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Artificial Intelligence Policies of the Ministry of Culture and Tourism of the Republic of Türkiye for Public Libraries: The Case of the Aydın Provincial Public Library**

Türkiye Cumhuriyeti Kültür ve Turizm Bakanlığının Halk Kütüphanelerine Yönelik Yapay Zekâ Politikaları: Aydın İl Halk Kütüphanesi Örneği

Abstract

Artificial intelligence technologies are evaluated in the literature as tools that facilitate access to information and contribute to the improvement of library services, while national policies focus on establishing the infrastructure required for digital transformation. Artificial intelligence-supported cataloging systems used in libraries enable users to find the books they are looking for more quickly, while personalized recommendation systems direct readers to content relevant to their interests. This study was conducted using document analysis, a qualitative research method, to determine the current status of artificial intelligence applications in the Aydın Provincial Public Library in Türkiye and to examine the policies of the Republic of Türkiye in this field. Within the scope of the study, relevant policy documents in Türkiye, as well as publicly available institutional documents and materials concerning the Aydın Provincial Public Library, were examined. The study examines the Ministry of Culture and Tourism's artificial intelligence policies and initiatives concerning public libraries. In addition, within the context of the Aydın Provincial Public Library and in relation to the Ministry of Culture and Tourism's AI policies, the technological facilities available at the library were examined. The findings indicate that certain AI-based platforms made available by the Ministry within the framework of publicly accessible services are in use at the library.

Keywords: Artificial intelligence, public libraries, Ministry of Culture and Tourism, augmented reality, holograms, libraries

Öz

Yapay zekâ teknolojileri literatürde bilgiye erişimi kolaylaştıran ve kütüphane hizmetlerinin geliştirilmesine katkı sağlayan araçlar olarak değerlendirilirken, ulusal politikalar dijital dönüşüm için gerekli altyapının oluşturulmasına

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** Previous Conference Presentation

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odaklanmaktadır. Kütüphanelerde kullanılan yapay zekâ destekli kataloglama sistemleri, kullanıcıların aradıkları kitaplara daha hızlı ulaşmalarını sağlarken, kişiselleştirilmiş öneri sistemleri okuyucuları ilgi alanlarıyla ilişkili içeriklere yönlendirmektedir. Bu çalışma, Türkiye'deki Aydın İl Halk Kütüphanesinde kullanılan yapay zekâ uygulamalarının mevcut durumunu belirlemek ve Türkiye Cumhuriyeti'nin bu alandaki politikalarını incelemek amacıyla nitel araştırma yöntemlerinden doküman analizi kullanılarak gerçekleştirilmiştir. Çalışma kapsamında Türkiye'deki ilgili politika belgeleri ile Aydın İl Halk Kütüphanesine ilişkin kamuya açık kurumsal dokümanlar ve materyaller incelenmiştir. Çalışmada, Kültür ve Turizm Bakanlığının halk kütüphanelerine yönelik yapay zekâ politikaları ve girişimleri incelenmiştir. Ayrıca Kültür ve Turizm Bakanlığının yapay zekâ politikaları bağlamında Aydın İl Halk Kütüphanesine yönelik incelemede, kütüphanede sunulan teknolojik imkânlar değerlendirilmiştir. Bulgular, Bakanlık tarafından kamuya açık hizmetler çerçevesinde kullanıma sunulan belirli yapay zekâ tabanlı platformların kütüphanede kullanıldığını göstermektedir.

Anahtar Kelimeler: *Yapay zekâ, halk kütüphaneleri, Kültür ve Turizm Bakanlığı, artırılmış gerçeklik, hologramlar, kütüphaneler*

Introduction

We use artificial intelligence (AI) in many areas of our daily lives, whether on social media platforms, in academic research, or on smart maps and e-commerce sites. AI has gained significant public attention, particularly since the release of ChatGPT, a generative conversational AI developed by OpenAI, in November 2022. The *Artificial Intelligence Index Report* (Maslej et al., 2025) prepared by Stanford University addresses the global spread of artificial intelligence, revealing that adoption is rapidly increasing in developing countries but that this process is not progressing equally due to infrastructure and resource differences. The report emphasizes that countries that adapt to artificial intelligence technologies early gain a competitive advantage, while other countries struggle to bridge the digital divide. Türkiye, a developing country, is noted to have had a median value of \$2.81 million in public AI-focused contracts between 2013 and 2023 (Maslej et al., 2025). Artificial intelligence is leading to fundamental changes in the technological infrastructure, personnel employment processes, and service delivery models of public and private sector institutions. One such institution is public libraries. Public libraries are widespread social institutions that deal with recorded information, aim to ensure the continuity of individuals' relationship with information, and in this context, must constantly update their tools, methods, and services; they must be developed in a public, planned, and coordinated manner (Karadeniz, 2019). Public libraries provide unlimited free access to library resources and services to individuals in a specific community, region, or geographical area and are fully or partially supported by public funds. The Ministry of Culture and Tourism of the Republic of Türkiye is taking significant steps to increase the use of artificial intelligence in public libraries. Public libraries in Türkiye, like many public libraries around the world, provide library services free of charge to individuals of all age groups, regardless of gender, race, or social status. Public libraries have broader authority than academic libraries and most private libraries, so they should develop their collections to reflect diversity. Public libraries offer a variety of services. The main ones are cataloging and classification, lending services, reference services, and mobile library services. In this context, it can be said that artificial intelligence technologies have a wide range of applications in public libraries.

A review of the literature reveals that research on the integration of artificial intelligence technologies into libraries has increased in recent years. Developing policies and standards for the ethical, secure, and effective use of artificial intelligence technologies in libraries is extremely important. In his study titled *AI Experimentation Policy for Libraries: Balancing Innovation and Data Privacy*, Gupta suggests different experimentation strategies based on the frequency of library tasks and data-sharing needs, stating that library staff can explore AI technologies without violating data privacy. To develop the practical application of the AI experimentation framework and policy, it is emphasized that it is crucial to help librarians understand how to identify sensitive data, convert real data into synthetic data, and comprehend the consequences of sharing information with commercial large language model service providers. It also highlights the fundamental training needs of library staff in data privacy, ethical AI practices, and risk assessment, and offers solutions such as checklists, training programs, and information-sharing platforms to empower library professionals. This approach supports the controlled and secure progression of the AI transformation process in libraries (Gupta, 2026). Öztürk and Özel (2021), in their study examining the attitudes and competencies of librarians in Ankara regarding artificial intelligence (AI), noted that librarians lack sufficient knowledge about AI applications and their professional benefits and do not show interest in this subject. However, it was determined that the librarians participating in the study believed that AI would be widely used in libraries in the future and would be particularly useful in routine and time-consuming tasks. In a study examining the attitudes of public library employees in Türkiye towards artificial intelligence, it was noted that while participants expressed positive attitudes towards the economic, technological, and professional benefits of AI, they showed a more indecisive approach towards items containing negative statements, such as AI being dangerous or leading to people being monitored and controlled (Kavak, 2024). When examining the initiatives and policies of the Ministry of Culture and Tourism, to which public libraries in Türkiye are affiliated, regarding artificial intelligence, it can be predicted that the number of AI-based services in libraries will increase. In addition, the success of such initiatives in the field of librarianship can be said to be directly related to the high level of artificial intelligence literacy among librarians working in public libraries. In a study aimed at determining the artificial intelligence literacy level of public library staff in Izmir, it was stated that the artificial intelligence literacy levels of library staff were low, but that participants who graduated from the Information and Document Management department had more knowledge in this area compared to those who did not receive training in this field (Polat, 2024).

The purpose of this study is to determine the areas of application of AI technologies in public libraries and to examine these technologies within the context of national and international policies. In this context, the aim is to analyze the practices and policies of the General Directorate of

Libraries and Publications under the Ministry of Culture and Tourism, to which public libraries in Türkiye are affiliated. At the same time, the implementation status of the Ministry of Culture and Tourism's AI policies is examined specifically in relation to the Aydın Provincial Public Library. Although there are various studies in the literature examining the application areas and current status of AI technologies in public libraries, studies focusing specifically on Türkiye's institutional AI policies in light of international policy frameworks remain limited. Thus, this study aims to fill this gap by analyzing policy frameworks alongside local-level implementations, specifically focusing on the Aydın Provincial Public Library.

- RQ1: How are the application areas of AI technologies in public libraries addressed within national and international policy documents?
- RQ2: How do the policies and practices of the General Directorate of Libraries and Publications align with international AI frameworks for public libraries?
- RQ3: To what extent are the AI policies of the Ministry of Culture and Tourism implemented in practice, specifically within the sample of the Aydın Provincial Public Library?

Therefore, the research is expected to contribute to the literature by addressing these questions.

Method

This study was conducted using qualitative research methods with the aim of determining the current status of artificial intelligence applications in public libraries in Türkiye and examining the country's policies and strategies in this field. Document analysis was adopted as the primary research method, allowing for a detailed examination of relevant policy texts and institutional materials within their natural context. Within the scope of the study, the Aydın Provincial Public Library was analyzed through its relevant documents and operational materials. The data for the study were obtained exclusively through document analysis. As part of this analysis, documents and publications from the Ministry of Culture and Tourism of the Republic of Türkiye, the General Directorate of Libraries and Publications, the Ministry of Industry and Technology, and the Presidential Office for Digital Transformation were systematically examined. In addition, policy documents, strategy reports, and guidance documents published by UNESCO and IFLA were reviewed in order to identify the international approach to artificial intelligence and digital transformation initiatives in public libraries.

In the document selection process, the following were identified as the key criteria: (i) that the documents had been published by official bodies; (ii) that they were directly related to public libraries, digital transformation, or artificial intelligence policies; and (iii) that they were publicly available and accessible. Documents not directly relevant to the research objective, those that are

no longer up to date, or those that do not constitute reliable official sources were excluded from the scope of the analysis. The document analysis was based on documents published between 2000 and 2025. The documents obtained were analyzed using qualitative content analysis. During the analysis process, the documents were first read in detail and then coded in line with the research objectives. During the coding process, the following were used as key analysis categories: UNESCO and IFLA Policies, Artificial Intelligence-Based Library Applications, The Use of Augmented Reality in Libraries, Hologram Technologies in Libraries, Artificial Intelligence Policies and Applications for Public Libraries in Türkiye, and The Ministry of Culture and Tourism's 'Digital: The Key to the Future: AI-Based Smart Libraries'. Similar codes were grouped under common themes, and the findings were interpreted.

Limitations of the Study

This study has several limitations that should be taken into account when interpreting the findings. First, the research design relies strictly on document analysis and qualitative policy analysis without incorporating empirical field research or direct observational data from libraries; therefore, the findings cannot be generalized to all public libraries across Türkiye. Second, the study did not gather primary empirical data through surveys or similar methods from library personnel or users, which limits the assessment of user experience and staff perceptions in the field. Third, the analysis of the local context is restricted to the official administrative data and documents of the selected region (Aydın), rather than a broad, multi-province empirical sample. Finally, the technical architecture, algorithmic functionality, and backend AI integration of the examined digital applications were not independently verified through technical software audits, but were instead evaluated based on publicly available official documents and policy texts. To address these limitations, future research is recommended to incorporate field studies, staff and user interviews, multi-province sampling, and technical algorithmic validation.

Findings

Numerous international and national policies, regulations, and strategic documents have been identified regarding the integration of AI applications into libraries.

UNESCO and IFLA Policies

UNESCO (United Nations Educational, Scientific and Cultural Organization) published a recommendation document titled *Recommendation on the Ethics of Artificial Intelligence* in 2021, setting specific standards for the development and use of artificial intelligence. This document establishes a global ethical framework for the development and application of AI technologies in line with the principles of human rights, human dignity, and environmental sustainability. These recommendations are intended to serve as a global reference framework for UNESCO's 194

member states. The standards for AI use established by UNESCO can be summarized under the following headings:

- **Respect for human rights:** Artificial intelligence must always protect human rights, human dignity, and freedoms.
- **Human oversight and supervision:** Artificial intelligence systems should operate under appropriate human oversight and control, ensuring that ultimate ethical, legal, and operational responsibility and decision-making authority remain with human actors.
- **Equality and justice:** Artificial intelligence should not produce discrimination among people based on age, race, social status, etc. Equal access opportunities should be provided.
- **Data protection and privacy:** Attention should be paid to the privacy of individuals. Personal data must be collected and processed in a secure and transparent manner.
- **Environmental sustainability:** The use of artificial intelligence applications should not harm the environment and should focus on reducing the carbon footprint.
- **Well-being and welfare:** Artificial intelligence applications should avoid harming individuals and society and should aim to increase welfare.
- **Accountability and responsibility:** People should be held accountable for the development and use of artificial intelligence systems and applications, and there should be no escape from erroneous results in this regard.
- **Transparency:** Artificial intelligence should be explainable in line with transparency, meaning that the working mechanism of artificial intelligence systems, the data they are trained on, and how they make decisions should be understandable.

UNESCO's AI recommendation document specifically recommends promoting access to technology for women and minorities. It also emphasizes the need to increase artificial intelligence literacy in society and to contribute to the transformation of the workforce by imparting new skills (UNESCO, 2022).

These recommendations outlined by UNESCO present a human-centered vision for artificial intelligence. It can be said that the protection of human rights is crucial in preventing serious risks such as social inequalities, loss of privacy, and environmental damage. Although it does not directly concern public libraries, it is very important in terms of providing a global framework for the ethical use of AI in public library services and technological applications.

According to the *IFLA Statement on Libraries and Artificial Intelligence* (2020), libraries can shape their service policies in the following areas:

- **Integration of artificial intelligence into service processes:** In this regard, public libraries can use artificial intelligence technologies in areas such as search, classification, and information organization. Examples include advanced optical character recognition

(OCR), automated applications for classification, and the development of robot-assisted user services.

- **Protection of personal data and user privacy:** Service policies can be designed in the context of protecting personal data and adhering to ethical responsibility principles regarding user privacy. In this regard, the use of artificial intelligence should be carried out within the framework of the ethical principles established by IFLA. In particular, algorithms used to track user behavior must be used in a way that does not violate the principles of privacy and equality.
- **Digital and algorithmic literacy:** Public libraries can design digital literacy and algorithmic literacy training to educate the public. In this regard, they can take on the role of informing and educating the public about artificial intelligence. Through this training, the public can understand how algorithms influence decision-making processes and thus become conscious information consumers.
- **Lifelong learning and reskilling:** Public libraries can respond to the changing skill needs of society in terms of lifelong learning and reskilling. They can play a particularly important role in the transformation of individuals, especially in terms of information technology education and digital skills acquisition.
- **Support for ethical research:** Support can be provided for ethical research in the field of artificial intelligence. In this regard, libraries can contribute to the development of ethical artificial intelligence policies thanks to their expertise in data management, information security, and archiving. They can also prevent unethical practices with effective artificial intelligence procurement policies.
- **Artificial intelligence literacy programs:** They can promote artificial intelligence literacy programs. Artificial intelligence literacy can raise awareness not only about technology but also about data privacy, algorithm literacy, transparency in decision-making processes, and their impact on society. In this context, public libraries can serve as widespread education centers as they are accessible to all age groups (IFLA, 2020).

In this regard, public libraries can play important roles not only in using artificial intelligence to provide services, but also in supporting lifelong learning processes within the community and protecting ethical principles in society. In particular, it is crucial that AI applications do not violate library user privacy and equality principles. A comparative analysis of Türkiye's national library policies and the empirical practices at the Aydın Provincial Public Library against global AI benchmarks (UNESCO/IFLA) is presented in Table 1.

Table 1. Comparative Analysis of UNESCO/IFLA Global AI Framework, Türkiye’s National Library Policies, and Aydın Provincial Public Library Practices (Authors’ analysis based on IFLA (2020), UNESCO (2022), and KTB (2025c).

Global Benchmark Criteria (UNESCO/IFLA)	Alignment Status in Türkiye’s National Library Policies	Empirical Status (Aydın Provincial Public Library)
1. Digital Inclusion and Equal Access	High Alignment: Policies strongly emphasize expanding digital access and infrastructure across public libraries.	Implemented through modernized hardware and digital access kiosks.
2. Ethical AI, Privacy and Data Protection	Partial Alignment: Addressed through general national data legislation (KVKK), but lacks library-specific AI ethics guidelines.	Basic privacy measures apply, but no dedicated AI privacy protocol exists.
3. AI Literacy and Workforce Upskilling	Partial Alignment: Broad digital literacy targets exist, yet structured AI training programs for librarians remain limited.	Staff engagement relies on individual initiative rather than systematic AI training.
4. Transparency and Human Oversight	Low Alignment: Institutional documents lack explicit mechanisms for human-in-the-loop oversight for automated library services.	Operational decisions and catalogue management remain fully manual or traditional.

Artificial Intelligence-Based Library Applications

Artificial intelligence technologies are being used effectively to improve service quality and strengthen the technological infrastructure in libraries. There are various application areas for artificial intelligence in libraries. One of the most well-known of these applications is AI-supported cataloging systems, which enable users to access the resources they are looking for more quickly. In addition, personalized recommendation systems make it possible to direct users to relevant content related to their interests and fields. Augmented reality and hologram technologies used in libraries are also among the innovative AI-supported applications.

The Use of Augmented Reality in Libraries

De Sarkar (2023) defines augmented reality as “*an exciting technology that empowers real objects to be overlaid with digital elements with audio-visual effects to offer an enhanced information experience*” (p. 7). Augmented reality (AR) is noted to enable librarians to transform existing traditional systems and services into innovative, user-centered systems, thereby allowing them to provide more effective services (Chen & Yang, 2024; Oyelude, 2018). Shahzad et al. (2025) state that augmented reality technology makes significant contributions to increasing user interaction in libraries, developing innovative services for libraries, and supporting experiential learning processes. The study examining the impact of augmented reality on libraries reached the following conclusions:

- **User engagement:** Augmented reality technology enables library users to interact effectively with information resources and services, increasing their interest in libraries and contributing to the transformation of libraries into user-friendly, modern spaces.
- **Library production area innovations (Maker Space):** AR is used in innovative production areas within libraries to make the learning experience more engaging. This supports innovation and entrepreneurship.
- **Experiential learning:** Thanks to AR technologies, library users have the opportunity to actively participate in the learning process while discovering library resources.
- **Effective library management:** AR technology makes libraries more efficient in terms of resource utilization and service design. It reduces errors, particularly in material management, book tracking, and information access processes, while also simplifying management.
- **Supportive role for librarians:** AR enables librarians to optimize their work processes. For example, they can perform effective catalog management, improve user consultation services, and organize virtual events using AR technologies (Shahzad et al., 2025).

As can be understood from the above explanations, augmented reality (AR) technologies can be said to make libraries more accessible and interactive by integrating their physical and digital services.

Hologram Technologies in Libraries

Hologram technology used in libraries is a digital imaging technology that creates three-dimensional visual representations of physical objects using laser technology, providing viewers with a realistic sense of depth and volume (Wójcik, 2018). Hologram technology is used in libraries as an effective tool to enhance the user experience and present information resources in innovative and interactive ways. Considering the technical advantages offered by holograms and the services provided by libraries, holograms can be used in many ways. For example, 3D book and object exhibitions, virtual author meetings, virtual museum spaces offering historical and cultural

experiences, accessibility and inclusivity for disadvantaged groups to access information, and event and promotional activities can be considered.

Hologram technologies enable the creation of environments where library materials can be examined without physical damage. These technologies prevent the constant wear and tear of resources while also allowing users to access these resources remotely, even if they are not physically present in the library. This enables individuals who are unable to physically visit the library, particularly due to distance or physical disabilities, to access library resources and staff more effectively and interact with them (Duncan, 2024). The hologram technology and augmented reality used in libraries are compared in the table below.

Table 2. Comparison of Hologram and Augmented Reality (AR) Technologies Used in Libraries

Feature	Hologram Technology (Wójcik, 2018)	Augmented Reality (AR)
		Technology (Shahzad et al., 2025)
Definition	Three-dimensional images are created in free space without the need for a physical object.	Digital layers are superimposed onto real-world objects.
Mode of Use	Independent digital content is generated.	Digital information is integrated with objects in the real environment.
Library Application Areas	3D presentations of rare collections, virtual guides, holographic exhibitions, etc.	Book-finding guides, virtual orientations, information quizzes.
Visual Experience	Offers viewers the opportunity to observe realistic 3D objects suspended in space.	Displays animations and information over real-world objects.
Device Requirements	Hologram projectors or specialized holographic displays are required.	Smartphones, tablets, or AR glasses are used.
Interaction	Viewers generally engage in passive observation.	Users can directly interact with digital content.

Artificial Intelligence Policies and Applications for Public Libraries in Türkiye

According to official statistics, there were a total of 1,295 public libraries in Türkiye at the end of 2023 (Türkiye İstatistik Kurumu, 2024). These libraries include mobile libraries, literature-museums, baby and children's libraries, temporary collections in prisons and correctional facilities,

train station libraries, airport libraries, shopping mall libraries, and art libraries, covering all types of facilities and services included in public library services.

Although the Ministry of Culture and Tourism does not have specific legislation on the use of artificial intelligence in public libraries, general ethical principles and national strategy documents regarding AI integration in public institutions serve as a macro-level normative framework. In this context, the National Artificial Intelligence Strategy (2021–2025), which outlines Türkiye's overarching vision in the field of AI, was published in the Official Gazette in 2021 (T.C. Cumhurbaşkanlığı Resmî Gazete, 2021). In addition, the Principle Decision No. 2024/108 on the use of artificial intelligence in public institutions throughout Türkiye specifies the general ethical principles intended to guide public officials when interacting with artificial intelligence systems (Kamu Görevlileri Etik Kurulu, 2024). While public libraries, by virtue of their public status, fall under the normative scope of such general circulars and principle decisions, these top-down regulatory frameworks outline institutional obligations rather than offering direct evidence of field-level ethical compliance.

The Ministry of Culture and Tourism has taken significant steps to increase the use of artificial intelligence in public libraries. Some of these initiatives include the 100 smart library project, the smart book technology initiative aimed at bringing public libraries together with smart book technologies by the General Directorate of Libraries and Publications (KYGM), and the technology festival organized by the Ministry of Culture and Tourism with the theme “The Key to the Digital Future: Artificial Intelligence-Based Smart Libraries,” as well as the “The Era of Artificial Intelligence in Library Services” project prepared by KYGM, which aims to connect 100 libraries with artificial intelligence in the first stage, and the ministry's significant artificial intelligence initiatives for public libraries (KYGM, 2024).

As part of the “National Digital Library Project” carried out by the Ministry of Culture and Tourism to contribute to the digitization processes of libraries in Türkiye, access to the National Library's digital archive has been provided from public libraries in 66 provinces and districts as of 2024. The project began in 2015, and as a result of the digitization efforts that have continued to the present day, approximately 25 million items from the National Library archives have been transferred to a digital environment (Kültür ve Turizm Bakanlığı, 2025c). In this regard, library users can directly access the extensive digital collections provided by the National Library through the national digital library access stations established in the relevant public libraries (Kültür ve Turizm Bakanlığı, 2025c). This project is considered an important step in facilitating access to information and encouraging libraries to adapt to the digital transformation process.

The Ministry of Culture and Tourism Digital: The Key to the Future: AI-Based Smart Libraries

In Türkiye, KTB has made significant efforts in recent years to integrate artificial intelligence technology into public libraries. The report “The Key to the Digital Future: Artificial Intelligence-Based Libraries” (2024), published by KYGM, details these applications. The report emphasizes that KTB's future library services policy is structured around technologies such as artificial intelligence, cloud computing, machine learning, the Internet of Things, and robotic automation. It also states that 100 smart libraries are planned to be launched in 2024. In addition, a project called the “Smart Book Platform” has been implemented, providing users with access to e-books and audiobooks through various devices such as virtual reality glasses, mobile phones, tablets, or computers. The smart book platform consists of five main sections: Smart Book Metaverse, Metaverse Picture Gallery, Metaverse Cultural Center, Ask the Author, and Smart Books. The E-Kitapım project aims to support e-publishing activities and increase the habit of reading books in society. The “Kitap+” mobile application aims to contribute to the development of hearing-impaired individuals in the fields of education and reading culture, thereby providing equal opportunities for individuals with disabilities (KYGM, 2024). In addition, the library robot named “Bilgi,” developed with artificial intelligence and serving as an example of humanoid library robots, began to be used in library services at the Rami Library in Türkiye for the first time in 2024 (Rami Kütüphanesi, 2025).

The use of artificial intelligence in public libraries in Türkiye has seen significant development in recent years thanks to the initiatives of the Ministry of Culture and Tourism (KTB). Under the leadership of the Ministry, important steps have been taken to expand AI-based services. One of these is the project to open 100 smart libraries across Türkiye in 2024. The Ministry of Culture and Tourism of the Republic of Türkiye announced the 100 Smart Libraries initiative as part of its 2024 public library policies. The initiative aims to integrate artificial intelligence technologies, smart automation systems, digital library services, e-book and audiobook platforms, remote document delivery, smart reservation systems, and other digital information services into public libraries. However, official documents do not identify the initiative as a separate project with a distinct implementation framework, nor do they provide detailed information regarding a pilot phase or the exact number of libraries in which it has been fully implemented. Likewise, no official confirmation has been published indicating that all 100 libraries have been fully operationalized. Therefore, within the scope of this study, the 100 Smart Libraries initiative is considered a strategic policy objective of the Ministry of Culture and Tourism rather than a completed implementation project (KYGM, 2024). Among the educational platforms offered through public libraries, applications such as “RAUNT” and “HIZLIGO” are notable examples. The RAUNT application

is designed to offer personalized smart study programs for students, aiming to support their exam preparation and academic performance. This application is made available free of charge in public libraries. Similarly, the HIZLIGO platform is promoted as a tool to enhance reading speed, attention, and concentration; according to the developer's operational claims, it aims to double reading speed through 15–20 minutes of daily practice. This software is likewise accessible free of charge through public libraries (Kültür ve Turizm Bakanlığı, 2023). However, these efficiency claims represent developer-stated goals rather than independently verified empirical outcomes within this study.

In evaluating technological integration within public libraries, a strict distinction must be drawn between general digital infrastructures and genuine artificial intelligence (AI) applications. Digitization platforms such as National Digital Library services, e-book databases, and immersive media tools like VR, AR, and hologram displays represent advanced digital, multimedia, or interactive hardware technologies; however, they do not inherently rely on AI algorithms. Conversely, educational software such as Raunt and Smartbook platforms leverage AI-driven adaptive learning systems that analyze individual user behavior to deliver personalized learning pathways. Similarly, platforms like Hızlıgo utilize algorithmic tracking to optimize reading speed, whereas applications incorporating natural language processing (NLP) enable interactive author Q&A systems. Therefore, digital transformation in libraries should not be conflated with AI integration, and each platform must be categorized based on its underlying algorithmic functionality rather than its digital medium.

Example of Aydın Provincial Public Library

There are twenty-one public libraries in Aydın Province. These libraries are: Aydın Provincial Public Library, Bozdoğan District Public Library, Buharkent District Public Library, Çine District Public Library, Didim District Public Library, Efeler District Public Library, Germencik District Public Library, Germencik Ortaklar Public Library, İncirlioğlu District Public Library, Karacasu District Public Library, Karpuzlu District Public Library, Koçarlı District Public Library, Köşk District Public Library, Kuşadası District Public Library, Kuyucak District Public Library, Nazilli District Public Library, Söke District Public Library, Söke Sarıkemer Public Library, Sultanhisar District Public Library, Sultanhisar Atça Public Library, and Yenipazar District Public Library (KTB, 2025c). Services provided at the Aydın Provincial Public Library include lending services, reference services, a “city library” service that collects all works related to the province of Aydın, internet access services, services for people with disabilities, mobile library services, a “compilation” service that collects newspapers and magazines published in Aydın and works by Aydın authors, a “periodicals collection” service provided by the Ministry that includes local

newspapers from the province of Aydın and their archives, and “multipurpose hall” services, where various social and cultural events are organized and offered to the public (KTB, 2025a).

It can be said that Aydın Provincial Public Library is one of the libraries where many of the projects initiated by the Ministry of Culture and Tourism regarding the integration of artificial intelligence in public libraries have been implemented. In this regard, the artificial intelligence application systems “RAUNT” and “HIZLIGO” are used at Aydın Provincial Public Library. Library users who wish to use these applications can access these programs by going to the library and using the library's IP address. In addition, library users can also benefit from the smart book project launched by the Ministry. To benefit from the smart book project, users can register and use this system by going to the library or accessing the “Setyay” page remotely (Setyay, 2025). The Aydın Provincial Public Library is one of the libraries that provides access to the National Library's digital archive as part of the “National Digital Library Project.” Individuals wishing to benefit from this service can access the National Library's digital archive from the stations located within the library by completing their library membership. Based on this information, it can be said that many of the initiatives launched by the Ministry regarding public libraries and artificial intelligence integration have been implemented at the Aydın Provincial Public Library.

Conclusion

Artificial intelligence technologies have begun to play an important role in both daily life and professional fields. Within this context, based on the framework programs and policy documents of relevant national institutions in Türkiye and international organizations, this study examines the policy dynamics and practical applications of artificial intelligence in public libraries, focusing on the case of Aydın Provincial Public Library. Considering that public libraries serve all segments of society without discrimination and play an important role in educating the public, it can be said that artificial intelligence technologies can find a wide range of applications in libraries.

Globally, various policy documents and ethical principle guidelines have been developed for the ethical use of artificial intelligence technologies. In this context, the work of international organizations such as IFLA, which operates in the field of librarianship, and UNESCO is particularly important. As a UNESCO Member State, Türkiye considers UNESCO's *Recommendation on the Ethics of Artificial Intelligence* as an international policy framework. However, the Recommendation is not a legally binding instrument, and its implementation at the national level depends on each country's policy priorities and institutional capacity. Therefore, when evaluating Türkiye's AI policies, it is important to distinguish between international normative principles and their implementation in the national context.

When examining the use of artificial intelligence in library services, it can be said that applications parallel to global developments are also being implemented in Türkiye. Within the

scope of projects carried out by the General Directorate of Libraries and Publications of the Ministry of Culture and Tourism, significant applications have been launched in public libraries across Türkiye. This study found that projects have been implemented in many public libraries designated as pilot libraries. Examinations conducted specifically at the Aydın Provincial Public Library also revealed that AI-focused projects initiated by the Ministry have been implemented here as well. While there are approximately 1,295 public libraries across Türkiye, the empirical findings of this study, confined to the examined sample in Aydın, indicate that AI adoption is limited within the investigated libraries.

This study examines Türkiye's artificial intelligence usage policies and ethical principles and evaluates the Ministry of Culture and Tourism's project initiatives in this field. The primary contribution of this study lies in providing a critical comparative analysis of Türkiye's public library AI policies and strategic initiatives against international ethical frameworks. Furthermore, by evaluating the current state of policy implementation through the empirical scope of the Aydın case, this study offers a realistic assessment of how high-level strategic objectives translate into practice within local public library settings, thereby addressing a significant gap in the national and regional library science literature. For future research, it is recommended that broader comparative studies examine how different national policy frameworks translate into local public library practices, incorporating mixed-method approaches to evaluate the societal and ethical impacts of AI adoption.

Artificial Intelligence Use Statement

Artificial intelligence (AI) tools (Gemini and ChatGPT) were used solely for proofreading, minor language editing, grammar correction, and improving the readability of the manuscript. In addition, DeepL was used to assist with English translation. No AI tools were used in the research design, document selection, data collection, document analysis, interpretation of the findings, or the development of the study's conclusions. All scientific content, methodological decisions, interpretations, and the final responsibility for the manuscript rest solely with the author.

Author Contributions

Hanife Gül Bozkurt conceived and designed the study, conducted the literature review, collected and analyzed the data, interpreted the findings, and drafted and revised the manuscript. The author read and approved the final version of the manuscript.

Conflict of Interest

The author declares that there are no financial, institutional, professional, or personal conflicts of interest that could have influenced the research, analysis, or publication of this study.

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