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Web Based Library Services for Engineering College Libraries in West Bengal

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Abstract
Growth of modern technology engineering college librarians tries to changes their environment to satisfy their users need. Therefore they try to search and implemented the best way of the new service. In our studies we try to show the present web-based service status of the engineering college libraries and try to solve the problem with some suggestions for better web based service for more effective for their users.

Keywords: Library Service, Web-based service, Online Library Service, Library Website

1.0 Introduction

Any higher education institution's ability to succeed will be largely dependent on its library services which are essential and have an impact on the whole higher education system. In academic institution's library play crucial role because it gives students access to excellent/superior information resources. And its services are to promote the development of academic research. Web-based information services have replaced the traditional source of information for the users. The modern technological college libraries specially engineering college library responsibility is to provide appropriate information to its users at the appropriate time on their desktops. Engineering college libraries are adding more personalized and interactive with resources, services and methods like Web-OPAC, Discovery Services, Mobile Apps, online feedback, e-resources with remote access, online chart and virtual reference etc. The web enable library services make it easier for their user to use the libraries. E-books, e-journals, online delivery services, Web-OPAC, online current awareness service, alert service, digital library service, electronic document delivery service, Indexing and Abstracting Database etc required for development of any type of library.

2.0 Literature Review

Molla and Singh (2024) studied that the various facets of smart technology and information technology (IT). They highlighted on the internet, software and technology used in libraries to improve services and resources for its users. Kumar and Ram (2023) show in his studies the application and significance of online library administrations with regards to current data looking for conduct. Web-based services that make it easy to use and get to resources have been developed by libraries to meet the changing needs of their users. They concludes that Web-based library services represent an essential component of modern library services which offering a range of benefits to users and library staff. Haridasan and Firdaus (2021) examine through the content analysis method, the current study provides insight into trends, modifications and innovations in the provision of web based sources and services on engineering

institute library websites. They also show that the provision of various web-based sources and services. They also studies that the need to travel to the library, which has reduces environmental pollution through the effective utilization of energy resources and paper waste through availability of web-based sources. Patel (2015) says the college library websites are Web OPAC, information search and unique search, full text and bibliographic data sets, online report conveyance, admittance to institutional store and open access resources, databases and multimedia access resources, live chat, assemblage of exploration profile, online CAS and SDI, remote access etc.

3.0 Objectives

The following objectives of the studies are to explore and analysis the web-based library services of engineering college libraries:

- To find out how well-known web-based library resources and services are in private engineering college libraries in West Bengal.
- To find out what kind of resources and services available.
- To investigate the private engineering college library provides remote access for their students.
- To suggested the effective way to make the use of web-based library resources and services.

4.0 Limitations:

To realize the above objectives, the study has been restricted to web-based library resources and services, focusing on specific categories of services as well as the whole spectrum of library services. Present study covered only MAKAUT affiliated private engineering college libraries in West Bengal and based on library website.

5.0 Methodology:

This is an application research and based on real time data. To find data we have use observation method. We have collected college name list from MAKAUT website. Identify the private engineering colleges which run the engineering degree (B.Tech, M.Tech etc.). For our study we have selected personal observation method and visit engineering college website for collecting data.

6.0 Data Collection, Analysis and Findings:

In our studies the tools used to create tables, charts etc for data collection and analysis. First step we have prepare table and put same raw data in each row/ column in a single table then help multiple tables for multiple data. Here we used Microsoft office 2007 for writing text and calculating data and present different type of chart. In our studies we have taken and observed **30** college website and found the following observation:

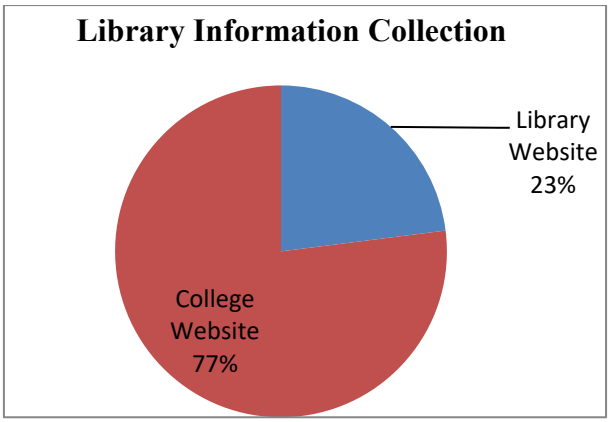

Fig -1: Library Information Collection

From the above chart (fig-1) we find that 77% college library has no library website. They marge their library information in a single page with their college website. Only 23% college libraries have personal website and they are given their entire information regarding library into several pages.

6.1 Non –Printed Collection:

In the following chart (fig-2) we represent the non-print collection of our studies:

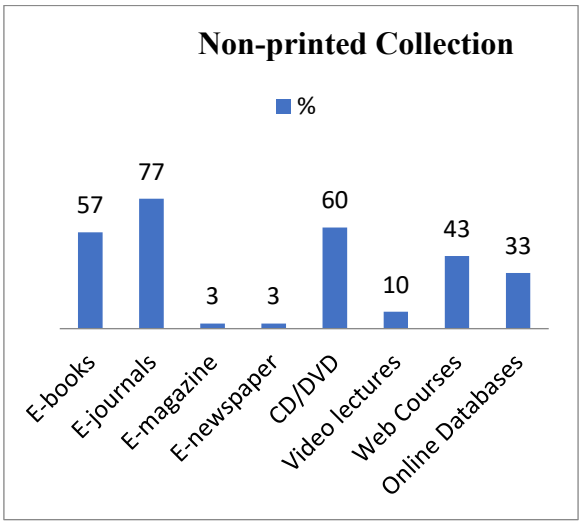

Fig-2: Non-Print Collection.

From the above chart (fig-2) we find e-journals services given to their users 77% libraries whereas e-books 57%, CD/DVD 60%, web courses 43%, online databases 33%, video lectures 10% respectively. Most significant services are e-newspaper and e-magazines services 3 % only.

6.2 General Library Services

In the following chart (fig-3) represent general library services:

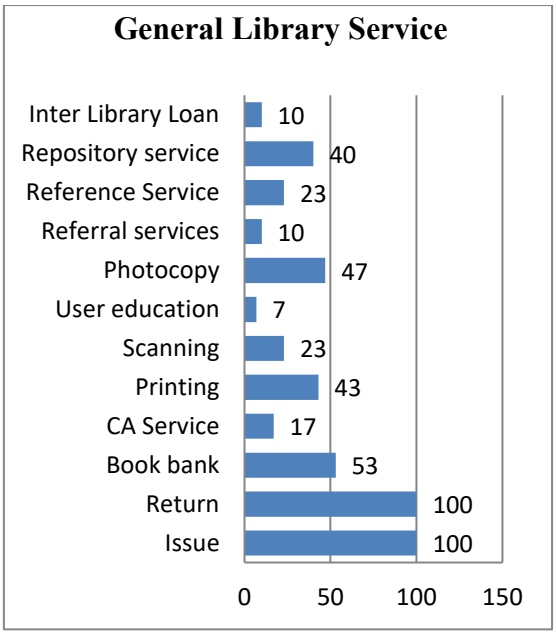

Fig-3: General Library Services

From the chart (fig-3) we found that general library services of the college such as issue and return 100%, book bank services 53%, CA services 17%, printing services 43%, scanning services 23%, photocopy service 47%, reference services 23%, referral service 10%, repository service 40%, 10% inter library loan services and only 7% library provides user education service regularly.

6.3 Web-based Services

6.3.1 General Online Service

In the following chart (fig-4) represent the web-based general online services:

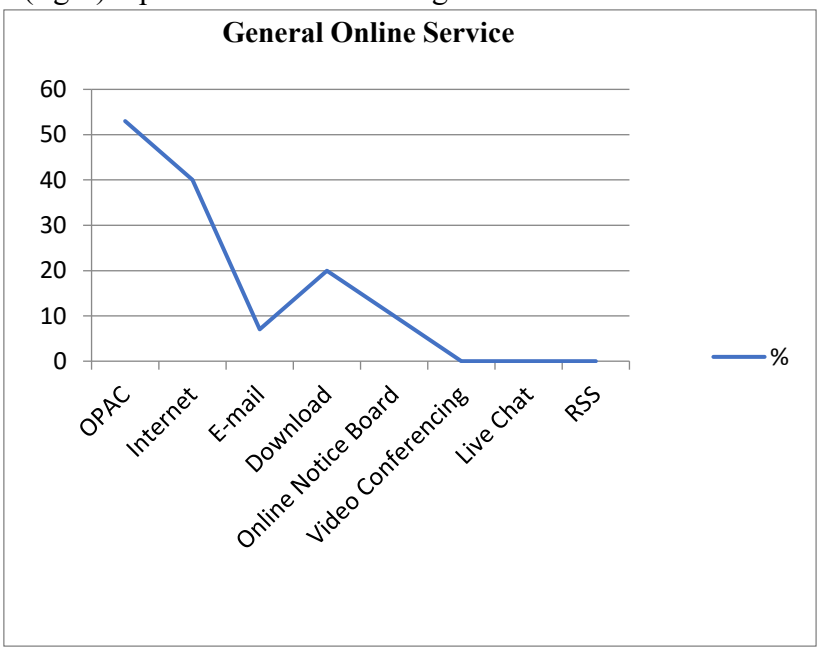

Fig-4: General Online Service

From the above chart (fig-4) we found that OPAC service 53%, Internet service 40%, Email service 7%, 20% library have download option and Online Notice Board 10% but no libraries using any video conferencing, live chat and RSS feed service.

6.3.2 Library Network Service

The following chart (fig-5) represents library network service

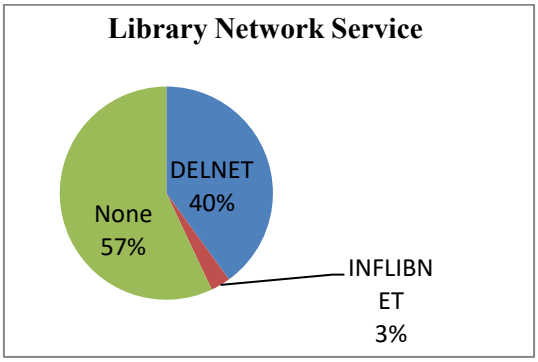

Fig-5: Library Network Service

From the above chart (fig-5) we found that some libraries have accessibility and subscribe various library networking services among of them 40% have access DELNET services and 3% have INFLIBNET but the significant observation that 57% libraries have not using any library networking services.

6.3.3 Online Bibliographic Database

The following chart (fig-5) represents the bibliographic database services:

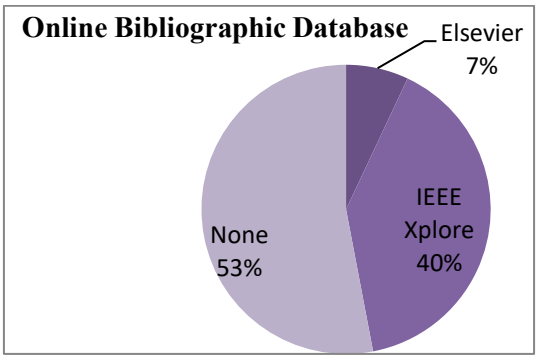

Fig-6: Online Bibliographic Database

From the above chart (fig-6) we found that 7% access Elsevier, 40% have IEEE Xplore bibliographic database but 53% libraries have not yet subscribe any bibliographic database.

6.3.4 Online Full Text Database

The following chart (fig-7) represents the online full text database service:

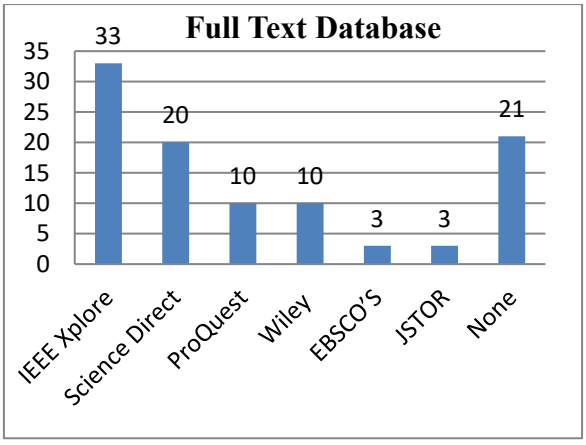

Fig-7: Full Text Database

From the chart (fig-7) we found that 33% libraries have IEEE Xplore full text database subscription, 20% have Science Direct, 10% have ProQuest, 10% have Wiley, 3% have EBSCO'S, 3% have JSTOR and 21% have not yet any full text database subscription.

6.3.5 Online Journal/E-books Access

The following chart (fig-8) has represented the status of online journal/e-books access:

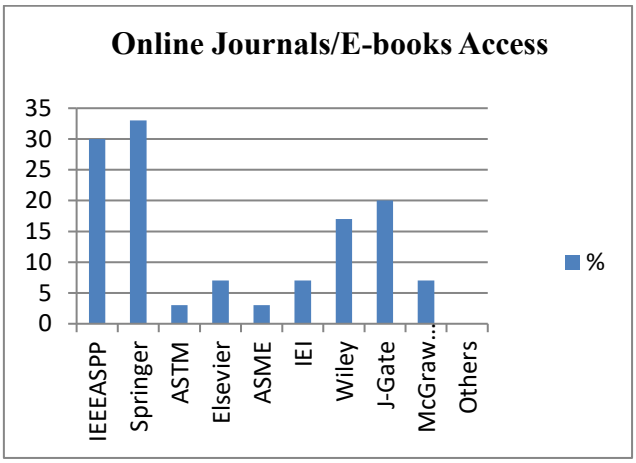

Fig-8: Online Journal/E-books Access

From the above chart (fig-8) we found that some of the libraries have access various online journal/e-books. Among them 30% have IEEE ASPP, 33% have Springer, 3% have ASTM, 7% have Elsevier, 3% have ASME, 7% have IEI, 17% have Wiley, 20% have J-Gate, and 7% have McGraw-Hill.

6.3.6 Status of Digital Library

The following table-1 represents the status of DL:

Digital Library Software (%)					Web Content Management Software (%)				
Dspace (%)	Greenstone (%)	E-print (%)	Tech Focuz(%)	Others(%)	Wordpress(%)	Zoomla (%)	Drupal (%)	OpenCMS (%)	Others (%)
7	3	0	0	3	3	0	0	0	0

Table-1: Status of DL

From the table-1 we found that few library have Digital Library Initiative, 7% using Dspace, 3% using Greenstone and 3% using others digital library software, 3% using Web content management software wordpress.

6.3.7 Library Management Software

The following table-2 has represented the status of LMS:

Library Management Software	Library Management Software		
47	37	6	4

Table-2: LMS

From the table-2 we found that 47% libraries using library management software among them 37% using LIBSYS, 6% using Koha, 4% using others and 53% libraries are not using any LMS.

6.3.8 Others Online Services

The following table-3 has represented some other online services

WEB OPAC (%)	News Archives (%)	Virtual Tour (College/ Library) (%)	Membership (%)			E-learning platform link				
			NDLI (%)	BCL (%)	ACL (%)	SWAYAM (%)	E-pg pathshala (%)	E-gyankosh (%)	E-sodhsindhu (%)	Sodhganga (%)
37	13	37	43	7	3	10	7	3	7	3

Table-3: Other Online Services

From the table-3 we found that some others online services such as 37% library have Web Opac, Virtual Tour (College Library) marge with college website but have not any Library Virtual Tour specifically 43% libraries have NDLI, 7% have BCL and 3% have ACL Membership. Some library also provide E-learning platform link on their college/library website among them 10% libraries provide SWAYAM, 7% libraries provide E-pgpathshala, 3% libraries provide E-gyankosh, 7% libraries provide E-sodhsindhu, 3% libraries provide Sodhganga.

7.0 Suggestion

- Every library Create Library Website
- Creation of virtual reference services for library users
- Required to develop the Web enable remote access to library services including cloud based services
- Libraries may maintain digital repositories or archives which contain digitized materials
- Virtual library tours have emerged as innovative and effective tools for introducing library resources and services in the digital age for its users
- Intact their website a field Ask-A-Librarian which play a vital role in bridging the gap between users and the wealth of information available in libraries
- Bulletin board services are meant for making general announcement to all users of a network and are used for publication of newsletters and other information services
- Required web-based collaboration tools enabling for real-time interactions. Users can edit documents, share feedback and collaborate in real-time, fostering productivity and efficiency.
- Web OPAC and Online Book Requisition/Reservation system
- Digital Library Platform and E-learning platform
- Online Payment Gateway
- Online Document Delivery (ODD) service

- Alerting Services most important part of any libraries because any type of information send to users for emergency or early possible to knowing
- Creating of Mobile Apps for library

8.0 Conclusion

Web-based services have changed the way of libraries to operate its user in the modern era. Where users are freely utilized information resources and interact with them. The development of above said services is a significant role in library operations that places an emphasis on adaptability to changing user's requirements. Any libraries must continue with modern technology to serve and satisfy their users demand by using web based technology. In conclusion we found that today's libraries can't function without web-based services**,** which offer gateway to numerous informational sources.

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