Access of web OPAC through library automation in university libraries in Tamil Nadu: A study

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Abstract
This paper attempts to improve user satisfaction with the online public access catalog (OPAC) in the deemed university libraries in Tamil Nadu. The study investigates the OPAC link in the website. The library has a separate server for LMS, the number of computers allotted for OPAC in a library, computers allotted for OPAC, the level of automation, software used for automation, types of OPAC access in automation available, subscribed link in OPAC and types of search. The present study survey approach was used to distribute 1200 questionnaires and 998 questionnaires were received back and analyzed with specific objectives. This study focused on the user OPAC to check OPAC link on website availability are 68.43%, followed by the type of OPAC access in automation available at 58.31%.

Keywords: Library automation, OPAC, WebOPAC.

Introduction

Online public access catalog (OPAC) is proof of the ability of technology to improve the library experience as libraries adapt to the various demands of their patrons. The purpose of this paper is to dissect OPAC and highlight its critical function in resource discovery and user interaction. Join us as we explore the possibilities of OPAC, navigating the virtual information corridors and revealing the revolutionary power it offers to libraries throughout the globe. Furthermore, OPAC is not limited to just physical collections. With the incorporation of electronic resources into their catalogs, numerous libraries have embraced the digital age. Through OPAC, e-books, online journals, and databases are easily accessible, forming a cohesive platform that connects conventional print and modern digital resources. OPAC changed the traditional card catalog system. With the new system, data may be distributed throughout the computer and the necessary entry can be quickly obtained in any format via the OPAC system. Users can now look up material online and, more recently, through OPAC. Finding pertinent information based on our needs has become much easier to keyword searches and Boolean operators.

OPACs are available in various varieties. Worldcat and LibraryWorld WebOPAC are two instances that link library collections around the globe. Academic journal bibliographies can be found in other databases like ERIC. OPAC gives users instant electronic access to a library’s collection. An easily comprehensible format is used to present the facts. A web OPAC search can now contain keywords and subjects despite the fact that search results were previously limited to the title, author, and call number. A library user will receive considerably more information from the results, such as an image of the item, a synopsis, links to relevant resources, and reviews or comments left by other users. A customer can save searches and place holds on selected materials after logging into their account.

Purpose of Web OPAC

Users can find and browse the library’s resources, such as books, journals, multimedia content, and other objects, through OPAC. The catalog can be searched by users using a variety of parameters, including author, title, subject, and keywords. It gives users internet access to the library’s catalog, which offers a thorough and well-organized list
of all the materials that are available. Users can peruse the catalog and obtain comprehensive details on every item. Users can verify the current availability status of individual goods using OPAC. Customers can use this function to find out if a resource is available for loan, checked out, on hold, or on the shelf at any given time. Information on the actual locations of objects in the library, including floor plans and shelf numbers, is available to users. This makes it easier for patrons to find and retrieve materials in the library.

Users can control their library accounts through OPAC. Viewing their borrowing history, verifying the due dates of items borrowed, renewing materials online, and placing holds or requests for items they want to borrow are all available to users. Through OPAC, users can reserve or put items on hold. The system facilitates the effective distribution of resources by handling these requests and alerting users when the items are ready for pickup. OPAC frequently offers access to electronic resources, including databases, online journals, and e-books. Through the catalog, users can easily access digital items. Advanced search tools are available in OPAC and include filters, Boolean operators, and additional criteria. This improves search precision and makes it easier for users to locate particular materials. OPAC serves as the focal point for a number of library operations since it can interface with other library management systems. This integration increases the total effectiveness of library operations. OPAC provides a forum for teaching users about information literacy, efficient search techniques, and how library resources are arranged. In order to improve users’ navigation and efficiency, libraries frequently offer lessons and guides inside OPAC.

**Review of Literature**

Jagjeet Singh (2018) describes how to implement OPAC in libraries and the challenges that may emerge. The study review at the top shows how OPAC is used in Indian libraries. The majority of research shows how both male and female users use OPAC, and the aforementioned studies incorporate ideas from authors and respondents. The top learning tools for using the OPAC are the orientation program, training, and library staff. Other difficulties with OPAC use were also identified during the research.

Joginder Singh and Rajinder Kumar (2019) the suggestions made by users (%) on OPAC system updates in Haryana’s university libraries out of 188, 193, 183, and 165 library users across all universities in Haryana, 26.0, 18.1, 11.4, and 14.5% of users realized that the OPAC system needed to be made simpler for document searches; 15.4, 19.6, 11.4, and 16.3% recommended that it be user-friendly; 15.9, 11.9, 5.4, and 12.1% believed that tutorial materials, whether online or offline, needed to be uploaded in OPAC terminals; and 14.8, 16.5, 11.4, and 23.0% recommended that the OPAC terminals.

Sirajudeen Femi Bakrin (2020) explains that the OPAC system is connected via LAN, while 30 (31.57%) said it was connected via WAN. In the same vein, 80 (84.21%) respondents stated that their OPAC is hosted by in-house personnel, while the remaining 15 (15.78%) respondents affirmed that an external body outside the library administers their OPAC.

Shilpa Uplaonkar (2020) the University of Agricultural Sciences, Dharwad faculty received the surveys. OPAC can be used for a variety of purposes. In this case, Table 4 makes it evident that 72.88% of respondents use it to check if books or other resources are available in the library, followed by 54.24% who use it to check their own issue or return history and 30.51% who use it to check new arrivals. Nonetheless, 15.25% of respondents use it to reserve a book that has been borrowed by someone else.

Isau Adewole Adegun (2021) the descriptive survey approach was used in the investigation. To gather information, a structured questionnaire was created. Users were given 150 questionnaires, of which 130 were collected (87%), and all were deemed appropriate for the study. The acquired data were subjected to basic frequency counts and percentage analyses. The study’s conclusions showed that patrons use the Olusegun Oke Library’s OPAC at a fairly high rate. The results also showed that while 23.1% of respondents use the OPAC to find out whether a book is available in the library, the bulk of respondents (33.0%) use it to find journals and other reading materials.

Pijushkanti Panigrahi (2021) according to the data, the majority of libraries (17) (43%) utilize LIBSYS for automation, with 09 (22%) using KOHA and 07 (16%) using EGRANTHALAYA. Three libraries (8%) use NEWGENLIB for automation, whereas two libraries (5%) use SOUL. The availability of OPAC/Web-OPAC facilities in libraries is addressed. It demonstrates that the majority of libraries, 82 (47.13%), have OPAC, with just 14 libraries providing web-OPAC, while 78 (44.83%) do not have an OPAC system.

Choudhry (2022) describes the NSUT is a well-known Indian state university that is administered by the Government of the National Capital Territory (GNCT). Set theory and statistical methods were used to evaluate library patron behavior. The log statistics for web-OPAC and book lending correspond to 1195 (18%) and 2174 (32.8%) library users, respectively. In any given year, 10.3% of users successfully accessed web-OPAC services by logging onto software. This percentage will be 1.3% in 2020 and 9.9% in 2021. In both years, 0.8% of web-OPAC service consumers were satisfied. Over the course of two years, 11.9% of undergraduate engineering students successfully used the web-OPAC program. The percentage of consumers who benefited.

Vasantha and Adithya Kumari (2022) Six (75%) of college libraries use the visitor management module, while all eight (100%) use the cataloging, circulation, and OPAC/
web OPAC modules. Three libraries (37.5%) employ the
digital resources management (DRM) module, whereas four
libraries (50%) automate the serial management section. As
a result, seven libraries (87.5%) provide OPAC services, three
libraries (37.5%) use library management systems to provide
digital information to their users, and there are challenges
in the business.

Amadi Edward & Nansoh Shehu (2023) the display and
analysis of response-derived data are the focus of this work.
The study’s sample population consisted of 204 people,
as was already mentioned. As a result, 169 of the 204
questionnaires that were issued were returned. The study’s
findings were arranged in the following manner according to
the research questions. One research questionnaire looked
into the rationale behind OPAC use in a few chosen South
African university libraries.

Devanand Mishra & Anurag Borpatra Gohain (2023)
The majority of the students 46 out of 84 students or most
students, use the OPAC free text search feature, which enables
them to look up articles by title, author, or subject
header. Researchers come next, with 27 (32.14%) of them
employing the same search parameter. When it comes to
students, however, only 22.61% of them use the Boolean
search option, and even fewer research researchers use it
just 5.95% than other options.

Rajasekaran and colleagues (2023) look at how current
library services help users, as well as the modern and
innovative services offered by academic libraries. Users
must be familiar with basic library terms and understand
how to use the library’s online catalog and other reading
materials. Users must be aware of databases and other
e-resources, and they must be able to locate information
using appropriate search engines. Web Opac allows users
to access library items as well as their intended purposes.
The web OPAC assigns call numbers to a library in order to
categorize them by subject. Some search possibilities are
limited to users and guests.

Kannaujia (2023) discusses concerns with the BHU
central library automation software’s OPAC service. To
understand about students’ expertise of information and
communication technology at Banaras Hindu University.
In this study, data is gathered by a questionnaire. According
to the data acquired, only 29 (34.52%) users are excellent at web
surfing, while 37 (44.05%) users are in good condition to web
surf out of 84 respondents from 100 questionnaires sent.

Muhammad Qasim and Muhammad Ahmed Shah
(2023) the study’s goal was to analyze the current level that
university libraries face in Pakistan’s Faisalabad Division. A
survey quantitative population for the study 15 librarians
from ten institutions in the Faisalabad Division completed
the survey, which was delivered to all university libraries
in the division. According to the other findings, university
library specialists were paid between Rs. 30,000 and Rs.
60,000, with a maximum of one lakh rupees. According to
the current status of library automation, KOHA software was
used to partially automate all university libraries.

Yogesh (2023) claims that the responders employed
OPAC for this purpose. The frequency of use of OPAC at the
library is a good indicator of its value. 77 (41.08%) of the
184 users who responded strongly supported using OPAC
to see if any articles were available. About 53 respondents,
or 28.08%, strongly like using OPAC to receive alerts when
new papers are received of the respondents 42 (22.08%) indicated
they only occasionally utilize the OPAC system
for labor-intensive jobs, whereas 25 (13%) said they use
it to discover the bibliographical information for titles or
documents.

Mazhar Iqbal (2023) investigated the usage of software
for the automation of academic libraries in Sialkot. The
frequency with which librarians respond to the name of
software used in their libraries. The survey results show
that 38 (82.6%) librarians use LIMS software for automation,
whereas 8 (17.4%) use Koha software.

**Objective of the Study**
The following are the main objectives of this study.

- To find the users can discover the OPAC link on the
  website (Web-OPAC).
- To find out if the library has a separate server for LMS
  and for OPAC use
- To determine library automation levels and software
  used for automation.
- To find out the type of OPAC access in automation
  available, the subscribed links are available.
- To explore the OPAC, have access to open source and
type of documents and search available.

**The Study’s Scope**
The scope of the present study is limited to the undergraduate
postgraduate students, faculty and research scholars of the
deemed universities in Tamil Nadu. A random sample of 998
was collected from eleven universities in Tamil Nadu was
taken for the study.

**Methodology**
The sampling approach was used to get responses from
respondents because the researcher wanted to examine
samples from each individual responder. A questionnaire-
based survey was employed and adopted in the study.
About 1200 faculty members, postgraduate students, and
researchers from Tamil Nadu’s private universities received
structured questionnaires with the aim of gathering
user data from several domains for this study. A total of
1,200 questionnaires were randomly sent for the current
investigation, of which 998 were received and properly
completed with all pertinent data sought. The responses
that the users provided served as the basis for the analysis.
Access of web OPAC through library automation in university libraries in Tamil Nadu: A study

Analysis of Collected Data

Number of responses to questionnaires collected

Figure 1 describes the number of responses to the questionnaire collected. The research scholars, 420 responded and 42.08% is the highest among all the other categories. Of the faculty members, 332 were responded and 33.26% and it is the second among all the categories. The undergraduate 103 and the percentage is 10.32% and it’s the third among all the categories. The junior research fellows are 80 members responded with 8.01% and postgraduates are 63 members responded and a percentage is 6.31% and it is the lowest among all the categories. From this analysis of number of responses are more from research scholars.

OPAC Link on Website (i.e. Web-OPAC)

Figure 2 describes the OPAC link on the website, i.e., web-OPAC. The ‘Yes’ category number of respondents are 644 and the percentage is 64.52% and it is the highest of the other category. The ‘No’ category number of respondents are 354 and the percentage is 35.47% and it is the lowest. From this, it is clear the most of the users are using web-OPAC and it is linked in the common OPAC.

Does Your Library has a Separate Server for LMS

Figure 3 describes the ‘Library having a separate server for LMS’. The ‘Yes’ category has 683 responses and the percentage is 68.43% and it is the highest among other categories. The ‘No’ category has 315 responses and the percentage is 31.56% and it is the lowest among all the ‘Yes’ categories. From this it’s clear that the library has a separate server for LMS for student’s use.

Number of Computers Allotted for OPAC in the Library

Figure 4 describes the number of computers allotted or OPAC in the library. The ten and above category has 353 responses and the percentage is 35.37% and it is the highest among all the categories. The ‘10 computers’ has 320 responses and the percentage is 32.06% and its second highest among all other categories. The ‘8 computers’ had 240 responses and the
percentage is 32.06%. The ‘6 computers’ and ‘5 computers’ and 57 and 28 responses and the percentage is 5.71% and 2.80 and these two categories. From this it is clear that the number of computers allotted to the OPAC in the library are more than ten and above.

**Your Library is Automated**

Figure 5 describes the ‘Your library is automated,’ and the ‘yes’ category has 930 responses and the percentage is 93.18% and it is the highest among of the categories. The ‘No’ category has 68 responses and the percentage is 6.81% and it is lowest than the ‘Yes’ category. From this, it is clear that the ‘Yes’ category. From this, it is clear that the Library is automated.

**Level of Automation**

Figure 6 describes the ‘Level of automation’ and the ‘Fully automated’ category has 880 responses and 88.17% and it is the highest among all the categories. The ‘Partially automated’ category has 118 responses and the percentage is 11.82% and it is the lowest among all the other categories. From this it is clear that the ‘Level of automation’ is fully automated.

**Software Used for Automation**

Figure 7 describes the types of software used for automation and the ‘commercial software’ category 890 responded and the percentage is 89.17% and it is the highest among all the other categories. The ‘Open source’ category 98 responses and the percentage is 9.81% and it is the second highest among all the other categories. The ‘In-House’ category is the ten respondents and the percentage is 1.00% and it is the lowest among all the other categories. From this, it is clear that the type of automation software used in most of the libraries in the study are commercial software for automation.

**Type of OPAC Access in Automation Available**

Figure 8 describes the ‘types of OPAC access in automation available’ the ‘Library (Library LAN) category’ are 582 responded and the percentage is 58.31% it is the highest among all the other categories. The within campus (LAN) category are, 316 were responded and the percentage is 31.66% and it is the second highest among all the other categories. The ‘Outside access through’ and ‘Mobile app’ are 93 and 7 responded and the percentages is 9.31% and 0.70% and it is the lowest among all the other categories.
Access of web OPAC through library automation in university libraries in Tamil Nadu: A study

2089

From this it is clear that the type of OPAC access in automation available are within Library-LAN.

**Do Your OPAC have Access to the Subscribed Links**

Figure 9 describes the ‘Do your OPAC have access to the subscribed links’ and ‘E-journals’ are 432 respondents and the percentage is 43.28% and it is the highest among all the other categories. The ‘E-books’ category is 293 and the percentage is 29.35% and second highest among all the categories. The ‘E-thesis’ and ‘E-proceedings’ are 164 and 109 responses and the percentages are 16.43 and 10.92% and it is the lowest among all the other categories. From this it is clear that the ‘Do your OPAC have access to the subscribed links’ are e-journals and e-books.

**Do Your OPAC have Access to Open Source**

Figure 10 describes the ‘Do your OPAC have access to open source’ and ‘Google Book’ are 353 respondents and the percentage are 35.37 and it is the highest among all the other categories. The ‘Open textbook Library’ and ‘Global textbook Project’ categories are, 45 and 40 responded and the percentages is 4.50 and 4.00% are lowest among all the other categories. From this it is clear that ‘Do your OPAC have access to open source’ are ‘Google Book’ and ‘DOAJ’.

**Type of Documents Covered in OPAC**

Figure 11 describes about the type of documents covered in OPAC’ and ‘Books’ are 293 responses and the percentage is 29.35% and it is the highest among all the categories. The ‘periodicals’ are 286 respondents and the percentage is 28.65% and it is the second highest among all the categories. The ‘Non-Book Material’ and ‘Thesis’ are 226 and 106 responses and the percentages is 22.64 and 10.62%. The ‘CD/DVD’ and ‘Maps/charts’ are 4 and 8 respondents and the percentages are 0.40 and 0.80%. The ‘Microfilms/Microfiche’ are two respondents and the percentage are 0.20% and it is the lowest among all the other categories. From this, it is clear that the ‘Type of document covered in OPAC’ are mostly books and periodicals.

**Types of Searches Available**

Figure 12 describes the ‘Types of searches available’ and ‘Journal articles’ are 242 respondents and the percentage is 24.24% and it is the highest among all the other categories. The simple/Basic search available has 209 responses and the percentage is 20.94% and it is the second highest among all the other categories. The E-resources and question Bank are 209 and 105 respondents and the percentages are 20.94 and 10.52%. The ‘Advanced /Complex’ and ‘Project’ are 104 and 77 and the percentage is 10.42 and 7.71%. The ‘News clippings’ are 52 respondents and the percentage are 5.21% it is the lowest among all categories. From this it is clear that the types of searches available are Journal articles and, simple/Basic searches and E-resources.

**Findings of the Study**

The respondent’s questionnaire collected are the research
scholars 420 and 42.08%, Faculty members 332 and the percentage are 33.26% undergraduates 103 and the percentage are 10.32%.

The OPAC Link on the website, i.e, web-OPAC and the ‘Yes’ category numbers of response are 644 and the percentage is 64.52% and the ‘No’ category is 354 and the percentage is 35.47%. The ‘Library has separate server for LMS’ and the ‘Yes’ category has 683 responses and a percentage are 68.43% and the ‘No’ category has 315 responses and a percentage are 31.56%.

The number of computers allotted or OPAC in the library and the ‘10 and above’ category has 353 responses and a percentage is 35.37% and the ‘10 computers’ has 320 responses and a percentage is 32.06% and the ‘8 computers’ has 240 responses and the percentage is 24.06%.

The ‘Your library is automated’ and the ‘yes’ category has 930 and the percentage is 93.18% and the ‘No’ category has 68 and the percentage is 6.81%.

The ‘level of automation’ and the ‘Fully automated’ category has 880 and a percentage is 88.17% and the ‘Partially automated’ category has 118 and a percentage is 11.82%.

The types of software used for automation and the ‘commercial software’ category is 890 and the percentage is 89.17% and the ‘Open Source’ category is 98 and the percentage is 9.81%.

The ‘Types of OPAC access in automation is available ‘within library (Library LAN) category’ are 582 and the percentage is 58.31% and the ‘within campus (LAN)’ category are 316 and the percentage is 31.66%.

The ‘Do your OPAC have access to the subscribed Links’ and ‘E-journals’ are 432 and the percentage is 43.28% and the ‘E-books’ category is 293 and the percentage is 29.35%.

The ‘Do your OPAC have access to open source’ and the ‘Google Book’ are 353 and the percentage is 35.37 and the DOAJ are 340 and the percentage is 34.06%.

The types of documents covered in OPAC and ‘Books’ are 293 and the percentage is 29.35% and the ‘periodicals’ are 286 and the percentage is 28.65%. The ‘Non-book material’ and ‘Thesis’ are 226 and 106 and the percentage is 22.64% and 10.62%.

The types of searches available and Journal articles are 242 and the percentage are 24.24% and the simple/basic search available are 209 and the percentage is 20.94%.

**Conclusion**

OPAC is a crucial service that libraries offer to their patrons. It allows them to find out which documents are available in the library. This study shows that every student is aware of the OPAC and that most of them picked up how to utilize it from the library personnel. The majority of them looked for OPAC to check whether books were available or not. The majority of respondents said that they prefer to search using the library software and links given on the website for OPAC. According to the study's findings, users should be given an OPAC usage demonstration whenever there is a change so they can avoid difficulties in finding any.

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**References**


