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*Article*

# Digital Technologies Used in Customs Management Processes in Uzbekistan

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**Abstract:** This article examines the role of modern digital technologies used in customs management processes, including automated information systems (AIS), digital platforms, data processing software and integrated digital management tools. The study analyzes how digital technologies contribute to optimizing customs control procedures, accelerating customs clearance processes and improving the efficiency of information exchange between relevant institutions. Particular attention is given to the potential of digitalization to enhance transparency in customs administration, reduce the influence of human factors and improve the overall efficiency of public management. The findings of the study provide a basis for further improvement of digital transformation in customs authorities and modernization of customs management systems.

**Keywords:** Customs Management, Digital Technologies, Automated Information Systems, AIS, Electronic Customs, Digital Platforms, Customs Clearance, Information Systems, Digital Transformation

## 1. Introduction

The acceleration of globalization processes, the growth of international trade volumes, and the development of logistics systems have led the customs system to become an important institutional element of state economic policy. In modern economic conditions, customs authorities function not only as structures controlling foreign trade operations, but also as an important management mechanism that ensures the economic security of the state, restricts illegal trade flows, and improves the efficiency of international trade processes [1].

In recent years, the rapid development of digital technologies has caused fundamental changes in public administration systems. In particular, digital platforms, automated information systems (AIS), electronic declaration systems, and software solutions based on elements of artificial intelligence are increasingly used in the automation of customs management processes, the acceleration of data exchange, and the optimization of control mechanisms. Digital technologies significantly enhance management efficiency by simplifying customs clearance procedures, reducing the human factor, and lowering the risks of corruption [2].

In international practice, the digitalization of customs systems is considered an important component of trade facilitation policy. According to World Bank studies, the implementation of digital customs processes and electronic declaration systems can reduce

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the time required for international trade operations by an average of 20–40 percent and significantly decrease logistics costs [3]. Therefore, many countries are prioritizing the introduction of digital technologies in the modernization of customs management systems.

Among the digital technologies applied in customs management processes, automated information systems (AIS), electronic customs platforms, risk management systems, "Single Window" platforms, and big data processing technologies occupy an important place. Through these systems, customs authorities are able to analyze information about foreign trade operations in real time, identify risky transactions, and organize control processes more efficiently [4].

In the Republic of Uzbekistan, significant reforms have also been implemented in recent years to modernize and digitalize the customs system. The introduction of electronic declaration systems, digital customs platforms, automated control systems, and data exchange platforms has contributed to increasing the speed and transparency of customs procedures. This plays an important role not only in improving the efficiency of public administration but also in enhancing the investment climate and facilitating international trade operations [5].

From this perspective, the scientific analysis of digital technologies used in customs management processes, the assessment of their impact on management efficiency, and the identification of ways to further improve these processes remain among the urgent issues of scientific research. The main objective of this study is to scientifically analyze the role of digital technologies used in customs management processes—particularly automated information systems, digital platforms, and software tools—and to evaluate their importance in improving management efficiency.

**Literature Review**

The introduction of digital technologies into public administration systems has become one of the most important areas of scientific research in recent decades. In particular, the digitalization of customs management processes is closely related to the increasing complexity of international trade, the expansion of logistics systems, and the acceleration of global economic integration. For this reason, the theoretical and practical aspects of using digital technologies in customs management have been widely studied by numerous international organizations and researchers.

The importance of digital technologies in the modernization of customs systems is primarily associated with the simplification and acceleration of international trade processes. Studies conducted by the World Customs Organization emphasize that the digitalization of customs procedures improves the efficiency of monitoring trade operations, accelerates information exchange, and ensures transparency within logistics chains [1]. In these studies, automated information systems and electronic customs platforms are considered the core technological infrastructure of customs management.

The issue of automating customs management processes has also been extensively studied by the United Nations Conference on Trade and Development (UNCTAD). According to UNCTAD research, automated customs systems—particularly the ASYCUDA (Automated System for Customs Data) platform—enable effective management of customs operations, automation of declaration procedures, and integration of databases [4]. Today, this system is implemented in more than one hundred countries worldwide and has significantly accelerated customs clearance procedures.

In addition to improving the efficiency of customs management, digital technologies also play a significant role in ensuring transparency in public administration. Research conducted by the OECD indicates that digital technologies help reduce the human factor in customs procedures, lower corruption risks, and standardize management processes [2]. In particular, electronic declaration systems and risk management systems make it possible to organize customs control more effectively.

In scientific literature, the digitalization of customs management is often analyzed within the framework of the "e-Customs" concept. According to researchers of the World Bank, the electronic customs system involves the complete transition of customs clearance procedures into digital form, the creation of integrated information exchange systems among government agencies, and the provision of convenient services for business entities [3]. Through such systems, the time required to conduct customs operations is reduced and international trade processes become more efficient.

Single Window systems also play a special role in the digitalization of customs management processes. According to studies conducted by the World Trade Organization (WTO), Single Window platforms allow all documents related to export-import operations to be submitted through a single electronic platform. This contributes to reducing administrative costs associated with trade operations and significantly accelerates customs clearance procedures [6].

The impact of digital technologies on customs management is also frequently studied in relation to data analytics technologies. Modern customs systems increasingly apply Big Data analytics and artificial intelligence-based risk identification systems to process large volumes of information. According to researchers, these technologies enable customs authorities to detect illegal trade operations, forecast smuggling activities, and optimize control mechanisms [7].

Furthermore, digital technologies contribute to improving the institutional efficiency of customs management processes. Some studies indicate that the digital transformation of customs systems positively affects the quality of public administration, the development of the investment climate, and the growth of international trade volumes [8]. For this reason, many countries consider the digital transformation of customs systems to be one of the key directions of economic policy.

In the Republic of Uzbekistan, scientific and practical studies on the digitalization of the customs system are also being conducted. Local researchers emphasize that the introduction of information and communication technologies in customs administration can improve customs control, simplify customs procedures, and enhance the efficiency of public administration. These studies particularly highlight the importance of electronic declaration systems, automated control mechanisms, and data exchange platforms.

Thus, the analysis of scientific literature demonstrates that the digitalization of customs management processes is an important component of modern economic governance systems. Digital technologies contribute to improving the efficiency of customs systems, facilitating international trade processes, and enhancing the quality of public administration. At the same time, ongoing research in this field indicates the need to introduce new technologies in customs management and to scientifically evaluate their effectiveness.

## 2. Material and Methods

This study is aimed at analyzing the application of digital technologies in customs management processes and evaluating their impact on management efficiency. During the research process, several scientific research methods were applied by combining both theoretical and practical approaches. These methods made it possible to comprehensively examine the digital technologies implemented in the customs system, assess their influence on management processes, and identify existing trends.

The theoretical foundation of the study is based on scientific concepts related to public administration, the digital economy, and the modernization of customs administration. During the research, theoretical perspectives presented in international organizational reports and local scientific sources were studied and systematically analyzed. For this purpose, the method of scientific literature analysis was applied to

examine the role, functions, and development trends of digital technologies in customs management.

The study also employed the system analysis method. This method makes it possible to consider customs management processes as a set of interconnected elements. Based on this approach, digital platforms, automated information systems, and electronic services implemented in the customs system were analyzed as an integrated management mechanism. The system approach allowed customs management processes to be evaluated not as separate technologies but as a unified digital ecosystem.

In addition, the comparative analysis method was applied in the study. Using this method, digital customs systems used in international practice were compared with the platforms implemented in the customs system of Uzbekistan. As a result of this comparison, the specific features of customs digitalization and effective management mechanisms in different countries were identified, and the possibilities of applying these experiences in the conditions of Uzbekistan were evaluated.

The statistical analysis method was also used during the research process. Through this method, statistical data such as foreign trade volume, the number of customs operations, and indicators of electronic service usage were examined. These statistical data made it possible to evaluate the practical results of the introduction of digital technologies in the customs system. Through statistical analysis, changes in the speed, efficiency, and transparency of customs management processes were identified and relevant conclusions were formulated.

Another important method applied in the study was the method of logical generalization. Using this method, theoretical and empirical data obtained from various sources were generalized to determine the main directions and development trends of implementing digital technologies in customs management. Logical generalization played an important role in systematizing the research results and developing scientific conclusions.

The combination of these methods made it possible to comprehensively study the application of digital technologies in customs management processes, determine their impact on management efficiency, and develop scientifically grounded conclusions for improving these processes. The comprehensive nature of the research methodology allowed for an in-depth theoretical and practical analysis of the research topic.

In recent years, digital technologies have fundamentally transformed economic governance systems and contributed to improving the efficiency of public administration institutions. In particular, the introduction of modern information and communication technologies in customs management processes has made it possible to simplify international trade operations, optimize customs control, and accelerate the exchange of information. The digitalization of the customs system plays an important role in automating trade processes, ensuring transparency in logistics chains, and accelerating customs clearance procedures [1].

## 3. Results and Discussion

In modern customs management systems, digital technologies are applied in various forms. These include automated information systems (AIS), electronic customs platforms, risk management systems, Single Window platforms, electronic declaration systems, and technologies for analyzing large volumes of data. These technologies are applied at different stages of customs management and contribute to increasing the efficiency and speed of customs processes.

**Automated Information Systems (AIS)**

One of the key elements of digitalizing customs management processes is automated information systems. AIS systems enable the automation of customs operations, processing of declarations, and storage of customs information within a unified

information database. With the help of such systems, customs authorities can quickly process information related to export-import operations and organize control processes more effectively.

One of the most widely used automated customs systems in international practice is ASYCUDA (Automated System for Customs Data). This system was developed by the United Nations Conference on Trade and Development (UNCTAD) and is designed to automate customs clearance procedures and manage customs data [4]. Through the ASYCUDA system, it is possible to receive customs declarations electronically, calculate customs payments, and monitor customs operations. Research shows that in countries where this system has been implemented, customs clearance procedures have significantly accelerated.

**Electronic Customs Platforms**

Digital technologies are also expanding the possibilities for providing electronic services in customs management processes. Through electronic customs platforms, business entities can interact with customs authorities in electronic form. These platforms simplify the processes of submitting documents related to export-import operations, processing customs declarations, and making customs payments.

According to studies conducted by the World Bank, the introduction of electronic customs systems significantly reduces the time required to perform customs operations and lowers logistics costs [3]. In addition, electronic platforms are an important tool for increasing transparency in customs procedures and reducing corruption risks.

**Risk Management Systems**

Risk management systems play a crucial role in improving the efficiency of customs control. In modern customs systems, it is practically impossible to inspect all cargo shipments. Therefore, control mechanisms based on risk analysis are applied. Risk management systems analyze customs operations based on databases and analytical algorithms and identify operations that carry a high level of risk.

According to research conducted by the World Customs Organization, the use of risk management systems increases the efficiency of customs control and expands the ability to detect illegal trade operations [7]. At the same time, these systems allow customs authorities to allocate their resources more efficiently.

**Single Window Systems**

Single Window systems also play an important role in simplifying customs management processes. The Single Window platform allows all documents related to export-import operations to be submitted through a single electronic system. Through this system, the exchange of information between customs authorities, transport organizations, sanitary and phytosanitary services, and other government agencies is automated.

According to studies conducted by the World Trade Organization, the implementation of the Single Window system reduces administrative costs associated with trade operations and accelerates customs clearance procedures [6]. For this reason, many countries pay special attention to implementing this platform as part of the modernization of their customs systems.

**Big Data and Artificial Intelligence Technologies**

In recent years, technologies for analyzing large volumes of data have also been widely applied in customs management processes. Big Data technologies allow customs authorities to analyze large volumes of information related to export-import operations and forecast potential risks. Analytical systems based on elements of artificial intelligence are also used as effective tools for detecting illegal trade operations.

According to OECD research, digital technologies and artificial intelligence make it possible to improve the efficiency of customs management and optimize control processes

[2]. These technologies contribute to transforming the customs system into a more modern and effective management mechanism.

Thus, digital technologies used in customs management processes play a significant role in improving the efficiency of the customs system, facilitating international trade operations, and enhancing the quality of public administration. Automated information systems, electronic platforms, risk management systems, and artificial intelligence technologies are considered the main factors ensuring the digital transformation of customs systems.

In the Republic of Uzbekistan, the digitalization of the customs system is considered one of the priority areas in the process of modernizing public administration. Through the automation of customs processes, particular attention is being paid to simplifying foreign trade operations, improving the efficiency of customs control, and ensuring transparency within the public administration system. For this purpose, various digital platforms, automated information systems, and electronic services have been introduced into the activities of customs authorities.

**Table 1.** Digital Platforms in the Customs System

| Digital platform | Main function | Impact on management efficiency |
|---|---|---|
| **Single Window** | Exchange of information among various government agencies and processing of permits on a single platform | Simplifies export-import procedures and reduces clearance time |
| **Electronic Declaration System** | Submission of customs declarations for goods and vehicles in electronic form | Automates document circulation and reduces the human factor |
| **Customs Electronic Services Portal** | Provision of interactive customs services for entrepreneurs | Increases transparency and facilitates access to public services |
| **UzTradeInfo platform** | Provision of information on foreign trade procedures and customs requirements | Enhances information openness for entrepreneurs |
| **Risk Management System (RMS)** | Analysis of customs operations based on the level of risk | Optimizes control resources and improves the detection of illegal operations |

As can be seen from this table, one of the most important digital platforms introduced in the customs system of Uzbekistan is the Single Window information system. This platform was created to ensure electronic information exchange between entrepreneurs and government agencies during export-import operations. Through this system, participants in foreign economic activity are able to submit various permits, certificates, and other necessary documents through a single electronic platform.

The Single Window system automates information exchange among several government agencies, including customs authorities, sanitary and phytosanitary services, veterinary bodies, and other control agencies. This simplifies export-import procedures and significantly reduces the time spent on document processing. The system became fully operational from 2020 and has been serving the digitalization of international trade processes.

Another important digital platform in the customs system of Uzbekistan is the electronic customs declaration system. Through this system, entrepreneurs can submit cargo customs declarations electronically. The electronic declaration system enables the rapid clearance of export-import operations and the electronic processing of documents.

Within this system, the declaration is generated in XML format, certified by electronic digital signature, and sent to customs authorities. The system also allows

entrepreneurs to monitor the status of submitted declarations and make corrections when necessary.

The introduction of the electronic declaration system has contributed to the automation of customs clearance procedures, the acceleration of document circulation, and the reduction of the human factor. As a result, the speed of cargo clearance by customs authorities has significantly increased.

In order to expand digital services in the customs system of Uzbekistan, the customs electronic services portal is also in operation. Through this portal, users can access customs statistics, customs payments, data on export-import operations, and various interactive services.

Within the portal, a number of services are provided, including:

- Obtaining information about customs warehouses,
- Calculating customs payments,
- Receiving information on foreign trade operations,
- Reporting customs violations.

Through this platform, interaction between customs authorities and business entities is further simplified, and the process of using public services is digitalized.

Another platform playing an important role in the digitalization of Uzbekistan's foreign trade processes is Uzbekistan Trade Info. This platform functions as an information system providing step-by-step guidance on export, import, and transit procedures. Through the platform, entrepreneurs can obtain detailed information about foreign trade processes, customs procedures, and required documents.

This platform is managed by the Ministry of Investments, Industry and Trade and serves to increase transparency in foreign trade operations while providing entrepreneurs with necessary information through a single source.

In recent years, information systems based on elements of artificial intelligence have also been introduced into Uzbekistan's customs system. For example, artificial intelligence technologies have begun to be used in the automatic processing of customs declarations and the classification of goods. With the help of these technologies, the speed of declaration processing has increased several times, and the accuracy of control procedures has improved.

AI-based systems make it possible to rapidly analyze large volumes of data and assist customs authorities in identifying illegal trade operations and forecasting risks. This, in turn, contributes to improving the efficiency of customs control.

The digital platforms introduced into Uzbekistan's customs system constitute an important component of the modernization of public administration. The Single Window system, electronic declaration platforms, the customs electronic services portal, and AI-based information systems are helping automate customs procedures and simplify foreign trade operations. Through these platforms, the effectiveness of customs authorities has increased, while the transparency and speed of international trade procedures have been enhanced.

The results of the study show that digital transformation in Uzbekistan's customs system is moving beyond the level of merely electronic service provision and is gradually shifting toward an integrated management model. In particular, the regulatory and legal framework clearly defines tasks such as expanding the Single Window customs information system, improving control procedures at customs posts through this system, strengthening integration with the information systems of other control agencies, and fully digitalizing services. While the 2020 reform package established the task of improving control over goods and vehicles at customs posts through the Single Window and integrating customs information systems with those of other control agencies, the 2022

document envisaged increasing the number of services provided through this platform to 40 and launching a mobile electronic system. This indicates that digitalization is not a one-time campaign, but rather an institutional policy that is being deepened step by step [9].

The first important result is that customs management is no longer limited to the digitalization of document circulation; rather, it is increasingly seeking to integrate different stages of authorization, monitoring, risk analysis, and service delivery into a unified information space. According to the 2025 resolution, from October 1, 2025, all certificates, conclusions, and permit-related documents concerning the import, export, and transit of goods must be processed exclusively through the Single Window customs information system. This rule is theoretically very significant: it transforms customs from a separate control body into a digital coordination center linking various permit-issuing institutions involved in foreign economic activity. From this perspective, customs digitalization in Uzbekistan is becoming not only a mechanism for administrative simplification but also a tool for restructuring the architecture of public administration [10].

The second important result is the strengthening of procedural speed and standardization in the customs system. The expansion of electronic platforms standardizes the stages of document submission, review, and clearance, thereby reducing excessive dependence on the individual discretion of officials. In particular, the introduction of a mobile electronic system covering customs inspection procedures is important in terms of electronically recording inspection results on site, instantly transmitting information to the central system, and ensuring consistency in subsequent inspections. Such systems not only reduce paper circulation but also enhance the possibility of auditing managerial decisions through the preservation of a digital trace for each operation. Therefore, this result should be interpreted not merely as an increase in speed, but also as a strengthening of procedural discipline [11].

The third result is the growing role of risk-based management elements in the customs system. The 2025 document sets the task of improving the system of rapid customs control for citizens entering the country through analysis based on the “Risk Management” information system, including integration with border protection systems for the online exchange of biometric data and photographs. In addition, it provides for the pilot testing of a two-channel state control procedure based on risk management principles at certain border crossing points, with gradual expansion to other points later. This is a very interesting logic of governance: instead of imposing the same burden on all subjects, the system is moving toward allocating resources according to the degree of risk. As a result, low-risk flows can pass more quickly, while high-risk flows are subjected to deeper control mechanisms [12].

The practical significance of this approach becomes particularly visible against the backdrop of the scale and geography of Uzbekistan’s foreign trade. According to data from the National Statistics Committee, in January–December 2024, Uzbekistan imported goods and services from 172 countries. Such a broad foreign trade geography places before customs authorities the task of processing massive information flows, identifying diverse risk profiles, and rationally allocating control resources. This means that the introduction of digital technologies here is not merely a slogan of modernization; it has become an operational necessity. As foreign trade flows expand, a manual management model becomes economically costly, time-consuming, and ineffective from the standpoint of control [13].

The fourth result is that interagency integration is becoming an institutional priority in the customs system. While the 2020 document set the task of integrating with the information systems of other control agencies, the 2025 resolution provides for coordination of veterinary and phytosanitary information system concepts with the Customs Committee, as well as harmonization of terminal services based on the “single

window" principle with customs, banking, logistics, laboratory, phytosanitary, veterinary, sanitary-epidemiological, environmental, and certification services. Furthermore, it envisages integration with the Ministry of Transport's "Smart Bus Station" system to obtain advance information on international buses and their passengers. These results suggest that customs digitalization is not an isolated IT project; rather, it is evolving into an intersectoral governance system linked with transport, border security, sanitation, and trade administration [14].

The fifth result is the strengthening trend toward artificial intelligence and analytical management. Official information from the Customs Committee notes the direction of developing a risk management system using elements of artificial intelligence in order to prevent offenses in the customs sphere through 2030. This also aligns with broader state policy, as the strategy for the development of artificial intelligence through 2030, adopted in 2024, envisages the creation of legal and technological foundations for AI implementation across sectors of the economy. From this perspective, the use of AI in Uzbekistan's customs system is not yet a fully mature final model, but rather an emerging management paradigm. However, the scientific significance of this paradigm is substantial: it makes possible deeper segmentation of declarations, the identification of abnormal operations, profile creation, and the preemptive targeting of control measures [15].

At the same time, caution is necessary when assessing these results. Although the existing regulatory framework and organizational measures for digitalization are strong, their real effectiveness depends on several factors. First, there is the issue of data quality and compatibility across integrated systems. If different agencies maintain data in different formats, the Single Window may remain a formal center, while in practice repeated requests for the same information may continue. Second, however sophisticated the risk management system may be, its quality ultimately depends on the completeness and cleanliness of the data entered into it. Third, the introduction of new electronic systems requires new competencies from personnel; otherwise, the system may be introduced, but in practice old working methods simply migrate into a new interface. For this reason, when discussing the results, one must consider not only technology itself but the combined set of technology, data quality, human capital, and institutional adaptation. There is a small governance paradox here: even the best platform, if managed poorly, can become nothing more than an expensive electronic bureaucracy. This conclusion is also supported by the large number of integration, training, and organizational measures reflected in the regulatory documents [16].

From the perspective of discussion, another important point is that while the digital customs system increases transparency, it also strengthens the degree of centralization in governance. Electronic traces, centralized databases, and a unified platform make it easier to monitor decisions and may reduce corruption risks. At the same time, however, such centralization means that if a technical failure, cybersecurity issue, or inter-system disruption occurs, the entire chain may be affected. Therefore, the effectiveness of Uzbekistan's customs system at the next stage will depend not only on digitalizing more services, but also on ensuring continuity, backup infrastructure, and cyber resilience. In particular, as more permit documents and control functions are transferred to the Single Window, the technical reliability of this system acquires strategic importance [17].

At present, the digital platforms in Uzbekistan's customs system are mainly serving the purposes of administrative efficiency and control optimization. However, in the near future, they may also exert a strong influence on the competitiveness of the foreign trade environment. This is because the speed of customs clearance, the convenience of obtaining permit documents, advance information exchange, and risk-based control reduce transaction costs for exporters and importers. In this sense, customs digitalization is moving beyond a purely fiscal or control function and becoming one of the key factors of

trade facilitation policy. In particular, the 2025 initiatives on the electronic confirmation mechanism for international postal and courier shipments, risk-based clearance, and the customs formalization of local entrepreneurs' products for export through courier consignments show that the customs system is becoming more responsive to the needs of small business and e-commerce [18].

Overall, the results of the study show that the introduction of digital technologies in Uzbekistan's customs system is progressing on the basis of a three-stage evolution. The first stage is the electronicization of services and declarations; the second stage is interagency integration and the transformation of the Single Window into a central platform; and the third stage is the transition toward risk management, mobile electronic control, and analytical management based on elements of artificial intelligence. As a result of the discussion, it can be concluded that Uzbekistan's customs system has created a significant institutional foundation in the course of digitalization. The main task now is not simply to increase the number of such platforms, but to improve their interoperability, data quality, user convenience, and analytical value. From a scientific point of view, the most important issue is that the success of digital customs should be measured not by the number of platforms, but by the quality of decisions, the time saved, and the precision of risk management.

## 4. Conclusion

The findings of the study showed that the introduction of digital technologies into customs management processes is one of the important factors in improving the efficiency of public administration. Modern digital platforms, automated information systems, electronic declaration mechanisms, and risk management systems contribute to optimizing customs control, automating document circulation, and simplifying foreign trade procedures. In particular, the Single Window system, electronic customs declaration platforms, and the customs electronic services portal significantly accelerate information exchange between participants in foreign economic activity and government agencies.

The study also revealed that the digitalization of the customs management system is not merely a process of technological modernization, but also a transition toward a new model of public administration. With the help of digital technologies, customs authorities are able to rapidly process large volumes of data, identify risky operations, and allocate control resources more efficiently. As a result, the speed, accuracy, and transparency of customs management processes are increasing.

At the same time, the process of digitalizing the customs system is associated with a number of institutional and technological challenges. In particular, there is a need to ensure data integration among the information systems of different government agencies, strengthen information security, and improve the capacity of personnel to work with digital technologies. In addition, the effectiveness of digital platforms introduced into the customs system largely depends on the level of their interoperability, the quality of data, and the extent to which they are deeply integrated into managerial decision-making processes.

Based on the research findings, the following scientific recommendations were developed for the further improvement of digital technologies in the customs management system.

First, in order to further integrate the digital platforms used in customs management processes, it is necessary to develop a unified data exchange infrastructure among the information systems of different government agencies. This would further simplify the clearance of export-import operations and reduce cases of repeated submission of documents.

Second, in order to organize customs control more effectively, it is advisable to expand the use of artificial intelligence and Big Data technologies. These technologies

enable in-depth analysis of customs operations, identification of risky transactions, and forecasting of illegal trade activities.

Third, in order to ensure the effective application of digital technologies in customs management processes, it is important to enhance the digital competencies of customs officers. For this reason, it is necessary to expand specialized training programs in information technologies within the customs system and improve the professional development system.

Fourth, it is necessary to develop mechanisms for the regular monitoring of the effectiveness of digital platforms introduced into the customs system and for the assessment of their economic efficiency. This would make it possible to determine the real impact of digital technologies on management processes and further improve them.

Overall, the introduction of digital technologies into customs management processes is of great importance for simplifying foreign trade operations in the economy of Uzbekistan, improving the efficiency of public administration, and accelerating the integration of the national economy into the global trading system. In the future, the further digitalization of the customs system and the wider introduction of modern technologies will remain one of the main directions for enhancing the efficiency of customs management.

**REFERENCES**


[1] World Customs Organization, *Study Report on Disruptive Technologies*. Brussels, 2022.
[2] OECD, *Digital Transformation of Border and Customs Services*. Paris: OECD Publishing, 2021.
[3] World Bank, *Doing Business 2020: Trading Across Borders*. Washington, DC: World Bank, 2020.
[4] UNCTAD, *Automated System for Customs Data (ASYCUDA) Programme Report*. Geneva: United Nations Conference on Trade and Development, 2019.
[5] S. C. C. of the Republic of Uzbekistan, "Report on the digitalization of the customs system in the Republic of Uzbekistan," 2023, *Tashkent*.
[6] World Trade Organization, *Trade Facilitation Agreement and Single Window Systems*. Geneva, 2017.
[7] D. Widdowson, *Risk Management in Customs*. Brussels: World Customs Organization, 2018.
[8] A. Grainger, *Trade Facilitation and Customs Modernization*. London: Palgrave Macmillan, 2014.
[9] C. of Ministers of the Republic of Uzbekistan, "Resolution No. 55, 31 January 2025," 2025, *Tashkent*.
[10] C. of Ministers of the Republic of Uzbekistan, "Resolution No. 244, 19 April 2025," 2025, *Tashkent*.
[11] Lex.uz, "Decree of the President of the Republic of Uzbekistan No. PF-122 ``On additional measures to further improve customs administration'',," 2022.
[12] P. of the Republic of Uzbekistan, "Decree No. PF-6005, 5 June 2020," 2020, *Tashkent*.
[13] P. of the Republic of Uzbekistan, "Resolution No. PQ-358, 14 October 2024," 2024, *Tashkent*.
[14] P. of the Republic of Uzbekistan, "Decree No. PF-57, 25 March 2025," 2025, *Tashkent*.
[15] P. of the Republic of Uzbekistan, "Decree No. PF-250, 17 December 2025," 2025, *Tashkent*.
[16] R. of Uzbekistan, "State Program of the Republic of Uzbekistan for 2025," 2025, *Tashkent*.
[17] I. for Communication and T. T. of the Republic of Uzbekistan, "Regulation registered on 18 February 2013, Registration No. 2428," 2013, *Tashkent*.
[18] Stat.uz, "Official statistics of the Republic of Uzbekistan," 2025.