

PROSPECTS OF USING ARTIFICIAL INTELLIGENCE IN WORLD LIBRARIES*Abdullaeva Nurjamal**Nukus branch of the Uzbek State Institute of Arts and Culture**2nd year student of the Faculty of "Technogen and Art History"*

Annotation: This article analyzes the prospects for using artificial intelligence (AI) technologies in Uzbek libraries. The possibilities of AI in such areas as digitization of library services, provision of personalized services to users, optimization of information search systems, and automatic analysis of library funds are widely covered. Also, based on foreign experience, practical aspects, opportunities, and existing problems of introducing AI in Uzbekistan are considered. The article focuses on the role of AI in modern librarianship and its future significance.

Key words: artificial intelligence, library services, digitization, information technologies, user experience, Uzbek libraries, innovative technologies, data automation.

INTRODUCTION

Today, artificial intelligence (AI) technologies are widely used in almost all aspects of life. Digital transformation processes are also fundamentally changing the information sphere, creating the basis for the library system to reach a new level. The world's leading libraries are actively using AI capabilities to provide users with high-quality, fast and personalized services. Uzbek libraries are also taking important steps to improve their activities by introducing innovative technologies, not remaining aloof from these global processes.

This article analyzes the application of AI technologies in the library system, its role in improving user experience, optimizing fund management and information search systems, as well as the current state and future development prospects in Uzbek libraries.[1]

DISCUSSION AND RESULTS

It is worth noting that the main support of artificial intelligence systems is a database. These databases can be formed from various sources. Regular updating and expansion of the database increases the analytical potential and efficiency of artificial intelligence. Currently, there is an opportunity to form a database for artificial intelligence and effectively use it based on open and public resources available in Uzbekistan. In particular:[2]

Unique Identification System (id.gov.uz);

Open Data Portal of Uzbekistan (data.gov.uz);

Electronic Government Information Base (my.gov.uz);

Database of the State Services Agency (davxizmat.uz);

As well as information systems of various ministries and departments.

Today, the prospects for using artificial intelligence in libraries around the world are expanding. In particular:

In Russia, artificial intelligence technology is developing rapidly within the framework of the national strategy until 2030. Artificial intelligence is being actively introduced into library activities in this country.

For example, the robot librarians named Chuck and Huck walk through the bookshelves, read audiobooks aloud, accept books and show users the necessary information via a touch screen.

The robot Robertino organizes tours of the library sections, answers questions, and participates in interactive activities for children.

The robot named Elby can communicate with the user, read books, answer questions, and distinguish between adults and children.

In the UK, the robot named Hugh can answer pending questions, accept voice commands, and provide information about books through a system integrated into the library catalog.

In the US, the robots Vincent and Nancy can speak 19 languages, help users find books, and have a facial recognition function.

Marlowe in the US analyzes the texts written by authors and shows them their shortcomings.

In Israel, the MyHeritage website allows users to build their family tree online, which is very useful for genealogical research.

In Japan, a robot has been created that allows users to read books in a library without having to log in. It can automatically turn pages and display content on a screen.

In Southeast Asia, the AuRoSS robot scans books on shelves using laser and ultrasonic sensors to identify missing or misplaced books.

According to an analysis of the use of artificial intelligence in librarianship, the following was found:

The United States and Russia are leading the way in this area.[3]

In Russia, artificial intelligence is being widely implemented not only as a means of automation, but also as a means of improving the quality of service and interactivity.

Artificial intelligence helps library staff in their work: reading books, working with users, organizing events, answering questions, sorting and analyzing literature, and using voice search systems.

However, despite all its advantages, the main task of the library remains the preservation and development of human knowledge. Artificial intelligence should not replace the librarian, but rather assist him. At the same time, increasing the number of qualified specialists is of great importance for the implementation of this technology. After all, the most important factor in the full implementation of artificial intelligence in all areas is experienced and knowledgeable personnel.

Today, it is becoming increasingly clear that artificial intelligence technologies can be widely used in various areas of library activity. Initially, AI plays a major role in identifying the needs of library users and improving their information search experience. For example, systems that provide personalized recommendations based on the user's previous search history can significantly improve the quality of library services.

Another important area is the digitization of library collections and automated classification systems. With the help of artificial intelligence, it is possible to automatically thematize, index, and analyze books and articles based on context. This reduces the workload of library staff and ensures prompt service to users.[4]

Foreign experience, in particular, the successful implementation of AI technologies in large libraries in countries such as the USA, Great Britain, and South Korea, shows that these

approaches are also relevant for Uzbekistan. Chatbots, virtual assistants, voice search systems, and automated library management have already been put into practice in these countries.

Although work in this area has just begun in Uzbek libraries, the initial results are promising. Digitization projects have been launched in some university libraries, electronic catalog systems are being improved, and the user interface is being improved. However, the full implementation of AI technologies requires a sufficient technical base, qualified specialists, and appropriate regulatory and legal frameworks.

Thus, although there are prospects for the introduction of artificial intelligence in Uzbek libraries, this process requires a gradual implementation and a systematic approach to the development of modern technologies.

The role of artificial intelligence technologies in world librarianship practice is growing, and these technologies allow information services to be more effective, interactive and personalized. Libraries in Uzbekistan should not be left out of these global changes. The use of artificial intelligence plays an important role in modernizing library services, adapting them to user needs, digitizing collections and automating management systems.[5]

CONCLUSION

The analysis shows that although initial steps have been taken in this direction in Uzbekistan, in order to achieve full-fledged development, it is still necessary to improve the technological infrastructure, increase human resources, effectively use foreign experience and develop strategic programs at the state level.

In the future, virtual assistants based on artificial intelligence, automatic recommendation systems, text analysis algorithms and systems capable of studying user behavior may become an integral part of library services. This will shape libraries not only as scientific and cultural centers, but also as modern innovative information platforms.

Thus, the use of artificial intelligence in Uzbek libraries is not only a technological innovation, but also a qualitatively new stage in the approach to information. A consistent and strategic approach in this direction can achieve significant results.

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