

# Web-Based Services In College Libraries: Study Of Librarians Perspective

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## ABSTRACT-

Technology development has provided the academic libraries of higher education an opportunity to store, promote and disseminate information using web-based tools to meet their user needs. Web 2.0 is a popular technology many libraries adopt to reach their users. The libraries are now using innovative tools to disseminate the information, but at the same time, they are facing challenges while delivering these web-based services. The main purpose of web-based services is to support the user community by providing them with easy and convenient access to information and resources. The purpose of this paper was to study the current state of college libraries and to examine the web-based services offered by these college libraries in the state of Goa. A structured questionnaire was sent online to 30 college librarians across Goa for data collection. The data were analysed through descriptive analysis. The study revealed that most of the colleges in Goa offer innovative web-based library services.

**Keywords:** Web-based library services, College libraries, Catalogue services, Reference services, Communication services, e-services.

## INTRODUCTION

E-resources have become more important for learning and research activities in the field of higher education. During the Covid-19 pandemic, most of the faculties and research scholars relied on the e-resources provided by the libraries over their websites. There is a need for proper collection building of these e-resources and to provide better and more efficient services for the faculties and research scholars. Dhuri & Lobo (2021) in their study found that e-resources are the best substitute for conventional/print resources and are also useful for research, projects and assignment purposes. In the earlier days, most of the library resources remained untouched and underutilized. With the emergence of the internet and the advent of ICT (Information Communication Technology), libraries started using innovative technologies to disseminate information in online mode and so also web-based library services. Gmiterek (2021) states Web 2.0 apps proved notably advantageous for libraries. It has ensured the easy access and archiving of the available resources in the library and helped to

raise the library standard. Many libraries started using the SNS (Social Networking Sites) tools 24/7 to reach their users to meet their information needs. The digital age has made it easier to meet user needs quickly. Library web-based services are technology-driven services. The web-based services support digital literacy and lifelong learning process for the users. Web 2.0 technology has made libraries to change their service structure to meet the information needs of the users. The libraries started designing dynamic and attractive websites to encourage their users to be attracted to their library websites. With the help of Web 2.0 technologies, it has become easier for libraries to generate and exchange information with users. The study conducted by Punchihewa (2018) found that RSS and SNS are the widely used Web 2.0 tools in libraries. Academic libraries' website is a gateway for the users to access the e-resources of the library. The library website shall act as a learning tool. Web 2.0 tools make the libraries more visible to their users and make it easier to connect the users 24/7, anywhere. The libraries are taking the initiative to provide convenient and accessible services to their users.

Libraries shall provide training to their students, faculties and research scholars to access the web-based resources provided on the Internet and how to retrieve the data over the Internet. Dhande (2017) reveals that Internet web-based services are essential in the modern era. In the study found that web-based services like E-mail, OPAC, E-Journals E-Books, E-Databases, and E-document delivery services play an important role in disseminating information. Naik (2017) found that web-based library services provided by university libraries help users to find, evaluate and use information effectively and efficiently

## **REVIEW OF LITERATURE**

Library users' demands depend on their needs for information and they expect various types of innovative services from the libraries which will meet their information requirements. As technology continues to be in rapid change, users prefer libraries to serve as hubs for community members to interact and engage. Web-based services provided by libraries bring recent and current information to the attention of the users. The college libraries shall have to provide web-based resource services to their users in addition to print resources to attract the users to the library. Web-based services are an innovative tool to market library resources and services. There is a need for libraries to redefine their resources in e-mode according to the changing demands of the user community since the users are depending on the internet rather than visiting the library. Sushma and Ramesha (2022) conducted a study to know the usage of web-based library information services among the faculty members and research scholars of Bangalore University. The study reviewed the use of eight web-based services and found that the university library is lagging behind in providing online services such as interlibrary loan, electronic document service and real-time service. The study suggests conducting an orientation programme to create awareness among the users, develop dynamic library websites and update library websites frequently and develop mobile-friendly web-based services. Gavit (2019) has highlighted the various types of web-based services like web pages, web OPAC, Bulletin board, Access to databases, Electronic Selective Dissemination of Information, Ask-a-Librarian and Web-based user education that can be implemented in college libraries. The study suggests providing quality information services to satisfy the users' needs. Shivakumaraswamy (2019) focuses on the use of web-based services by the Mysore

city engineering colleges. The study has covered various web-based services provided by the engineering college libraries of Mysore city. The objective of the study was to know the use of various web-based services and the problems faced while accessing these web-based resources. The study found that engineering college libraries are making all the efforts to deliver quality web-based services and suggest that librarians play a leadership role in providing better web-based services. Balaji and Kumar (2019) reveal that the emergence of web-based services has made an impact on library and information services. They examine how university libraries in southern India are using new generation web technologies, web 2.0 features and social media. The study found that majority of the university libraries are working in traditional library setup and relatively very low spread of web information services. They suggest the library professionals shall develop training programs to enable the users to use the web services more effectively. Deepa & Aziz (2016) conducted a study to know the use of web-based information services by the research scholars of Calicut university. The study examined the web-based services provided by the university, effective use of web-based services by the research scholars and challenges faced while using the web-based information services. Study found that most of the research scholars are not aware of the web-based services provided by the university. They suggest the awareness programme for the research scholars, to make effective use of web-based information services provided by the university library. Akeriwe and Thompson (2014) investigated whether web 2.0 applications can be used to deliver enhanced library services to the Graduate students of university in Ghana. Study has discussed the opportunities and challenges, while implementing the web 2.0 services to their

students. They wanted to know which web 2.0 tool could be used to enhance the library services. Study found that instant messaging and social networking tools can be used to enhance library services. They suggest the academic libraries to integrate the innovative technologies in their variety of services. The study conducted by Madhusudhan & Nagabhushanam (2012), examined the web-based services offered by some university libraries in India. They observed that many of university libraries have not explored the effective use of the library website. They observed few university libraries offer innovative web-based service to their users. Study suggests some innovative and creative web-based services for the libraries. Zarei and Zahra (2011) conducted a survey on the web-based services offered by offered by Asian National Libraries and found that Asian libraries website are far away from providing optimal online services.

#### **OBJECTIVES OF THE STUDY**

The study's main objective was to know the encouragement, usefulness, challenges and satisfaction of the libraries while providing resources and services to the users using web 2.0 tools and to know how far the libraries provide effective and efficient quality services to their users to build their image. Hence the objectives were framed as:

- To discuss the web-based services provided by college libraries through college library websites.
- To discuss the factors that encouraged libraries to deliver information through Web 2.0 tools.
- To know the usefulness of web 2.0 tools for college libraries.
- To discuss the challenges faced by the college libraries while delivering web-based services

- To know the satisfaction of college librarians based on the user feedback obtained by libraries.
- To know the image build-up by the college libraries using web 2.0 tools.

**METHODOLOGY**

The technique used to evaluate the data is access, observation and evaluation of college library websites, the colleges affiliated to Goa University imparting the education in the field of Arts, Commerce, Science & Law and responses obtained through structured questionnaires were sent through online mode (Google forms) to college librarians. A total of 30 college library websites were accessed and questionnaires were obtained. The data is presented in a tabular form and analyzed by using descriptive statistical techniques.

**ANALYSIS AND INTERPRETATION OF DATA**

Web-Based services provide speedy information to users. The 30 college libraries selected for study are offering web-based services to their users are discussed in different forms.

**Table 1. Web-based reference services**

Types of web-based reference services	No. of colleges	Percentage
E-Document Delivery Service	17	56.61
E-Current Awareness Service	16	53.28
Ask-a-Librarian	25	83.25
Virtual Reference Service	18	59.94

Source: Compiled using primary data

From the above table 1 it is found that almost more than 50% of the colleges are providing

web-based reference services. Research scholars are in need of information at any time and the most suitable service for them is Ask-a-Librarian. Above table no. 1 indicates that Ask-a-Librarian, a popular service provided by 83.25% of libraries to their users, followed by Virtual reference service with 59.94% while E-document delivery service with 56.61% and E-Current awareness service by 53.28%.

**Table 2. Web-based catalogue services**

Types Catalogue web-based services	No. of colleges	Percentage
OPAC	30	100
New Arrival	23	76.59
Online Book Recommendation	15	49.95
Inter-Library loan	08	26.64
Article Request	14	46.62

Source: Compiled using primary data

OPAC is a most popular web-based service used by the users of the library to search for books, journals and other library resources. The above table 2, indicates that all the college libraries (100%) are providing OPAC service for their users while 76.59 % of colleges are providing New arrival service followed by online book recommendation service.

**Table 3. E-services**

E-Services	No. of colleges	Percentage
E-Books	25	83.25
E-Journals (Subscribed)	28	93.24
Open Access Journals	27	89.91
N-LIST	25	83.25
E-Databases	22	73.26
Theses	10	33.3
Dissertations	09	29.97
Project Reports	12	39.96
E-Newspaper Clipping	23	76.59

E-News Letter	10	33.3
Previous year’s Question Papers	30	100
Syllabus	25	83.25

Source: Compiled using primary data

E-services provided by the libraries help the users to get information speedy and accurately. The image of the library depends on the services provided by the libraries. Many resources of the libraries remain untouched, but with the help of web-based services, it has become possible for the libraries to deliver information to the user on the internet. From the above table 3, it reveals that all the libraries (100%) provide links to access the previous year’s question papers. 93.24% of libraries provide access to e-journals, while 81.91 % of libraries provide access to open-access journals and 83.25% of libraries provide access to e-books. Many libraries also provide access to syllabi & E-Newspaper clipping.

**Table 4. Web-based Communication Services**

Web-based Communication services	No. of colleges	Percentage
Facebook	21	69.93
WhatsApp	30	100
Twitter	12	39.96
YouTube	08	26.64
Instagram	13	43.29
LinkedIn	11	36.63
Email	30	100
Blog	04	13.32
QR code	20	66.6
Messaging	05	16.65

Source: Compiled using primary data

With the emergence of Social Networking Tools, libraries shifted from traditional services to innovative services mode. Libraries started using social networking tools to deliver information to the user’s community 24/7, anywhere and at any time. Table 4 indicates WhatsApp (100%) is the most powerful tool used by all libraries to deliver information. 69.93% of users are using Facebook to deliver library services. A Blog (13.32%) is a tool used by the least of the libraries to market their resources. Many colleges need to create blogs to provide e-services to their users.

**Table 5. Factors that encourage the libraries to provide Web-Based Services.**

Variables	Mean	Rank	Std. Deviation
Marketing of library resources & services	4.43	2	.568
Information about the new arrival	4.30	3	.596
Current awareness service	4.27	4	.521
Providing easy access and faster services to the user	4.47	1	.507
Visibility of the library	4.47	1	.571

Source: Compiled using primary data

Above table 5 indicates the mean value (4.47) is high in the case of Providing easy access & faster services and Visibility of the library, which means that these two factors encourage and influence the libraries to provide web-based services. Marketing library resources and services has the second highest mean value (4.43), which encourages the libraries to

promote the resources and services to reach the users. The mean value of information about new arrivals is 4.30, considering it is important to provide up-to-date information about the new resources that arrived in the library. Current awareness service has the lowest score of 4.30, suggesting that the library considers keeping users informed about the latest information and developments and encourages the provision of web-based services. The factor titled Information about new arrival having a standard deviation value of 0.596 states that it is one of the least important factors considered for colleges while providing web-based services, followed by Visibility of library, having a standard deviation of 0.571 score.

**Table 6. The usefulness of Web-based library services.**

Variable	Mean	Rank	Std. Deviation
Usefulness of Virtual Service	4.20	3	.997
Usefulness Communication services	4.00	4	.910
The usefulness of Catalogue Service	4.60	1	.498
The usefulness of Social Networking Sites	4.33	2	.661

Source: Compiled using primary data

The usefulness of web-based services to the users is indicated in table 6. The study reveals that the Catalogue service is considered to be the most important web-based service by the respondents, with a mean score of 4.60, suggesting that the users find the catalogue services valuable to search and access library resources online. The usefulness of social

networking sites and the usefulness of virtual service with a mean score of 4.33 and 4.20, respectively, occupy the second and third place, thereby implying that the users value social networking sites such as Facebook, WhatsApp, Twitter, YouTube and Instagram rendered by the libraries and virtual services like Ask-a-Librarian and online reference services as useful. Communication service, with the lowest mean score of 4.00, is considered the least useful of services.

**Table 7. Challenges faced by libraries while providing Web-Based services.**

Variable	Mean	Rank	Std. Deviation
Lack of Internet connectivity	3.77	1	1.194
Lack of Technological skills among library professionals	3.50	3	1.167
Lack of Infrastructure	3.67	2	1.295

Source: Compiled using primary data

Table no. 7 portrays the challenges faced by libraries while providing web-based services to their users. Lack of Internet connectivity (3.77) is the biggest challenge faced by most of the libraries surveyed. It deters the provision of web-based services made available by the libraries. The libraries also suffer from the lack of infrastructure (3.67), such as hardware and software, which hinders the delivery of web-based services. This is followed by a Lack of technological skills among library professionals (3.50), which affects the provision of delivering web-based services.

**Table 8. Satisfaction of the users with web-based services delivered by libraries**

Variable	Mean	Rank	Std. Deviation
Satisfaction of users with accessing data	4.30	2	.596
satisfaction of users in locating the data	4.30	2	.651
satisfaction level of users relating to speedy retrieval of data	4.40	1	.621

Source: Compiled using primary data

The above table no. 8 reflects that the ‘satisfaction level of users relating to speedy retrieval of data’ (4.40) is an important determinant of users' satisfaction with library web-based services. The next two most important factors that impact user satisfaction with library web-based services are ‘Satisfaction of users with accessing data’ and ‘Satisfaction of locating data easily’ with a mean score of 4.30. The study proves that these two factors are equally vital in determining user satisfaction with the web-based services provided by the libraries.

**Table 9. Factors responsible for building library image**

Variable	Mean	Rank	Std. Deviation
Information about the library on the webpage/website	4.57	2	.504
Web-based Services provided by the library	4.67	1	.479
Collections in a library	4.67	1	.479

Source: Compiled using primary data

Table 9 exhibits the factors responsible for building the library image on the Internet. The

mean value of all three variables is high. The factors ‘Web-based services provided by the library’ and ‘Collections in a library’, sharing a mean score of 4.67, have been revealed to be of utmost essential in building a library image. The web-based services delivered by the libraries, such as E-Current Awareness Service, E-Document Delivery Service, Ask-a-librarian service, subscription to e-journals and databases etc., contribute positively to building the library image. The availability of quality collections has a direct relationship with the library image among the users. The factor ‘Information about the library on webpage/website’ (4.57) has a significant role to play in building a positive library image, thus corroborating the major finding of Kanmadi & Kumbar (2006).

**FINDINGS AND CONCLUSION**

The study recommends the following suggestions to improve the quality of services provided by the college libraries:

- There is a need for the college libraries to expand the ‘E-Document Delivery Service’ and ‘Virtual Reference Service’ to their users since only 50% of the colleges are offering these services. Expanding this service will improve the accessibility to the available resources of the library.
- The libraries should enhance the ‘E-Current Awareness Service’, ensuring to provide up-to-date information which will help in utilising more library resources.
- ‘Inter-Library Loan service’ is most important for resource sharing among the libraries. Expanding this service will benefit the students, faculty and researchers to access the resources not available in the library.
- The college libraries must offer ‘Article Request Service’ to a larger extent since

only a few offer this service.

- ‘Instant messaging Service’ is a Real-Time Communication service allowing libraries to engage with their users. The libraries have to promote this service to enhance the quality of library services to their users, such as promotion of library resources, reference queries, research queries etc.

The library website reflects the strengths and weaknesses of the library. To build a positive image of the library in the minds of users, the library shall make an effort to offer web-based services to its users. The survey has revealed that many college libraries are providing web-based services to their users. Few libraries need to develop their unique library portal. Librarians should be experts in offering web-based services since users are adopting new communication technologies. Library professionals must use innovative services to meet the information requirements of users. This study has focussed on the different web 2.0 tools used by the libraries to deliver information and discussed the factors that encourage the delivery of web-based services, their usefulness to users, challenges faced by libraries, satisfaction level of users and building of library image in the users' minds. The limitation of this study is that it surveyed only 30 college libraries in Goa. Future research should include broad study and more colleges that offer a wide range of web-based library services.

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10. Narayan Zantye College of Commerce, Bicholim.
11. Parvatibai Chowgule College of Arts & Science, Margao.
12. Rosary College of Commerce & Arts, Navelim.
13. Shree Damodar College of Commerce & Economics, Margao
14. Shree Mallikarjun and Chetan Manju Desai College, Canacona.
15. Shri. Ravi S. Naik College of Arts & Science, Ponda.
16. Sridora Caculo College of Commerce & Management Studies, Khorlim, Mapusa.
17. St. Joseph Vaz College, Cortalim.
18. St. Xaviers College of Arts, Science & Commerce, Mapusa.
19. Swami Vivekananda College of Commerce, Borim, Ponda.
20. Vidyaprabodhini College of Commerce, Education, Computer & Management, Parvari.
21. Govt. College of Arts, Commerce & Science, Khandola.
22. Govt. College of Arts, Science & Commerce, Sanquelim.
23. Govt. College of Arts, Science and Commerce, Quepem.
24. Govt. College of Commerce & Economics, Borda.
25. Sant Sohrobanath Ambiye, Govt. College of Arts & Commerce, Pernem.
26. V. M. Salgaokar College of Law, Miramar, Panjim

#### APPENDIX I

1. Carmel College for Arts, Commerce & Science for Women, Nuvem.
2. CES College of Arts & Commerce, Cuncolim.
3. Dempo College of Commerce and Economics, Cujira, Panjim.
4. Dhempe College of Arts & Science, Miramar, Panjim.

27. Govind Ramnath kare College of Law,  
Margao.

28. Dr. Dada Vaidya College of Education,  
Ponda.

29. Nirmala Institute of Education, Altinho,  
Panaji.

30. Goa College of Home Science, Panaji.

