

# **EXPLORING THE USER PERSPECTIVES ON LIBRARY AUTOMATION IN COLLEGE OF ENGINEERING LIBRARY, ANDHRA UNIVERSITY – A STUDY**

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## **ABSTRACT:**

**Purpose:** Library Automation has transformed the way academic institutions manage and provide access to information resources. This study explores user perspectives on library automation at Andhra University College of Engineering.

**Design/methodology/approach:** The research observes how students, understand the effectiveness, accessibility, and usability of automated library systems through an analysis of the survey studies utilised a questionnaire as the primary data collection tool, distributed to academic students through Google Forms to identify key benefits such as improved efficiency, ease of access to digital resources, and enhanced user experience. However, challenges such as technical difficulties, lack of user awareness, and the need for better training programs are also highlighted.

**Findings:** The findings provide valuable insights into user satisfaction and suggest areas for improvement to optimise library automation services. This study aims to contribute to the ongoing enhancement of library systems, ensuring they meet the evolving needs of academic users.

**Keywords:** Library Automation, User Perspectives, Digital Resources, Academic Libraries, Information Resources, Andhra University

## **INTRODUCTION:**

In the current digital era, libraries have experienced significant transformations, with automation being a crucial factor in improving efficiency and accessibility. Library automation refers to the use of advanced technologies, including integrated library systems

(ILS), digital catalogues, and self-service kiosks, to enhance various functions such as cataloguing, circulation, and user services. This shift has notably changed the way students and researchers find, access, and use information, ultimately impacting their academic success. The automation of library services enhances the educational experience by facilitating quick access to a vast array of digital resources, reducing human errors, and enabling remote access. Additionally, automated libraries foster personalized learning by providing digital tools for research, citation management, and collaboration in academia. As educational institutions increasingly incorporate technology into their programs, it becomes vital to evaluate the influence of library automation on students' academic performance. This research investigates the effect of library automation on students' academic success, research output, and overall engagement in learning. By examining factors like accessibility, speed of retrieval, and user satisfaction, this study seeks to highlight both the benefits and challenges posed by automated library systems within an educational context.

A librarian should have a comprehensive understanding of the needs of students. To achieve this, it is essential for librarians and faculty to work together to determine the necessary books and journals, enhance the use of existing materials, and efficiently manage library resources. Singh and Mahajan (2015) highlight that assessing the needs of users are a crucial function of academic libraries, as it provides valuable insights for their improvement. This analysis helps direct collection development, initiate new services, and refine current ones. A well-structured and consistently updated collection ensures that users can easily access the resources they need. Therefore, it is important for academic libraries to regularly assess user needs.

## **BACKGROUND OF THE ANDHRA UNIVERSITY:**

- Andhra University established in 1926 by the Madras University Act to serve the entire linguistic region of Andhra as a residential teaching-cum affiliating multi-disciplinary university.
- The institution has Sir C.R. Reddy as its founder Vice-Chancellor and Dr.Sarvepalli Radhakrishnan as the second Vice-chancellor.
- The university has the distinction of having five Shanti Swarup Bhatnagar Awardees, two Padma Vibhushan Awardees, one Padma Bhushan Awardee, and five Padma Shri Awardees with the recent addition of two in 2023, amongst its alumni. Since its establishment in 1926, Andhra University follows its noble vision and mission as inscribed in the logo, "ThejasvinaVadhitamastu ", which means," May the Divine Light Illuminate Our Studies".
- At present, 58 departments, 16 specialized research centres, 188 ICT enabled classrooms, state -of the-art of computer and GIS laboratories, 76 seminar halls on campus will give the students ample learning opportunities as it is critically related to the University's objective.

## ABOUT THE ANDHRA UNIVERSITY COLLEGE OF ENGINEERING

- Andhra University College of Engineering (AUCE) originated in the Composite Madras State prior to Independence, specifically in 1946. Nevertheless, the groundwork for technical education on the Andhra University Campus dates back to 1933 with the establishment of Sugar Technology, which is now the Department of Chemical Engineering.
- In 1946, following official approval, the college was initially situated in Cocanada (now known as Kakinada), within the Madras State. The first bifurcation of the state in 1955 saw the establishment of key engineering departments—mechanical, civil, and electrical—on the university's campus.
- The current AUCE Campus (the North Campus of Andhra University) was founded in 1955, covering an expansive area of 160 acres. This relocation resulted in the North Campus becoming the current site of the Andhra University College of Engineering.

### NEED AND IMPORTANCE OF THE STUDY:

Exploring User Perspectives on Library Automation in Andhra University engineering college library, is significant as it directly influences students' learning experiences, and academic success. With the integration of automated systems, such as digital catalogues, electronic databases, and self-service tools, students can access a vast range of resources more efficiently. Taking direct respond from user how to they are using library facilities and resources and digital resources.

**Defining the Study Boundaries :** This study will be delimited to the library users who are currently enrolled in Department of CSC, ECE, EEE, CIVIL, MECH, CHEMICAL, PG Courses

### AUTOMATION:

The word “automation” had derived from word “auto mode” means something which has a power of spontaneous motion on self-movement. The term automation was first introduced by **D. S. Harden in 1936**, who was then with general Motors Company in U.S. He used the term automation to mean automatic handling of parts between progressive production processes. In simple terms, automation means an application of computer and use of computer-based operations of a various routine task performed by a human being.

The Oxford English Dictionary (**Simpson & Weiner, 1989**) defines automation as “application of automatic control to any branch of industry or science by extension, the use of electronic or mechanical devices to replace human labour”.

### **Library Automation:**

According to Encyclopaedia of Library and Information Sciences (Kent, 1977)"Library automation refers to the use of automatic and semi-automatic data processing systems to carry out traditional library functions such as acquisitions, cataloguing, and circulation. While these tasks may not always be performed in conventional ways, they remain fundamental to library operations. Library automation is distinct from related fields like information retrieval, automatic indexing and abstracting, and automated textual analysis."

### **IMPACT OF USING THE ACADEMIC LIBRARY**

- The library plays a vital role in enhancing student retention.
- Library instruction enhances a student's long-term academic journey.
- The library strengthens a student's academic engagement.
- Utilizing library space positively impacts students' learning and enhances academic performance.
- Collaborative academic programs and library services improve students' learning skills.
- Information literacy instruction enhances overall educational outcomes.

### **OBJECTIVE OF THE STUDY**

- Examine how students at Andhra University College of Engineering perceive the effectiveness, accessibility, and usability of automated library systems.
- Highlight key advantages of library automation, including improved efficiency, ease of access to digital resources, and enhanced user experience.
- Investigate issues such as technical difficulties, lack of user awareness, and the need for better training programs.
- Evaluate the overall satisfaction levels of users with the current automated library services.
- Provide insights and recommendations to optimize library automation services for better user experience and functionality.

### **METHODOLOGY**

The researcher utilized a questionnaire as the primary data collection tool, distributed to academic students via Google Forms. A random survey was carried out to identify students who use the library and to explore the relationship between library usage and their academic performance. Above 500 questionnaires were shared to 7 different department students and 335 (67%) students are responded to the questionnaire due to availability.

### **REVIEW OF LITERATURE:**

1. **Rajput and Gautam (2010)** conducted a study to assess the status of library automation and the challenges associated with its implementation in special libraries in Indore, Madhya Pradesh. The research explores the concept of automation, its

necessity, and its application in these libraries. It also highlights the various difficulties encountered by library authorities and staff during the automation process. A well-structured questionnaire was used as the primary research tool. The study identifies staff reluctance, a negative attitude toward automation, and inadequate library software as the primary obstacles to efficient automation. Finally, the research provides key recommendations for improving the implementation of library automation and addressing challenges faced both before and after automation.

2. Academic staff and students perspectives. The finding of this study reveals that users' satisfaction is a function of the quality of staff and services of a library. **Adeniran (2011)** revealed that provision of relevant information materials, access point and conductive environment for learning, teaching and research lead to an increase in the use of library. Mainly this paper examines the relationship between service quality and users' satisfaction.
3. **Pandey and Singh (2014)** found that a large number of respondents were satisfied with library resources and services and books are most widely used resources and most preferred services used by the users is circulation service. Respondents have given suggestions to make library resources and services effective and can be used in an efficient manner.
4. **Veena and Kotari (2016)** the findings reveal that 59% of respondents visit the library daily. In addition, 86.7% of respondents are highly satisfied with the general book collection, while 70.0% are very satisfied with the textbook collection. Furthermore, 53.3% of respondents rated the circulation services as excellent. **Veena and Kotari (2016)** recommends that the college library conduct regular user studies to better understand and meet users' information needs.
5. A survey in the main library of the Open University of Sri Lanka to assess user satisfaction. According to their findings, the quality of library services could be evaluated through a user satisfaction survey. **Adeniran (2011)** revealed that the library was primarily used for reading, accessing resources and information, and borrowing or returning books. While respondents were generally satisfied with the library's resources, services, and facilities, they expressed lower satisfaction with user awareness programs, training on information searching, dissemination of services via social media, access to Wi-Fi and audio-visual materials, and online library services. The survey recommended that the library should periodically conduct user awareness and information literacy programs.
6. **Indraji and Dominic (2025)** conducted a study to evaluate the utilization of online public access catalogues (Web OPAC) in university libraries across Tamil Nadu. The research examines the types of bibliographic displays available, the access points covered by the Web OPAC, and the assistance or on-screen help provided to users. Additionally, it explores the services and a facility offered through OPAC and identifies the general options available within the system.
7. **Sonawane (2025)** conducted a study main topics include ICT applications, integrated library automation software packages, academic library automation, human elements of library automation, the state of ICT infrastructure in libraries, issues with library automation, and future possibilities. The study is therefore entirely applicable to

college libraries. In addition to the variety of services provided, the value of a college library and the standing of the college librarian also depend on how well users use those services in an automated and networked environment. To determine the issues users face with computer and network-based services.

## **ANALYSIS OF DATA AND INTERPRETATION**

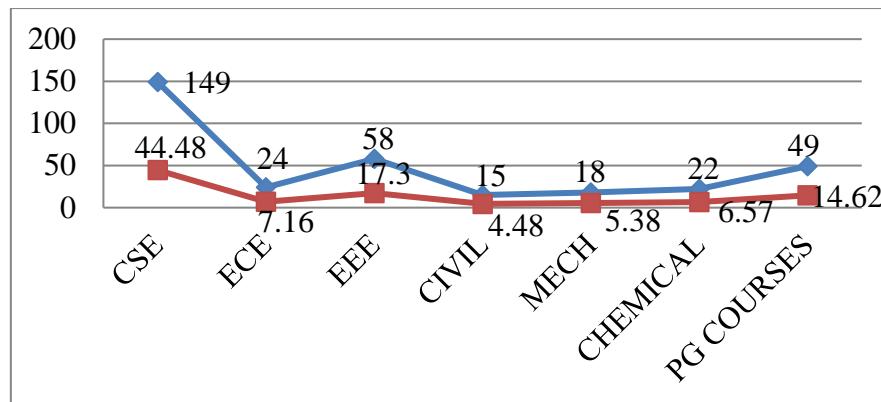
### **1. Department wise Responses from the Students**

The following table will presents the responses of the targeted Academic departments from the AU engineering college are shown below.

**Table: 1 Department wise Responses from the Students**

| Name of the department | No of the response | Total N=335(%) |
|------------------------|--------------------|----------------|
| CSE                    | 149                | 44.48          |
| ECE                    | 24                 | 7.16           |
| EEE                    | 58                 | 17.3           |
| CIVIL                  | 15                 | 4.48           |
| MECH                   | 18                 | 5.38           |
| CHEMICAL               | 22                 | 6.57           |
| PG COURSES             | 49                 | 14.62          |
| <b>TOTAL</b>           | <b>335</b>         | <b>100</b>     |

The above table with regard to the Departmental distribution reveals that in various engineering departments wise responds shows that, it is noticed that highest percent (44.48%) belongs the computer science are visiting the library and followed by the percent of users (17.3%) users are represent from department of Electrical Electronic Engineering and above 14 percent of users from PG courses. The recognized above 7 percent of the users from Electrical Communication Engineering, 6.57% users from Chemical Engineering, 5.38% users from Mechanical Engineering and finally least 4.48% users from Civil Engineering correspondingly

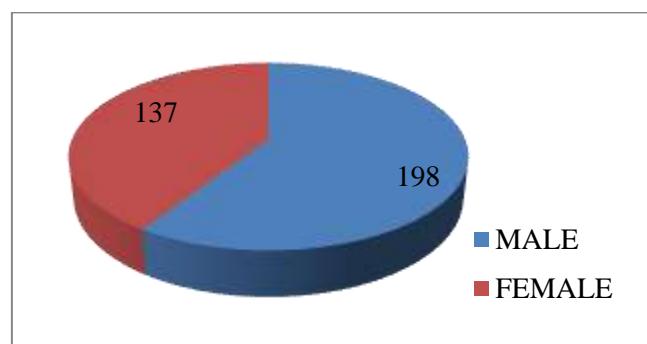
**Fig: 1 Department wise Responses from the Students****2. Gender wise responses of the students.**

The following table will explore the gender wise responses of the students from the various academic departments of the AU engineering College

**Table 2: Gender Wise Responses**

| Gender       | Number of users | Percentage  |
|--------------|-----------------|-------------|
| Male         | 198             | 59.10%      |
| Female       | 137             | 40.90%      |
| <b>Total</b> | <b>335</b>      | <b>100%</b> |

The above table explained about the gender wise responses of the student community. It is revealed that among the responses, highest percent of the respondents belongs to the male community and followed by the (nearly 41%) female respondents. The analysis noticed that majority of them regarding the responses majority of them are male category.

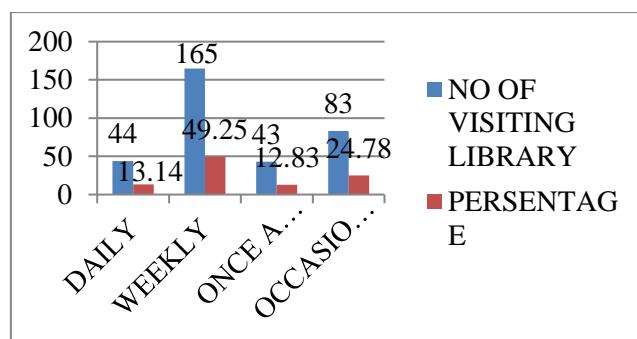
**Fig: 2 Gender Wise Responses****3. Frequently Visits made to the Library**

The following table shows frequency of visiting the library for using library resource from different departments in AU engineering College

**Table 3: Frequently Visits made to the Library**

| Daily        | 44         | 13.14%      |
|--------------|------------|-------------|
| Weekly       | 165        | 49.25%      |
| Once a month | 43         | 12.83%      |
| Occasionally | 83         | 24.78%      |
| <b>Total</b> | <b>335</b> | <b>100%</b> |

Above table indicates the results shows regarding user's frequently visiting library. Above 49 percent of the users are mostly visiting library on weekly basis, followed by the second highest (nearly 25) of users visiting occasionally. The study noticed that (above 13) of users visiting daily and least of visiting percentage of users in nearly 13 percent.

**Fig 3: Frequently Visit Library**

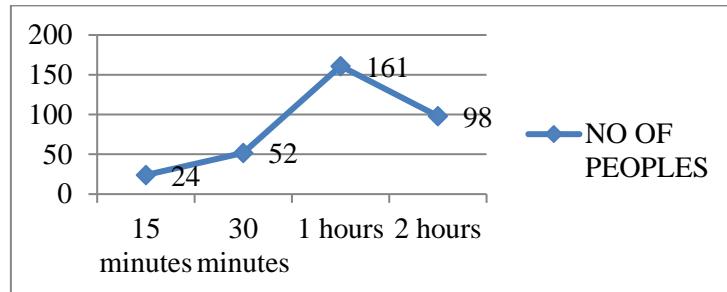
#### 4. Users are Spending Time in Library

The following table will explain about the user's spent time in Library and Information Centres. Data gathered and analysed the following.

**Table 4: users are Spending time in library**

| 15 minutes   | 24         | 7.16%        |
|--------------|------------|--------------|
| 30 minutes   | 52         | 15.52%       |
| 1 hour       | 161        | 48.05%       |
| 2 hour       | 98         | 29.26%       |
| <b>Total</b> | <b>335</b> | <b>100 %</b> |

The table shows students is how much time spending in library. Firstly 48 percent of students are highest times spending in library followed by the percent (29.26%) of students are spending in 2 hours, and third highest percent (15.52%) of students are spending 30 minutes and finally least above 7 percent of students are spending time in 15 minutes duration.

**Fig 4: users are Spending time in library**

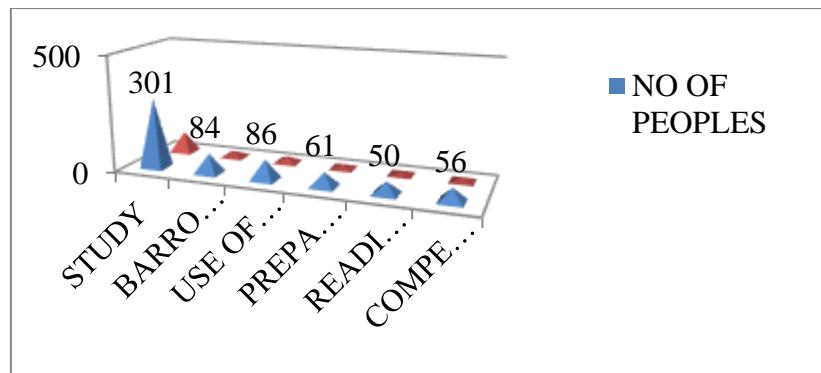
## 5. Purpose of Visiting the Library

The following table presents users are which purpose to visiting the library

**Table 5: Purpose of visiting the library**

| Purpose of visiting the library   |     |        |
|-----------------------------------|-----|--------|
| Study                             | 301 | 89.86% |
| Barrow books                      | 84  | 25.07% |
| Use of internet services          | 86  | 25.68% |
| Preparing projects                | 61  | 18.20% |
| Reading newspapers                | 50  | 14.92% |
| Competitive books and e resources | 56  | 16.72% |

The above table indicates the results regarding the purpose of visiting the library. In the listed out above purpose, majority of the students visits made to the library for the purpose of study (nearly 90%) followed by and above 25 percent of the users using the internet services and followed by the same percent of them visiting the library for the barrowing books and above 18 percent of users from preparing projects, nearly 17 percent of the users from competitive books and resources and nearly 15 percent of users from reading newspapers correspondingly.

**Fig 5: Purpose of visiting the library**

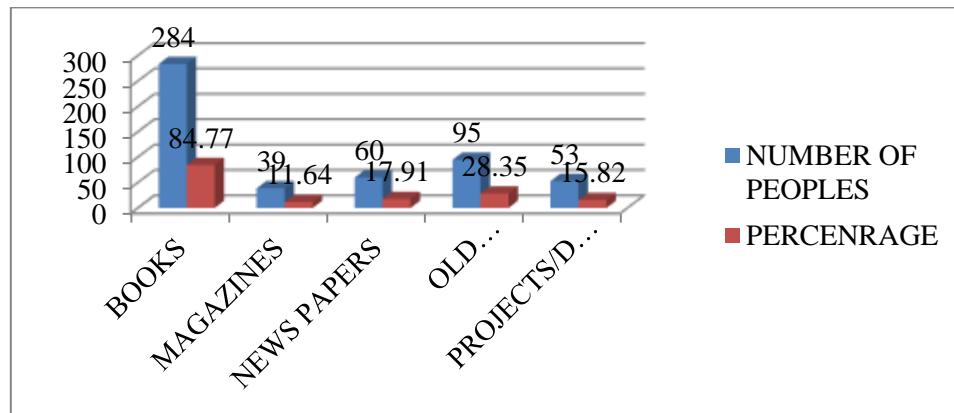
## 6. Types of Resource Using In Library

The bellow table shows users are using the different types of resources in the library

**Table 6: Types of resource using in Library**

| Types of resource using in library |                   |            |
|------------------------------------|-------------------|------------|
| Resource                           | Number of peoples | Percentage |
| Books                              | 284               | 84.77%     |
| Magazines                          | 39                | 11.64%     |
| News papers                        | 60                | 17.91%     |
| Old question papers                | 95                | 28.35%     |
| Projects/dissertations             | 53                | 15.82%     |

The above table shows that types of resources using in library by the users. It is noticed that the highest percent of the (nearly 85%) using books followed by the resources the percent of users (above 28%) using old question papers respectively. The study shows the results about 18 percent of them using newspapers, followed by (nearly16%) for projects/Dissertations. The study noticed that with regard to using magazines occupied the least percentage of users (above 11%)



**Fig 6: Types of Resource Using In Library**

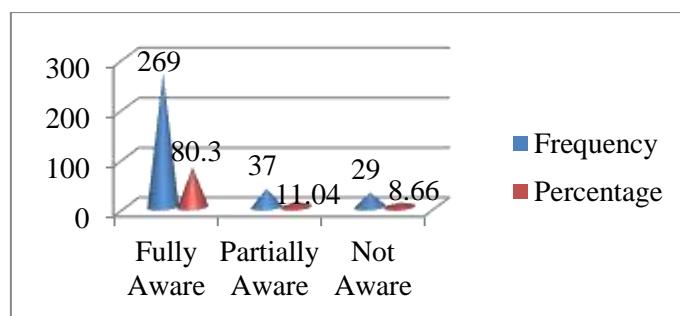
### 1. Awareness of Library Automation

The following table presents how much users are aware about library automation in them library

**Table 7: Awareness of Library Automation**

| Awareness of library automation |            |                     |
|---------------------------------|------------|---------------------|
|                                 | Frequency  | Percentage (%)      |
| Fully Aware                     | 269        | 80.30%              |
| Partially Aware                 | 37         | 11.04%              |
| Not Aware                       | 29         | 8.66%               |
| <b>Total</b>                    | <b>335</b> | <b>100 % ( 67%)</b> |

The above table shows the results about user's awareness with regard to the library automation. It is analysed that above 80 percent of them are fully aware of the library automation and followed by the percent of them (above 11%) users are partially aware, Above 8 percent of the users are Not Aware about the library automation respectively.

**Fig 7: Awareness of Library Automation**

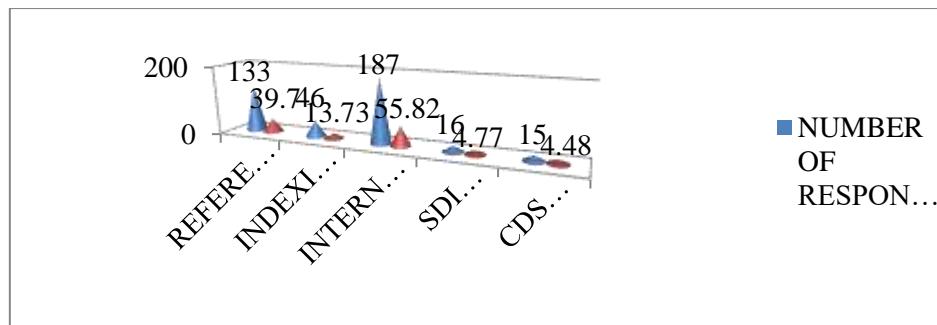
## 2. Types of Services Using In Library

This table represented the which types of library services are using the library

**Table8: Types of Services Using In Library**

| Types of services using in library |                    |            |
|------------------------------------|--------------------|------------|
| Library Services                   | Number of Response | Percentage |
| Reference services                 | 133                | 39.70%     |
| Indexing services                  | 46                 | 13.73%     |
| Internet services                  | 187                | 55.82%     |
| SDI services                       | 16                 | 4.77%      |
| CAS services                       | 15                 | 4.48%      |

The above table shows the results type of services using by the users in the library. It is noticed that highest percent of them (nearly56%) students are using internet services, followed by the percent of them (nearly 39%) using reference services, followed by (nearly14%) indexing services. About nearly 5percent of the users s are using SDI services and CAS services (above 4percent)



**Fig 8: Types of Services Using In Library**

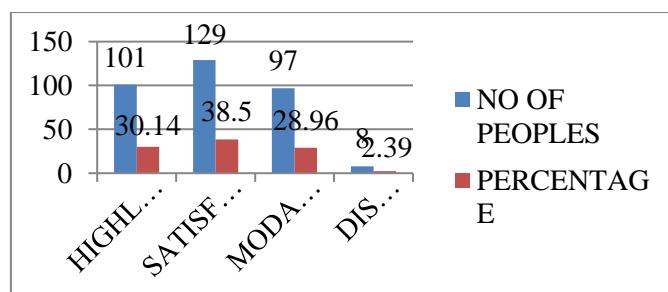
### 3. Satisfaction Level of Library Services

The table shows that the satisfaction levels of users about library services.

**Table 9: Satisfaction Level of Library Services**

| Satisfaction level of library services |            |             |
|--|------------|-------------|
| Highly satisfied                       | 101        | 30.14%      |
| Satisfied                              | 129        | 38.50%      |
| Moderate                               | 97         | 28.96%      |
| Dis satisfied                          | 8          | 2.39%       |
| <b>Total</b>                           | <b>335</b> | <b>100%</b> |

The above table shows that satisfaction level of library services. The analysis noticed that majority of them (nearly 39%) students are satisfied with library services and followed by the percent of them (above 30%) highly satisfied. With regard to moderate satisfaction the percent of (above 29%) them expressed to their positive response. In case of dissatisfaction few percent (above 2%) of them expressed their negative response with existing library services.



**Fig 9: Satisfaction Level of Library Services**

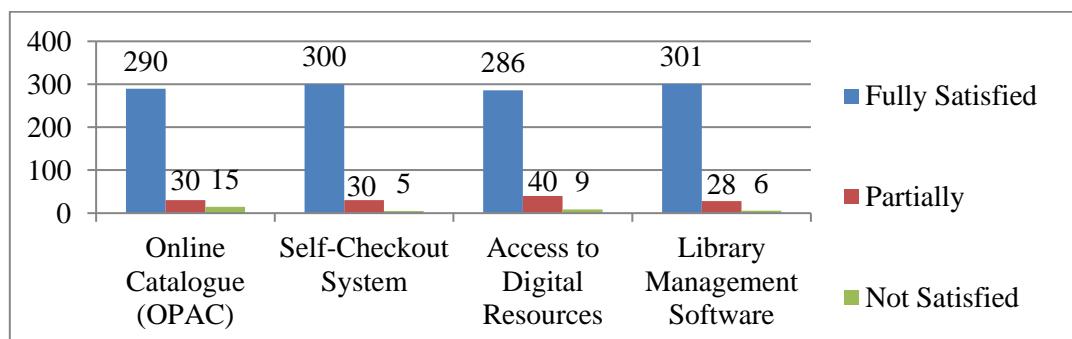
### 4. User satisfaction with library automation

The table describe the satisfaction levels of users on library automation working

**Table 10: level of user satisfaction with library automation**

| Library automation          | Fully satisfied | Partially satisfied | Not satisfied |
|-----------------------------|-----------------|---------------------|---------------|
| Online Catalogue (OPAC)     | 290(86.5%)      | 30(8.9%)            | 15(4.4%)      |
| Self-Checkout System        | 300(89.5%)      | 30(8.9%)            | 5(1.4%)       |
| Access to Digital Resources | 286(85.3%)      | 40(11.9%)           | 9(2.6%)       |
| Library Management Software | 301(89.8%)      | 28(8.3%)            | 6(1.7%)       |

With regard to the user's level of satisfaction the analysis found that the majority of users (86%) reported being fully satisfied with the Online Catalogue system, which indicating its effectiveness and user-friendliness. However, the study noticed that nearly 9percent of them were only partially satisfied, and a small portion of the users (above 4%) was not satisfied. The Self-Checkout System received strong approval, with above 89 percent of the respondents being fully satisfied. Only the percent of the users (nearly9%) were partially satisfied and meagre percent it is found that (above 1%) not satisfied. The Library Management Software stands out with the highest rate of full satisfaction at nearly 90 percent, indicating robust system performance, effective user support, and streamlined management features. Only above 8 percent were partially satisfied and above 1 percent of the users not satisfied. Access to digital resources this component had the lowest full satisfaction rate by above 85 percent among all categories, along with the highest rate of partial satisfaction nearly 12 percent. While the overall dissatisfaction remains low above 2 percent correspondingly.

**Fig 10: user satisfaction with library automation**

## 5. Types of Digital Resource Using In Library

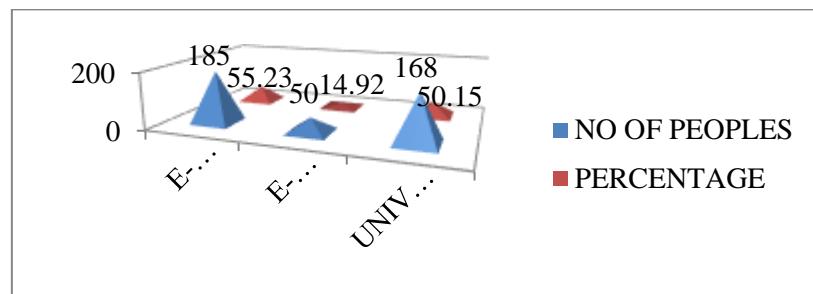
The following table shows that the types of Digital resources using in library

**Table 11: Types of Digital Resource Using In Library**

| Types of digital resource using in library |                  |            |
|--|------------------|------------|
| Digital resource                           | Number of people | Percentage |

|                     |     |        |
|---------------------|-----|--------|
| E-books             | 185 | 55.23% |
| E-journals          | 50  | 14.92% |
| University websites | 168 | 50.15% |

The above table shows which type of digital resources using in library. Majority of them (above 55%) are using E-Books and followed by the percent them (above 50%) University websites and about 15 percent of them are using E-Journals.



**Fig 11: Types of Digital Resource Using In Library**

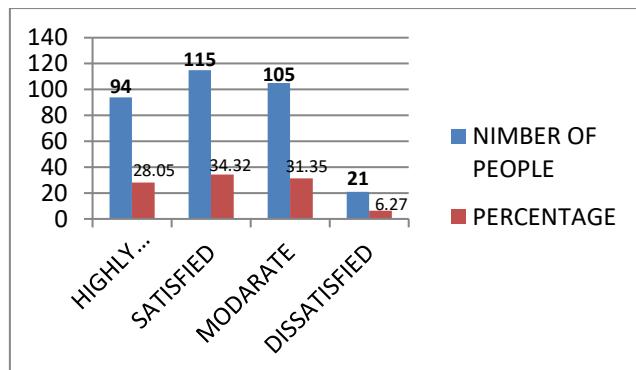
## 6. Satisfaction Level of Digital Services in Library

The following table was described in the user satisfaction levels about Digital services in the library

**Table 12: Satisfaction Level of Digital Services in Library**

| Satisfaction level of digital services in library |            |             |
|---|------------|-------------|
| Highly satisfied                                  | 94         | 28.05%      |
| Satisfied   | 115        | 34.32%      |
| Moderate  | 105        | 31.35%      |
| Dis satisfied                                     | 21         | 6.27%       |
| <b>Total</b>                                      | <b>335</b> | <b>100%</b> |

The above table shows that the user satisfaction level about Digital services in library. It is found that above 34 percent of students are satisfied followed by the percent of them (above 31%) are moderate. With regard to highly satisfied, the percentage of users expressed their positive response (above 28%) and remaining percent of students are expressed to their dissatisfaction (above 6%)

**Fig 12: Satisfaction Level of Digital Services in Library**

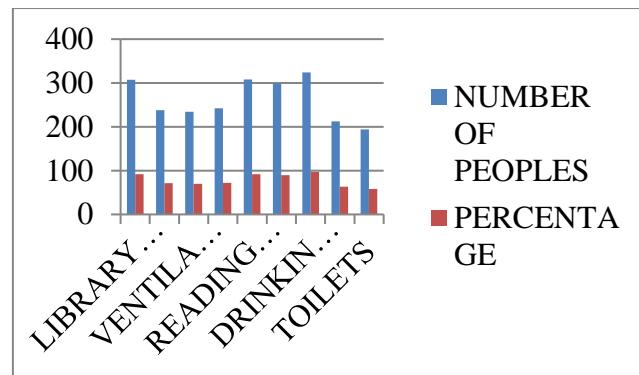
## 7. Comfortable Facilities in Library

The following table shows that what the comfortable facilities in the library are

**Table 13: Comfortable Facilities in Library**

| Comfortable facilities in library |                   |            |
|-----------------------------------|-------------------|------------|
| Comfortable facilities            | Number of Peoples | Percentage |
| Library timings                   | 307               | 91.64%     |
| Arrangements of books             | 238               | 71.05%     |
| Ventilation                       | 234               | 69.85%     |
| Cleaning                          | 242               | 72.24%     |
| Reading space                     | 308               | 91.94%     |
| Furniture                         | 299               | 89.25%     |
| Drinking water                    | 324               | 96.71%     |
| Internet connection               | 212               | 63.28%     |
| Toilets                           | 194               | 57.91%     |

The above table shows Comfortable Facilities in library. It is noticed that highest percent of them (nearly92%) students are comfortable in reading space and above 89 percent of them satisfied in furniture, With regard to drinking water the percent of them (above 96%) and followed (above91%) Library timings, satisfied in cleaning, (aboven72%) arrangements of books (71%) and ventilation (nealy70%) followed by internet connection (above 63%). The study noticed that the percent (58%) of students are satisfied in Toilets consistently

**Fig 13: Comfortable Facilities in Library**

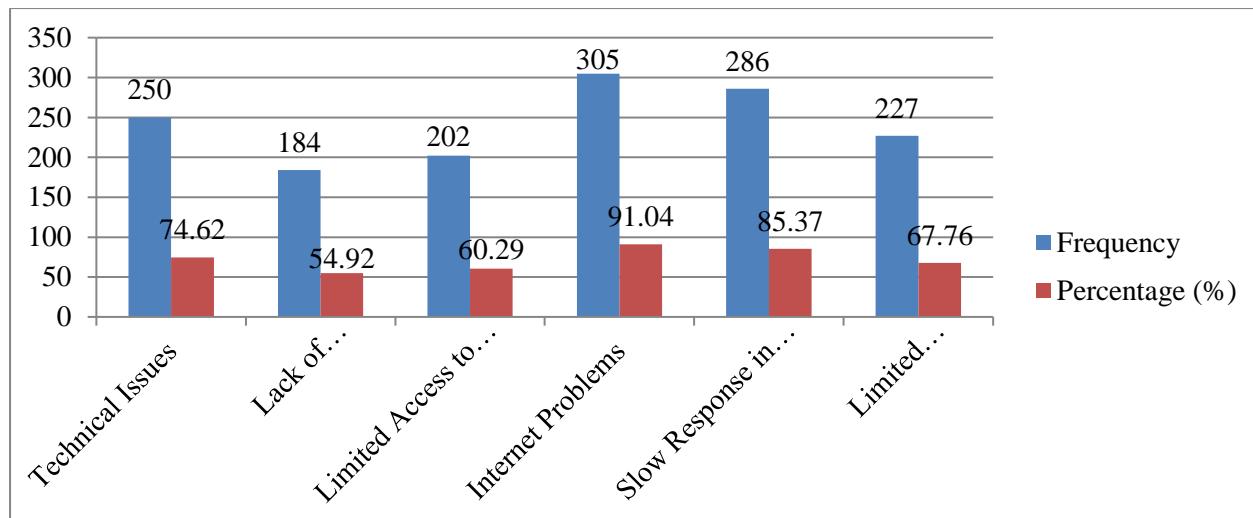
### 8. Challenges Faced In Using Library Automation

This table shows that what are the challenges are faced in library while using the library automation

**Table14: Challenges Faced In Using Library Automation**

| Challenges Faced in Using Library Automation | Frequency | Percentage (%) |
|--|-----------|----------------|
| Technical Issues                             | 250       | 74.62%         |
| Lack of Training/Understanding               | 184       | 54.92%         |
| Limited Access to Digital Resources          | 202       | 60.29%         |
| Internet Problems / E-resource accessing     | 305       | 91.04%         |
| Slow Response in Service                     | 286       | 85.37%         |
| Limited Support/Assistance                   | 227       | 67.76%         |

The above table shows challenges faced in using Library Automation like technical issues faced by the users. (Above 74%). With regard to the Lack of Training/Understanding problem faced by the users (55%) and limited access to Digital Resources facing problem (above60%). Internet Problems/E-resources accessing facing users percentage (above91) Next problem is Slow Response in Service percentage (above85%) and Limited Support/Assistance is another problem facing users percentage (above69%)

**Fig 14: Challenges Faced In Using Library Automation**

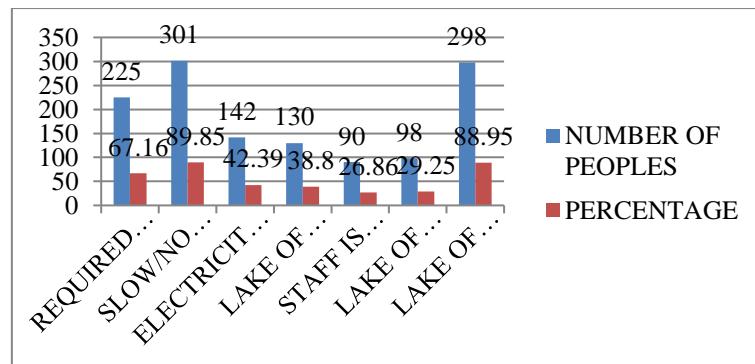
#### 9. General In-Conveniences Is Facing In Library

**Table 15: General In-Conveniences Is Facing In Library**

| Basic problems are facing in library |     |        |
|--------------------------------------|-----|--------|
| Required materials are not available | 225 | 67.16% |
| Slow/no internet                     | 301 | 89.85% |
| Electricity problems                 | 142 | 42.39% |
| Lake of chairs& tables               | 130 | 38.80% |
| Staff is not co-operative            | 90  | 26.86% |
| Lake of cleaning environment         | 98  | 29.25% |
| Lake of proper washrooms             | 150 | 44.07% |

T

he above table shows facing basic problems in library. The studies found that majority of them (90%) students are facing slow or no internet. The percent of the students (above 67%) are facing required materials are not available and about 44% students are facing lake of washroom problem. above 42 percent of students are facing electricity problem and nearly 39 percent students are facing lake of chairs and tables. The study emphasized above 29 percent of students are facing lake of cleaning environment problem followed by 27 percent of them are facing staff is not cooperative problem individually.



**Fig 15: General In-Conveniences Is Facing In Library**

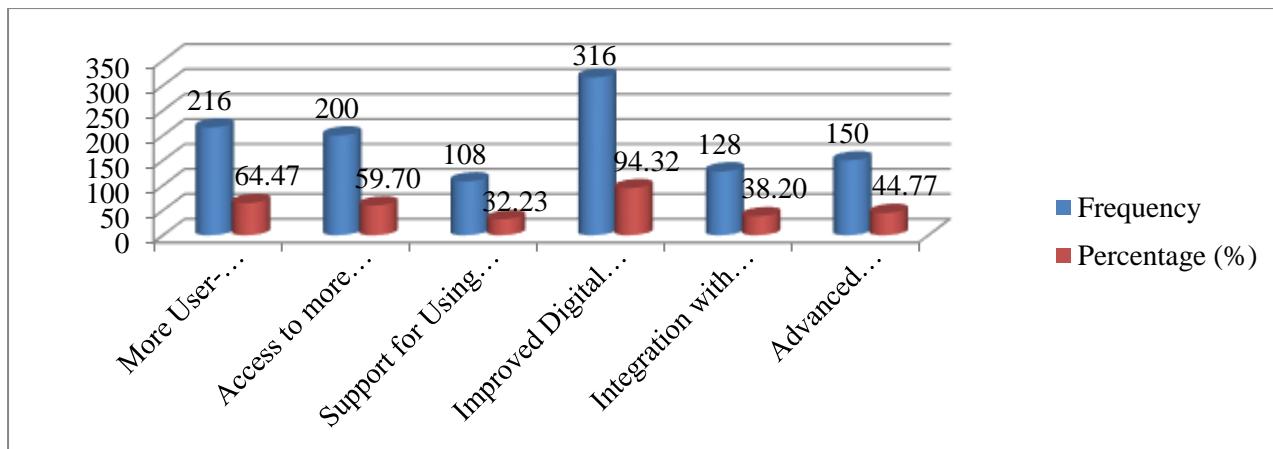
#### 10. Suggestions of Users Regarding Future Improvements in Library Automation

This table shows that users are given some suggestions to the library regarding future improvement in library automation

**Table16: Suggestions of Users Regarding Future Improvements in Library Automation**

|                                     | Frequency | Percentage (%) |
|-------------------------------------|-----------|----------------|
| User-Friendly                       | 216       | 64.47%         |
| Digital Resources                   | 200       | 59.70%         |
| Support for Using Automated Systems | 108       | 32.23%         |
| Digital Library Services            | 316       | 94.32%         |
| Resource sharing among universities | 128       | 38.20%         |
| WEBOPAC                             | 150       | 44.77%         |

The above table shows user's give some suggestions to library that is More User-Friendly Interface (above 64%) Access to More Digital Resources (nearly 60%) and Support for Using Automated Systems (above 32%) Improved Digital Library Services (above 94%) Integration with Other University Resources (38%) and Advanced Library Catalogue and Resource Management (45%) exclusively.



**Fig 16: Suggestions of Users Regarding Future Improvements in Library Automation**

### **FINDINGS AND DISCUSSIONS:**

1. The study findings shows that among the responded departments highest percent the computer science students are visiting the library and followed by the Electrical Electronic Engineering students.
2. With regard to the gender wise responses revealed that majority of the respondents belongs to the male community.
3. The findings of the study designates the results regarding user's frequently visits made to the found that nearly half of the percent of the respondents of the users are mostly visiting library on weekly period and one fourth of the users visiting the library infrequently. The findings noticed that above one/tenth of them visiting the libraries on regular manner correspondingly.
4. The study findings indicates that with regard to the time spent of the students in the libraries nearly half of the percent of them one spent one hour duration and nearly one third of them are spending in 2 hours inter well.
5. The results regarding the purpose of visiting the library, it is noticed that majority of the students visits made to the library for the purpose of study (nearly 90%) above one fourth of them using the internet services and equal percent of them visiting the library for the barrowing books.
6. With respect of using in library resources by the users, it is observed that the highest percent of the (nearly 85%) using books and above one/fourth of the respondents retrieved longstanding question papers.
7. In case of with regard to aware of library automation above one third of them are fully aware of the library automation and followed by above one/tenth of them ) users are somewhat aware separately
8. The findings expose type of services using by the users in the library majority of the visitors are using internet services, and using reference services by considerable respondents one-to-one.
9. The findings recognised that with regard to satisfaction level of library services, majority of them are pleased with library services and above one/fourth percent of

them extremely gratified. With regard to moderate satisfaction the same percent of they expressed to their positive response.

10. With regard to the user's level of satisfaction of library automation the analysis found that the majority of users (86%) reported being fully satisfied with the Online Catalogue system, which indicating its effectiveness and user-friendliness. Findings emphasized regarding the Self-Checkout System received strong endorsement, with highest percent of the respondents being fully satisfied. In case of the Library Management Software stands out with the highest rate of completely consummation at nearly 90 percent. In electronic age digital resources are played crucial role in this aspect 85 percent expressed their highest satisfaction.
11. The findings show the results type of digital resources using in library by the users. Above half of them are using E-Books and followed by the same percent them are using University websites.
12. The study's findings about user satisfaction level about Digital services in library are found that 34 percent of students are satisfied followed by the percent of them (above31%) are moderate.
13. With regard to Satisfied Facilities in library nearly all most stake holders are comfortable in reading space and above 89 percent of them satisfied in furniture. With favour to drinking water all most expressed happy ness and Library timings, satisfied in cleaning, arrangements of books and ventilation, internet connection including rest room facilities were also occupied highest level satisfaction by the visiting users.
14. Regarding technical issues faced by the nearly one/third of the users. With regard to the Lack of Training/Understanding problem faced by the users and limited access to Digital Resources facing problem including Internet Problems/E-resources accessing facing users employed highest percentage.
15. The study findings found that majority of them (90%) students are facing slow or no internet, and about 43% students are facing lake of washroom problem. The percent of the students (above 67%) are facing required materials are not available and above 42 percent of students are facing electricity problem and nearly 39 percent students are facing lake of chairs and tables.
16. The study findings with regard to suggestions made by the users to library that is More User-Friendly Interface (above 64%) Accesses to More Digital Resources and Sustenance for Using Automated Systems, Enhanced Digital Library Services are more suggestible areas by the users.

## CONCLUSION

The investigation into user opinions on library automation at the Andhra University Engineering College Library shows that users generally hold a favourable view of the system's adoption and operation. The majority of participants recognized that automation has greatly improved the library's efficiency, ease of access, and overall user experience. Tools like the Online Public Access Catalogue (OPAC), digital borrowing options, and off-campus

access to materials were especially valued for their time-saving benefits and positive impact on academic work.

Nevertheless, the study also highlighted certain challenges. Some users reported difficulty using the automated services, often due to limited digital skills or insufficient awareness of available features. Several respondents also noted the need for enhancements, including a more intuitive design, user-friendly interfaces, and stronger technical support. Regular training sessions and orientation programs were suggested to better equip users in utilizing the technology effectively.

In conclusion, while library automation has led to notable improvements, on-going efforts are needed to engage users, upgrade systems, and build digital competency. Prioritizing user needs in future developments will be key to maximizing the impact of automation and ensuring the system supports the varied requirements of students, faculty, and researchers.

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