Library Science. Record Studies. Informology.

Library Science. Record Studies. Informology. 21(1), 2025, 8-16
Journal homepage: https://bdi.com.ua/en
Received 22.10.2024 Revised 23.01.2025 Accepted 24.02.2025

UDC 027.22:004.777:004.8(477) DOI: 10.63009/lsrsi/1.2025.08

Use of artificial intelligence and chatbots in public libraries

Oleksandr Berestov*

Postgraduate Student
National Academy of Culture and Arts Management
01015, 9 Lavrska Str., Kyiv, Ukraine
https://orcid.org/0000-0001-6896-5587

Abstract. This study examined the evolution of artificial intelligence and chatbot implementation in the operations of public libraries in Ukraine within the context of contemporary technological advancement. The relevance of the topic was underscored by the growing role of information technologies in society, changing user needs, and the necessity to enhance the efficiency and competitiveness of libraries. This study aimed to analyse the impact of digital technologies, particularly artificial intelligence, on library services, and to explore the stages of innovation adoption. The research employed methods of analysis, synthesis, explanation, and classification. Various approaches to the integration of artificial intelligence into library practices were discussed, with a particular focus on the introduction of chatbots for automating communication, improving information retrieval, and personalising services for users. The study also investigated key areas of artificial intelligence application, including the automation of routine tasks, the development of intelligent search systems, and recommendation platforms, and the use of chatbots to provide timely user feedback. Particular attention was devoted to the development of intelligent systems capable of adapting to individual user needs, thereby providing a personalised experience. An important aspect of the study was the examination of the ethical implications of applying artificial intelligence in library practice. Specifically, it considered issues such as user data privacy, the potential for algorithmic bias, and the influence of artificial intelligence on the freedom of access to information. The introduction of artificial intelligence and chatbots into the operations of public libraries represented a significant step towards the creation of a modern information environment that was accessible, user-friendly, and efficient for all users. The findings of this research will contribute to the development of strategies for the successful implementation of technological innovations in public libraries across Ukraine. They will help libraries not only to improve the quality of user services and adapt to the demands of the digital age, but also to ensure their competitiveness, increase operational efficiency, and promote the intellectual advancement of society

Keywords: information institutions; information technologies; neural networks; electronic resources; library innovations; intelligent assistants

Introduction

The world is changing rapidly, and public libraries in Ukraine are not standing aside. Their traditional role is undergoing transformation in the era of digital technologies. The implementation of innovations, particularly intelligent systems, has become a key factor in the successful development of libraries and their adaptation to the needs of contemporary users. This topic is highly relevant, as the use of AI and chatbots has the potential to significantly enhance library operations. These technologies can optimise user services by providing quick and personalised responses to enquiries via virtual librarians, expand access to digital resources through automated recommendations of books, academic articles and multimedia materials, and increase user engagement by means of interactive platforms and voice assistants. Furthermore, AI can automate

Suggested Citation:
Berestov, O. (2025). Use of artificial intelligence and chatbots in public libraries. *Library Science. Record Studies. Informology,* 21(1), 8-16. doi: 10.63009/lsrsi/1.2025.08.

*Corresponding author

processes such as archiving and digitisation, which contributed both to the preservation of cultural heritage and to more convenient information retrieval.

The challenges of implementing AI and chatbots in library operations have been the focus of numerous scholarly investigations. The study by L. Demianiuk (2022), for example, examined cases of artificial intelligence adoption in libraries abroad. A key finding of this research was that AI was already helping to improve access to information for users in various countries, demonstrating the practical potential of these technologies in the library sector. In turn, Y. Horban *et al.* (2024) emphasised the importance of artificial intelligence in enhancing the efficiency of library operations. The authors highlighted AI's potential to optimise internal processes, which could lead to increased productivity and free up librarians' time for more critical tasks. The study by O. Kuzmenko (2024) focused on the role of AI-powered chatbots in facilitating user interaction with libraries. The author argued that such chatbots can improve resource navigation, provide rapid responses to enquiries, and generally enhance the user experience. Meanwhile, O. Shevchuk & A. Saltykova (2024) examined issues of inclusivity and ethics in chatbot-generated content. Scientist's research raised important concerns about potential risks associated with data bias and underscored the need for a responsible approach to the development and use of AI in libraries to prevent unethical or discriminatory content. Finally, S. Kabilwa *et al.* (2025) explored, how AI was transforming reference services, becoming a valuable tool for librarians by expanding their capabilities and improving service delivery through quicker and more personalised responses. M.A. Shaheen & A. Khurshid (2023) investigated user perceptions of AI chatbots in academic libraries. Researchers found a generally positive attitude towards their accessibility and speed, though concerns were raised regarding accuracy and the absence of human interaction, highlighting the importance of high-quality design. S. Mishra (2023) focused on the ethical aspects of AI use in cataloguing, pointing to the risks of reproducing biases. The researcher stressed the need for transparent algorithms and maintaining librarian oversight to ensure impartial representation of information. In the context of the digital transformation of libraries, Yu. Kulish (2023) examined the features of the digital environment in university libraries at the modern stage, offering insights into broader trends in the development of digital infrastructure within the library sector.

This study aimed to analyse the impact of AI and chatbots on library services and to assess their influence on user behaviour. The academic novelty lies in exploring the prospects for using artificial intelligence and chatbots in public libraries in Ukraine, alongside a review of successful international practices that may be adapted to the Ukrainian context.

Materials and Methods

To examine the evolution of the development and implementation of artificial intelligence in the operations of public libraries in Ukraine, methods of historical analysis were employed. This included the study of academic articles and materials describing the introduction of digital technologies into the library sector (Innovative activities…, 2022). This approach made it possible to identify the key stages of AI integration into library processes and to assess its impact on library operations.

Content analysis was carried out on a range of online resources. Among them were the official websites of leading Ukrainian libraries, such as the Official website of Vernadsky National Library of Ukraine (2024), which allowed for the identification of AI tools or references to them – for example, in sections related to digital resources or user services. The website of the Scientific and Technical Library of the Igor Sikorsky Kyiv Polytechnic Institute was also analysed (Stefanovych, 2024), with particular attention paid to descriptions of electronic catalogues, recommendation systems, and other intelligent services.

Special attention was given to the social media pages of libraries, in particular the official Facebook page of the Lviv Regional Universal Scientific Library (2025). Posts concerning the use of chatbots for consultations, announcements of online events involving intelligent tools, and reports on the implementation of new digital services were examined as part of the analysis. The Telegram channel of the Good Library (as of 2025) was also examined, where information was recorded regarding the use of chatbots for promptly informing users and providing reference services (A modest dramatic and realistic story of a good library…, n.d.).

In addition, specific sections of library websites dedicated to innovative projects and digital services were analysed in detail. For example, the website of the Odesa National Scientific Library (as of 2024-2025) was reviewed to explore descriptions of beta versions of intelligent catalogue search systems, information on the development of chatbots for user support, and reports on the implementation of artificial intelligence elements in the digitisation of collections (International Federation of Library Associations…, 2021). The analysis of specific cases of AI implementation in the libraries of Kyiv Polytechnic Institute, Good Library, and The Hong Kong Polytechnic University (Meet "LiBot"…, 2024) enabled the identification and examination of successful practices in the integration of machine learning algorithms, chatbots, automated recommendation systems, and other intelligent technologies. A comparative analysis of AI implementation in libraries across Ukraine and other countries made it possible to identify global trends and best practices that may be adapted to the Ukrainian context to improve the efficiency of library services.

Results and Discussion

With the advancement of artificial intelligence (AI) and machine learning (ML) technologies, libraries can gain access to new services and capabilities. For example, AI and ML can assist libraries in improving optical character recognition and discovering new ways to utilise their digitised collections, such as enhanced categorisation and search functions. These improvements can benefit not only libraries, but also users and researchers (Artificial Intelligence in..., 2024).

In addition, AI and ML can enhance information management in libraries, particularly in organising, storing, and integrating data. When combined with automation, AI may open up new possibilities for service delivery. While AI can automate certain existing services – such as chatbots and search tools – it was important to proceed with caution to ensure that service quality and staff wellbeing were not negatively affected (Denysovets & Bosyak, 2024). Libraries and library associations may collaborate with AI researchers and developers to create tailored applications that meet user needs and offer accessible services that were previously unattainable. The use of AI in libraries must adhere to ethical standards, such as the IFLA Statement on Libraries and Artificial Intelligence. For instance, AI-based programmes that collect large amounts of data – such as behavioural analysis software – must not violate users' rights to privacy or social justice (International Federation of Library Associations..., 2021).

In September 2024, Clarivate published the first Pulse of the Library report (Beit-Arie, 2024), dedicated to the role of artificial intelligence in transforming libraries around the world. The study was based on a survey of over 1500 librarians representing academic, national, and public libraries across various countries. The report focused on how libraries were beginning to integrate artificial intelligence into their operations, the benefits they anticipate from this technology, and the challenges they encounter during its implementation (Fig. 1).

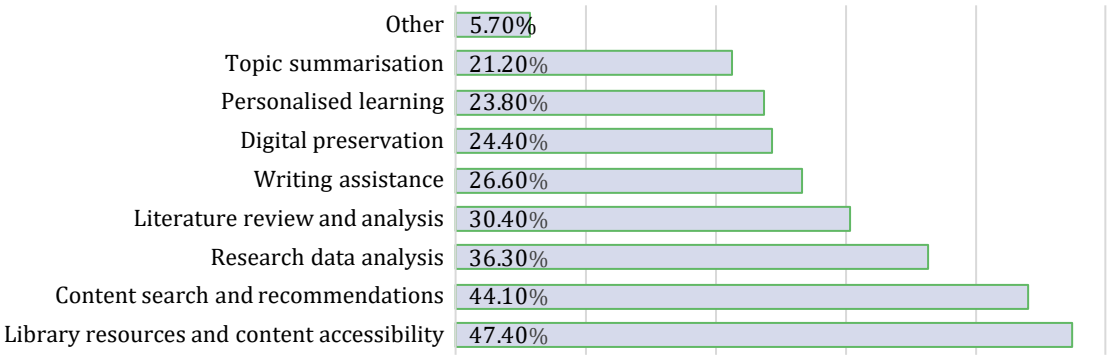

Figure 1. AI applications that are of greatest interest to libraries in supporting research and learning
Source: based on O. Beit-Arie (2024)

One of the key findings of the study was that over 60% of surveyed libraries were already actively planning or implementing initiatives related to the integration of artificial intelligence. For many, this technology was a strategic priority for the coming 12 months. Libraries expressed a strong interest in leveraging AI to enhance research activities, support student learning, and improve content accessibility. At the same time, the report highlighted that despite considerable enthusiasm for AI adoption, libraries face several challenges. The main obstacles included limited funding and a shortage of qualified staff capable of effectively working with AI technologies. Many librarians also raised concerns regarding the ethical implications of AI use, particularly issues surrounding data privacy and the reliability of algorithms.

Furthermore, O. Beit-Arie (2024) noted that the findings of the study could assist libraries and educational institutions in better understanding, how to harness AI to improve their services. The report features interactive visualisations that allowed users to analyse the data by region and library type, helping to identify both global trends and local specificities in AI implementation. These insights provided libraries with essential tools to adapt to the evolving digital landscape.

M. Sokil & A. Zvorskiy (2024) observed that the use of artificial intelligence enables the automation of routine tasks such as book classification and cataloguing, handling user queries, and providing recommendations based on individual interests. Chatbots can respond to frequently asked questions, assist with locating relevant literature, and even organise virtual tours of the library. In addition, artificial intelligence can support the development of digital libraries by offering users instant access to e-books, academic articles, audio materials, and other resources at any time and from anywhere in the world (Korzhylov & Sitsylitsyn, 2024).

The analysis of large data sets using AI also helped librarians to better understand the needs of their users and to enhance library collections in line with modern trends. AI can examine reader behaviour, search queries, and borrowing history to deliver personalised

recommendations. This improved user engagement and helped individuals discover new books, articles, and multimedia content that may be of interest to them (Demianiuk, 2023).

AI-based automated systems can also optimise library collection management by analysing demand for specific titles, forecasting user needs, and even assisting in decision-making regarding the acquisition of new books (Khmelnytska *et al.*, 2024). The introduction of voice assistants enhanced the accessibility of library services for people with disabilities. For instance, visually impaired users can interact with the library through voice commands, listen to audiobooks, or receive text materials in formats suited to their needs. The use of text recognition and automated translation technologies contributed to the development of multilingual library platforms, enabling a wider audience to access literature in various languages. Artificial intelligence also made it possible to generate audio versions of texts, facilitate automated reading, and navigate library resources using voice commands.

An important aspect of implementing emerging technologies is maintaining a balance between digital and traditional library services. Despite rapid digitalisation, the library continues to serve as a space for meetings, discussions, and cultural engagement. Integrating artificial intelligence with conventional practices allows libraries to preserve their social and educational role, while responding to the demands of the modern information society.

The use of artificial intelligence and chatbots in libraries opened new horizons for their development. These technologies not only enhanced user interaction with library resources, but also supported more efficient collection management, process automation, and improved access to information for all users (Innovative activities…, 2022). In the future, further integration of AI into the library sector may lead to even more profound transformations, turning libraries into true innovation hubs for knowledge and culture. In this context, the review of the Official website of Vernadsky National Library of Ukraine (2024) provided insight into the strategic vision and national priorities related to the implementation of emerging technologies in the library sector, including issues of digital literacy and cybersecurity.

In 2024, the library of the Hong Kong Polytechnic University announced the launch of an innovative AI-based chatbot, LiBot, designed to offer users round-the-clock support and information about library services. LiBot was an artificial intelligence system developed to provide users with instant answers to questions about library operations at any time and from any location. It drawn on publicly available library resources, including content from the website and reference guides, and provided links to sources for verification. To begin interacting with LiBot, users simply need to click the chatbot icon on the library's website, agree to the terms of use, and submit a query in English (Meet "LiBot"…, 2024).

The primary purpose of LiBot was to provide information related to library services. For locating books, audio and video materials, academic articles, and other resources, users were advised to use the library's One-Search catalogue. As chatbot's responses were generated using artificial intelligence, occasional inaccuracies may occur. Therefore, it was recommended to verify the information through the official library website or by consulting library staff directly. To help improve LiBot's performance, users can rate the quality of its responses by selecting either the "like" or "dislike" icon following each interaction. This feedback contributed to the ongoing development of the chatbot. If a query exceeded LiBot's capabilities, users were encouraged to contact library staff during service hours, referred to the Frequently Asked Questions section, or used alternative communication channels. The library hoped that LiBot will become an effective tool for providing convenient access to information resources and supporting users (Fig. 2).

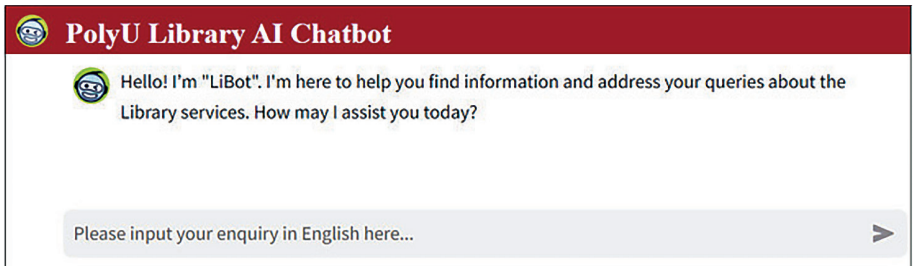

Figure 2. LiBot – chatbot of the Hong Kong Polytechnic University Library
Source: Meet "LiBot" – our 24/7 library AI chatbot! (2024)

The analysis of the Facebook page of the Lviv Regional Universal Scientific Library (2025) also highlighted the practical aspects of implementing chatbots for user communication and disseminating information about digital initiatives at the level of a regional library. Libraries were actively exploring emerging technologies such as artificial intelligence and machine learning to personalise search results, curate content, and

automate repetitive tasks (Onipko & Kozoriz, 2020). Virtual reality programmes were being tested to create immersive learning environments, while opened access initiatives support the wider dissemination of research outcomes. V. Medvedeva (2015) noted that new technologies, particularly artificial intelligence, hold promise for delivering personalised learning experiences and automated content management. The analysis of big data helped identify user needs, enabling libraries to tailor services and anticipate research trends. By employing advanced algorithms and machine learning techniques, libraries can better understand which resources were most in demand and adapt their collections and services accordingly.

Blockchain technology, which ensured secure data storage, has the potential to significantly transform knowledge sharing and collaboration. Due to its decentralised nature, blockchain provided a protected platform for storing and transmitting academic and research data, simplifying access and reducing the risk of unauthorised access or data loss. AI-based assistants offer personalised learning approaches tailored to individual needs. AI algorithms can automatically analyse vast collections, identifying relevant information with high accuracy, thereby saving librarians' time and ensuring that users can locate the knowledge they require (Artificial intelligence in…, 2019). The introduction of AI technologies into the library sector enhances user services, automates routine processes, and improves access to information resources, marking a vital step in the development of modern libraries.

AI technologies were rapidly being integrated into various aspects of public and private life, shaping a new reality. While AI offers solutions to a wide range of challenges, some scholars have warned of the potential risks associated with its use (Long & Magerko, 2020). Nonetheless, its implementation continues to advance, and applications of AI were becoming increasingly widespread. One example of such integration was the adoption of AI technologies by the Scientific and Technical Library of the Igor Sikorsky Kyiv Polytechnic Institute (Stefanovych, 2024).

The introduction of AI in university libraries has become essential due to the advancement of information technologies. The experience of foreign universities has demonstrated that such technologies improve library services and communication with users. In light of these findings, the Scientific and Technical Library of the Kyiv Polytechnic Institute (STL KPI) decided to implement AI to optimise one of its library processes. One promising direction identified was the development of a chatbot capable of providing users with information about the library's operations, its resources, spatial layout, and events. To realise this project, the BotpressGPT platform was selected. The main selection criteria were security, cost-effectiveness, and a user-friendly interface that enables use without requiring in-depth programming knowledge. BotpressGPT, developed by a Canadian company, has already been successfully applied in the library sector. STL KPI became one of the first university libraries in Ukraine to launch a virtual "library navigator" powered by AI (Fig. 3).

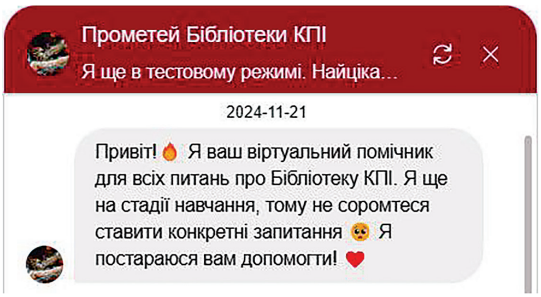

Figure 3. Prometheus – the AI assistant of the Scientific and Technical Library of KPI
Note: screenshot provided in the original language – "Prometheus at the Library of KPI. I'm still being tested. Hello! I'm your virtual assistant for all questions about the KPI Library. I'm still in the learning phase, so feel free to ask specific questions. I'll do my best to help you"
Source: based on D. Stefanovych (2024)

The chatbot was launched in mid-October 2023. During the first week, it was tested in a closed mode by library staff. Following an evaluation of its performance, the service was made available to all users. The chatbot's primary function was to provide prompt consultations on matters related to the library's operations, services, room locations, and ongoing events. In its first two weeks of operation, the chatbot processed over 140 queries and provided more than 250 responses. While it understands English, the chatbot was configured to reply exclusively in Ukrainian.

An analysis of user queries revealed that the most frequent questions concerned library services, such as the classification of academic studies using the UDC, electricity availability in the library building, opening hours, and information about events held on the premises. A significant advantage of the chatbot was its round-the-clock availability. To access the chatbot, users should visit the official website of the STL KPI and use the interactive window located in the bottom right-hand corner of the page. The chatbot was named Prometheus, reflecting its role in providing information within the educational and academic context of the library. The name was linked to the presence of Prometheusthemed art installations within the library, including a sculpture of Prometheus equipped with solar panels that provide Wi-Fi access.

The Luhansk Regional Universal Scientific Library, known as the Good Library, has become an important cultural and educational institution that has undergone two evacuations – first from Luhansk to Starobilsk, and later from Starobilsk to Cherkasy. Despite these challenges, the library has continued to operate actively, im-

plementing a travelling library project and working in a hybrid format in cities such as Dnipro, Kyiv and across the Zakarpattia. The library's main objective has been to unite displaced persons through educational events and to provide reliable access to information. Its activities have included Ukrainian language courses, media literacy and cybersecurity training, children's coding clubs, as well as the provision of trustworthy legal and psychological support resources. The Good Library also served as a methodological centre for libraries across the Luhansk Region, offering guidance on working under evacuation conditions, monitoring pressing issues, and assisting in identifying solutions. To facilitate communication and user support, the library employed modern online platforms such as Telegram, WhatsApp, and Facebook Messenger (Fig. 4).

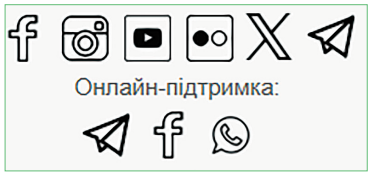

Figure 4. Online communication platforms used by the Good Library
Source: A modest dramatic and realistic story of a Good library. And thoughts/advice/wishes for other libraries on how to become cool (n.d.)

One of the library's key tools for supporting users was its Telegram chatbot (Fig. 5). Unlike traditional forms of library assistance, the chatbot offers round-the-clock availability. This enabled users to access essential information and receive consultations at any time convenient for them, regardless of the library's operating hours. It can provide instant responses to frequently asked questions regarding opening times, user regulations, resource availability, registration procedures, and more – saving time for both users and librarians. Thanks to its ability to analyse previous queries and user preferences, the chatbot can also offer personalised recommendations on literature, new arrivals, curated collections, or the library's online events. In situations, where physical access was limited, the chatbot became a vital tool for informing users about available e-books, audiobooks, databases, online courses, and other digital resources. It provided direct links, access instructions, and navigation support to help users make full use of these services remotely.

The use of AI in libraries offered a wide range of opportunities to enhance automation processes, improve access to information, deliver personalised services, and manage knowledge more efficiently. However, as these technologies continue to evolve, significant ethical issues have emerged that require careful analysis and resolution. One of the most pressing ethical concerns was the issue of copyright. AI can generate or modify texts by processing vast amounts of data, some of which may include works protected by copyright. This raised questions about, who held the rights to AI-generated content, and how to ensure that such content does not infringe upon existing copyright laws.

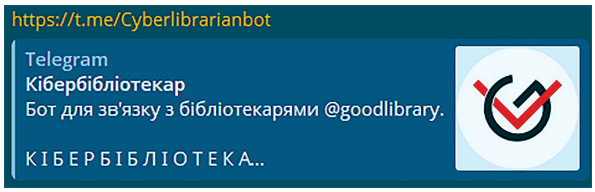

Figure 5. The Good Library chatbot on Telegram
Source: A modest dramatic and realistic story of a Good library. And thoughts/advice/wishes for other libraries on how to become cool (n.d.)

M. Maranchak (2024) noted that this issue becomes even more relevant, when AI was used to create new materials based on existing ones, potentially violating intellectual property rights if the content has not been properly licensed or authorised by the original authors and rights holders. In addition, the imperfection of the algorithms used by AI can lead to the selection or generation of content that fails to meet standards of quality or accuracy.

As noted by A. Cox (2022), another ethical issue concerns the risk of information manipulation and the spread of disinformation. AI can generate texts that appear entirely credible on the surface, but were often incomplete, inaccurate, or even fabricated. When libraries rely on AI for the automatic creation, adaptation, or retrieval of materials, there was a risk that users may receive incorrect or distorted information. This was particularly dangerous in academic and educational institutions, where accuracy and truthfulness were crucial to ensuring a high standard of teaching and research. Furthermore, according to research by M. Komova & D. Drapaliuk (2024), the ability to manipulate content through algorithms can result in the dissemination of biased or even harmful ideas, which undermined the ethical principles of librarianship, traditionally based on neutrality and objectivity.

The replacement of human staff has also raised ethical concerns. While AI can significantly improve the efficiency of library operations – particularly in areas such as cataloguing, search functions, and personalised recommendations – there was a risk that many librarians may lose their jobs as a result of these technological implementations. The changing role of humans in libraries could lead to social consequences, such as unemployment and a decline in service quality, as AI cannot replace all aspects of human work, including emotional intelligence, intuition, and the capacity for critical thinking (Malanchuk & Lishchuk, 2023).

Algorithmic transparency was another critical issue. AI systems used for search, recommendations, or

content generation were often complex and opaque to users. This can lead to situations in which library users were unaware of the criteria by which materials were selected and presented to them. A lack of transparency in algorithms may foster mistrust and even abuse in decision-making processes. For instance, if algorithms were biased, certain topics or sources may be overlooked or deliberately excluded, thereby limiting access to diverse and comprehensive information (Jobin *et al.*, 2019).

Another concern was the excessive proliferation of AI-generated texts within library collections without proper verification of their accuracy or compliance with quality standards. If libraries permit AI to generate large volumes of content without properly evaluating its accuracy or informational value, this may lead to the saturation of information systems with low-quality or superficial materials. Such a situation could significantly affect users' knowledge levels, as AI cannot provide the depth of understanding or critical insight that a qualified expert or academic can offer. This, in turn, diminished the overall quality of the library information environment and may negatively impact scholarly and educational activities (Lee, 2023).

While the use of AI in libraries has the potential to greatly enhance access to knowledge, automate routine processes, and make libraries more inclusive, it also necessitated careful ethical oversight. Libraries must adopt new technologies not only with regard to their technical capabilities, but also in line with ethical standards that ensure impartiality, accuracy, truthfulness, and high-quality content, as well as the protection of intellectual property rights and employment.

Conclusions

Modern technologies, particularly artificial intelligence and chatbots, have significantly influenced approaches to innovation within the library sector, opening up new opportunities for both librarians and users. The diversity of the Ukrainian library system included urban and rural institutions, as well as academic, public, and specialised libraries. Research must take these characteristics into account in order to develop adaptive strategies for the implementation of artificial intelligence and chatbots that meet the varied needs of users.

One of the main objectives has been to ensure equal access to technology for all segments of the population. Libraries were expected to serve as centres of digital literacy, where users can acquire the necessary skills to work with innovative tools. Furthermore, ensuring cybersecurity has become a key aspect, helping to protect users' data and enhance trust in library services. The evolution of artificial intelligence and chatbot implementation in the operations of public libraries in Ukraine has manifested in the automation of routine processes, the provision of personalised services, improved access to information, and the advancement of users' digital literacy. Libraries have become centres of innovation, where artificial intelligence has supported the optimisation of operations, enhanced data security, and enabled adaptation to contemporary technological challenges, making services more accessible and efficient for a broader audience.

Overall, the integration of artificial intelligence and chatbots into public libraries in Ukraine has opened up significant opportunities for the development of the sector, contributing to more effective service delivery, community support, and responsiveness to modern challenges. Artificial intelligence and chatbots have emerged as powerful tools capable of transforming public library services. Their implementation has improved service efficiency, supported adaptation to evolving information needs, and helped to broaden user engagement. For the successful integration of these technologies, Ukrainian libraries must consider both technical and ethical dimensions, ensuring accessibility and the security of services for all users. Further research should focus on examining international experience with the implementation of artificial intelligence in libraries, adopting best practices, and developing strategies to address existing challenges.

Acknowledgements

None.

Funding

None.

Conflict of Interest

None.

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Використання штучного інтелекту та чат ботів у публічних бібліотеках

Олександр Берестов
Аспірант
Національна академія керівних кадрів культури і мистецтв
01015, вул. Лаврська, 9, м. Київ, Україна
https://orcid.org/0000-0001-6896-5587

Анотація. Дослідження присвячено еволюції впровадження штучного інтелекту та чат-ботів у діяльність публічних бібліотек України в контексті сучасного технологічного прогресу. Актуальність теми визначається зростанням ролі інформаційних технологій у суспільстві, зміною потреб користувачів та необхідністю підвищення ефективності й конкурентоспроможності бібліотек. Мета роботи – проаналізувати вплив цифрових технологій, зокрема штучного інтелекту, на послуги бібліотек, а також дослідити етапи впровадження інновацій. У дослідженні використано методи аналізу, узагальнення, пояснення та класифікації. Розглянуто підходи до інтеграції штучного інтелекту в бібліотечну діяльність, зокрема впровадження чат-ботів для автоматизації комунікацій, покращення пошуку інформації та персоналізації послуг для користувачів. Також, було досліджено ключові напрямки застосування штучного інтелекту, включаючи автоматизацію рутинних завдань, створення інтелектуальних пошукових систем, рекомендаційних платформ та впровадження чат-ботів для забезпечення оперативного зворотного зв'язку з користувачами. Особливу увагу приділено розробці інтелектуальних систем, які здатні адаптуватися до індивідуальних потреб користувачів, забезпечуючи персоналізований досвід. Важливим аспектом дослідження стало вивчення етичних аспектів застосування штучного інтелекту в бібліотечній діяльності. Зокрема, розглянуто питання конфіденційності даних користувачів, можливості упередженості алгоритмів та впливу штучного інтелекту на свободу доступу до інформації. Впровадження штучного інтелекту та чат-ботів у діяльність публічних бібліотек є важливим кроком на шляху до створення сучасного інформаційного простору, який буде доступним, зручним та ефективним для кожного користувача. Результати даного дослідження сприятимуть формуванню стратегій успішного впровадження технологічних інновацій у публічних бібліотеках України. Вони допоможуть бібліотекам не лише покращити якість обслуговування користувачів та адаптуватися до потреб цифрової епохи, але й забезпечити свою конкурентоспроможність, підвищити ефективність роботи та сприяти інтелектуальному розвитку суспільства

Ключові слова: інформаційні установи; інформаційні технології; нейронні мережі; електронні ресурси; бібліотечні інновації; інтелектуальні помічники