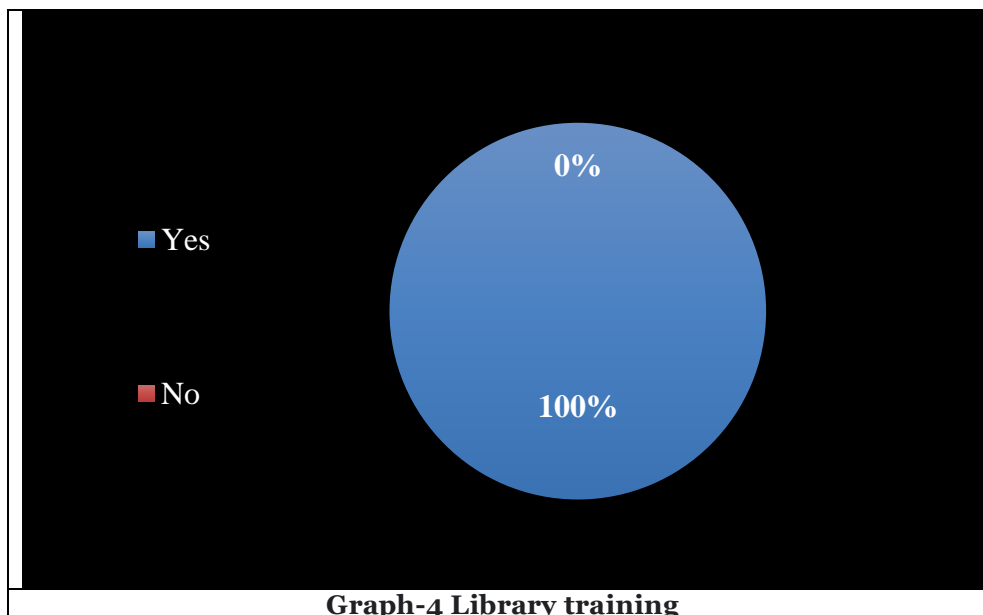
Table 1 revealed that twenty-one engineering institutes have a library budget of up to five lakhs, eighteen engineering institutes have a library budget of up to 10 lakhs, nine engineering institutes have a library budget of up to 15 lakhs and only six engineering institutes have a library budget above 15 lakhs. It shows that very few libraries have a reasonable budget for the infrastructural development of libraries, and most libraries have a budget of up to ten lakhs, which is insufficient for the infrastructural development of libraries, such as the procurement of electronic resources and commercial ERMS.

Que. 4 what measures have been taken by the library to promote the use of e-resources?



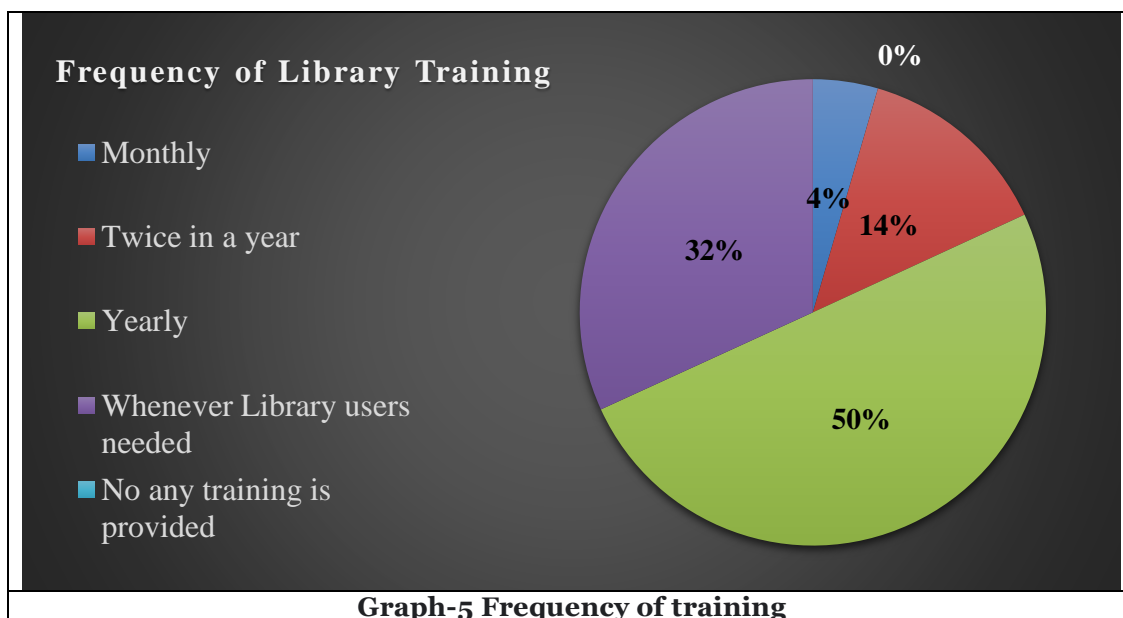
Graph 3 revealed that 95 percent of librarians display/ provide links on library notice boards, 73 percent conduct a library orientation program for users, 46 percent disseminate notices using social media and 55 percent provide remote access to promote the use of library e-resources. The study observed that most libraries are using traditional methods and that the average number of libraries started using social media platforms to promote the use of library e-resources. The study also found that techno-savvy library professionals use social media platforms to encourage the use of library e-resources, such as using user's WhatsApp groups, Facebook, email and other social media tools.

Que. 5 Do you provide training regarding access of e-resources to the library users?



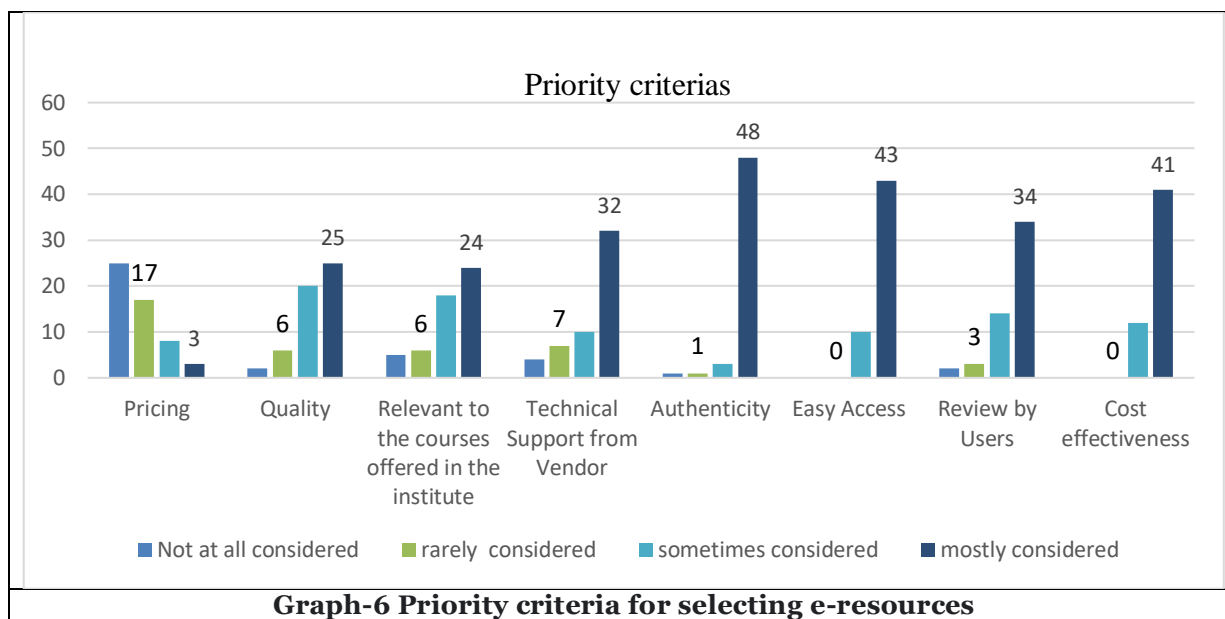
Graph 4 indicates that almost 100 percent of engineering institute libraries provides training regarding access to e-resources to the library users by organizing library orientation and training from the vendors of e-resources.

Que. 6 If yes mentions the frequency of the training.



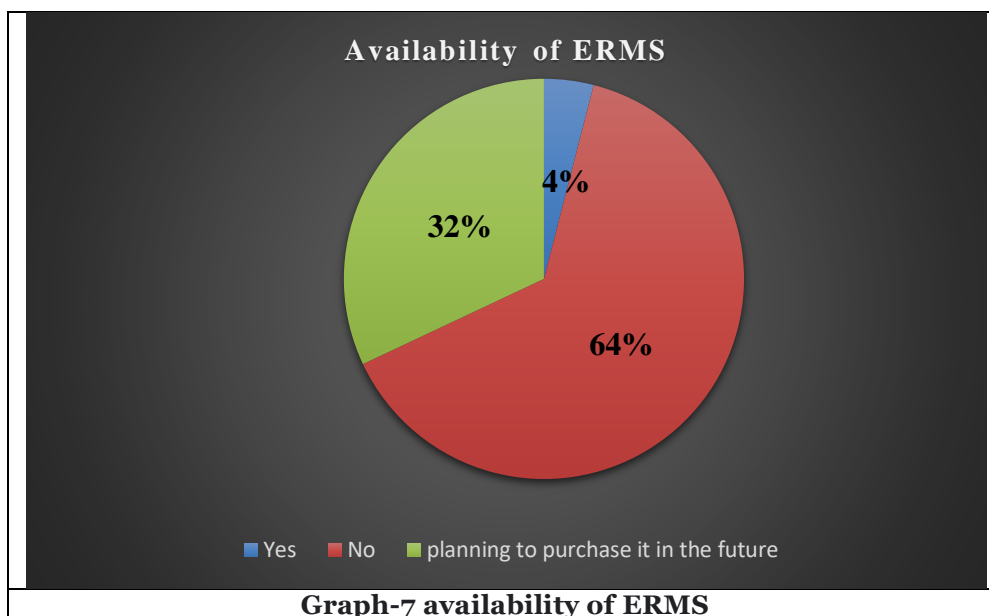
Graph 5 explains almost 100 percent of libraries provide library training and in that four percent of libraries provides library training once in a month, 14 percent of libraries provide library training twice in a year, 50 percent of libraries provide library training yearly and 32 percent of libraries offer library training whenever library users need. It is observed that majority of libraries provides library training once in a year followed by whenever library users needed the help.

Que.7 Rate your priority criteria for selecting of e-resources for the library. (1-Not at all considered, 2-rarely considered, 3-sometimes considered,4- mostly considered)



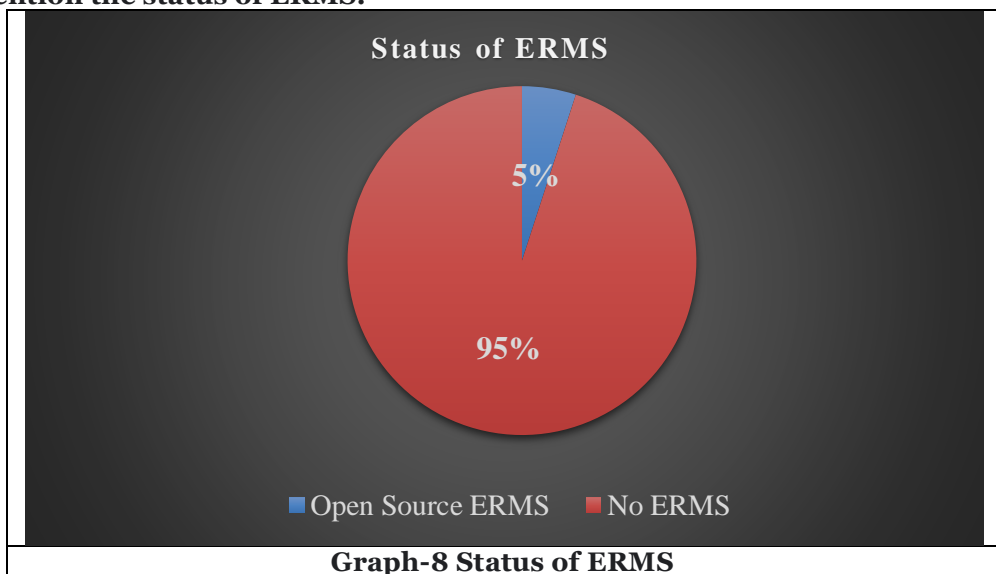
Graph 6 explains that forty-eight librarians mainly consider authenticity, forty-three librarians mostly think about easy access, and forty-one librarians mostly consider cost-effectiveness. Whereas the quality of e-resources, relevant to the courses offered in the institute, and review of user, these criteria are sometimes considered. Significantly, few libraries did not consider the easy access to the e-resources and cost-effectiveness of the e-resources. The quality of e-resources, technical support from vendors, authenticity and review by users these criteria were rarely considered while selecting e-resources.

Que. 8 Do you have electronic resource management system (ERMS) in your library?



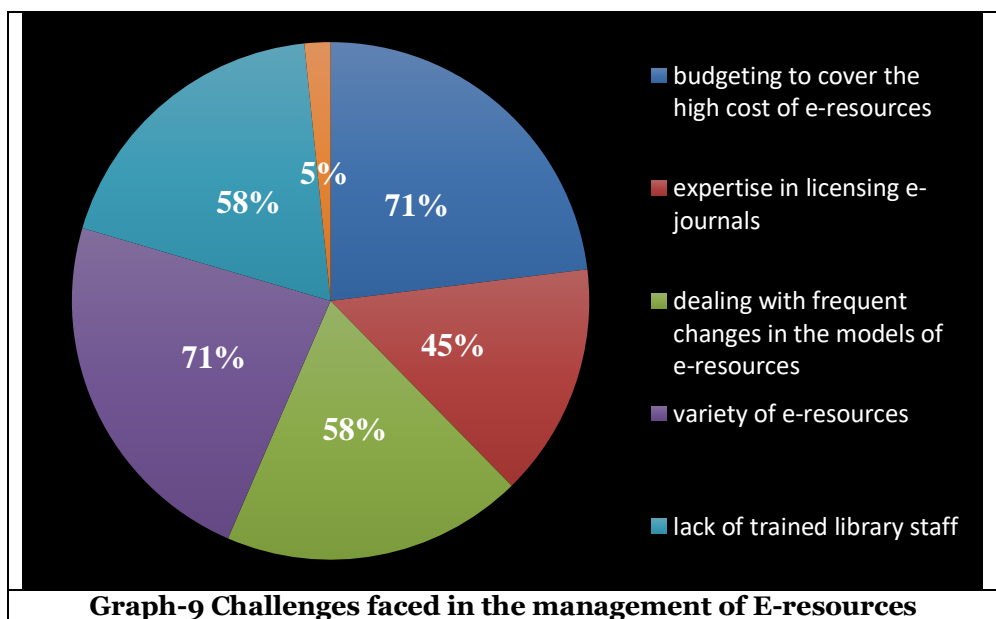
Graph 7 indicates the availability of ERMS in the libraries. The study found that 64 percent of college libraries do not have an electronic resource management system (ERMS), 32 percent are planning to purchase it in the future, and only four percent have an electronic resource management system (ERMS). It shows that 96 percent of libraries manage e-resources manually, like print collection, by following standard procedures in their own ways.

Que. 9. Mention the status of ERMS.



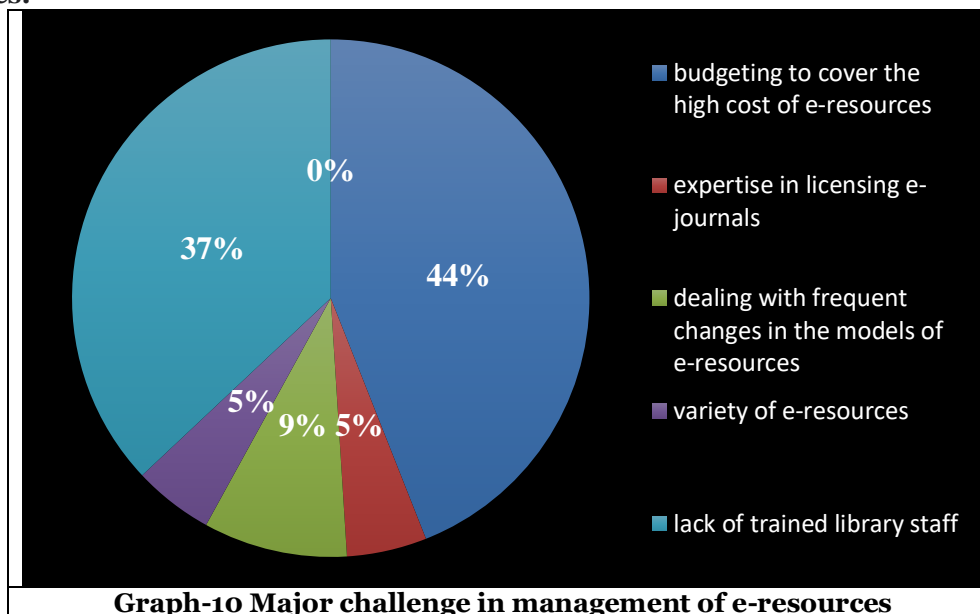
Graph 8 indicates the status of ERMS, and the researcher observed that 95 percent of college libraries do not have any ERMS, and only five percent have open-source ERMS. It is found that no any a single library has commercial ERMS implemented in the library.

Que 10. As a librarian, what challenges are you facing in the management of e-resources?



Graph 9 describes the challenges the librarians face in managing E-resources. The study revealed that 71 percent of college librarians found budgeting to cover the high cost of e-resources and a variety of e-resources. 58 percent of librarians found dealing with frequent changes in the models of e-resources and a lack of trained library staff. It is also found that 45 percent of librarians face the problem of expertise in licensing e-journals, and only 5 percent of librarians do not face any problem managing e-resources. The graph shows that less budget and a variety of e-resources are the significant challenges faced by the librarians.

Que. 11. According to you which is the major challenge facing by you in the management of e-resources.



Graph 10 indicates that 44 percent of librarians found budgeting to cover high cost of e-resources, followed by 37 percent who found a lack of trained library staff. The study also revealed that 9 percent of librarians found dealing with frequent changes in the models of e-resources, and 5 percent of librarians stated that expertise in licensing e-resources and variety of e-resources are the major challenges faced in the management of e-resources.

Results and Discussion

The study was conducted to investigate the challenges faced by library professionals in managing e-resources. The study revealed the following things.

Most of the libraries subscribed to the DELNET database and member of national digital library of India.

The majority of the libraries have library staff below five; 50 percent of librarians are satisfied with this strength of library staff, and 50 percent are not satisfied with the same. It is observed that less and untrained library staff is one of the major challenges in the management of e-resources.

The study found that the majority of libraries have budgets of up to 5 lakhs, and very few libraries have budgets above 15 lakhs for the overall development of the library.

It is also observed that the majority of librarians display links of e-resources on the library notice boards, followed by taking orientation for library users to promote the use of e-resources. It is also found that only a few librarians are using social media to raise awareness of e-resources.

It is revealed that almost all library professionals organize library training for library users to access e-resources.

The study found that the majority of librarians consider technical support and review of users sometimes while selecting e-resources, and the majority of librarians mainly consider authenticity, easy access and cost-effectiveness while purchasing e-resources. In contrast, the pricing and quality of e-resources are less considered.

It is observed that librarians try to follow standard procedures to subscribe to and manage e-resources but lack at certain stages like expert and less library staff, minimum budget, etc.

It is observed that most college libraries do not have any ERMS; only one library uses open-source ERMS, and some libraries use the Knimbus platform only for keeping all the subscribed e-resources on a single platform.

Most librarians faced the challenge of fewer budget to cover the high cost of e-resources and a variety of e-resources, followed by a lack of trained library staff.

The study recommended that the budget for subscribing to e-resources should be increased and frequent special training should be arranged for library staff and library users by the publishers of e-resources regarding how to use these e-resources. It is suggested to conduct a user survey before subscribing to e-resources. The researcher suggested to market e-resources with the help of social media platforms along with traditional ways to make more use of e-resources. It is also recommended the study of electronic resource management systems should be included in the syllabus of library and information science.

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