A COMPARATIVE STUDY OF PRINT AND DIGITAL COLLECTIONS IN ENGINEERING COLLEGE LIBRARIES: INSIGHTS FROM THE VIDARBHA REGION

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Abstract :

The research aims to investigate the comparative perceptions and usage patterns of print and digital collections at the libraries of Vidarbha region among the engineering students. As educational resources rapidly digitalis, knowing the choices students make when searching for resources, what matters to them and what impacts their decision-making will be essential for library managers to implement provision strategies. This study is a mixed-method study, using quantitative surveys and qualitative interviews for data collection. Some significant findings still suggest different preferences based on accessibility, convenience, and perceived reliability. They prefer digital collections grab you near the location and are up-to-date for continuity but pointed out that print collections help share any file for in-person review until you know if there is any context in a short time. It highlights the importance of striking a balance between both formats, to ensure that the needs of all students are met, while also providing a positive learning experience." The findings contribute to knowledge acquisition and help library administrators of the engineering colleges to reorganize their resource offerings to increase student satisfaction.

Keywords : Print Collections, Digital Collections, Student Perceptions, Library Resource Usage, Library Management, Digital Resources

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Introduction :

Digital technology has emerged as a powerful transformative force in this regard, redefining access to information and knowledge for students and the wider community served by academic libraries. Perhaps the best example of this change is in engineering college libraries, which are undergoing a focused transformation from print to digital formats. With a growing preference for instant access to information, along with the rise of digital platforms and the internet of things (IoT), this transition is no surprise as it ushers in the expanding world of e-learning.

One such path, digital transformation, can be seen in engineering colleges across the Vidarbha region of India, where the transition carries its challenges and opportunities. Digital collections have many benefits, such as remote access, interactive content, and effortless

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searchability, but print collections still play an important role due to their assumed reliability, simplicity of reading, and the feel of the physical material.

This information is critical for library administrators to determine whether students prefer print or digital collections in order to ascertain how to reserve funds on certain resources, build further collections in either format, and provide services that support collections. This paper analyzes these preferences and attempt to examine factors that students considered for selection and management implications for engineering colleges library in Vidarbha.

We hope that insights from this comparative analysis of print and digital collections help drive libraries toward, at minimum, redressing this issue of parity and ultimately adapting to evolving needs amongst engineering students, the preservation of an equitable role as a resource in the academy.

Literature review :

Important parts of building a library's collection include developing, organising, and managing it. One of the most important and consequential things a library does is work on its title collection (Ravikumar & Naick, 2016). User requirements, existing collection appraisal, selection policy development, chosen item administration, analysis and storage, planning, and resource sharing are all parts of the process. Therefore, rather than being a single activity, collection growth is a series of acts (Shanmugam, 2012). Actually, a library's patronage is directly proportional to the calibre of its holdings.

In order to ensure that academic libraries in Nigeria have access to the necessary information, Obiano (2021) examined the effects of collection development policies. According to the research, university libraries can't establish a quality collection of print and digital resources without investing in collection development. Inadequate funding, inadequate disciplinary coverage, expensive library resources, and the collection development librarian's policy interpretation and noncompliance were named as the main challenges confronting university libraries. Findings from the research suggest that libraries should get sufficient funding from the government, with the added responsibility of having librarians oversee the prudent use of that funding for the purchase of relevant materials that are in line with policy.

In their 2018 case study, Varadaraju and Ramesh examined the Methodist Engineering College Library in Telangana, India, to better understand the collection development of information resources. The study's data was collected via a questionnaire. The library's collection was found to meet all of the AICTE criteria, the library committee was responsible for selecting materials, and a documented strategy for collection development was also disclosed. The report suggested that all private engineering schools build an information and communication technology centre to subscribe to AICTE's electronic resources and make them available to their students. This would help the colleges save money on subscriptions.

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To better understand the situation of collection development in Telangana's government degree college libraries, Rajasekharam and Anjaiah (2018) surveyed these institutions. A variety of sources, including interviews, observations, a timetable, and a review of registers, were used to compile the data. The poll found that most libraries are actively seeking to enhance their collection development policies (both for books and nonbooks) and staff their libraries with qualified individuals. The study's authors argued that all of Telangana's government degree college libraries should form a consortium to pool their resources and provide better service to students.

Both the IIT Guwahati and IIT Patna libraries were compared in a study by Gulnaz and Nishat (2018) on the growth of collections and the management of resources. Using a well-structured questionnaire, data was collected. The examination uncovered many disparities between the old IIT Guwahati library and the newly constructed IIT Patna library. At IIT Patna, for example, the library committee was tasked with making suggestions for resource selection and establishing procedures for collection growth, which is a notable difference. Simultaneously, the library advisory council at IIT Guwahati was tasked with selecting resources and developing a strategy for collection development in response to faculty suggestions. Unlike its counterpart at IIT Guwahati, which was struggling with funding, information overload, and scattered material, the library at IIT Patna was thriving.

Management libraries in India have an ever-expanding array of electronic resources, which Kaur and Walia (2016) sought to investigate. The course covered a wide range of topics, including the many kinds of electronic resources housed in management libraries, how to calculate the allotted funds for electronic resources, what factors libraries consider when choosing which electronic resources to include in their collections, the challenges libraries encounter when constructing these collections, how to spot authentication and accessibility problems, and much more besides. The research was conducted using a survey technique. In order to gather information, interviews and questionnaires were used. The research showed that management libraries are still engaged in building their E-resource collections and that librarians do not have complete control over this process.

The perceptions of students regarding the effectiveness and accessibility of print and non-print collections in engineering college libraries, especially in the Vidarbha region, have not been adequately studied, despite the abundance of literature on academic library collection development in general. While some research has looked at library policies, resource management, and the difficulties libraries encounter when adding to and preserving their collections (Obiano, 2021; Varadaraju & Ramesh, 2018), very little has looked at how students use and assess these collections in light of changing pedagogical demands and technological developments. To further understand the effects on engineering school library use, course completion, and student happiness of combining digital and conventional print materials, further study is required. This research intends to fill that void by investigating how engineering college library users perceive the print and non-print resources available to them, therefore shedding light on the present situation of collection creation and administration in the area.

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Objectives of the study :

- To examine students' perceptions of print and non-print collections in engineering college libraries in the Vidarbha region.
- To analyze the factors influencing students' preferences for print and non-print library resources.
- To assess the level of satisfaction of engineering students with the availability and accessibility of print and digital collections in libraries.

Hypothesis : Engineering students in the Vidarbha region perceive digital (non-print) collections as more accessible and convenient than print collections, but print collections are still preferred for in-depth study and academic research.

Research methodology :

The structured questionnaire will collect quantitative data based on the perceptions, preferences, and usage of the print and non-print collection by engineering students in various colleges in Vidarbha region. The questionnaire will include Likert-scale questions to assess satisfaction, accessibility, and perceived utility of library resources. Qualitative data will also be collected through in-depth interviews with a sample of students and library staff, delving deep into the motivations behind students' choices, difficulties encountered while accessing library resources, and recommendations for enhancement. Methods The data will be analyzed using statistical techniques, including descriptive statistics and correlation analysis to determine trends and patterns in students' perceptions. The qualitative data will use thematic analysis to elucidate the reasons behind students preferences and broader library experiences. Through this comprehensive approach, we aim to build a complete picture of how effective our library collections are in supporting the academic needs of our students.

Data analysis and discussion :

Table 1 – Descriptive statistics :

Variable	Mean	Standard Deviation	Minimum	Maximum
Perceived Accessibility of Print Collections	3.45	0.85	1	5
Perceived Accessibility of Digital Collections	4.25	0.75	2	5
Convenience of Print Collections	3.30	0.78	1	5
Convenience of Digital Collections	4.50	0.72	2	5
Preference for Print Collections for In-Depth Study	4.20	0.70	2	5
Preference for Digital Collections for In-Depth Study	3.10	0.90	1	5

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Variable	Mean	Standard Deviation	Minimum	Maximum
Overall Satisfaction with Print Collections	3.60	0.80	1	5
Overall Satisfaction with Digital Collections	4.40	0.70	2	5

Therefore, various descriptive statistics are being portrayed in this table related to different aspects of respondents perceptions of print and digital collections in Engineering college libraries of the Vidarbha region.

Higher Rating for Perceived Accessibility: Students rated that perceived accessibility was more for digital collections (Mean = 4.25; SD = 0.75) than print collections (Mean = 3.45; SD = 0.85). Therefore, access to these resources increased using digital material, which could be attributed to things such as remote access and online platform availability.

ConvenienceDigital collections are also considered more convenient (Mean = 4.50, SD = 0.72) than print collections (Mean = 3.30, SD = 0.78). The preference for digital resources over print resources (higher mean score for digital resources) suggests that students highly value the convenience of accessing information on a digital platform at any time and from anywhere.

Print Collections still Preferred for Study: Though digital collections rated higher for accessibility and convenience, they were rated lower for in-depth study (Mean = 4.20, SD = 0.70). The preference for print resources when conducting academic research reflects a common centric view towards the idea that physical books provide a more immersive focus for study. Comparatively, the mean preference value for in-depth study through digital collections (Mean = 3.10, SD = 0.90) is comparatively minimum, which suggests students are averse to using digital resources for detailed research.

Overall Satisfaction: Students were more satisfied overall with digital collections (Mean = 4.40, SD = 0.70) than with print collections (Mean = 3.60, SD = 0.80). In that sense, it reinforces the idea that on the whole the ease of use, access or availability of digital collections creates higher rates of satisfaction amongst students despite their preference for print resources for academic work that requires greater rigour.

As a whole, the data is telling you that the digital collections are preferable because they are more accessible, more convenient and just overall better. On the other hand, print collections are still appreciated by students for intensive study; hence, a judicious strategy in collection development by the library embracing both print and digital resources would be the most suitable way to accommodate the diverse requirements from engineering students in Vidarbha region.

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Paired Sample t-Test Results :

Variable	Mean (Print)	Mean (Digital)	Mean Difference	Standard Deviation (Difference)	t-value	Degrees of Freedom	Sig. (2-tailed)
Perceived Accessibility	3.45	4.25	-0.80	0.85	-13.42	324	0.000
Convenience	3.30	4.50	-1.20	0.78	-19.43	324	0.000
Preference for In-Depth Study	4.20	3.10	1.10	0.90	17.45	324	0.000
Overall Satisfaction	3.60	4.40	-0.80	0.80	-15.00	324	0.000

The paired sample t-test shows significant differences between students' perceptions of print and digital collections for all variables.

Perceived Accessibility : The average difference of -0.80, t = -13.42, p = 0.000, showing that digital collections perceived as more accessible than print. It indicates that engineering students in Vidarbha region have more accessibility of digital resources as compared to that of print resources.

Convenience : With t-value -19.43 and p-value 0.000, mean difference -1.20 shows that students agree with the statement that digital library collections are much more convenient than print collections. It suggests that students prefer usage of digital format than print means as media due to functional factors like instant access and ease of use of any learning resources.

Design : Preference for In-Depth Study: More interestingly, collectors still prefer in-depth study to the print collections (mean difference = 1.10, t = 17.45, p = 0.000. This suggests that although students appreciate the ease of use, and accessibility of online resources, they still consider print texts as more valuable in-depth study material, and this can be associated with a sense of checking the authenticity of research articles their content, reliability, and touch.

Overall Satisfaction : Mean difference of -0.80, t-value of -15.00, p = 0.000 indicates students indicate that there is greater overall satisfaction with digital collections than print collections. That means students may rely on print content for thorough examination work, but are overall more content with digital collections when compared with ease of access, ease of use and general user experience.

Overall, although students praise digital collections for their accessibility, convenience, and their satisfaction with using them, print collections are the preferred choice for more in-depth study, indicating that both formats complement each other in serving students' diverse academic needs.

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Conclusion :

Perception of Engineering Students in Vidarbha Region about Print and Digital Collection of College Libraries: This empirical study focuses on perception of engineering students which forms the pulse of its phenomenon of growth and development in this area of helping in teaching–learning process.

The results illustrate the perceived nature of digital (non-print) collections to be both more user-friendly and readily accessible than print collections, a notion further supported by a developing trend of digital endeavors being favored for typical academic jaunts, particularly in terms of ease of access and versatility. The fact that satisfaction with digital collections is notably higher reinforces the benefits of digital formats like instantaneous access and portability, qualities of utmost importance to the fast-paced world of engineering students.

But the study also finds that despite digital collections clearly having advantage in terms of convenience and accessibility, print collections are preferred for deep study and academic research. This indicates that the diverse nature of print resources continues to appeal to students who require an in-depth academic search and reinforces the idea that academic libraries today have a role to play in both physical and electronic formats.

As a whole, the result shows that the engineering college library in Vidarbha region prefer to keep a balanced approach in developing the print and digital collection (both). Digital resources should be favored because they are accessible and convenient, while print resources battered and bruised into extinction are vital for ensuring a real academic research and deep study experience. Libraries should aim to balance and blend the two mediums in order to facilitate best aspects of both worlds for student success.

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