TASHKENT UNIVERSITY OF
INFORMATION TECHNOLOGIES
NAMED AFTER MUHAMMAD AL-KHWARIZMI

MUHAMMAD AL-XORAZMIY NOMIDAGI
TOSHKENT AXBOROT TEXNOLOGIYALARI
UNIVERSITETI

BULLETIN OF TUIT:

MANAGEMENT AND COMMUNICATION TECHNOLOGIES



ISSN:2181-1083 DOI:
U.M.Yusupov № 3(27)2025

Development Stages of the Electronic Archival System in Uzbekistan

U.M.Yusupov *Independent Researcher*
Agency "Uzarchive" Tashkent, Uzbekistan
u.yusupov1985@gmail.com

***Abstract*—** This paper analyzes the development of the electronic archive system in Uzbekistan in two consecutive stages (2010–2019 and 2020–2024). The first phase (2010–2019) focused on infrastructure development of state archives, while the second phase (2020–2024) emphasized the digital transformation and implementation of electronic archival information systems. The study outlines institutional structures, statistical indicators, technological integration challenges, and service efficiency gains resulting from system digitization. The paper also presents the architecture of the Integrated Corporate Electronic Archive and evaluates its effectiveness in delivering online archival services.

***Keywords*—** *Electronic archives, digitization, public service delivery, Uzbekistan, archival system*

I. INTRODUCTION

The digitization of archival systems has become essential in the modern governance framework, where transparency, accessibility, and efficiency are paramount. Uzbekistan, with its rich documentary heritage dating back to the 9th century, embarked on an ambitious journey to modernize its archival infrastructure. The effort was structured in two strategic stages: modernization of infrastructure (2010–2019) and digital transformation (2020–2024).

II. STRUCTURE OF THE ARCHIVAL SYSTEM IN UZBEKISTAN

Currently, there are a total of 226 state archives in Uzbekistan, with the entire archival sector under the supervision of the "Uzarchive" Agency, operating under the Ministry of Justice. Out of these, three archives have the status of National Archives. Specifically:

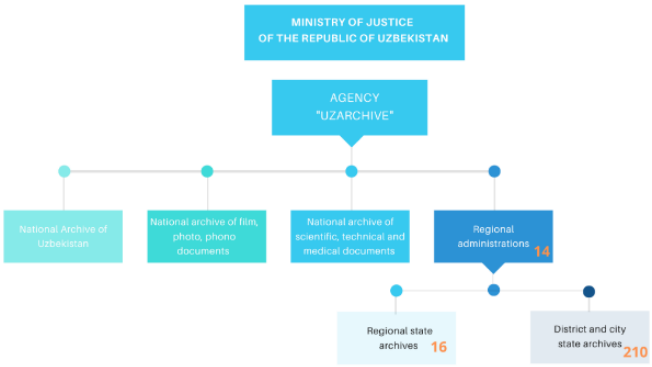
The Uzbekistan National Archive preserves paper-based historical documents from the earliest periods.

The Uzbekistan National Archive of Cinema, Photo, and Phono Documents preserves audiovisual materials only.

The Uzbekistan National Archive of Scientific, Technical, and Medical Documents preserves documents related to science, technology, and healthcare.

The remaining 223 archives operate at regional, district, and city levels, covering almost all institutions throughout the territory of Uzbekistan, as shown in Fig. 1.

FIG. 1. STRUCTURE OF THE ARCHIVAL SYSTEM IN UZBEKISTAN



III. ARCHIVAL DOCUMENT RETENTION AND HOLDINGS

According to Uzbek legislation, permanent records must be stored in republican organizations for 15 years, in regional organizations for 10 years, and in district and city organizations for 5 years before being transferred to state archives for long-term preservation [1].

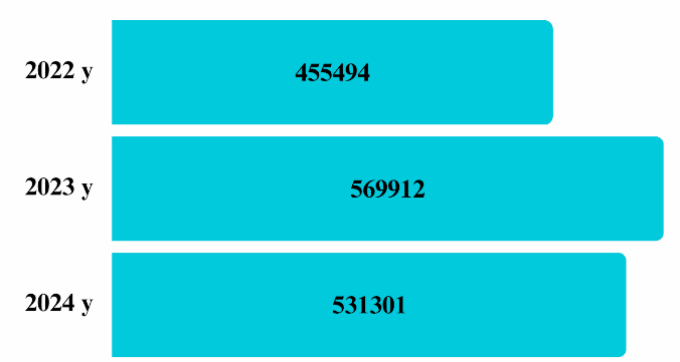
As of today, more than 16 million folders of paper documents are stored in Uzbekistan's state archives, along with over 551,000 photo documents, more than 16,000 audio documents, and over 21,000 video

materials [2]. The preservation of these documents is managed by approximately 2,500 archival staff members. Uzbekistan's archives are considered the richest in Central Asia, with the oldest documents dating back to the 9th century. Some paper documents reach lengths of up to 80 meters [3], [4].

IV. RATIONALE FOR DIGITAL REFORM

Among the types of services provided by the state archives, ten have the highest demand among citizens. According to statistical data, the number of requests for these services increases year by year, as shown in Fig. 2.

FIG. 2. NUMBER OF CITIZEN REQUESTS SUBMITTED TO STATE ARCHIVES



As seen from the above figures, the number of requests is high, and previously, citizens faced many inconveniences and difficulties when accessing archival services.

Before the pandemic, in order to access services, citizens had to personally visit each individual archive and submit a physical application. For instance, if someone needed an archival certificate, they had to write a request at the archive and return 30 days later to receive a response. Moreover, if the individual had worked in a different region, they had to visit the archive of that specific region. The same inconveniences applied when requesting document copies or access to reading rooms.

At the same time, service provision processes in state archives were also complex. Each request had to pass through five steps before reaching the executor. As a result, service fulfillment often took 30 or more days.

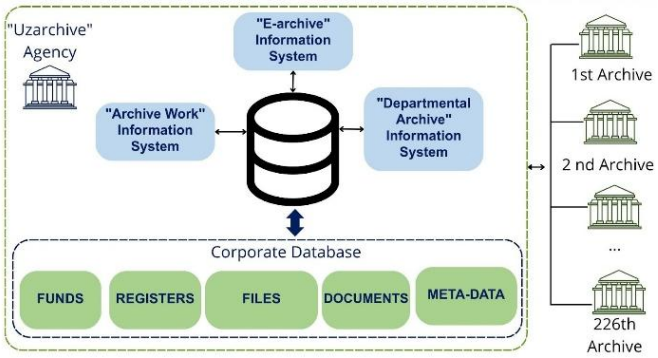
V. ARCHITECTURE OF THE ARCHIVE INFORMATION SYSTEMS

After the pandemic was declared globally, it became necessary to rethink archival operations, radically improve service delivery conditions, and fully integrate information technologies into archival activities. This required the development and implementation of an Electronic Archive System across all state archives [5].

In the process of developing the Electronic Archive System in Uzbekistan, a number of scientific studies by foreign scholars were also examined. Notably, the findings of Feaster, Vancour, and Witherspoon (2020), Yang, Du, and Shi (2020), Ukata and Wechie (2019) and Obotu, Soloman, and Ogezi (2018) were thoroughly analyzed and taken into consideration [6], [7], [8], [9], [10], [11].

One of the most complex challenges was to create a centralized information system and connect all 226 state archives in the republic to it. Based on this objective, an integrated corporate electronic archival structure was developed, and its subsystems were defined, as shown in Fig. 3.

FIG. 3. INTEGRATED CORPORATE ELECTRONIC ARCHIVE SYSTEM ARCHITECTURE



These core systems represent the most essential components of the electronic archive infrastructure. The "Archive work" information system is designed to provide online archival services; the "E-archive" information system is intended for digitizing archival documents and integrating them into a unified platform; and the "Idoraviy arxiv" information

system is designed for the acceptance of electronic documents formed within organizations into state archival custody.

It must be acknowledged that the implementation process of these information systems was quite complex and challenging. This is because, in order to connect each state archive to a unified system, it was necessary to work individually with every archive.

For instance, speaking about the "Archive work" information system, which is aimed at delivering online archival services, 226 state archives have been connected to this system. A separate cabinet was set up for each of them, and the information system itself consists of two components: the front office, which serves the users, and the back office, which covers the internal workflow processes of the state archives.

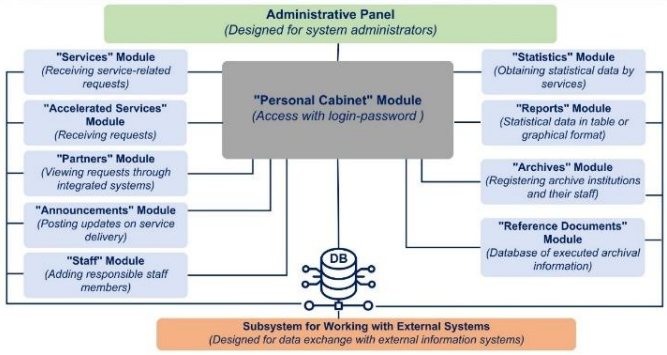
To make the system even more user-friendly, we integrated it with the Unified Interactive Public Services Portal, enabling all archival services to be accessed through this portal as the front office.

In addition to this, for citizens who may face difficulties in using information technologies, the system was also integrated into the information system of the Public Services Centers, thereby expanding access and creating broader opportunities for users to benefit from archival services.

One of the greatest advantages of providing archival services through Public Services Centers is that citizens can visit the center closest to their place of residence and access services through the center's operators.

In addition, archive staff can generate archival data directly within this system, and these records can also be signed by the archive director within the same platform. From the moment service requests are received to their full processing through all stages within the archive and the delivery of results to the user — every step is carried out exclusively within this system, as shown in Fig. 4.

FIG. 4. FUNCTIONAL STRUCTURE OF THE "ARCHIVE WORK" SYSTEM



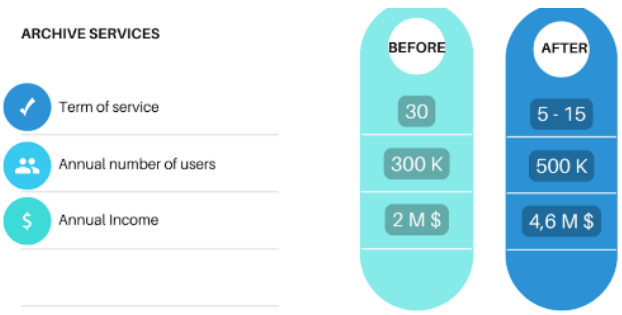
Previously, requests to archives from courts, pension departments, and law enforcement agencies were received in paper format. To digitize these processes as well, we integrated our information system with the information systems of these organizations. As a result, the processes of receiving and fulfilling archive-related requests have been fully digitized.

VI. EFFICIENCY AND ECONOMIC IMPACT

After successfully completing all stages of implementation, all the most popular and in-demand archival services are now digitized and provided online.

Due to the increased convenience of accessing archival services, the revenue generated by state archives has also grown. For example, the total income of all archives amounted to USD 2.1 million in 2019, and by 2024 this figure has reached USD 4.6 million. The service delivery time has been reduced from 30 days to 5 days, and the number of users has increased from 300,000 to 500,000 as shown in Fig. 5 [12].

FIG. 5. EFFECTIVENESS OF THE ELECTRONIC ARCHIVE INFORMATION SYSTEMS



VII. CONCLUSION

The development and implementation of a centralized Electronic Archive System in Uzbekistan mark a major milestone in the modernization of public administration and archival governance. Through a two-phase national strategy spanning from 2010 to 2024, Uzbekistan successfully transitioned from traditional, paper-based archives to an integrated digital ecosystem that connects 226 state archives under a unified infrastructure.

Moreover, the integration of archival services into the Unified Government Portal and Public Service Centers has democratized access to archival records. Citizens no longer need to travel between regions or endure lengthy queues, making archival services more inclusive and user-friendly.

Uzbekistan's experience demonstrates that successful archival digitization requires not only technical infrastructure but also legal regulation, staff training, and cross-sectoral interoperability. The challenges faced—such as connecting diverse archives, training personnel, and integrating systems with courts and law enforcement—were overcome through phased planning and centralized coordination by the "Uzarchive" agency.

Going forward, the lessons learned from Uzbekistan's case can serve as a blueprint for other developing nations aiming to modernize their archival systems.

In conclusion, the electronic archive system of Uzbekistan stands today as one of the most advanced in the Central Asian region, representing a successful example of digital governance, archival innovation, and citizen-centric public service delivery.

REFERENCES

[1] Law of the Republic of Uzbekistan on Archival Affairs, 2010

[2] M. Isakova, The Establishment and Development of Archival Work in Uzbekistan, Tashkent: Universitet, p. 31, 2012.

[3] A. Abdullaev, "On the Experience of Technical Modernization of Archives under the Project 'Informatization of Central State Archives of the Republic of Uzbekistan" in Proc. Int. Sci.-Pract. Conf. "New Technologies in the Field of Ensuring the Preservation of Archival Documents", Yerevan, Oct. 30, pp.50–57, 2009.

[4] A. Abdullaev, S. Okilov, and Zh. Murodov, "The Experience of Archival Institutions of the Republic of Uzbekistan in the Field of Electronic Document Management" Uzarchive Bulletin, no. 2, 2013.

[5] Uzarchive Agency, *Program for the Further Development of Archival Work and Records Management in the Republic of Uzbekistan for 2020–2025*, Tashkent, 2020

[6] P.Feaster, S.VanCour, T.Witherspoon, The Radio Spectrum Archive: A New Approach to Radio History and Preservation. Journal of archival organization, 17 (1-2), pp.144-160, 2020.

[7] A. Obotu, U. Solomon, and I. Ogezi, "Evaluative study of digital record management system in the hospitals in Minna Metropolis: A case study of General Hospital Minna, Niger State, Nigeria," *Library Philosophy and Practice* (e-journal), pp.1–34. 2018.

[8] Q. Yang, Y. Du, and L. Shi, "Exploring the mechanisms for records management's digital transformation: A case study from China," Records Management Journal, vol. ahead-of-print, no. ahead-of-print, [Online]. Available: https://doi.org/10.1108/RMJ-10-2019-0064 [Accessed: Apr. 11, 2021], 2020.

[9] P. Ukata and N. Wechie, "Electronic records management and national development: A case of Nigeria," International Journal of Social Science and Management Research, vol. 5, no. 2, pp.35–57, 2019.

[10] J. Alokluk, "Archiving and document management at Taibah University: A case study," Computer and Information Science, vol. 12, no. 4, pp.11–19, 2019.

[11] N. S. Netshakhuma, "Responsibilities of archivist now and in the future as the result of COVID-19: Case of ICA-SUV," Emerald

Insight, 2020. [Online]. Available: https://www.emerald.com/insight/2059-5816.htm [Accessed: Mar. 31, 2021]. 2013.

[12] Uzarchive Agency, "Reports" [Online]. Available: https://archive.uz/category/hisobotlar [Accessed: Apr. 05, 2024], 2024.