

NEED OF COLLABORATIVE TECHNOLOGIES IN THE ACADEMIC LIBRARIES

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Abstract - *The function of the library and information science (LIS) profession has altered due to the amount of information and its availability in many forms. Several changes were made to the status and goals of library professionals followed by library services in the twenty-first century. There is an unprecedented spread of knowledge and the significance of electronic communications and mobile technologies in generating, transferring, and accessing information. This research investigates the importance of collaborative technologies in libraries. An initial examination of the literature was undertaken for this study to identify the function of ICT and collaborative tools in academic libraries. This review includes a full description of collaborative tools in libraries, including their usage, feasibility, application, and influence, as well as a wide perspective on past research in the field, with the purpose of finding major aspects associated with it. Because it is a descriptive research, the results will be based on information gleaned from real-life examples.*

Keywords: Collaborative Technologies, Academic Libraries, Web 2.0 Technologies, Knowledge Sharing

INTRODUCTION

Libraries were formerly known as bookstores, despite the fact that librarians were only the keepers of these books. With the advancement of technology, the situation in libraries has revolutionized. Rapid technological advances in the realm of library and information services were a major driver of the revolution. It has shifted the way services are delivered from traditional sources to e-resources, electronic databases, and electronic data storage and retrieval. ICT has had a huge influence on all professions, including

librarianship. The LIS expert must match the user's high expectations as well as the quantity of knowledge. ICT has altered the social demands and working styles of librarians and information workers. As a result, because technology is rapidly growing, library professionals must constantly upgrade their technological abilities in order to meet their clients' needs.

DEFINITION

Technology that enables successful interaction in virtual worlds. Message boards and discussion

forums, audio and video conferencing, information portals, company directories, and Web cameras are all included (Tuffley, 2009). Collaborative technologies in academic libraries refer to a wide range of digital tools, platforms and systems that facilitate communication, collaboration, and information sharing among library staff, students, and faculty. These technologies include virtual meeting and conferencing tools, social media and networking platforms, online collaboration and document sharing platforms, and online course management systems. They enable library staff to work together more effectively, students to engage in collaborative learning, and faculty to access and share resources and information from different locations. Collaborative technologies in academic libraries support the goal of providing seamless access to information and resources, and fostering knowledge sharing among users.

LITERATURE REVIEW

Bunker & Zick (1999) The changing information environment presents significant challenges as well as possibilities. There is universal agreement that the existing Web is difficult to find and use, lacks quality standards and protocols, and lays the responsibility of effective access on the user. The eventual worth of digital resources to the user will be determined by the content's quality, organization, and data management systems. There are several barriers to improving the processes of digital information gathering,

storage, retrieval, and usage. Successful systems cannot be produced in a vacuum, as experience has proven, but must be investigated and designed in collaboration with users and domain experts. When system researchers and developers engage with librarians, who have a long history of focusing on information structure, retrieval, management, and usage, there is a considerable benefit. The University of Washington Digital Libraries Initiative fosters effective and comprehensive collaboration among teachers, engineers, students, and librarians. This program serves as a focal point for the development, usage, and analysis of electronic information services, resources, and systems designed with the user in mind. This article discusses the synergy formed when engineers, information scientists, and librarians adopt a user-centered approach to generating, organizing, and exploiting digital collections and resources for study and education.

Fasana & Veaner (2002) University libraries have a long history of sharing the knowledge they store and making it freely available to researchers in general. This volume continues this legacy into the current age of automated library systems by illustrating how such libraries may participate in the development of automated systems and by sharing this information with librarians in general. **McAfee (2009)** Most firms recognize that in today's tumultuous environment, they must function as an integrated whole in order to tap into breakthroughs and innovative ideas. Nonetheless,

many businesses still struggle to capture the collective wisdom of their staff and consumers. Companies are unaware of what they know, but they must learn quickly. Organizations may now exploit information in important new ways, such as collecting accumulated knowledge, linking employees who need information with experts who have it, and allowing the greatest ideas to develop spontaneously, thanks to a new class of collaborative technology. These "Web 2.0" technologies first surfaced on the Internet, where they fueled popular social communities and collaborative platforms such as Facebook and Wikipedia. A wide spectrum of enterprises are now deploying Web 2.0 technologies, techniques, and philosophies, making them more flexible, productive, and inventive.

Scobba (2011) Massive technological developments in research, knowledge generation, publication, and communication are reshaping how researchers operate. As a result of technological advancements, research is increasingly being conducted as data-driven collaborative initiatives involving teams from many locations, organizations, and even disciplines. As the speed of change quickens, the necessity for new types of library collaborations and cooperative working arrangements becomes more obvious. Information services must be available on the go, in real-time, and from any location. Collaborative ways are being used in new library activities, including traditional

operations and developing roles. These transformational trends include the use of evolving collaborative technologies and social networks, the development of tools to support mobile access, an emphasis on instructional technology services and information literacy, the promotion of embedded librarians as members of research teams, the reconfiguration of library space to support learning and research, the digitization of shared library collections, and the assumption of leadership in scholarly communication.

Goswami & Choudhury (2014) The advancement of technology, particularly internet technologies, has altered how people get information. The emergence of new web programming languages has offered new possibilities for more dynamic online applications. Collaboration tools will allow its users to work with one another in numerous ways in a virtual community. Exploration, sharing, interacting, and connecting with people and material in meaningful ways will be enabled through easily available and user-friendly collaborative technologies, allowing them to learn and exchange knowledge.

Doherty (2016) Many academic institutions confront fierce competition for highly valued, yet limited, resources in order to satisfy the demands of a changing and demanding society. Libraries have always been a centred focus on any campus; however, these facilities are now experiencing budget cuts and fewer resources, pushing them to

seek out the required partnerships in order to continue to deliver services to students and employees. The author investigates the librarian collaboration initiatives that enable them to deliver additional services and resources to their customers, with a focus on the digital tools and resources utilized in such collaborations. This publication is an essential reference source for librarians, researchers, academic administrators, advanced-level students, and information technology professionals, as it contains research on various types of partnerships and institutional relationships, as well as the overall benefits of these collaborations.

Kinyanjui (2017) Web 2.0 technologies are being used in corporations, schools, libraries, and government agencies. Web 2.0 technologies are widely used by online e-commerce organizations such as eBay, Alibris, and Amazon. However, the author simply described how various web 2.0 tools and technologies may be used in libraries in this paper. Collaboration between users generates new knowledge. Everyone has the ability to generate content; ideas and information freely circulate and are remixed and repurposed.

OBJECTIVES OF THE STUDY

1. To endorse knowledge sharing through collaborative innovations
2. Creating a cooperative perspective among library professionals

3. Understand ICT systems for moving libraries from traditional to cutting-edge
4. To perceive the difficulties for library professionals
5. To find existing strategies used by library experts

IMPORTANCE OF COLLABORATION IN ACADEMIC LIBRARIES

Collaborative technologies play a critical role in academic libraries by providing the tools and platforms necessary to facilitate collaboration and communication among library staff, students, and faculty. These technologies are important for a number of reasons, including:

- Improved access to resources and information: Collaborative technologies allow for the sharing of resources and information, leading to a wider range of materials and knowledge being available to users.
- Increased efficiency and productivity: Collaborative technologies allow for the sharing of responsibilities and workload, leading to more efficient and effective use of resources and staff time.
- Enhanced user experience: Collaborative technologies allow for the creation of tailored and personalized services for users, leading to a more satisfying and productive experience for them.
- Facilitation of remote and online learning: Collaborative technologies allow for remote

access to resources and services, supporting remote and online learning and research.

- Support of interdisciplinary and cross-institutional research: Collaborative technologies allow for the sharing of information and resources across different departments and institutions, leading to more interdisciplinary and cross-institutional research opportunities.
- Professional Development: Collaborative technologies allow for the sharing of expertise and professional development opportunities among library staff, leading to a more skilled and knowledgeable workforce.
- Inclusivity and social environment: Collaborative technologies allow for the engagement of diverse perspectives, leading to a more inclusive and socially just academic environment.
- Cost-effective solution: Collaborative technologies are often low-cost or free, making it an accessible solution for all libraries.

APPLICATIONS OF COLLABORATIVE TECHNOLOGIES IN ACADEMIC LIBRARIES

Collaborative technologies have many applications in academic libraries, including:

- Virtual reference and consultation services: Library staff can use virtual meeting and conferencing tools to provide

reference and research assistance to students and faculty remotely.

- Digital collections and resource sharing: Libraries can use online collaboration and document sharing platforms to share digital resources and collections among different libraries, allowing for greater access to materials and information.
- Online instruction and workshops: Libraries can use online course management systems to provide instruction and training on library resources and services, as well as workshops on research and information literacy skills.
- Social media and networking: Libraries can use social media platforms to engage with students, faculty, and the broader community, providing updates on library services, events, and resources.
- Group work and collaboration: Libraries can use online collaboration and document sharing platforms to support group work and collaboration among students, faculty, and staff.
- Virtual meetings and events: Libraries can use virtual meeting and conferencing tools to hold virtual meetings, events, and conferences, allowing for greater participation and access for remote users.
- Digital curation and preservation: Libraries can use digital curation and preservation tools to manage and preserve

digital resources and collections, ensuring their long-term accessibility. Thus, such rare resources can easily access and shared through collaborative platforms.

- Research and data management: Libraries can use online collaboration and document sharing platforms to support researchers in organizing, sharing, and analyzing data, allowing for more efficient and effective research.
- Archival and special collection management: Libraries can use digital curation and preservation tools to manage and preserve rare and unique materials, making them accessible to researchers and students.

SOME OF THE MOST COMMONLY USED COLLABORATIVE TECHNOLOGIES IN LIBRARIES INCLUDES:

- Virtual meeting and conferencing tools: These tools such as Zoom, Skype, and Google Meet enable library staff to provide virtual reference and consultation services, hold virtual meetings and events, and provide instruction and training remotely.
- Social media and networking platforms: These platforms such as Facebook, Twitter, and LinkedIn are used to engage with patrons, provide updates on library services and events, and create online communities of users.

- Online collaboration and document sharing platforms: Platforms like Google Docs, Microsoft Teams, and Slack enable library staff and patrons to collaborate on documents, share information and resources, and communicate in real-time.
- Online course management systems: Platforms like Blackboard and Canvas are used to provide instruction and training on library resources and services, as well as workshops on research and information literacy skills.
- Digital asset management systems: These systems allow libraries to store, manage, and share digital resources and collections among different libraries, improving access to materials and information.

ADVANTAGES OF USING COLLABORATIVE TECHNOLOGIES IN THE LIBRARIES

Facilitation of remote and online learning

- Increased access to resources and information: Collaborative technologies can provide patrons with greater access to information and resources, both within the library and from external sources.
- Enhanced communication and collaboration: Collaborative technologies can facilitate communication and collaboration among patrons and library staff, both within the library and remotely.
- Improved patron engagement: Collaborative technologies can provide

patrons with new and innovative ways to engage with the library and its resources.

- **Increased efficiency and productivity:** Collaborative technologies can automate routine tasks and streamline processes, which can increase efficiency and productivity for library staff.
- **Greater flexibility:** Collaborative technologies can provide greater flexibility in terms of when and where patrons can access library resources and services.
- **Improved user experience:** Collaborative technologies can provide patrons with a more personalized and interactive experience when using the library.
- **Better data analysis:** Collaborative technologies can provide libraries with tools to better analyse data and gain insights on their users, which can help them improve their services.
- **Cost-effective:** Collaborative technologies can help libraries save costs by automating certain tasks and reducing the need for physical resources.

CHALLENGES AND LIMITATIONS OF COLLABORATIVE TECHNOLOGIES IN LIBRARIES

- **Cost:** Implementing and maintaining collaborative technologies can be expensive for libraries, especially for smaller libraries with limited budgets.

- **Technical expertise:** Library staff may not have the technical expertise required to effectively implement and maintain collaborative technologies.
- **Accessibility:** Not all patrons have access to the same technology or internet speeds, which can limit the accessibility of collaborative technologies.
- **Privacy concerns:** Collaborative technologies can raise privacy concerns, as they may collect and store personal information about patrons.
- **Limited adoption:** Some patrons may be resistant to using new technologies, which can limit the effectiveness of collaborative technologies.
- **Security:** Collaborative technologies may also be vulnerable to cyber-attacks; this can put the library at risk of losing sensitive data.
- **Scalability:** Collaborative technologies may not be able to handle large numbers of users simultaneously, which can lead to slow performance and technical issues.

CONCLUSION

Technology has unquestionably played an essential role in postmodern culture. Advances in ICT and digital technology have given library professionals more options for addressing professional difficulties, improving access to content, and distribution, and promoting

professional identity and visibility. In India, certified librarians encounter a variety of problems when it comes to acquiring digital know-how and technological abilities. IT increasingly alters the entire world, introducing new challenges and opportunities. LIS professionals must confront a variety of complex challenges, seize opportunities, and respond decisively to each of these advances. LIS experts are in great demand for modern technical skills. They have excellent career chances and open doors as long as they improve their technologies and skills.

Collaborative technologies are essential for academic libraries to remain competitive and relevant in today's digital age. They enable libraries to provide seamless access to information and resources, foster knowledge sharing, and support remote and online learning and research. Collaborative technologies have greatly improved the way academic library's function, but there are still challenges that need to be addressed to fully utilize their potential. With the right approach and investment, academic libraries can fully leverage the potential of collaborative technologies to support the needs of their users and contribute to the academic success of their institution.

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