EMBRACING DIGITAL CHANGE: THE EVOLUTION OF TECHNOLOGY-DRIVEN SERVICES IN ACADEMIC LIBRARIES

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Crossref DOI - https://doi.org/10.5281/zenodo.23432532

Abstract :

The enormous impact of technological advances profoundly affects academic libraries. An important objective of the research is to review the literature related to the use of development technology by university libraries. The main purpose of the study was to examine the means of literature used in university libraries related to emerging technology and to identify the transformative role of university librarians in these technology-ready libraries of today. The study also examines the state of mind of library experts in the field of this modern environment. The results of the study are mainly based on four topics which are: "popularity of emerging technology in academic libraries", "librarians' thinking towards emerging technology", "technology compatibility with many experts in the field". libraries and barriers to adoption of emerging technology. However, while there has been much research on emerging technology in higher education libraries, this research has generally focused on increasing the awareness of technology educators through the library and information science discipline. This literature evaluate enables library specialists and librarians approximately the era utilized by libraries and additionally the limitations confronted through them. Furthermore, it increases consciousness of the demanding situations those new technology poses each for customers and for libraries. This evaluate article examines library records offerings on this context of the net surroundings. It gives an perception into the brand new technology that are turning into the want of the hour of each individual.

Keywords : Library, technology, learnings, environment

Introduction :

The rapid expansion of online services and the integration of emerging technologies have significantly transformed the experiences and expectations of library users. Technology is increasingly viewed as a means of accomplishing specific objectives, overcoming challenges, and carrying out tasks with greater efficiency and skill. In this changing environment, academic librarians have an important responsibility to understand,

adopt, and effectively implement modern technological developments. Doing so enables libraries to respond to changing user needs, improve service quality, and strengthen the digital competencies required by both librarians and users. Although technological and generational changes are occurring at a rapid pace, it may not be practical for libraries to adopt every emerging trend or accommodate every technological preference. Therefore, academic libraries need to identify and prioritize technologies that provide long-term value and meaningful benefits to their users. As educational institutions increasingly depend on digital resources, academic libraries should serve as important centers for introducing, preserving, and transferring technological knowledge to present and future generations. This study therefore focuses on examining emerging library technologies and evaluating their potential contribution to improving the effectiveness, accessibility, and quality of services provided by higher education libraries.

Review of literature :

Chingath (2020) expressed the principle goals of his examine, that is to illustrate the combination and seamless functioning of generation in libraries. Whereas, the writer additionally blanketed fundamental generation tendencies consisting of Robotics, Drones, Blockchain, Big Data and Mobile Apps in addition to their use and alertness in libraries. However, the fields and offerings of the library for which the generation may also follow have been additionally decided on and mentioned primarily based totally on a cumulative exam of the to be had literature and in addition studies through the writer.

Status of emerging technologies in the libraries :

Recent literature indicates that emerging technologies are becoming increasingly important in reshaping the products, services, and operations of academic libraries. Lubanga and Mumba (2021) emphasized that information and communication technologies have played a central role in expanding the range of services offered by UNILIA libraries. Technologies such as Library 2.0 platforms, social networking tools, electronic mail, web-based resources, digital catalogues, and online public access catalogues have enabled libraries to improve communication and provide users with more convenient access to information. Their findings further suggest that academic libraries can respond effectively to a rapidly changing technological environment by continuously exploring new developments, encouraging research, and promoting creativity and innovation in library services.

Saibakumo (2021) observed that although numerous emerging technologies are available to libraries, their adoption remains uneven because of differences in technological preparedness, awareness, infrastructure, and professional competence. Technologies and services such as library websites, WebOPACs, institutional repositories, social media platforms, integrated library management systems, library-guide applications, radio-frequency identification (RFID), and the Internet of Things have gradually become relevant to modern library operations. However, the successful implementation of these technologies

depends not only on their availability but also on the ability of library professionals to understand and utilize them effectively.

Chingath (2020) highlighted the potential of advanced technologies to improve the efficiency and quality of library services. Developments involving secure databases, interactive or conversational technologies, and other innovative digital applications demonstrate how technological advancement can create new possibilities for information delivery and user engagement. The incorporation of such innovations may contribute to the modernization of academic libraries and help them provide services that are more responsive to contemporary information needs.

The continuous development of technology also requires a corresponding transformation in the skills and professional roles of librarians. Brown et al. (2017) emphasized the importance of developing new approaches to professional preparation so that library employees can acquire competencies relevant to emerging technological environments, including participation in innovative initiatives such as the Maker Movement. Similarly, Enweani (2018) stressed the importance of employing adequately qualified personnel and providing regular training and retraining opportunities. Continuous professional development is particularly necessary because library professionals work within an environment characterized by rapid technological change and constantly evolving methods of information creation and dissemination (Hayman & Smith, 2017).

Hussain and Jan (2018) recommended that librarians should develop greater familiarity with Web 2.0 technologies because these tools can enhance interaction, collaboration, and information sharing with users. Jerry and Ramasesh (2012) further pointed out that professionals in Library and Information Science require not only effective communication abilities but also practical knowledge of ICT, networking technologies, and their associated applications. These competencies are increasingly essential for librarians who are expected to operate digital systems and provide technology-supported information services.

The reviewed studies collectively demonstrate growing recognition of emerging technologies within academic libraries at both national and international levels. Chingath (2020), for example, presented the adoption of new technologies as an important pathway for LIS professionals, particularly younger practitioners, to modernize library services and strengthen the contemporary image of libraries. Ajie (2019) examined the opportunities and challenges encountered by information professionals in Nigeria within the context of globalization, highlighting the need for librarians to adapt to technological and professional changes. The literature also indicates that professional development programmes have traditionally focused heavily on newly qualified graduates, while greater attention is required toward continuous learning opportunities for existing library staff.

Overall, the literature establishes that technological innovation has considerable potential to improve academic library services, but successful adoption depends on

appropriate infrastructure, skilled personnel, institutional support, and continuous professional development. Academic libraries therefore need to move beyond simply acquiring new technologies and focus on developing the human and organizational capabilities necessary for their effective implementation. Regular training, experimentation, research, creativity, and adaptation can enable library professionals to remain relevant and deliver services that meet the changing expectations of contemporary users.

Technological compatibility among the professionals of the libraries :

Objects can include digitized content material like print or photographs, in addition to initially produced virtual content material like phrase processor documents or social media posts. In addition to storing content material, virtual libraries offer manner for organizing, searching, and retrieving the content material contained withinside the series. Contrary to the traditional or conventional libraries, a virtual library may be very bendy and it has all of the modern-day and up to date data or assets a mean reader would possibly need. Some publishers do now no longer manually need to submit the up to date model in their books, articles, blogs or different content material assets as virtual libraries normally make the up to date model of each ee-e book to be had as quickly as it's miles posted online, such that each reader could have get entry to to their favored eBook while not having to undergo any trouble.

In addition, the section also discusses the limits of libraries. It has been reported in the literature that library expert training techniques were previously designed mostly for recent graduates and organized for staff participation. The improvement of the last era requires new methods from libraries to open experts with new technological possibilities; based primarily on a master version of an employee fully engaged with the Maker Movement (Brown et al., 2017). Adequate/certified staff and library training/retraining (Enweani, 2018). Precisely the most important questions for library professionals operating in a complex and ever-changing climate of comfortable creation and creation (Hayman and Smith, 2014). Hussain and Jan (2018) suggest that librarians should have an additional hobby in Web 2.zero technology. LIS experts should have knowledge of ICT and network technology and their equipment in addition to verbal communication skills (Jerry and Ramasesh, 2012).

Impacts of digital libraries :

When we consider libraries, the primary issue that involves thoughts is the bodily additives which includes space, equipment, storage, racks complete of books and different educational material. No one could deny the position studying play withinside the existence of college students. Since digitization has taken over maximum of the additives in college mastering and better training, mastering thru virtual libraries isn't always a issue of the beyond anymore. The decline in visits to traditional libraries indicates that scholars opt to get right of entry to records and examine content material with out traveling a library in person. While many libraries and universities are digitizing their substances to be handy to participants and the overall public, allow us to check the primary advantages of virtual

libraries for better training:

1. Instant get right of entry to to sources: There isn't anyt any luxurious which includes getting access to considerable understanding and applicable records touching on precise subjects. A Digital library cuts quick the effort and time one might placed into traveling a traditional library and locating the proper book. With alternatives like in-constructed content material seek with only some key phrases or titles, looking for what you want from lots of sources will become easy.

2. No bodily boundaries: Accessing the virtual library is a good deal simpler and efficient, not like a traditional library, college students do not have to test the outlet and last hours to plot their visits; with simply a web connection, you may get right of entry to a virtual library every time, everywhere. Digital libraries offer the scholars with the ease of mastering at their very own comfort. Students can get right of entry to and examine the library substances in numerous virtual formats (eBooks, audiobooks, movies on call for 24 hrs/day) every time and everywhere the usage of their favored devices.

3. Preservation of sources: Conventional libraries want to make investments closely withinside the upkeep and maintenance of library sources. The bodily library sources are accessed and reused through readers frequently, wherein it will become tough to save you the deterioration of books, vinyl records, cassette tapes and different sources. Whereas with virtual libraries, the content material is digitized, and the virtual sources are handy to a massive wide variety of readers frequently with out focusing at the maintenance of bodily substances.

4. Real-Time Interactions: One of the primary advantages of the usage of the virtual library is that scholars can make clear their doubts then and there with new-age control software program which can facilitate interplay among readers and administrators. The readers also can engage through putting in on line groups and discover a decision to their doubts in real-time. This dynamic and real-time interplay characteristic has the capacity to make the readers transfer from traditional libraries to virtual libraries.

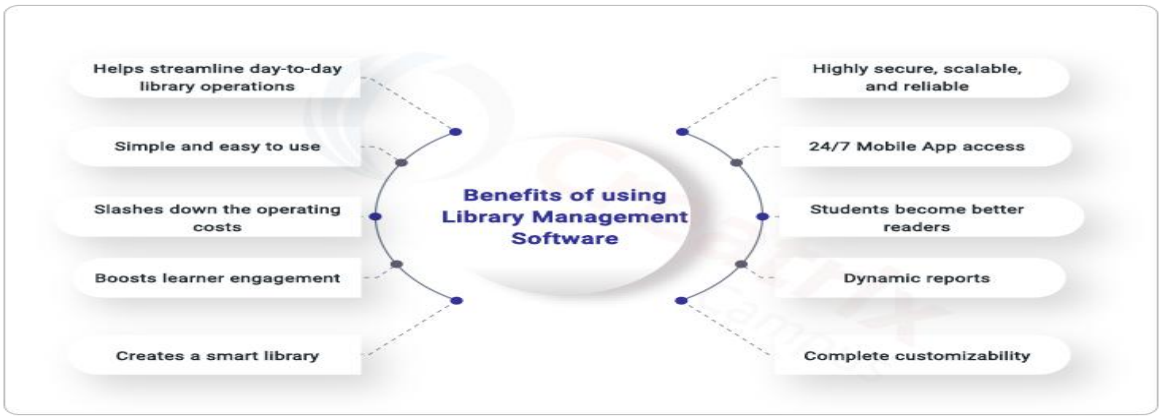


Fig-1 Technology over libraries

Conclusion :

The motive of the have a look at is to have a look at literature to be had at the utility of era in libraries. This literature evaluate enables library specialists and librarians approximately the era utilized by libraries and additionally the limitations confronted through them. Furthermore, it increases consciousness of the demanding situations those new technology poses each for customers and for libraries. This evaluate article examines library records offerings on this context of the net surroundings. It gives an perception into the brand new technology that are turning into the want of the hour of each individual. Users have now known the fee of era and subsequently as a result their expectancies and needs are developing. The evaluation of the literature showcases that with the developing intervention of era, demanding situations associated with it additionally grows equally. Therefore, it's far essential for library sources and offerings to head in sync with the rising library technology.

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