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Innovative Horizons: a systematic review of emerging technologies transforming library services

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Abstract

The ever-changing demands of users and the continuous advancements in network technologies have fundamentally transformed the roles and perspectives of library professionals. Simultaneously, users have eagerly embraced cutting-edge technologies, raising their expectations for libraries to provide innovative and interactive services. This has created a need for a meticulous and systematic review of existing literature on integrating emerging technologies into library services, drawing from various online databases and forms the subject of the current article. The study is a comprehensive investigation that delves into multiple facets of emerging technologies, including, but not limited to, artificial intelligence, the Internet of Things, augmented reality, virtual reality, blockchain, chatbots, and robotics. The literature was carefully curated using the PRISMA methodology, a rigorous approach for systematic literature reviews. The selected studies underwent thorough scrutiny, focusing on essential attributes such as authorship, scope, methodology, and sampling techniques. This systematic review empowers the authors to provide an exhaustive and insightful analysis of how diverse emerging technologies can enhance and enrich existing library services and operations. The study elucidates the multifaceted challenges and influential factors associated with integrating emerging technologies into library services. Furthermore, it strategically formulates practical implications to address and overcome these challenges. This systematic review is an invaluable guide, offering librarians the knowledge and insights they need to embrace emerging technologies in their libraries effectively. It equips them to remain abreast with the latest technological advancements, thereby transforming traditional library services into smart, forward-thinking services that meet the information needs of today's discerning users.

Keywords: Emerging library services, Web 3.0 in libraries, IoT in libraries, AI-ML in libraries, Smart library services, PRISMA guidelines