THE EXPERIENCE OF CHINA IN APPLYING AUTOMATED INFORMATION SYSTEMS TO ENHANCE THE COLLECTABILITY OF CUSTOMS PAYMENTS

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Annotation. *This article analyzes China's experience in ensuring the collectability of customs payments and enhancing the effectiveness of automated information systems. Based on the conducted analysis, scientific proposals and practical recommendations have been developed to improve customs administration efficiency and strengthen revenue collection mechanisms.*

Keywords: *customs payments, automated information systems, smart customs, risk management system, big data, artificial intelligence, single window.*

In a period when the global economy is undergoing rapid digitalization, enhancing the efficiency of the customs system has become one of the key factors of state financial stability. In particular, the full and timely collection of customs payments ensures the sustainable formation of state budget revenues. Therefore, advanced countries, including the People's Republic of China, have achieved a significant increase in the collectability of customs payments by widely implementing technologies such as the automation of customs control processes, artificial intelligence, blockchain, and big data analytics.

It should be emphasized that these systems have significantly enhanced the effectiveness of risk management, reduced dependence on the human factor, strengthened transparency, and at the same time ensured the accuracy and completeness of customs payment calculations. China's experience is of particular importance in developing a modern customs administration model that complies with the requirements of the World Customs Organization and the World Trade Organization's Trade Facilitation Agreement. These and other factors determine the relevance of the topic under consideration.

In his studies, Liu Zhenyu emphasizes that the "Smart Customs" model implemented in China is a key factor in enhancing the collectability of customs payments. According to him, risk management systems based on artificial intelligence and big data analytics reduce

errors in the declaration process by 30–40% and significantly increase the effectiveness of detecting illicit goods flows [4].

Furthermore, Bernard Hoekman's studies scientifically demonstrate that the implementation of digital customs systems leads to a significant increase in the collectability of customs payments in adopting countries. According to his findings, the Single Window system reduces cargo clearance time by 40–50%, thereby ensuring the timely collection of payments and lowering external trade costs [5].

Another economist, Chen Yang, has conducted research on real-time cargo monitoring based on artificial intelligence in China's customs system. According to him, Internet of Things (IoT) devices and AI algorithms detect attempts to conceal customs payments two to three times faster, which enables a stable increase in the collectability of revenues to the state budget. The above-mentioned studies also highlight both the level of development of digital technologies and their role in improving public welfare, as well as existing shortcomings in automation, which further confirms the high relevance of the selected topic [6].

The reform of the customs system of the People's Republic of China (PRC) is fundamentally based on the "Smart Customs" concept. This concept signifies a profound strategic transformation in the approach to customs administration and goes beyond mere technical modernization. It is grounded in the principles of "Smart Customs, Smart Borders, and Smart Connectivity." On 24 June 2022, the President of the People's Republic of China chaired a High-Level Dialogue on Global Development, one of the outcomes of which was the implementation of cooperation under the "Smart Customs, Smart Borders, and Smart Connectivity" ("3S") initiative. Below is a brief overview of each component of the "3S" initiative [7].

Smart Customs promotes the adoption of technological innovations and the optimization of control instruments to modernize the customs management system and enhance its operational capacities. It supports the development of smart infrastructure, intelligent customs control mechanisms, and smart internal governance within customs authorities.

Smart Borders encourages all customs and border agencies to engage in data sharing, strengthen joint operations, and enhance risk control, thereby achieving coordinated border management. The "Smart Borders" concept is implemented through intelligent approaches to border control, inter-agency cooperation, and cross-border collaboration.

Smart Connectivity fosters interconnectivity among global supply chain participants, compatibility of systems and standards, and cooperative engagement, thereby ensuring both trade security and facilitation. It focuses on the intelligent interconnection of customs information networks, smart alignment of customs management frameworks, and intelligent cooperation with supply chain stakeholders.

The customs authorities of the People's Republic of China have pursued a strategy of comprehensive integration of modern technologies with the aim of optimizing control and

administrative processes. The "Smart Customs" system extensively employs advanced technologies such as big data, artificial intelligence, and cloud computing.

This integration has enabled a high level of automation of customs control in China, significantly reducing dependence on the human factor. As a result, the speed and objectivity of risk assessment processes have increased substantially, ensuring more efficient allocation of resources toward targeted and risk-based inspections.

In enhancing the collectability of customs payments and ensuring transparency, the establishment of a nationwide unified and centralized information platform is considered to be of decisive importance. Such centralized integration guarantees the accuracy, consistency, and real-time availability of all data, which in turn leads to a significant reduction in administrative errors, data discrepancies, and corruption risks.

China has developed four fundamental principles for the implementation of the "3S" Concept (see Figure 1).
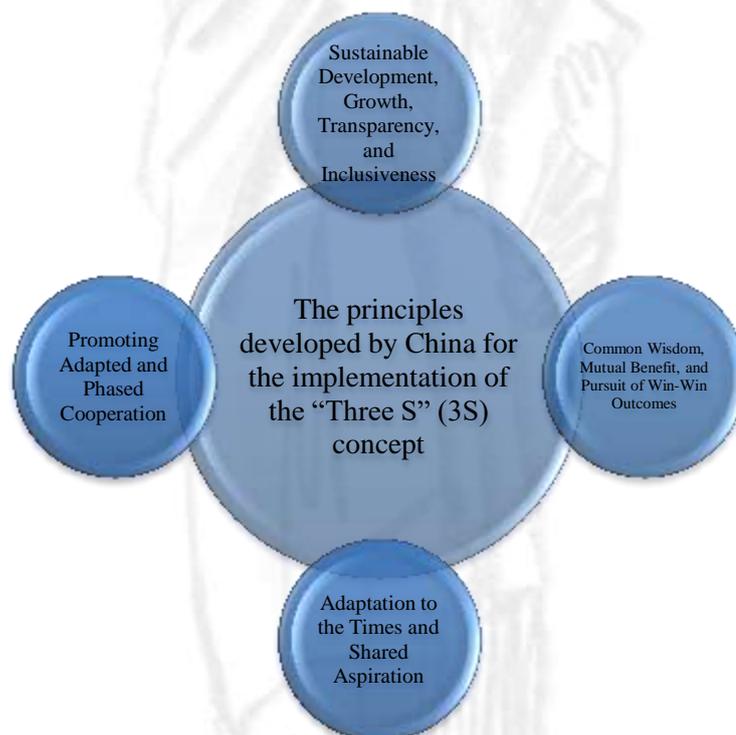
Figure 1. Key Principles Developed by China for the Implementation of the "Three S" (3S) Concept

Additionally, China has put forward the following initiatives to promote the development and implementation of the "3S" concept across all countries:

Initiative 1: Developing "Smart Customs" in all countries (regions) through the application of intelligent technologies and innovative thinking;

Initiative 2: Advancing "Smart Borders" in all countries (regions) by enabling data sharing and mutual recognition of customs controls;

Initiative 3: Deepening cooperation with stakeholders to promote "Smart Connectivity" of the global supply chain;

Initiative 4: Supporting capacity building to jointly develop intelligent governance.

When discussing China's experience with "Smart Customs" and its key features, it is important to note that China is undertaking comprehensive reforms to modernize its customs system, with Automated Information Technologies (AIT) playing a critical role. The "Smart Customs" initiative focuses on enhancing efficiency by automating and digitizing customs operations. Key achievements in China include the implementation of a Single Window system for AIT usage, utilization of big data and artificial intelligence, the introduction of electronic payment systems, and the adoption of mobile applications.

China's "Smart Customs" initiative has achieved the following key accomplishments:

the time required for customs clearance has been significantly reduced;

costs associated with customs processes have decreased;

transparency in procedures has increased, helping to prevent corruption;

the collection of customs payments has improved, resulting in increased revenues for the state budget.

In conclusion, an analysis of China's experience demonstrates the vital role and significance of automated information systems in enhancing the collectability of customs payments. Digitalization processes not only simplify foreign trade operations but also serve as a crucial factor in the stable formation of state budget revenues. Technologies implemented in China's customs system—such as "Smart Customs," "Single Window," blockchain, and artificial intelligence—ensure faster declaration processes, minimize corruption risks, reduce illicit goods circulation, and significantly improve the efficiency of customs payment collection.

Reports by the World Customs Organization (WCO), UNCTAD, and OECD on digital customs confirm the critical importance of automated systems for fiscal stability and trade security. Although significant modernization efforts have been undertaken in Uzbekistan's customs system in recent years, China's deeply integrated and highly technological model provides essential directions for improving the national system.

In our opinion, to implement China's technological modernization and digital technologies in the customs sector of Uzbekistan, the following recommendations can be proposed:

the creation of a unified, integrated "Digital Customs" platform, that is, the consolidation of all customs information systems into a single ecosystem based on China's "Smart Customs" model, alongside the introduction of real-time data exchange between government agencies, is advisable;

it is necessary to improve the risk management system based on artificial intelligence. As a result, the automatic detection of smuggling risks using AI and real-time filtering of

suspicious operations within goods flows will enhance the collectability of customs payments;

developing strategic plans for the effective implementation and continuous improvement of Automated Information Technologies (AIT) within customs authorities is critically important.

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