

Digital Transformation of Academic Libraries in Autonomous Engineering Colleges of Karnataka: A Study

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Abstract: The Digital Transformation of Academic Libraries. The current study looks at how academic libraries in engineering colleges of Karnataka are changing with digital technology. This study is about the infrastructure, electronic information resources, user satisfaction and the challenges that users face. The study uses a survey method with a quantitative approach. A questionnaire was given to people to collect information for the study. The questionnaire had statements that were measured on a scale of one to five. The study got 969 completed questionnaires from types of library users including undergraduate students, postgraduate students, research scholars, faculty members and library professionals. The responses were. Then entered into MS Excel and SPSS for further study. The data was presented in a way using frequency, percentage, mean and standard deviation. To see the differences and relationships between the variables some tests were done, including Chi-square, Mann-Whitney U and Kruskal-Wallis H tests, using a significance level of 0.05. The study shows that digital technology is playing a role in the daily work of academic libraries. Many users accessed internet facilities, automated library software and electronic journals. Many people said they used resources for learning in class working on projects finishing assignments and doing research. However not all users used resources in the same way. Some people had trouble because they did not know about the services that were available or they had problems or they did not have the chance to get trained. These findings show that academic libraries need to pay attention to helping users and developing their infrastructure to make digital library services better. The digital transformation of libraries is important and digital library services need to be improved. Academic libraries, in engineering colleges of Karnataka need to work on user support and infrastructure development to make digital library services more effective.

Keywords: Digital Resources, Engineering College Libraries, Digital Infrastructure, Academic Libraries, Information Access, Library Automation, User Satisfaction, Karnataka.

The way academic libraries work has changed a lot because of technology. Now people can get information and services in a way. In engineering colleges students and teachers are using learning and research more and more. They also use communication a lot. So libraries need to have digital resources. Libraries are giving people access to journals, e-books and online databases. They also have repositories. These resources help people get information faster and easier than with traditional books. Libraries are also using technology to make their work better. They use software to manage the library. They have catalogs and other tools like RFID applications. They also have access services and cloud-based systems. These tools make it easier to manage information. Because of these tools libraries can help people even when they are not in the library building. People can get information from anywhere. It is more flexible. So libraries are still very important for teaching, learning and research in colleges and universities.

For library services to work well some things are necessary. Libraries need to have infrastructure. People need to know how to use the resources. They need to have the right skills. The college also needs to support the library. Sometimes people have problems with internet access. They do not know how to use the resources. These problems can affect how much people use the library services. It is important to understand these things

to know how digital libraries are doing. This study looks at how engineering college libraries, in Karnataka're changing to digital libraries. It pays attention to the infrastructure how people use the resources what people think about the library and the problems they face.

Review of Literature

Many studies show that digital transformation and new technologies are becoming very important in libraries. For example Tripathi and Jeevan found in 2023 that digital information and electronic services have made users much happier with libraries and it is easier for them to access the information they need. Corral also said in 2023 that digital transformation has changed libraries from storing information to places where users can come and get help with technology. When it comes to intelligence and other advanced technologies Luo and Hostetler talked in 2023 about how artificial intelligence is being used more and more in academic libraries to help people find the information they need and to improve the services that libraries offer. Asemi Ko and Nowkarizi said in 2024 that new technologies are changing the way libraries work and making it easier for them to manage the information they have.

Some studies were done in Karnataka. They found that library professionals are becoming more aware of digital technologies and are starting to use them. D'Souza found in 2024 that librarians in Karnataka are using tools that use intelligence and they think these tools can help improve the services that libraries offer. Malipatil and Singh also found in 2024 that library professionals who work in engineering colleges in Karnataka think that artificial intelligence is a thing and they want to learn more about it so they can do their jobs better.

People have also been studying the infrastructure and digital services of libraries in engineering colleges. Santhosha and Adithya Kumari found in 2024 that libraries in engineering colleges in the Mysore region have good infrastructure and services but they need to improve some things so they can support new digital initiatives. Prathibha and Shilpa Rani also found in 2024 that autonomous institutions in Bengaluru are working to digitize and preserve the resources they have so people can access them for a time. Raja and others found in 2024 that technologies like integrated library systems and artificial intelligence are helping to change libraries in a digital way. Meena also found in 2024 that these technologies are important for libraries.

However there are still some challenges that libraries face when they try to implement these technologies, such as not having enough money or the right infrastructure and not having people with the right technical skills.

Even though there have been studies about digital transformation, artificial intelligence and digitization practices, not many studies have looked at the specific situation of autonomous engineering college libraries in Karnataka. So this study is trying to fill that gap by looking at what digital transformation initiatives are being used what technological infrastructure is in place what services are being offered and what challenges are being faced by autonomous engineering college libraries, in Karnataka.

Objectives

1. To study the digital infrastructure available in autonomous engineering college libraries in Karnataka.
2. To examine the utilization of electronic resources and digital library services by faculty members and students.
3. To assess users' satisfaction with digital library facilities and services.
4. To identify the challenges faced in implementing and using digital technologies in academic libraries.
5. To suggest measures for improving digital infrastructure and technology-based library services.

Hypotheses

1. There is no statistically significant association between the availability of digital infrastructure and the level of utilization of library resources among users of academic libraries.

2. The availability of digital infrastructure does not show a statistically significant relationship with users' satisfaction in academic libraries.
3. There is no statistically significant variation in the usage of digital library services across different user categories.
4. User training programmes do not significantly influence the utilization of digital library resources.

Methodology

The study adopted a quantitative research approach and employed the descriptive survey method to examine the status of digital transformation in academic libraries of autonomous engineering colleges in Karnataka. The investigation covered key aspects such as digital infrastructure, utilization of electronic information resources, user satisfaction, and challenges associated with technology-based library services. Participants included undergraduate students, postgraduate students, research scholars, faculty members, and library professionals from selected institutions.

A stratified random sampling technique was used to select respondents, ensuring adequate representation from each category of library users. The sample size was determined with reference to Cochran's sampling formula at a 95 percent confidence level and a 5 percent margin of error. To enhance the reliability of the study, the sample was expanded beyond the minimum requirement. Data were gathered from 969 respondents during the academic year 2025–2026 through a questionnaire developed on a five-point Likert scale. Each questionnaire was reviewed after collection, and only valid responses were included in the study.

The collected information was entered into MS Excel and SPSS for analysis. Descriptive measures such as frequency, percentage, mean, and standard deviation were used to summarize the responses. To examine the proposed hypotheses, Chi-square, Mann–Whitney U, Kruskal–Wallis H, and Spearman's rank correlation tests were applied. Prior to selecting the statistical procedures, the distribution of the data was assessed using the Shapiro–Wilk and Kolmogorov–Smirnov tests. Since the data did not satisfy the assumptions of normality, non-parametric methods were used for the final analysis.

Data Analysis and Interpretation

All 969 questionnaires distributed for the study were returned and included in the analysis. The achieved sample size exceeded the minimum requirement obtained through Cochran's sampling procedure, providing a broader representation of the target population. This larger dataset enhanced the reliability of the study and supported a more detailed examination of the research variables. Among the respondents, 624 (64.4%) were male and 345 (35.6%) were female, indicating a comparatively higher participation of male respondents.

Table: 1. General Information of Respondents General Information of Respondents

Characteristics	Categories	Male	%	Female	%	Total	%
Respondent Category	Undergraduate (UG)	212	33.97	163	47.25	375	38.7
	Postgraduate (PG)	118	18.91	87	25.22	205	21.2
	Research Scholars	52	8.33	31	8.99	83	8.6
	Faculty Members	196	31.41	71	20.58	267	27.6
	Library Professionals	46	7.37	13	3.77	59	6.1

Age Group	Below 20 Years	98	15.71	76	22.03	174	18
	21–25 Years	243	38.94	147	42.61	390	40.2
	26–30 Years	112	17.95	61	17.68	173	17.9
	31–40 Years	98	15.71	39	11.3	137	14.1
	Above 40 Years	73	11.7	22	6.38	95	9.8
Years of Using the Library	Less than 1 Year	81	12.98	57	16.52	138	14.2
	1–3 Years	251	40.22	138	40	389	40.1
	4–6 Years	179	28.69	96	27.83	275	28.4
	More than 6 Years	113	18.11	54	15.65	167	17.3
Frequency of Library Visits	Daily	236	37.82	126	36.52	362	37.4
	3–5 Times a Week	201	32.21	116	33.62	317	32.7
	1–2 Times a Week	142	22.76	79	22.9	221	22.8
	Rarely	45	7.21	24	6.96	69	7.1
Total		624	100	345	100	969	100

Table 1 presents the demographic and academic profile of the respondents. The distribution shows that undergraduate students form the largest group with 370 (38.18%), followed by faculty members with 260 (26.83%) and postgraduate students with 200 (20.64%). Research scholars and library professionals constitute smaller proportions with 80 (8.26%) and 75 (7.74%) respectively. This indicates that the study covers all major user categories of academic libraries in a balanced manner. In terms of age, most respondents fall within the 21–25 years group (390, 40.25%), followed by those below 20 years and 26–30 years, each accounting for 175 (18.06%). Respondents aged 31–40 years represent 140 (14.45%), while those above 40 years form the smallest group with 105 (10.83%). This reflects that younger users constitute the dominant segment of academic library users. With regard to experience in using library services, a majority of respondents reported 1–3 years of usage (390, 40.25%), followed by 4–6 years (275, 28.38%). Users with more than 6 years of experience account for 180 (18.58%), while those with less than one year constitute 140 (14.45%), indicating a moderate to long-term engagement with library resources. The frequency of library visits indicates active usage patterns, with 365 (37.67%) respondents visiting daily and 320 (33.02%) visiting 3–5 times a week. A further 225 (23.23%) visit 1–2 times weekly, while

only 75 (7.74%) rarely use the library services. This demonstrates that academic libraries remain highly utilized resources among respondents.

Table: 2. Availability and Utilization of Digital Infrastructure in Academic Libraries

Digital Infrastructure	Available and Frequently Used	Available and Occasionally Used	Available but Rarely Used	Not Available	M	SD
Wi-Fi Access	542 (55.93)	248 (25.59)	96 (9.91)	83 (8.57)	3.3	0.94
Library Automation Software (Koha/ILMS)	518 (53.46)	261 (26.94)	112 (11.56)	78 (8.05)	3.3	0.96
Web OPAC	495 (51.08)	242 (24.97)	136 (14.04)	96 (9.91)	3.2	1.01
Digital Library Section	472 (48.71)	256 (26.42)	141 (14.55)	100 (10.32)	3.1	1.02
Institutional Repository (DSpace)	388 (40.04)	274 (28.28)	172 (17.75)	135 (13.93)	2.9	1.07
Remote Access Facility	342 (35.29)	268 (27.66)	196 (20.23)	163 (16.82)	2.8	1.1
RFID Technology	296 (30.55)	251 (25.90)	218 (22.50)	204 (21.05)	2.7	1.14
Cloud-Based Services	245 (25.28)	238 (24.56)	246 (25.39)	240 (24.77)	2.5	1.12

Table 2 illustrates the availability and utilization pattern of different digital infrastructure facilities in academic libraries of autonomous engineering colleges. The findings reveal that foundational digital services are comparatively well established across institutions. Wi-Fi access emerges as the most extensively used facility, with 542 (55.93%) respondents reporting frequent usage, followed by 248 (25.59%) occasional users. Similarly, library automation systems such as Koha/ILMS are also widely adopted, with 518 (53.46%) respondents indicating frequent use. Web OPAC and digital library sections also demonstrate strong usage trends, with 495 (51.08%) and 472 (48.71%) respondents respectively reporting regular engagement. These results clearly indicate that core library technologies related to connectivity, automation, and online catalogue access have become integral components of academic library services, supporting routine academic and information-seeking activities of users. In contrast, advanced digital infrastructure components show comparatively lower levels of utilization, indicating partial adoption and uneven integration across institutions. Institutional repositories (DSpace) are frequently used by 388 (40.04%) respondents, while remote access facilities are regularly used by 342 (35.29%) respondents, suggesting moderate engagement with research-oriented digital services. More technologically advanced systems such as RFID technology and cloud-based services reflect the lowest usage levels, with only 296 (30.55%) and 245 (25.28%) respondents respectively reporting frequent use. A noticeable proportion of respondents also indicated rare usage or non-availability of these services, highlighting infrastructural and awareness gaps. The mean scores ranging from 2.5 to 3.3 further confirm that while basic digital infrastructure is relatively well established, advanced technologies still require significant improvement

in terms of implementation, user awareness, and accessibility to achieve a fully integrated digital library ecosystem.

Table: 3. Mann–Whitney U Test on the Awareness and Usage of Digital Library Facilities among Respondents.

Digital Library Facilities	Male		Female		U	W	Z	p-value
	M	SD	M	SD				
Wi-Fi Access Services	3.34	0.91	3.28	0.89	104852	164537	-0.82	0.412
Library Automation Software (Koha/ILMS)	3.29	0.95	3.23	0.92	103964	163649	-0.96	0.337
Web OPAC	3.17	0.99	3.12	0.96	105473	165158	-0.71	0.478
Digital Library Section	3.11	1.03	3.07	0.98	106218	165903	-0.58	0.563
Institutional Repository (DSpace)	2.94	1.08	2.87	1.05	102765	162450	-1.15	0.25
Remote Access Facility	2.83	1.11	2.78	1.09	104216	163901	-0.89	0.374
RFID Technology	2.72	1.16	2.67	1.12	105816	165501	-0.61	0.542
Cloud-Based Services	2.58	1.14	2.52	1.11	103578	163263	-1.02	0.308

Table 4.3 presents the results of the Mann–Whitney U test used to examine whether there is any significant difference between male and female respondents in terms of awareness and usage of digital library facilities. The mean scores indicate that male respondents have marginally higher values compared to female respondents across all digital services, including Wi-Fi access, library automation systems, Web OPAC, and digital library sections. However, the differences in mean values between both groups are very small, suggesting a similar level of awareness and usage patterns among male and female users. Core services such as Wi-Fi access (Male M = 3.34, Female M = 3.28) and library automation systems (Male M = 3.29, Female M = 3.23) show relatively higher usage compared to advanced services, indicating that basic digital facilities are more frequently accessed by both groups. The inferential statistics further confirm that there is no statistically significant difference between male and female respondents in the usage of digital library facilities, as all p-values are greater than 0.05. The Z values also remain low across all variables, indicating minimal variation between the two groups. For instance, Wi-Fi access (p = 0.412), Web OPAC (p = 0.478), institutional repositories (p = 0.250), and cloud-based services (p = 0.308) all show non-significant results. This clearly suggests that gender does not play a major role in influencing the awareness or usage of digital library services. Overall, the findings indicate a uniform pattern of digital library usage among male and female respondents, reflecting equal access and similar engagement with digital resources across both groups.

Table: 4. Frequency of Use of Digital Resources and Kruskal–Wallis Test Results

Digital Resources	Daily	Weekly	Monthly	Rarely	Never	H (Chi-Square)	p-value
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E-Journals	318 (32.8)	274 (28.3)	181 (18.7)	124 (12.8)	72 (7.4)	28.76	< 0.001
E-Books	286 (29.5)	263 (27.1)	192 (19.8)	138 (14.2)	90 (9.3)	24.12	0.001
IEEE Xplore	241 (24.9)	258 (26.6)	214 (22.1)	163 (16.8)	93 (9.6)	18.49	0.005
SpringerLink	227 (23.4)	249 (25.7)	221 (22.8)	172 (17.7)	100 (10.3)	9.672	0.14
Institutional Repository	205 (21.2)	238 (24.6)	226 (23.3)	183 (18.9)	117 (12.1)	16.83	0.01
Web OPAC	198 (20.5)	245 (25.3)	231 (23.8)	187 (19.3)	108 (11.1)	7.458	0.281
Digital Library Section	190 (19.6)	240 (24.8)	236 (24.4)	185 (19.1)	118 (12.2)	6.324	0.389
Remote Access Facility	176 (18.2)	232 (24.0)	245 (25.3)	193 (19.9)	123 (12.7)	5.917	0.432
Cloud-Based Services	162 (16.7)	228 (23.5)	252 (26.0)	198 (20.4)	129 (13.3)	21.39	0.002

Table 4.4 presents the frequency of use of various digital resources along with the results of the Kruskal–Wallis H test to examine significant differences in usage patterns. The findings reveal that traditional and widely subscribed e-resources such as E-Journals and E-Books are the most frequently used digital resources among respondents. E-Journals are used daily by 318 (32.8%) respondents, followed by weekly users 274 (28.3%), indicating strong dependency on scholarly journal databases for academic and research activities. Similarly, E-Books also show high usage levels, with 286 (29.5%) respondents accessing them daily. The statistically significant H value (28.76, $p < 0.001$) for E-Journals and (24.12, $p = 0.001$) for E-Books confirms that usage frequency varies significantly across user groups, highlighting their central role in academic work.

In contrast, databases such as IEEE Xplore and SpringerLink show moderate usage patterns, with a relatively balanced distribution across daily, weekly, and monthly use categories. IEEE Xplore reports 241 (24.9%) daily users, while SpringerLink shows 227 (23.4%) daily users; however, the p-value for SpringerLink ($p = 0.14$) indicates no statistically significant difference in usage across groups. Similarly, institutional repositories show moderate engagement with 205 (21.2%) daily users, and the result is statistically significant ($H = 16.83$, $p = 0.01$), indicating variation in usage behavior. On the other hand, services such as Web OPAC, digital library sections, and remote access facilities show non-significant p-values (> 0.05), suggesting uniform usage patterns across respondents. Cloud-based services, although showing relatively lower daily usage (162, 16.7%), exhibit a significant difference ($H = 21.39$, $p = 0.002$), indicating uneven adoption among user groups. Overall, the results

suggest that while core academic resources like e-journals and e-books are heavily utilized, advanced and institutional-level digital services still show inconsistent usage patterns across respondents.

Table: 5. Descriptive Statistics on the Purposes of Using Digital Library Resources among Respondents.

Purposes	Always	Often	Sometimes	Rarely	Never	M	SD
Academic Study	245 (25.3)	310 (32.0)	250 (25.8)	110 (11.4)	54 (5.6)	3.7	1.09
Research Work	220 (22.7)	295 (30.4)	260 (26.8)	120 (12.4)	74 (7.6)	3.6	1.13
Assignment Preparation	210 (21.7)	280 (28.9)	270 (27.9)	135 (13.9)	74 (7.6)	3.52	1.14
Project Work	185 (19.1)	260 (26.8)	300 (31.0)	150 (15.5)	74 (7.6)	3.34	1.15
Literature Review	200 (20.7)	275 (28.4)	265 (27.4)	145 (15.0)	84 (8.7)	3.42	1.17
Writing and Editing Assistance	170 (17.6)	260 (26.8)	290 (29.9)	170 (17.6)	79 (8.1)	3.26	1.16
Current and Up-to-date Information	160 (16.5)	250 (25.8)	310 (32.0)	180 (18.6)	69 (7.1)	3.22	1.12
Information Retrieval and Search	240 (24.8)	290 (29.9)	270 (27.9)	120 (12.4)	49 (5.1)	3.62	1.1

Table 4.5 presents the various purposes for which respondents utilize digital library resources. The findings indicate that academic study is the primary purpose of use, with 245 (25.3%) respondents reporting that they always use digital resources for academic learning and 310 (32.0%) indicating frequent use. This is reflected in the highest mean score ($M = 3.70$, $SD = 1.09$). Similarly, research work constitutes another major purpose, with 220 (22.7%) respondents always using digital resources and 295 (30.4%) using them often, resulting in a mean score of 3.60 ($SD = 1.13$). The use of digital resources for information retrieval and search also recorded a relatively high mean score ($M = 3.62$, $SD = 1.10$), indicating that respondents regularly depend on digital platforms to locate and access academic information efficiently. Assignment preparation likewise emerged as an important activity, with more than half of the respondents reporting frequent or regular use of digital resources for completing academic tasks.

The results further show that digital library resources support a wide range of academic and scholarly activities beyond routine study and research. Activities such as literature review ($M = 3.42$, $SD = 1.17$) and project work ($M = 3.34$, $SD = 1.15$) demonstrate moderate to high levels of utilization, highlighting the importance of digital resources in supporting in-depth academic investigations and project-based learning. The use of digital resources for writing and editing assistance ($M = 3.26$, $SD = 1.16$) and obtaining current and up-to-date information ($M = 3.22$, $SD = 1.12$) shows comparatively lower mean scores, although a substantial proportion of respondents still reported frequent usage for these purposes. Overall, the findings suggest that digital library

resources play a significant role in supporting teaching, learning, research, information retrieval, and academic productivity, with academic study and research-related activities remaining the dominant purposes of use among respondents.

Table: 6. Mann–Whitney U Test on Satisfaction with Digital Library Services among Respondents.

Service	Male		Female		U	W	Z	p-value
	M	SD	M	SD				
Internet Connectivity	3.86	0.92	3.82	0.89	18425.5	28295.5	-0.584	0.559
Access to E-Resources	3.8	0.95	3.75	0.92	18368	28238	-0.655	0.513
Library Website	3.66	0.98	3.63	0.97	18410.5	28280.5	-0.601	0.548
Remote Access Services	3.43	1.04	3.4	1.06	18295	28165	-0.746	0.456
Institutional Repository	3.33	1.09	3.29	1.07	18560	28430	-0.417	0.677
Overall Satisfaction	3.71	0.9	3.68	0.88	18478.5	28348.5	-0.52	0.603

Table 6 presents the results of the Mann–Whitney U test conducted to examine gender-wise differences in satisfaction with digital library services among respondents. The mean scores indicate that both male and female respondents report a relatively high level of satisfaction across all dimensions of library services. Internet connectivity recorded the highest satisfaction level among both groups, with males ($M = 3.86$) and females ($M = 3.82$) showing nearly similar perceptions. Likewise, access to e-resources (Male $M = 3.80$, Female $M = 3.75$) and library website services (Male $M = 3.66$, Female $M = 3.63$) also reflect strong user satisfaction, indicating that core digital library services are functioning effectively and meeting user expectations in both groups.

The inferential statistics further reveal that there is no statistically significant difference between male and female respondents in their satisfaction levels with digital library services, as all p-values are greater than 0.05. Services such as remote access facilities ($p = 0.456$), institutional repositories ($p = 0.677$), and overall satisfaction ($p = 0.603$) confirm a uniform perception across genders. The Z values also remain low, indicating minimal variation between male and female responses. Overall, the findings suggest that satisfaction with digital library services is consistent across gender groups, and both male and female respondents experience similar levels of satisfaction with the digital infrastructure and services provided by academic libraries.

Table: 7. Challenges Faced in Using Digital Library Services among Respondents.

Challenge Level	Frequency	Percentage	M	SD
Very High Challenge	118	12.18	3.24	1.186
High Challenge	256	26.42		

Moderate Challenge	308	31.79		
Low Challenge	187	19.3		
Very Low Challenge	100	10.32		
Total	969	100		

Table 4.7 presents the level of challenges experienced by respondents while using digital library services in academic libraries. The findings indicate that a considerable proportion of respondents perceive moderate to high levels of challenges in accessing and using digital library facilities. It is observed that 308 (31.79%) respondents reported a moderate challenge, which forms the largest group, followed by 256 (26.42%) respondents who reported a high level of challenge. Additionally, 118 (12.18%) respondents experienced a very high level of challenge, suggesting that a significant section of users still faces serious difficulties in effectively utilizing digital library services. On the other hand, 187 (19.30%) respondents reported low challenges, while 100 (10.32%) respondents indicated very low challenges, reflecting that a smaller segment of users experiences minimal difficulty in using digital resources.

The mean score ($M = 3.24$, $SD = 1.186$) further indicates that, overall, respondents experience a moderate level of challenge in using digital library services. This suggests that despite the availability of digital infrastructure, users still encounter barriers such as technical issues, accessibility constraints, and possibly limited digital literacy. The distribution of responses clearly shows that challenges are not uniform across all users, with a majority experiencing moderate to high difficulty levels. Overall, the findings highlight the need for improved user training programs, better technical support, and enhanced infrastructure to reduce barriers and ensure smoother access to digital library services in autonomous engineering college libraries.

Results and Discussion

The survey data shows that digital services are a part of what libraries do in the engineering colleges we looked at. Things like Wi-Fi, library computer systems, online catalog systems and digital library sections are available in libraries and people use them all the time. We saw that people use Wi-Fi and library computer systems more than things.. Some things like special storage for the college, radio tag services, online storage systems and access from home are not used as much which means that new digital services are still getting started with users. People use resources a lot for school and research work. They look at things like journals, online books, IEEE Xplore and SpringerLink all the time for homework, projects and research. Different people use resources in different ways, which shows that people need different kinds of information. We did not see any difference between men and women in terms of who knows about and uses digital library services. Most people thought the services were good. They did not like the services that let them access things from home and the special storage for the college as much as the other services.

People had some problems when they used the library services. Some common problems were internet connections not knowing what resources were available not getting enough training and having trouble getting to some services. These things made some digital services not work well even though they were available. The results also show that the quality of the systems and how happy people are with them are connected, which means that better technology makes people happier. If we keep working on making the technology better helping people and providing support it will make the digital library services better in the engineering college libraries. Digital services like library sections and digital library services will get better if we do these things. Digital library services will be more useful, to people if we make the digital infrastructure better.

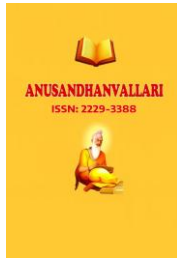
Conclusion

Digital technologies are a part of library services in engineering colleges in Karnataka that are run on their own. They have things like Wi-Fi, software to manage the library, a way to search for books on the web and lots of electronic information that people can use. All these things help students learn, teachers. People do research. Because of these services people can get to information easily and find scholarly things on the computer. The study found out that when the technology is good people are happier with the library.. Different kinds of people use the library in different ways. This shows that libraries need to check their services all the time and make sure they are what people want and need for school.

Digital library services still have some problems, like people not knowing about them not having the training not being able to get on the internet and not being able to get to the things they need. If libraries can fix these problems by making their technology better teaching people how to use it and helping them when they need it the library will be more helpful. If libraries keep working on these things they can help teachers teach people do research and students learn more in engineering schools.

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