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## EMBRACING DIGITAL TRANSITION IN UKRAINIAN CUSTOMS WITH ICT AND ELECTRONIC SYSTEMS

The rapid evolution of technology marks a substantial transition into an era dominated by electronic systems. This transformation is underscored by the widespread adoption of digitalization across diverse areas. This phenomenon underscores fundamental changes in the way we interact and operate, driven by technological influences. Scholars highlight the multifaceted nature of this transformation, from the seamless integration of information technology into organizational workflows to the regulatory impact of digital technologies on administrative bodies, playing a crucial role in changing legal, ethical, and cultural contexts (Cooper & Zmud, 1990; Khrypko et al., 2021).

Regarding payment systems, Ukraine must align with European standards, while e-governance at customs, as a foundation of international integration, demands a tailored approach. The COVID-19 pandemic has underscored the crucial role of information and communication technologies (ICT) in helping customs administrations adapt to global challenges. In the modernization of customs operations, scholars like Dalton and Stosic (2021) recommend introducing new ICTs aligned with sustainable development goals to improve customs efficiency. However, the path to eCustoms and IT-driven reforms requires careful consideration of specific circumstances.

This research aims to examine the transformative impact of ICT and electronic systems on Ukrainian customs activities and analyze the benefits, challenges, and implications of this shift. Specifically, the study examines the role of ICT in the modernization of Ukrainian customs in the face of global challenges, and explores the opportunities and challenges associated with eCustoms and IT-based reforms. Considering the diverse perspectives of scholars is crucial for a comprehensive understanding of potential biases.

The implementation of anti-corruption measures at customs, particularly through the Single Window system has proven successful and widespread. This system significantly reduces human intervention, acting as a deterrent to corrupt practices. The operational benefits of the Single Window, such as streamlined processes, reduced costs for businesses, and efficient decisionmaking, contribute to effective border management, aligning with the goals of ICT-oriented reforms. Customs authorities, struggling with limited resources to oversee crossborder operations, need innovative approaches to risk management in the face of rapidly growing international trade (Van Trang et al., 2023). Adaptability of processes is key to effective border management, and modern technologies, including eCustoms, are changing global economic dynamics.

The world's leading customs services are using modern information technologies, as exemplified by Korean research on robotic process automation (RPA) and the introduction of artificial intelligence at customs in Brazil (Lee, 2023; Collosa, 2020).

In Ukraine, the eCustoms system ensures an uninterrupted flow of information and contributes to the reduction of the shadow economy (Ishchuk, 2023). Despite the challenges, positive aspects of the single window system, such as anti-corruption initiatives and efficiency gains, underline the transition from traditional customs to an electronic model.

The ongoing systemic integration of eCustoms into society emphasizes inclusiveness and equal access to technological advances, promotes accountability, and strengthens public trust in administrative authorities. This prompts discussions on the ethical implications of integrating technology into governance mechanisms. The introduction of eCustoms requires societal and philosophical changes, demonstrating the interconnectedness between technology, governance, education, and social dynamics.

In conclusion, the widespread adoption of digitalization represents a profound shift toward an era dominated by electronic systems, reshaping how we interact and operate in various fields. This transformative journey, highlighted by scholars, spans organizational integration to regulatory impacts, influencing legal, ethical, and cultural contexts. The study underscores the need for Ukraine to align with European standards in payment systems and adopt a tailored approach to e-governance at customs for international integration. The COVID-19 pandemic underscores the crucial role of ICT in adapting global customs administrations. While scholars advocate for ICT introduction in customs modernization, the path to eCustoms and IT-driven reforms demands careful consideration. The successful implementation of anti-corruption measures, particularly through the Single Window system, signifies a shift to an electronic model in Ukrainian customs, offering streamlined processes and efficiency gains. Despite challenges, positive aspects underscore the benefits of this transition. ongoing integration of eCustoms emphasizes inclusiveness. The accountability, and trust in administrative authorities, sparking discussions on the ethical implications of technology in governance. The introduction of eCustoms prompts societal and philosophical changes, showcasing the interconnectedness of technology, governance, education, and social dynamics. Further exploration of the societal impact, ethical considerations, and continuous advancements in technology within customs control processes is essential for a comprehensive understanding of this evolving landscape.

## **References:**

1. Collosa, A. (2020). The Digitalization of Customs: Some Trends Purpose of the Recent EU Customs Plan. 8 November 2020. URL: https://www.linkedin.com/pulse/digitalization-customs-some-trends-purpose-recent-eu-plan-collosa/

2. Cooper, R.B., Zmud, R.W. (1990). Information Technology Implementation Research: A Technological Diffusion Approach. *Management Science*, 36, 123–139. DOI: https://doi.org/10.1287/mnsc.36.2.123

3. Dalton, S., Stosic, B. (2021). The Importance of Applying Lean Innovation for Enhancing Harmonization of Customs Procedures in context of Digitalization of Customs Administration – A Case Study of Serbia. *Lex Localis – Journal of Local Self-Government*, 19(2), 305–327. DOI: https://doi.org/10.4335/19.2.305-327(2021)

4. Ishchuk, M. A. (2023). Customs policy vs. shadow economy: implications for Ukrainian enterprises. Enterprise Economics: Modern Problems of Theory and Practice: Proceedings of the XII International Scientific and Practical Conference, 8 September 2023, Odesa, 597–598.

5. Khrypko, S., Aleksandrova, O., Stoliarchuk, L., Ishchuk, O., Oblova, L., Pavlovska, O., Bezuhlyi, A. (2021). Value Complexity of Virtual Communities and Information Security in the Postmodern World: Semantic Focus and Language Innovations. *International Journal of Computer Science and Network Security*, 21 (12), 712–718. DOI: https://doi.org/10.22937/IJCSNS.2021.21.12.97

6. Lee, J. (2023). Robotics Process Automation (RPA) And The Import/Export Customs Declaration Process. *Global Trade and Customs Journal*, 18 (10), 384–390, DOI: https://doi.org/10.54648/gtcj2023042

7. Van Trang T., Hong Le, D., Tuan Nam, V., Quynh Giang, D., Thuy Hong, Ph. (2023). Customs Risk Management in Vietnam During Digital Transformation: Toward an Intelligent Customs Model. *Global Trade and Customs Journal*, 18(4), 160–173. URL: https://kluwerlawonline.com/journalarticle/Global+Trade+and+Customs+Journal/18.4/GTCJ2023017