

Library and Information Science: Historical Development and Current Trends

Dr. Mahadeva Prasad M S¹, Nirmala G²

¹Lecturer (Senior Scale), Department of Library and Information Science, Government Polytechnic for Women, Hassan

²Lecturer, Department of Library and Information Science, Government Polytechnic for Women, Hassan

Abstract- Modern information systems and technology are combined with conventional library practices in Library and Information Science (LIS). This paper examines the history of LIS in India, emphasizing significant events such as the establishment of the Baroda Library School and the assistance provided by UGC after independence. ICT integration, Library 2.0, and open-access digital libraries are the main topics of contemporary LIS. AI and open-source programs like DSpace and Koha have improved automation and library administration. Addressing data security and ethical issues while maintaining an inclusive information ecosystem requires constant cooperation between LIS specialists and AI specialists.

Keywords: Library and Information Science, Digital Libraries, Information Management, AI in Libraries, Library Education, Open Access, ICT, Library 2.0, Information Literacy, Evidence-Based Practice.

INTRODUCTION

Library and Information Science (LIS) amalgamates aspects of library science and information management with technology to investigate information organization, preservation, and dissemination processes. The field operates by analyzing data access methodologies, organizational principles, storage and retrieval techniques, as well as medium-sharing practices in both physical and digital contexts. The primary objective of LIS is to enhance information accessibility and usefulness for individual users, organizations, and society. The domain encompasses traditional library storage methods and contemporary digital libraries, along with information systems functioning in current digital contexts. (Felipe, 2013)

The foundation of LIS centers on comprehending

information retrieval systems by developing methods for efficient search functions and the categorization and structuring of extensive datasets. Contemporary civilization relies on these systems due to the rapid expansion of data across various diversified platforms. LIS specialists utilize databases alongside cataloging systems and digital archives to construct retrieval solutions that guarantee both efficient and effective information retrieval.

The fundamental element of LIS involves information management, which encompasses the formulation of strategies for overseeing both tangible and intangible assets. This field encompasses the preservation of historical documents, the management of intellectual property rights, and the assurance of digital resource accessibility over time. Information professionals, including librarians and archivists, are trained to select technical instruments that improve administration chores via metadata standards, content management frameworks, and digital preservation systems.

Information behavior forms an essential part of LIS education through its study of individual actions surrounding information seeking and usage and their interaction with information systems. The design of user-oriented systems needs to base itself on information behavior comprehension to enhance both information discovery and utilization for people. The process of educating users about information source navigation and critical assessment is a responsibility commonly carried out by LIS professionals.

LIS grows significantly because of rapid technological developments that include artificial intelligence, machine learning and big data analytics. Modern innovations continue to reshape the processes of

information generation and delivery and information retrieval operations. LIS professionals must now demonstrate competence regarding new technologies because their impact on information access and management has become a core expectation in the field. (Gaur, 2013)

HISTORICAL DEVELOPMENT

The development of Library and Information Science (LIS) education in India started during the early 20th century through which time professional practice evolved under worldwide movements and local requirements as well as educational advancements. LIS education in India evolved through time to follow changes in information management standards while libraries became essential for educational growth and societal advancement. The initial efforts created the essential groundwork for official library studies that developed educational institutions and academic programs which continue to shape current practices.

The Baroda School and Early Initiatives stand as major early achievements within the historical development. The inaugural steps of formal library education in India were taken when Baroda State created its first library school during 1911. By launching the first formal training program for structured library techniques this initiative became the initial organized educational program of its type in Indian history. Libraries achieved essential institutional status for learning and information distribution when this event took place.

Raja Sayaji Rao Gaikwad the ruler of Baroda State directed the establishment of this library school through his visionary leadership. The ruler of Baroda State pursued state education advancement by inviting Mr. William Borden who was an American librarian under the tutelage of notable Melvil Dewey. The Western influence entered Indian library education development when Borden accepted his position as Director of the State Library Department.

The Baroda library school curriculum provided basic foundations which formed the basis for further growth in LIS education during that period. The educational program consisted of direct library skills training that included book repair alongside circulation systems

and library handwriting techniques alongside overdue materials management. These educational courses delivered fundamental operational understanding students needed to efficiently operate libraries thereby preparing them for community service.

Through his teaching methods Borden drew inspiration from the Columbia Library School model thus combining practical instruction with organizational systems and procedural training for library management. Dewey's progressive educational philosophy found harmony in Borden's teaching approach by focusing on practical library administration skills that became core to Indian LIS education. (Azeeza, 2018)

The establishment of the Punjab University and Beyond represented an important development for Library and Information Science education across India. In 1915 Government of India appointed American librarian Asa Don Dickinson to develop the Punjab University's Department of Library Science. The creation of the first university-level library science program in the country began through this initiative which delivered academic training for future library professionals.

Punjab University developed a broad set of academic subjects which included library administration, cataloging, classification along with fundamental library management strategies. The program dedicated itself to teaching practical and theoretical knowledge to establish professional library science capabilities throughout India while creating skilled personnel who could operate libraries nationwide.

The Punjab University library science program created an impact that prompted numerous other Indian universities to launch similar programs. The University of Madras became one of the first institutions to introduce a Department of Library Science when it started operations in 1929. The University of Madras became a leading LIS educational center for southern India after establishing this department in 1929. At Madras the educational program focused on creating skilled professionals in the areas of library organization and classification together with cataloging to ensure efficient library operations. The expanding need for qualified

librarians caused multiple universities to start offering LIS education programs throughout the nation.

During the 1940s the major academic institutions of University of Delhi and University of Calcutta independently created departments of library science in 1946. In 1950 the University of Bombay joined existing universities that offered LIS education to strengthen its national footprint.(Azeeza, 2018), (Verma, 2012)

Soon after India gained independence in 1947 the country experienced extensive development and organization of LIS educational programs. The Government of India implemented policy initiatives together with national-level organizations which fostered this process.

The Indian Library Association established itself in 1933 to become a leading entity for shaping and developing LIS higher education across the nation. 3 It operated alongside other professional organizations to establish educational criteria and curriculum frameworks and accreditation processes for LIS programs throughout the country.

The University Grants Commission (UGC) as a statutory body dedicated itself to coordinating and maintaining higher education standards while expanding and standardizing LIS education. 7 The UGC helped fund and guide LIS department and program establishment in various universities alongside efforts to harmonize curricula and qualifications.

Through the establishment of the Indira Gandhi National Open University (IGNOU) in 1985 the offering of LIS programs through distance education mode became possible. This breakthrough allowed the training of many more professionals to serve the expanding information requirements of the country.(Kumar, 2014)

The Indian government acknowledged library importance for education development after independence in 1947. The National Library Act of 1948 established the former Imperial Library as the National Library of India in Kolkata while it evolved into a nationwide library service center. During the

First Five-Year Plan (1951-1956) the government took steps which aimed to enhance library services and recommended building a national network of libraries and state central libraries across India.

Public libraries achieved significant expansion throughout India during the time after independence. During the Second Five-Year Plan authorities funded the network formation of national libraries through the establishment of the Institute of Library Science at the University of Delhi in 1960. Organizations under the Eighth Five-Year Plan worked on library service evolution by suggesting changes to library organizations and technology implementation for library operations.

The National Mission on Libraries launched in 2014 focused on public library transformation through national virtual library establishment and model library infrastructure setup. The new initiative demonstrates continuous attempts to meet changing technological requirements and enhance service delivery methods. (Kumar, 2014), (Savenije, 2014),(Biswas, 2011)

CURRENT TRENDS

Library and Information Science (LIS) underwent substantial modifications propelled by technological innovations and changing user requirements. Prominent trends encompass:

1. Integration of Information and Communication Technology (ICT): The implementation of ICT transformed library operations and services. Libraries have progressively used digital catalogs, online databases, and electronic resources to improve accessibility and efficiency. This transition necessitated LIS practitioners to develop new technical competencies for the proper management and maintenance of these systems.

2. Emergence of Library 2.0: Libraries adopted Web 2.0 technologies, promoting interactive and user-centric services. Elements like blogs, social media integration, and user-generated material became essential to library platforms, enhancing user engagement and participation.

3. Expansion of Digital Libraries and Open Access: There was a significant rise in the establishment and administration of digital libraries, enhancing the preservation and distribution of digital content. The open access movement accelerated, with libraries serving a crucial function in offering free access to academic papers, thus bolstering the global information economy.

4. Emphasize Information Literacy and User Education: Acknowledging the significance of information literacy, libraries enhanced initiatives to instruct users on proficient information search, assessment, and ethical utilization. This program sought to enable consumers to adeptly traverse the expanding information world.

5. Adoption of Open-Source Software: Libraries progressively embraced open-source software solutions for cataloging, digital repositories, and content management. Platforms such as Koha for Integrated Library Systems (ILS) and DSpace for digital repositories gained prominence, providing economical and configurable alternatives to proprietary systems.

6. Emphasis on Evidence-Based Practice: A notable trend emerged towards evidence-based library and information practice (EBLIP), wherein decisions and practices were guided by rigorous research and data analysis. This strategy sought to improve the efficacy and efficiency of library services.

7. Evolution of LIS Education and Research: LIS education experienced substantial transformations, integrating modern technology and approaches into its courses. Research domains have broadened to encompass subjects like as data curation, digital preservation, and the influence of social media on information distribution. Research emphasized the necessity of ongoing professional development to be aligned with technology progress.(Gupta & Das, 2010),(Kaur, 2017),(Das & Chaudhuri, 2015), (Afolabi & Abidoye, 2011)

CONCLUSION

Traditional information management has been revolutionized using artificial intelligence (AI) into

library services, which has increased efficiency, accessibility, and user engagement. Library patrons may now take advantage of more tailored services thanks to advancements in automation, machine learning, and natural language processing, all of which are powered by artificial intelligence. Chatbots and virtual assistants driven by AI have also enhanced user interactions by eliminating manual processes and giving instantaneous help. Still, there are a lot of obstacles to overcome, including worries about data privacy, ethical issues, and a lack of qualified experts. Responsible adoption of artificial intelligence will depend on the continued development of partnerships between artificial intelligence (AI) specialists and library and information science professionals as libraries adapt to the digital age. The development of AI-driven solutions that improve knowledge dissemination while also aligning with library ethics should be the focus of future study. By enhancing human expertise, libraries can create an information ecosystem that is more intelligent, user-friendly, and responsive to the changing needs of the digital era. AI should not be seen as a replacement for human knowledge, but rather as an adjunct to it.

REFERENCES

- [1] Afolabi, A. F., & Abidoye, J. A. (2011). The Integration of Information and Communication Technology in Library Operations Towards Effective Library Services. *Journal of Humanistic and Social Studies*.
- [2] Azeza, D. S. E. (2018). HISTORY OF LIBRARY SCIENCE EDUCATION. "Knowledge Librarian" An International Peer Reviewed Bilingual E-Journal of Library and Information Science, 5(6). https://www.klibjlis.com/5.6.1.pdf?_gl=1*17gxbzo*_gcl_aw*R0NMLjE3MzcwODczNjYuQ2owS0NRaUF2NjI4QmhDMkFSSXNBSUpJaUstemVuRU1zd20zN1gxX05BSnd4cGlkdDUtYTVaWGI1NRVVBWk55S3lhbnMUElnZDZyWlJQVWFBb04yRUFMd193Y0I.*_gcl_au*MjY5ODE0NTM4LjE3MzU4ODYwNDg.
- [3] Biswas, S. C. (2011). Indian Legal Deposit Legislation and its Impact on the National Library. *Alexandria: The Journal of National and International Library and Information Issues*, 22(2-3), 49-59.

- <https://doi.org/10.7227/ALX.22.2.7>
- [4] Das, A. K., & Chaudhuri, V. (2015). WEB 2.0 TECHNOLOGIES IN MODERN LIBRARY AND INFORMATION SERVICES : A STUDY ABOUT THE NEW ERA OF LIBRARY 2.0. *Golden Research Thoughts*, 4(8).
- [5] Felipe, F. (2013). *What is Library and Information Science (LIS) in Latin American Library schools*. <https://www.enssib.fr/bibliotheque-numerique/documents/66403-what-is-library-and-information-science-lis-in-latin-american-library-schools.pdf>
- [6] Gaur, K. (2013). *FOUNDATION OF LIBRARY AND INFORMATION SCIENCE*. https://lisstudymaterials.wordpress.com/wp-content/uploads/2017/12/dlis001_foundation_of_library_and_information_science.pdf
- [7] Gupta, P. K., & Das, T. (2010). Modern Trends in Library and Information Science. *Scientific Publishers*.
- [8] Kaur, T. (2017). Trends in Library Science Education and Research in India during 21st Century: An Exploration through Network Visualization. *Academia*. https://www.academia.edu/64969204/Trends_in_Library_Science_Education_and_Research_in_India_during_21st_Century_An_Exploration_through_Network_Visualization?utm_source=chatgpt.com
- [9] Kumar, S. (2014). GROWTH AND DEVELOPMENT OF LIBRARY SYSTEMS IN INDIA. *International Journal of Innovative Social Science & Humanities Research*. https://www.csirs.org.in/uploads/paper_pdf/growth-and-development-of-library-systems-in-india.pdf?_gl=1*1ivkqr9*_gcl_aw*R0NMLjE3MzcxODczNjYuQ2owS0NRaUF2NjI4QmhDMkFSSXNBSUpJaUstcmVuRU1zd20zN1gxX05BSnd4cGlkdDUtYTVaWG1NRVVBWk55S3lhbn dMUElnZDZyWlJQVWFBb04yRUF
- [10] Savenije, B. (2014). Towards a Networked National Library. *Alexandria: The Journal of National and International Library and Information Issues*, 25(3), 71–85. <https://doi.org/10.7227/ALX.0032>
- [11] Verma, A. (2012). *Library and Information Science Education in India- Options, Opportunities and Places*. http://library-soup.blogspot.com/2012/06/library-and-information-science.html?_gl=1*ngh5s6*_gcl_aw*R0NMLjE3MzcxODczNjYuQ2owS0NRaUF2NjI4QmhDMkFSSXNBSUpJaUstcmVuRU1zd20zN1gxX05BSnd4cGlkdDUtYTVaWG1NRVVBWk55S3lhbn dMUElnZDZyWlJQVWFBb04yRUFM d193Y0I.*_gcl_au*MjY