ARTICLE

Case Study of the Implementation of AI Primo Research Assistant (Beta Version) in Academic Libraries in Poland

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ABSTRACT

One of the generative artificial intelligence tools developed for use in libraries, including academic libraries, is the AI Primo Research Assistant. Of the 65 academic libraries in Poland, only 19 have access to software that supports this tool. In practice, only 9 libraries have implemented it (data from March 2025). For the purposes of this study, original research was conducted to assess the implementation status of the Primo Assistant in academic libraries in Poland. Two anonymous surveys were developed for this purpose and sent to libraries that had implemented the feature, as well as to those with the capability to run the Primo Assistant (i.e., the Primo VE Discovery admin role), in order to gather information on why they had chosen not to implement it. The analysis revealed several positive aspects, mainly a reduction in the workload of staff tasked with preparing publication lists on topics requested by library users. Some concerns were also raised by library employees, mainly regarding the reliability of the metadata provided and the accuracy of the recommended publications. The study also revealed a general lack of awareness and a need for further implementation. This paper presents the first scientific study focused on the implementation of the AI Primo Research Assistant in Polish academic libraries.

INTRODUCTION

Currently, the only generative artificial intelligence (GenAI) tool that is potentially suitable for widespread use in Poland is the AI Primo Research Assistant (beta version), which is one of the features of the Primo VE discovery system from Ex Libris. It is worth noting that the Primo discovery system was implemented at these institutions as part of, among other initiatives, the Polish National Library's nationwide "e-service OMNIS" and "OMNIS 2" projects, and later as part of the development of the Integrated Library Resource Management System.[1] At present, 18 of the 65 academic libraries in Poland (universities supervised by the Ministry of Science and Higher Education) are participating in any of these projects.[2] Of these, nine have implemented the AI Primo Research Assistant as part of the Primo VE discovery service. One of the surveyed libraries—the Centre of Scientific and Technical Information at Lublin University of Technology—is not yet involved in the National Library project but uses the AI Primo Research Assistant in its operations and was therefore included in the survey. In total, 19 academic libraries were surveyed.

Polish academic libraries also utilize other GenAI-based solutions. These include features available in databases such as Opus AI, AI–Web of Science Research Assistant, and Statista Research AI. However, these are supplementary functions within tools that are already available in libraries. The same is true of the Primo Library Discovery Service. It is important to note that this

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represents an information technology solution with the theoretical potential for implementation in various Polish libraries, not just academic institutions.[3]

PURPOSE OF THE STUDY AND METHODS

The purpose of this article is to present a case study of the implementation of the AI Primo Research Assistant (beta version) in academic libraries of public universities in Poland. The aim of the study was to answer several questions: What was the reason for implementing the tool? Does the library promote its use, and if so, how is it promoted to users? Have employees received training on how to use the tool? Do library employees think training for users is necessary? How is the tool evaluated by librarians and users? Do library employees believe the tool helps meet users' information needs? And does the company providing the tool offer any support for the implementation and use of the AI Primo Research Assistant? For libraries that have the Primo VE discovery service but do not use the GenAI feature, we sought to find out whether they have plans to implement it. We also wanted to understand why users at these institutions are unable to access the AI Primo Research Assistant.

To answer these questions, original research was designed and conducted as follows. First, an interview was conducted with the director of one of the libraries that had implemented the tool and with the employee responsible for overseeing its use. Based on the information obtained during the face-to-face interview, a decision was made to conduct a survey among all academic libraries of public universities in Poland that had the potential to implement the tool in question. The research plan was carried out in multiple steps.

First, we checked how many academic libraries at public universities in Poland use the Primo VE discovery service. Implementing this tool enables the use of the AI Primo Research Assistant. The survey found that, out of 65 academic libraries of public universities in Poland, 19 use Primo VE, which means 19 libraries have the potential to offer the AI assistant to their users. However, only nine have actually launched the AI Primo Research Assistant, which means that half of the libraries (10), despite having the capability, have not taken the initiative to include this tool in their search services. It is worth noting that 18 of the libraries surveyed are participating in the National Library's project—Integrated Library Resource Management System. They, therefore, have the opportunity to implement the Alma library services platform and the accompanying Primo VE free of charge. One library (Centre of Scientific and Technical Information, Lublin University of Technology) purchased Alma and Primo VE independently.[4] At the time of the study (March 2025), its operations were not closely tied to the National Library project. Nevertheless, our aim was to include all academic libraries using this tool.

Next, each of the libraries that launched the AI Primo Research Assistant—except the one where the personal interview was conducted—was contacted to participate in a survey. To this end, emails were sent to the library authorities on March 25, 2025, requesting detailed responses regarding their work with the tool in an anonymous survey. As a result, responses were received from six library directors (approximately 66% of the nine).

The academic libraries of public universities in Poland offering the AI Primo Research Assistant are the following:

1. Main Library of Cardinal Stefan Wyszyński University in Warsaw
2. Main Library of the Gdańsk University of Technology
3. Library of the University of Opole

4. Main Library of Maria Curie-Skłodowska University in Lublin
5. Main Library of the University of Physical Education in Krakow
6. University Library of The John Paul II Catholic University of Lublin
7. Jagiellonian Library
8. Centre of Scientific and Technical Information, Lublin University of Technology
9. University Library, University of Warmia and Mazury in Olsztyn

On March 25, 2025, emails were also sent to library authorities that had not implemented the Primo Assistant but had the potential to do so, in order to find out why these libraries had not yet taken such steps. An anonymous survey was also developed for this purpose, in which eight libraries (80%) ultimately participated.

1. The academic libraries at public universities in Poland with the possibility of launching the AI Primo Research Assistant are the following:Nicolaus Copernicus University Library in Toruń
2. Library of SGH Warsaw School of Economics
3. Library of Wrocław University of Science and Technology
4. Wrocław University Library
5. Main Library of Wrocław University of Environmental and Life Sciences
6. Library of the University of Gdańsk
7. Władysław Grabski's Main Library, Warsaw University of Life Sciences
8. Main Library of the Academy of Physical Education in Wrocław
9. Main Library of AGH University of Science and Technology in Krakow
10. University of Warsaw Library

The surveys were prepared using Google Forms. The first survey, addressed to library directors who had implemented the AI Primo Research Assistant, consisted of 14 questions: single-choice, multiple-choice, and open-ended (Appendix A). The second survey, addressed to library directors who had not implemented the tool, consisted of two questions—single-choice and multiple-choice—with an option to provide additional information (Appendix B). The emails briefly explained the objectives of the study, described how the survey results would support the development of AI and GenAI in academic libraries, and included information about the availability period (March 25–31, 2025) and the estimated time needed to complete the surveys: approximately three minutes and one minute, respectively.

LITERATURE REVIEW

The available literature generally points to the need for incorporating AI tools into the activities of academic libraries. Research has identified both challenges and opportunities in implementing AI in these libraries. AI has the potential to transform library services by improving efficiency and the quality of user support. In academic libraries in Croatia, it has been noted that AI implementation is still in the early stages, with the main obstacles being a lack of funding, appropriate skills, and institutional support.[5] In Nigeria, research indicates that implementing information technology, including AI, is crucial for improving access to digitized information. However, academic libraries in Nigeria face problems such as a shortage of funds and low computer skills among staff.[6] In Indonesia, a survey of academic library staff about AI awareness found a positive attitude toward AI initiatives, which could help their implementation, but adequate resources and competencies are needed.[7]

In Poland, despite growing interest in AI in academic libraries—declared by nearly half of these institutions—their activity in this area remains limited. The main obstacles are insufficient staff competencies and the absence of regulations governing AI-based services.[8] Key challenges for these libraries include not only technical implementation but also educating staff and users on the ethical, critical, and responsible use of AI, as well as developing appropriate regulations and competencies related to AI literacy.[9]

AI can significantly improve service quality and efficiency in areas such as reference services, document circulation, cataloging, and classification, helping to meet the changing needs of academic library users.[10] Mallikarjuna also mentions search systems, automatic indexing, and resource recommendations supported by natural language processing and machine learning tools.[11]

In Nigeria, AI has been used in reference systems, indexing, and natural language processing, which can improve access to information.[12] A comparative article on Scopus AI and Scholar GPT tools analyzed their usefulness for academic research, noting differences in their responses. Scopus AI has an advantage in terms of its source base and expert lists, while Scholar GPT offers more informative concept maps, which could be useful for researchers and students.[13] There is also a lack of detailed comparative analyses of AI tools in the literature, suggesting that this area is still evolving and needs further research.[14] Auburn University Libraries has partnered with IBM Research to use AI and machine learning in academic libraries for one of its projects.[15] Although specific AI tools are available, their full implementation and use in academic libraries are still being researched and developed.

Generally, most AI tools in library resources and systems are applications of large language models (LLMs). Library providers have so far tended to integrate third-party LLM programs rather than develop and train their own (e.g., ProQuest uses OpenAI's GPT-4o Mini and Elsevier uses ChatGPT in Scopus).[16] This approach allows for faster and more economical implementation of new features, but it also raises concerns about potential differences between the data on which the models are trained and the nature of the scientific literature to which they are applied.[17]

According to Ali and Richardson, the introduction of new technologies in libraries changes the information skills of both librarians and users, which requires ongoing training updates.[18] The ability to use AI in academic librarianship is increasingly becoming a necessity. It is therefore not surprising that "without AI literacy skills, librarians are at risk of being unable to effectively serve their users."[19] Moreover, libraries have an important role to play in this regard. Huang, for example, emphasizes that these institutions can play a supportive role, acting as mentors by teaching students how to use AI.[20] Lo, on the other hand, describes competencies related to AI that support its effective use in academic libraries.[21] This, in turn, leads to "integrating AI into library services and operations, ultimately ensuring that libraries continue to be indispensable centers of knowledge, learning, and innovation in the digital age."[22]

It should be noted that academic libraries, although slower to implement AI, are gradually catching up in the adoption of AI solutions in their activities.[23] There are, of course, many possibilities for applying AI in these institutions. For example, AI has significant potential to improve user experience, streamline operations, and enhance access to information in innovative ways.[24] The authors of *New Horizons in Artificial Intelligence in Libraries* also describe applications such as machine learning, deep learning, content indexing, metadata, and library management and operations.[25] They write, "AI offers the promise of optimizing library workflows and processes by

automating tasks, reducing errors, and saving time and resources, using robotics, computer vision, and predictive analytics. It can open possibilities for new service delivery options, including enhanced 24/7 support for library operations, including summarizing and annotating research and other user assistance."[26] However, numerous barriers continue to hinder the full integration of AI in both developed and developing countries. Major challenges include a lack of qualified specialists, insufficient funding, concerns about ethics and privacy, limited technical infrastructure, and fears of job losses.[27] The implementation of AI tools in academic libraries faces several challenges, including a lack of adequate funding and librarians' expertise. While many initiatives are still in the pilot phase, partnerships are emerging to enhance long-term service quality. These factors should be carefully considered when planning successful innovation in this area.

Two main types of AI tools are most commonly used in academic libraries. The first type includes tools for creating, modifying, or supporting search queries. The second type consists of tools that summarize search results or their components. The use of AI to create and improve metadata is also becoming increasingly important. Additionally, there is a group of more specialized and less frequently used tools, including reader advisory, digital resource management, intellectual property management, and data visualization.[28]

There is no doubt that users increasingly expect personalized and intuitive experiences, which in turn requires advanced search and recommendation systems.[29] Additionally, when writing about AI in academic libraries, it is difficult not to overlook the use of chatbots to interact with users.[30] AI can also be applied in advanced ways in the digitization and preservation of historical documents and rare manuscripts.[31]

One of the few studies on the implementation of the Primo Assistant is a survey conducted by the Open University, which evaluated the functionality of the Primo Assistant.[32] The study found that participants viewed the AI Primo Research Assistant favorably, particularly regarding its support for research topic exploration, although it identified limitations in terms of access to full texts and its impact on users' information habits. The report suggests potential for further development and wider use of the tool in academic libraries.[33]

It should be noted that although at the beginning of 2025 there was indeed a lack of studies devoted exclusively to the AI Primo Research Assistant in academic libraries, the situation changed in the second half of the year. The first publications and announcements on this subject appeared at that time, including an article by Li and Wilson in the journal *Internet Reference Services Quarterly*.[34] Nevertheless, this study should be treated as the first analysis of the implementation of the AI Primo Research Assistant in academic libraries at public universities in Poland.

THE AI PRIMO RESEARCH ASSISTANT IN POLAND

Since 2017, the National Library has been implementing a nationwide project called "OMNIS e-service" and developing an Integrated Library Resource Management System.[35] The expansion of linked catalogs continues as part of the National Reading Development Program 2.0 for 2021–2025.[36] A union catalog presenting the collections of cooperating libraries is being developed. Notably, these institutions co-catalog their resources with the National Library as part of a nationwide library network through the aforementioned system.[37] The nationwide library network includes all public libraries, as well as libraries designated by the decision of the minister responsible for culture and national heritage. Additionally, other libraries may be included in the

network at the request of the appropriate organizing body, including academic libraries. As of September 2023, nearly 550 libraries were participating in the project, with the number expected to grow to 885 by the end of 2025.[38]

As part of this project, the Alma library services platform is being implemented, which is integrated with Primo VE—the latest version of the Primo academic discovery service. This system enables simultaneous searching across various information resources, including the library catalog, electronic databases, and other digital content.[39] A key feature of Primo VE is the use of GenAI through the AI Primo Research Assistant tool. This feature is optional, and each institution decides whether to enable it. To activate the tool, the library must enable it in the Primo VE administration panel, where it can be displayed as an icon or widget in the selected catalog view.[40] According to Ex Libris, the manufacturer of Alma and Primo VE:

> Primo Research Assistant is a generative AI-powered tool designed to streamline time-intensive tasks. It enables users to query academic content in natural language and utilizes the breadth of your library to pinpoint five articles that can aid in answering your question. The tool distills the most pertinent information from the descriptions/abstracts of each article to craft the response's overview that includes in-line references to the sources to provide transparency in how each source contributed to the response. Beneath the overview, these sources and additional sources are available for further exploration of the subject and for verifying the tool's responses.[41]

The implementation in Polish libraries became available in the third quarter of 2024, and as a result, libraries could begin using the tool in October 2024. The tool's features include semantic search and natural language queries, summary answers with references based on abstracts, links to full texts, search suggestions, and, importantly for Polish users, support for non-English queries and responses.[42] It is important to note that AI Primo Research Assistant supports natural language search, but queries do not have to be complete sentences. What is more, a group of words suggesting some meaning is also a practical way to formulate queries, as the system can recognize their context and match the appropriate search results.[43] The AI Primo Research Assistant generates results using the Ex Libris Central Discovery Index.[44] Notably, answers to the same question may vary: "There may be more than one possible answer and different resources that are relevant. If you are not satisfied with your answers, use the <<Try again>> button."[45] Responses to user queries are generated using a pre-trained LLM based on the GPT engine, which breaks down each query into individual components and processes them using Solr, an open-source search engine. Solr is used for searching and indexing large datasets. In this case, it performs deep searches of the Central Discovery Index. The system then selects the 30 best results, from which it presents the five that best match the user's query.[46]

It should be noted that the National Library project, in its initial assumptions, was intended to encompass all Polish libraries of various types, totaling 32,000.[47] Each of these institutions will theoretically be able to use Alma and the Primo VE Primo Library Discovery Service with the GenAI feature in the future. This makes it potentially the most widely used GenAI tool in Polish libraries. It is also one of the first tools of its kind to be introduced in Polish libraries. We agree with Flynn's statement that "Primo Research Assistant Beta has the potential to dramatically improve the user searching experience and instruction librarians' ability to walk through critical information literacy skills."[48] Students are increasingly using GenAI in their research and assignments, often receiving answers that are inaccurate or contain hallucinations. The Ex Libris tool is designed to provide instant answers to natural language queries and offer access to

"dependable resources and references, emphasizing transparency, proper accreditation, and intellectual property rights."[49] With the May 2025 release, libraries can limit the Primo Assistant to only those records the library has access to.[50] At the time of research, however, this tool had some limitations in its beta version. Some instructions were not yet supported by the Primo Assistant.[51] For example, users could not request materials of a specific type (e.g., peer-reviewed articles on Web 2.0) or from a specific time period (e.g., the most recent data on a topic). The Primo Assistant did, of course, provide answers to users' questions, and the algorithm took into account keywords such as "peer-reviewed." However, the search results would not be filtered by type or date.[52] You cannot indeed write a successful prompt with these kinds of limits, but since the February 2025 release, users *can* refine their searches by resource type ("Books," "Journal articles," and "Peer-reviewed") and date ("Last 12 months," "Last 5 years," "Last 10 years," or a "Custom date") by selecting the Refinement icon next to the Search Box to open the refinement options.[53] Additionally, at the time of the research, it was not possible to ask follow-up questions; each query was independent.[54] For example, if users asked about topics covered in the publications by a particular author, they could not ask about the specifics of individual texts, because the tool was not able to process that. Therefore, users had to phrase their questions carefully to receive a satisfactory answer (e.g., "How does a specific author define the phenomenon of Library 2.0 in their publications?").

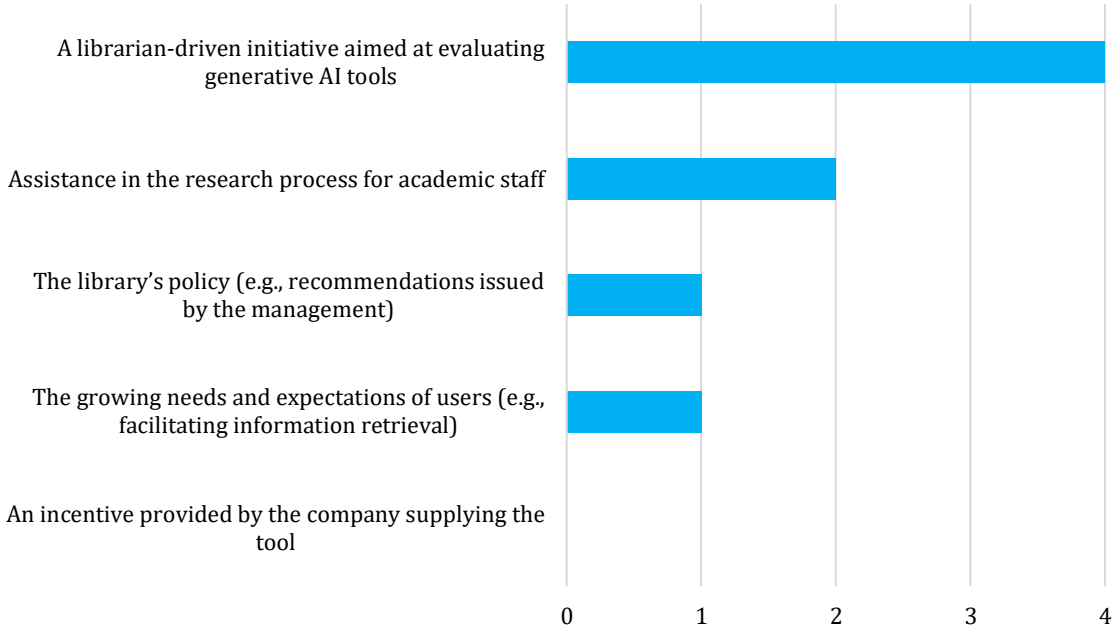
It is worth noting that in March 2025, it was announced that Primo VE was soon to be replaced by a newer version of the system, Primo NDE. As reported at the time by Aleph, published by Aleph Polska, the representative of Ex Libris in Poland: With the launch of Primo NDE, AI Primo Research Assistant will be made available in an improved production version that incorporates, among other things, the feedback and suggestions submitted by users of the beta version.[55] Even then, it was possible to conclude that in the near future, the tool would respond to user queries with increasing accuracy.

Results of Surveys Conducted in Libraries That Have Launched the Primo Assistant

Clarivate launched the AI-powered Primo Research Assistant on September 18, 2024.[56] From our survey, we learned that some libraries that adopted this solution began using it shortly after its release, with two respondents indicating October, and one each for November 2024 and March 2025.

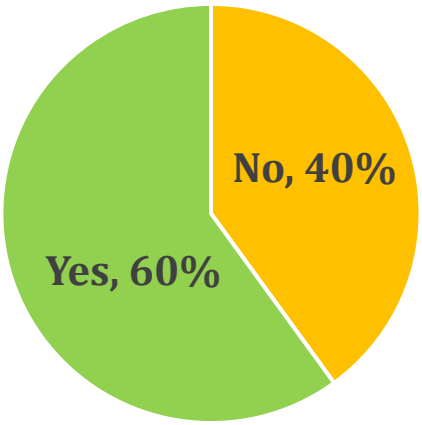
The next question concerned the reasons for launching the Primo Assistant. The decision to implement the tool was primarily driven by library staff (four responses). The second most common reason was related to the library's strategy, including management decisions (two responses). This is significant because library staff are best placed to assess whether a given tool would be useful for users. It is also worth noting that earlier studies have already shown some interest among Polish academic librarians in the use of AI and GenAI in libraries.[57] Therefore, the tool's launch may have been a consequence of this growing interest. Additionally, some responses mentioned the need to support university staff in the research process (two responses), which may be linked to growing demands from researchers for quick and accurate access to knowledge. The AI Primo Research Assistant provides answers based on the most relevant publications, which can be crucial for researchers. However, only one response mentioned the growing needs and expectations of users, suggesting that users may not yet be fully familiar with the tool. In most implementations, the process appears to be driven by library staff, which aligns with the broader understanding of how AI is currently being adopted. Although the responses are commendable, it seems reasonable for library management staff with the necessary skills to initiate such activities more often (Figure 1).

Figure 1. Reasons for activating the AI Primo Assistant.



When asked whether the library promotes the use of this tool, three responses were positive, and two were negative, and one library did not respond (Figure 2).

Figure 2. Does the library promote the use of this tool?

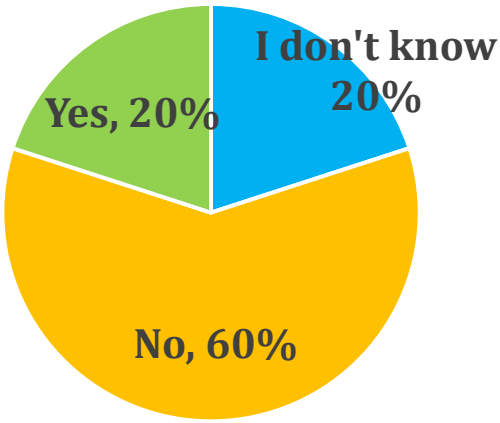


In our opinion, every AI tool should be widely promoted and discussed, especially now. Currently, the promotion of the Primo Assistant is still inconsistent, which may, unfortunately, affect its adoption by users. Promotional activities are mostly limited to posting information about the tool's launch on the website (three responses) or on social media (two responses).

Most employees have not received training on how to use the tool (three responses). This confirms the general lack of awareness about the need for training and promotional activities

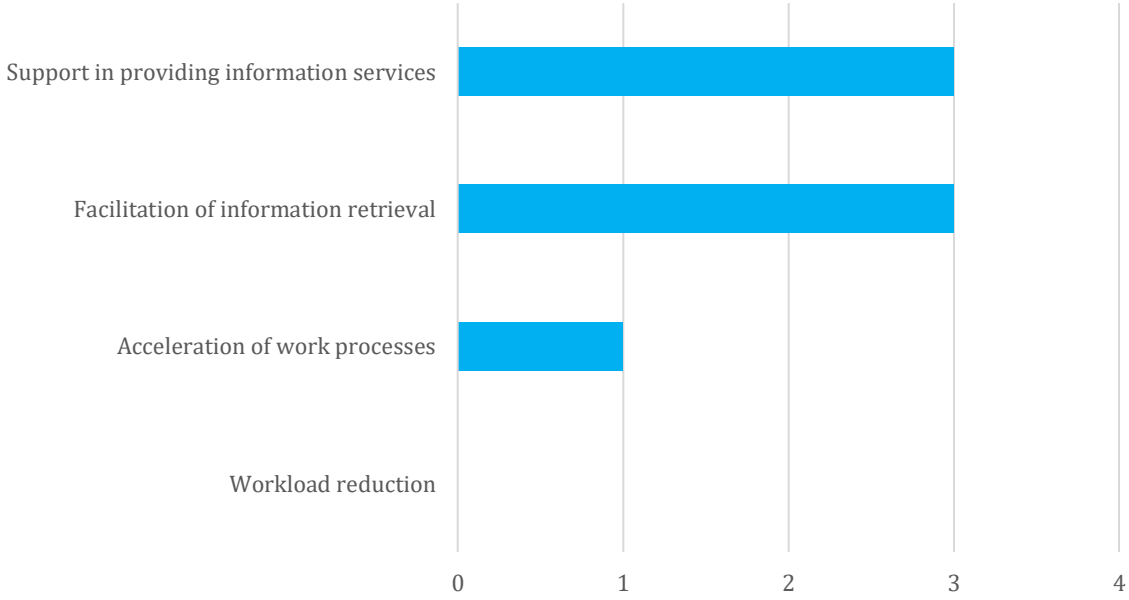
(Figure 3). In the subsequent question, respondents indicated that there is no need for additional training for library users on how to use the Primo Assistant (two responses), or that they had no opinion (two responses), while only one indicated a need for such training.

Figure 3. Have the staff members of your library received training in the use of the AI Primo Assistant?



The next questions assessed how library staff and users worked with the Primo Assistant. In both cases (60% of users and 80% of library staff), libraries indicated that they had no information on this, which means that they do not collect this type of data. Without such information, it is impossible to know whether and to what extent it is worthwhile to implement such solutions. The main positive aspects of using the tool were support in offering information services (three responses), facilitating information retrieval (three responses), and speeding up work (one response; Figure 4).

Figure 4. Emerging evaluations, if any, working with AI Primo Research Assistant.



However, 60% (three out of five responses) indicated that the Primo Assistant was not able to meet users' information needs in response to this closed-ended question.

The next question was open-ended: Do library staff see a need for any changes or improvements, or do they have any concerns about how this tool works? The answers were as follows:

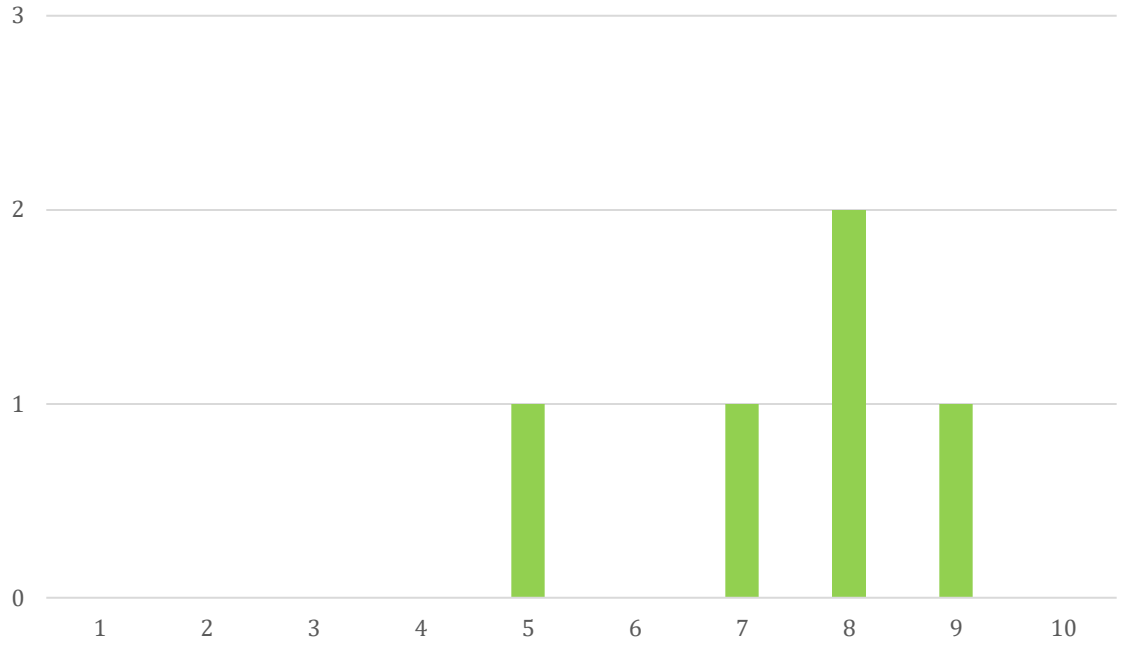
- "Lack of trust in AI-based tools."
- "Treating them more as a useful curiosity, a starting point for further information searches."
- "Library staff's acceptance of the functionalities proposed and offered by the provider."
- "Better metadata on which responses are generated, the ability to include local metadata in the process, and more accurate usage statistics."

Regarding the last comment from library staff, it is worth noting that the document "Primo VE Roadmap Highlights: 2026–2027" mentions the integration of local records as sources for Research Assistant, with support for various metadata formats and standards (MARC21, UNIMARC, Dublin Core, XML, etc.).[58]

Librarians feel apprehensive about using AI tools, which may stem from a lack of trust in the reliability of the responses generated—a sentiment confirmed by respondents ("Lack of trust in AI-based tools"). Undoubtedly, this refers to GenAI tools such as ChatGPT. However, previous studies have shown that some librarians view AI and GenAI tools as an interesting alternative to traditional search tools.[59] They are also open to using new technological solutions, although they are likely aware that the use of AI tools must be accompanied by a critical approach to the information generated and the need to verify its reliability. This is especially true now, in an era of growing disinformation. Still, it is clear that some librarians accept the new functionalities. It can be assumed that the Primo Assistant meets their basic expectations and may, in the near future, be seen as a valuable tool supporting them in their daily work. Librarians also pointed out the possibility of improving the metadata used for generating responses, along with the ability to incorporate local metadata into this process. It is also notable that, in their opinion, using the Primo Assistant can help obtain more accurate statistics, which in turn will allow the tool to be better adapted to the specific nature of a given library's work.

The next two questions concerned the activities of the company providing the tool, namely, encouraging its implementation (40% said "no," and 60% said "I don't know") and collecting feedback (60% said "no," and 40% said "I don't know"). The responses indicated that the respondents had little knowledge in this area and/or simply did not know. The final question concerned the overall assessment of working with the Primo Assistant on a scale from 1 (definitely negative) to 10 (definitely positive). The majority of responses were positive, ranging from 5 to 7, with 8 (the most frequent response, with two instances) and 9 being common (Figure 5).

Figure 5. What is your overall evaluation of working with the AI Primo Research Assistant?



Results of Surveys Conducted in Libraries That Have Not Launched the Primo Assistant

Six months after the launch of the AI Primo Research Assistant, half of the academic libraries at public universities in Poland with the technological capabilities to implement it have not yet done so. However, most of these libraries (six responses) have indicated their intention to adopt it, and two have stated that they have not yet considered this possibility. Reasons for not launching the Primo Assistant include poor functionality, limitations, unsatisfactory results in the humanities, unmet expectations, and the need for a better version. Unfortunately, there were also responses indicating a lack of relevant knowledge and competence, because two respondents explained that they did not have the Primo Library Discovery Service to which this extension could be added, which was not true. During the study, it was verified several times whether a given library had the appropriate infrastructure to implement the Primo Assistant. The answers to the second question also confirmed that some libraries had already begun work on implementing this GenAI tool.

DISCUSSION

The survey covered 19 Polish academic libraries of public universities that had the technical capability to implement the AI Primo Research Assistant, out of a total of 65 such institutions in Poland. Survey responses were obtained from 6 of the 9 libraries (66%) using the tool and from 8 of the 10 (80%) not using the Primo Assistant. This gives a total of 14 responses, representing 73% of the pool of potential respondents. This limited sample size makes it impossible to fully generalize the results to all Polish academic libraries, which is a key limitation of this case study. Nevertheless, these results lay a solid foundation for further, broader empirical research involving a larger sample, mixed methods (including in-depth qualitative interviews with directors, deputy directors, librarians, and users), comparative analyses between types of library institutions, and long-term tracking of implementation processes and their effects, as well as exploration of the tool's impact on the actual information behaviors of users.

By April 22, 2025, approximately 30% of academic libraries at public universities in Poland had access to a discovery service capable of launching the AI Primo Research Assistant. Respondents cited two main reasons preventing implementation: a lack of competence and knowledge in this area, and the fact that implementation had already been planned. As of October 28, 2025, only one library has implemented this tool.

The survey received a strong response (73% of those asked participated), indicating that libraries in Poland are interested in GenAI solutions. However, it is clear that certain measures are still lacking to make the AI Primo Research Assistant more popular among users and library staff. These results suggest that GenAI adoption in Polish academic libraries remains at an early stage, with significant potential for development. The low implementation rate underscores the need for capacity-building initiatives. Libraries could benefit from targeted training programs and workshops designed to improve staff skills and confidence in using AI tools. There is no doubt that further promotion of the tool and training on how to use the Primo Assistant are necessary. Promoting a new service solely through a post on the library website or social media is insufficient because it cannot be assumed that library users actively seek information about the library's offerings. New tools, such as GenAI assistants, require a more proactive promotional approach, including outreach beyond the library's internal communication channels with clear information about what is available, why it has been introduced, what it offers, and what benefits it provides to users.

Librarians can play a pivotal role in the adoption of GenAI solutions across institutions because they possess expertise in ethical issues related to database management and resource utilization, as well as the soft skills necessary to train users in the effective use of information retrieval tools.[60] This presents a clear opportunity for the library sector to gain recognition, particularly in the Polish context, where the social standing of library professionals is generally undervalued.

The authors, who have been teaching academic courses in information and library science for more than twenty years, observe that academic library users—both students and researchers outside the field—are often not well acquainted with new solutions implemented in academic libraries. In other words, they are frequently unaware of which tools and services are currently available. There is a growing demand in these institutions for training in the use of GenAI tools and AI assistants, such as the AI Primo Research Assistant. However, the range of services offered by academic libraries in this area remains limited and does not fully meet the needs of the academic community. Some institutions, however, provide training on the use of modern information tools. For example, the University Library in Warsaw offers students training on using GenAI tools alongside training on the Primo discovery system.[61] However, in the case of the latter, information is limited to the library catalog, basic and advanced search, availability of copies, reader accounts, and functions available at that level—there is no specific mention of the Primo Assistant.[62]

Libraries in Poland are still commonly perceived as book repositories, and borrowing is becoming less frequent. Therefore, the promotion of new services must be directed outward, using communication methods that can effectively reach users. These may include email invitations to workshops, training sessions, and presentations delivered in person, online, or in hybrid formats that demonstrate the benefits of the newly implemented tool. Paradoxically, this situation can be leveraged to the advantage of libraries, because they have access to vast textual resources that can serve as a foundation for training LLMs—a critical factor in ensuring the relevance of results. High-quality training material for GenAI leads to more accurate and effective query outcomes.[63]

Another effective approach is to publish instructions, tutorials, presentations, and other guidance related to the tool's operation on library websites. This practice is already used by foreign academic libraries. Notable examples include the Australian National University Library and the University of South Florida Libraries.[64]

In most implementations of the discussed tool, even library staff have not received appropriate training in its use. Some librarians do not perceive a need for such training. Although the GenAI tool is available in the library, librarians may be reluctant to encourage its use because they do not understand how it works, what benefits it provides, or what its limitations are. In some cases, they are not even aware of its existence. Interestingly, one response indicated that even supervisors lacked knowledge about whether any staff training had been conducted. This highlights broader systemic shortcomings. A GenAI tool may be offered in a library, and the library may choose to implement it or not for various reasons. However, once implemented, training for staff is typically neither conducted nor planned. Although most libraries do not offer such training, there is also little indication that staff perceive a need for it. Consequently, lower awareness among library employees leads to fewer implementations, limited user adoption, and a very slow pace of incorporating new technological advancements. Tools such as GenAI are intended to enhance research and academic work. This pattern mirrors earlier stages in the adoption of computers, the internet, online catalogs, and information retrieval systems. Undoubtedly, low staff awareness reduces the perceived value of new tools, delays their implementation, and limits promotional activities aimed at users. It is therefore crucial to develop training and educational programs at both the local (institutional) and national levels, including projects implemented by the Polish National Library.

The implementation of the AI Primo Assistant is optional—libraries can decide to implement it or not for various reasons. However, once the tool is implemented, employee training is not usually organized or planned. Although most libraries have not conducted such training, there is little evidence that employees recognize a need for it.

Evidence of formal and organizational shortcomings in the implementation of modern services in academic libraries in Poland is provided by respondents who indicated a lack of data on evaluating work with GenAI tools by library staff and users. The introduction of new services and tools requires continuous monitoring of feedback, because this provides valuable insights into user expectations, ideas, shortcomings, advantages, and potential improvements. Based on this information, libraries can take appropriate follow-up actions. Therefore, academic libraries in Poland should establish systematic methods for collecting user feedback and, after analysis, implement corresponding measures—provided these actions align with the library's strategic goals and mission.

Analysis of the survey results showed significant differences between libraries that have implemented the tool and those that have not. Libraries implementing the AI Primo Research Assistant often did so based on the initiative of their employees and the adopted institutional management strategy. In contrast, libraries that have not yet implemented the tool most frequently cited functional limitations, restrictions, and a lack of relevant staff competencies. Importantly, some libraries did not recognize their own implementation capabilities—two centers mistakenly assumed they lacked the appropriate infrastructure, despite its availability, highlighting systemic deficiencies in communication and education regarding new technologies.

Among libraries that implement the tool, the main barrier often concerns its quality and usefulness, and libraries are concerned about the need to better adapt it to the unique characteristics of each academic environment. Libraries that implemented the tool emphasized its benefits, including reduced staff workload, streamlined query handling, and decreased time spent preparing publication lists on topics of user interest. Criticism of the Primo Assistant, on the other hand, often concerned limitations such as the limited ability to filter results by publication type and date and the absence of solutions for full-text scientific articles.

It is worth noting that respondents emphasize the need to enrich the sources used for article recommendations, particularly regarding metadata. Concerns about the quality of generated recommendations, the transparency of the tool's operation, and the accuracy of metadata are closely connected to trust in GenAI tools. Although the lack of comprehensive Polish library resources in the Ex Libris Central Discovery Index was not explicitly cited, the need for local metadata integration suggests potential context-specific limitations that warrant further investigation. Our findings are consistent with those of Pontus Juth, who concluded that AI-based search tools cannot yet replace traditional systematic database searches, although they can serve as useful complements. These tools are valuable for identifying additional or hard-to-find sources and exploring unfamiliar research areas. A significant limitation is the lack of contextual information, because AI tools may generate results even when little or no relevant research exists, potentially misleading users and creating a false impression of research volume on a given topic. Moreover, the more systematic the search, the greater the need for transparency in the methods employed by the tool.[65] Research focusing on user feedback indicates that the AI Primo Research Assistant has been positively received.[66] Only systematic monitoring and clear communication about how such technological solutions operate can help build trust among library staff and users.

Additionally, planned but not yet executed implementations indicate strong potential for near-future adoption, highlighting the importance of supportive organizational policies and structured implementation strategies. Sharing experiences and best practices among libraries that have already adopted the Primo Assistant could facilitate knowledge transfer and lower perceived barriers. Developing guidelines and ethical frameworks for AI use in library services would further ensure responsible and effective integration of these technologies. Although Polish academic libraries are increasingly aware of the potential of GenAI, actual implementation remains limited. Strategic investments in staff training and collaborative knowledge-sharing initiatives are crucial to fully leverage the benefits of GenAI tools, improving both library operations and user services. Institutional support from university administrations and national bodies could play a critical role in promoting adoption and providing necessary resources. Finally, research on the use of the Primo Assistant among librarians and users is needed, and promotional activities based on this research should be carried out to encourage broader implementation.

CONCLUSIONS

The research identified key factors influencing the successful implementation of the AI Primo Research Assistant, including the role of library staff, the need for training, promotion of the tool, and systematic collection of data on its operational effectiveness. The results indicate that although there is technological potential and interest in the tool, its implementation remains at an early stage, highlighting a clear need for activities that build competence and awareness among library staff and users.

The implementation of the tool, through free participation in a project by the National Library of Poland, aligns with the principle of adopting GenAI through collaborative efforts.[67]

What practical implications can be identified for libraries in the context of implementing the AI Primo Research Assistant and other GenAI tools? The answer is relatively straightforward. Universities, libraries, and supervisory bodies should actively support the implementation of GenAI tools. This support should include providing adequate financial resources as well as information resources to enable technological innovation in libraries. Such measures will also allow for the effective use of AI's potential to streamline the work of librarians, increase resource availability, and improve the quality of user services.

Other key implications include the following:

- Preparing and systematically developing training programs for employees and users
- Proactively promoting GenAI services beyond traditional library communication channels
- Implementing systems to collect and analyze feedback to continuously improve the tool
- Encouraging cooperation between libraries to share experiences and best practices

Finally, the practical implications of using the AI Primo Research Assistant in academic libraries include significant support in reducing staff workload, particularly in preparing lists of publications on topics requested by users. The assistant enables natural language queries, quick searches for relevant articles, and the generation of abstracts with references to sources, improving both the efficiency and quality of information services. Additionally, recommendations from libraries already using GenAI tools, the quality of generated data, and the education of users and librarians form the basis for sustainable implementation of modern tools in libraries. A lack of awareness of these technological tools, limited training, and doubts about the transparency of their operation contribute to slow adoption, low utilization of GenAI's potential, and limited innovation in academic library activities.

APPENDIX A: THE USE OF THE AI PRIMO RESEARCH ASSISTANT IN ACADEMIC LIBRARIES OF PUBLIC UNIVERSITIES IN POLAND

1. When was the AI Primo Research Assistant implemented in your library (day, month, year)?

2. What was the reason for implementing the AI Primo Research Assistant?

- Library policy (e.g., recommendations from the library management)
- Encouragement from the vendor providing the tool
- A grassroots initiative by librarians to explore/test generative AI solutions
- Growing user needs and expectations (e.g., facilitating information search)
- Support for the research process of university staff
- Other

3. Does the library promote the use of this tool?

- Yes
- No
- I don't know

4. If the library promotes the use of the AI Primo Research Assistant, in what ways does it do so?

- Information on the websites
- Information shared on social media
- Tutorials
- Training sessions for library users

5. Have the staff at your library received training on using the AI Primo Research Assistant?

- Yes
- No
- I don't know

6. Do you believe that additional training is needed for library users on how to use the AI Primo Research Assistant?

- Yes
- No
- I don't know

7. How do users evaluate the tool in question?

- We do not have such information
- They evaluate it very positively
- They evaluate it neutrally
- They evaluate it negatively

8. How do library staff evaluate working with this tool?

- We do not have such information
- They evaluate it very positively

- They evaluate it neutrally
- They evaluate it negatively

9. The emerging evaluations, if any, concern the following aspects:

- Workload reduction
- Acceleration of work
- Facilitating information retrieval
- Support in providing information services

10. Do you believe that the AI Primo Research Assistant is capable of meeting users' information needs?

- Yes
- No
- I don't know

11. Do library staff perceive the need for any changes of improvement, or do they express any concerns regarding the functioning of this tool (open-ended question)?

12. Does the vendor encourage its implementation?

- Yes
- No
- I don't know

13. Does the vendor collect feedback regarding the tool's performance?

- Yes
- No
- I don't know

14. What is your overall assessment of working with the AI Primo Research Assistant on a scale from 1 (definitely negative) to 10 (definitely positive)?

APPENDIX B: THE POSSIBILITY OF USING THE AI PRIMO RESEARCH ASSISTANT IN ACADEMIC LIBRARIES OF PUBLIC UNIVERSITIES IN POLAND

1. Does the library plan to launch the AI Primo Research Assistant?

- Yes, it intends to
- This has not been considered so far

2. Why has the library not yet launched the AI Primo Research Assistant?

- The launch of the AI Primo Research Assistant has already been planned
- The implementation of the AI Primo Research Assistant is currently in progress
- No need perceived from the library users
- No need perceived from library employees
- Lack of awareness of the tool's existence and its functionalities
- Lack of competence in the field of artificial intelligence
- Other

ENDNOTES

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