Impact of Emerging Technologies on Library and Information Science Research

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Abstract

The emerging technologies in libraries have witnessed a dramatic change in the last two decades. It has enhanced the operational abilities and improved the services to a great extent. Emerging technology-driven innovations have posed a challenge to LIS education and are directed towards an employable and sustainable knowledge-driven economy. It has created new challenges to promote up-skilling of Library and Information Science (LIS) Professionals for the digital environment, with a blend of traditional principles and skills of ICT and converting them into information professionals and also nurture with both active professional and technology skills.

The impact of emerging technologies on LIS education includes establishing new curricula, new design of courses, new forms of organization of LIS education, the different competencies and skills of LIS teachers, and expansion of job markets and career opportunities. In addition, the impact of ICT on LIS training will bring challenges such as changing education/teaching environments, competition between LIS training and training from other related fields, ICT-based teaching techniques, comprehensive LIS course evaluations as compared to other courses of study, expanded opportunities for collaboration between LIS departments, inter-disciplinary and multi-disciplinary approach based research, and undertaking extensive research areas on emerging technologies for library services.

According to previous research, India's LIS programmes have not adapted to the new situation. They fail to provide students with the necessary knowledge and skills for the usage of emerging technologies. As a result, graduates of LIS programmes have limited work opportunities in the information industry.

Research in LIS has special importance, as library techniques, services and practices are constantly changing due to the import of emerging technologies to provide proper information support and services of the present-day generation. The trend has changed, and academic research is a marketplace for the knowledge economy and productivity globally. Hence, the LIS departments should devise suitable research areas to develop LIS students to improve emerging technology attitudes, knowledge, competencies and skills for managing information in both tangible and digital form. This paper suggests some new and emerging technology research areas to help the LIS students explore new methods for developing their emerging technology competencies and skills and new ways to develop library services and enhance existing library services into state-of-the-art library services to satisfy user demands.

Keywords:Library and Information Science, Education, Research, Library services, Big data, Internet of Things, Drones, Blockchain technology, Augmented reality, Robotics, Artificial Intelligence, Expert System.