



International Conference on Computing, Artificial Intelligence and Information Systems

Hosted Online from Warsaw, Poland

Date: 11th May, 2026

Website: <https://econferencia.com>

PROSPECTS FOR USING DIGITAL TECHNOLOGIES IN LIBRARIES, ADVANTAGES OF AUTOMATED LIBRARIES

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Annotation

In today's era of globalization and digital technologies, the process of automation is developing rapidly across all sectors. Libraries, which are closely linked to education, science, and information systems, are not excluded from this process. Modern automated libraries are fundamentally different from traditional libraries, allowing users to receive fast, convenient, and high-quality services. As a result of the development of information technology, it is observed that libraries are transforming from mere book-houses into modern information centers.

Keywords: Automated library, electronic catalog, information technology, digital library, electronic resources, RFID technology, multimedia, book fund, remote service, library science.

The concept of an automated library is essentially a modern library system managed using computer technology, electronic catalogs, internet networks, and specialized programs. In such libraries, the processes of searching for books, registering them, serving users, and exchanging information are carried out automatically. An automated library is a modern system that ensures the management, storage, and delivery of information resources to users in electronic form. This system serves to effectively organize library work and reduce certain



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errors caused by the human factor [2; 9]. In such libraries: electronic catalogs are created, books are monitored using special codes, first of all, users will register electronically, will have the opportunity to order books online. Also, the convenient side is that they can freely use the e-book database. In traditional libraries, it takes a lot of time to find the right book. The user will need to search for information among the card indexes or ask the librarian for help. In automated libraries, the necessary book can be found in a matter of seconds using an electronic catalog. For example, a user can quickly and easily find by:book title, author, topic, or year of publication. This saves time and improves the quality of service [4; 32]. One of the greatest advantages of modern libraries is the availability of electronic resources. Electronic books, scientific articles, dissertations, and digital databases are provided to users via the Internet.

Digital technologies expand opportunities for acquiring professional knowledge, creativity, and acquaintance with the values of world culture. They lead to the emergence of new methods for searching and reflecting information. Only those members of society who possess the necessary knowledge to orient themselves in the new information space can use these opportunities competently and skillfully. Thus, digitalization is encompassing all spheres and sectors of public life, penetrating deeply into the life of every person and influencing their way of thinking and behavior. The digitalization processes taking place in Uzbekistan could not fail to affect such an important social institution as the library [3; 80]. Overall, it has actively engaged in the process of building a unified information space and an information society. The essence of library digitalization is the use of information technologies to satisfy the information needs of its users. Thanks to digitalization, library institutions have become modern information centers, providing their users with access to a vast national and global treasury of



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knowledge. As noted in the Resolution of the President of the Republic of Uzbekistan "On further improvement of information and library services for the population of the Republic of Uzbekistan" dated June 7, 2019, the goals and objectives for the development of information and library activities in the current conditions of reforming the socio-economic sphere in the republic must correspond to the changes taking place in the country and international practice [7; 72].

Feature	Traditional Library	Digitalized/Automated Library (e.g., UzNel)
Search Mechanism	Manual, card-index-based, linear	Algorithmic, multi-attribute, near-instantaneous
Accessibility	Restricted by physical hours and location	24/7 remote cloud access
Data Redundancy	High (duplicate physical catalogs and manual records)	Low (centralized, unified bibliographic database)
Staff Role	Custodial and administrative (handling, filing)	Pedagogical, technological, and consultative
User Interaction	Passive retrieval	Active co-creation, digital curation, and personalized feeds

As early as the late 20th century, library scientist F.W. Lancaster predicted the transition to virtual, paperless information systems. Modern scholars analyzing Lancaster's legacy note that projects like the *National General Education Electronic Library of Uzbekistan* realize his vision. However, contemporary researchers emphasize that this is a "hybridization" rather than a complete elimination of physical books—the physical and digital co-exist as complementary infrastructures [5; 27].



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Among the main tasks of this resolution are: reforming information and library activities, taking into account the development of information and communication technologies and modern global trends; ensuring high-quality social guarantees for providing information and library services to the population and improving the regulatory framework for the development of information and library institutions, taking into account modern requirements; and providing information and library institutions with qualified specialists. In order to ensure the implementation of this decision, the National Library of Uzbekistan named after Alisher Navoi is implementing the "National General Education Electronic Library" project in cooperation with the Korean company LG CNS: Within the framework of the "National General Education Electronic Library" project, the Republic's information and library institutions were provided with software to transition the system into a unified system, while the Korean company FutureNuri developed and presented software called UzNel [8; 20], i.e., the "National General Education Electronic Library of Uzbekistan," based on technical specifications. When creating bibliographic records using UzNel software, the formation of a database is carried out in close connection with compilation and cataloging services. Under the joint project between the National Library of Uzbekistan named after Alisher Navoi and South Korea's LG CNS, the **UzNel** (National General Education Electronic Library of Uzbekistan) software acts as a central hub. If it applied in practice: A researcher in Nukus (the Republic of Karakalpakstan) can search the UzNel portal for a rare historical manuscript. If the physical copy is in Tashkent, the digitized version is instantly accessible via the unified database. The system automatically cross-references the cataloging metadata compiled by regional bibliographers, eliminating geographical barriers.



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In the context of local retraining programs, regional educational scholars often draw upon Vygotskian psychology. The transition of librarians to digital environments is viewed as cognitive adaptation [1; 81]. The specialized training software, peer-to-peer collaboration between regional hubs (like Karakalpakstan and Tashkent), and institutional support act as the "scaffolding" required to move library specialists from their traditional comfort zones into advanced digital fluency. It is an important software for cooperation with large libraries in the regions of the Republic of Karakalpakstan and the city of Tashkent. The digitalization of libraries fundamentally affects the public consciousness and the worldview of the professional librarian, forcing a rethink of all key aspects of professional development. This is not about the newly introduced procedures, but about the paradigm of professional activity and education. Therefore, at the level of philosophical generalizations, it is necessary to revise views on the status of the profession of a librarian and the content of labor. A distinctive feature of the information-librarian profession is that today librarian activities are carried out in the intersection of three very important areas - information technology, culture, and education. Information scientists analyze the transition to systems like UzNel through Shannon's classic mathematical model of communication. In traditional libraries, the "noise" (physical search latency, misfiled cards, geographical distance) high-jacked the system's efficiency. Scholars of modern information retrieval argue that database standardization (using MARC21 or UzNel's architecture) optimizes the "signal-to-noise ratio," [9; 17] ensuring that the transfer of knowledge from storage to user occurs with minimal thermodynamic loss of information. The profession of a librarian is also characterized by multifunctionality. This leads to a variety of specialties in the librarian profession – bibliographer, cataloger, methodologist, service department librarian, etc.



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There will be specialists such as librarian-psychologist, librarian-marketer, library design specialist, librarian-sociologist.

Furthermore, the development of the technical base will lead to the emergence of new specialties in information and library activities: librarian-technologist, information network manager, librarian-web design specialist, librarian-site promotion specialist, virtual reference service bibliographer, and others. All of this contributes to a greater social orientation of the librarian's profession toward the individual, toward satisfying any information needs of the user. The dynamic process of library digitalization requires the formation of new professional requirements for a modern librarian. The main condition for the adaptation of a modern librarian-specialist to the information society is constant professional improvement and development. Professional development reflects the process of preparing employees to perform new production functions, occupy new positions, and solve new tasks.

Professional development and professional retraining of librarians will be an important link in professional development. It is they who carry out the activities to adapt the librarian-specialist to the performance of new job responsibilities related to the application of information technologies. The role of supplementary professional library information is also important. It is through professional retraining that the formation of new personnel potential for modern libraries is carried out. Modern library digitalization is not a simple technical replacement of paper with screens. It is a cybernetic reorganization of knowledge (Shannon, Lancaster), a sociological integration into the global network (Castells), and a cognitive-professional transformation of the human actors operating within the system (Buckland, Ranganathan, Taylor). Retraining programs are the vital bridge ensuring that the human element evolves at the same speed as the



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technological infrastructure. New technologies are destroying traditional perceptions of professional development. Thus, the high level of development of information technologies and the widespread use of computer technology are the foundation of the modern information society. Information and knowledge will be the primary transforming force ensuring the future development of humanity.

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