XIV Міжнародна науково-практична дистанційна конференція
«Облік, оподаткування і контроль: теорія та методологія»
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DIGITAL TECHNOLOGIES IN THE AUDIT OF LOGISTICS PROCESSES

Modern logistics processes operate in an environment of high dynamics, globalization and constant growth of information flows. The development of e-commerce, the complexity of supply chains and the growth of requirements for speed and reliability of delivery determine the need to increase the transparency and manageability of logistics activities. In these conditions, the audit of logistics processes acquires particular importance, as it provides control over the efficiency of resource use, compliance with internal regulations and minimization of operational risks. Traditional approaches to logistics auditing, based on selective document review and retrospective analysis of indicators, are increasingly proving insufficient for assessing complex and multi-level processes of movement of material, information and financial flows. That is why digital technologies are becoming a key tool for transforming audit activities in the field of logistics. Their application allows integrating data from different stages of the supply chain, conducting operational monitoring of processes and obtaining more substantiated analytical conclusions.

Digital solutions, including automated accounting systems, analytical platforms, big data tools and visualization tools, significantly expand the capabilities of logistics process auditing. They provide not only increased accuracy of inspections, but also a transition to preventive control focused on early detection of deviations, inefficient operations and potential risks. This is especially important in conditions where even

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minor failures in logistics can lead to significant financial losses and loss of competitive positions.

The use of digital technologies in the audit of logistics processes also contributes to increasing the transparency of management decisions and strengthening trust between supply chain participants. Audit, supported by modern digital tools, is becoming an important element of the management system, providing not only control, but also information support for the strategic development of the enterprise.

That is why, based on research [1, 2, 3, 4], we will form an idea of the individual features of the use of digital technologies in the audit of logistics processes. Modern logistics audit is increasingly focused on the use of digital technologies, which is due to the need to ensure transparency, speed and comprehensiveness of inspections. The peculiarity of the modern approach is that digital tools allow the auditor to work with large volumes of data, integrate information from different stages of the supply chain and assess processes in real time, which significantly increases the accuracy and efficiency of control.

One of the key features is continuous data analytics. The use of automated accounting systems and big data platforms allows audit services to conduct a comprehensive analysis of operations, identify hidden patterns and detect deviations from regulations or internal policies. This means that the audit ceases to be selective and reactive, and becomes a proactive risk management tool. Another important feature is the increased integration of audit processes and logistics management. Digital technologies allow you to combine data from warehouses, transportation systems, procurement and resource accounting in a single environment, which contributes to a more comprehensive assessment of the effectiveness of the supply chain. This approach allows the auditor not only to record errors or violations, but also to provide recommendations for optimizing logistics processes based on actual data.

A feature of digital audit is also the ability to predict risks and model scenarios. The use of artificial intelligence and machine learning algorithms makes it possible to predict potential supply disruptions, warehouse overloads or transport delays, which

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allows you to prevent losses and increase the efficiency of management decisions. An equally important aspect is increasing transparency and trust in logistics processes. Digital platforms provide access to analytical information for all stakeholders: from company management to external partners and regulatory authorities. This creates conditions for more effective control and at the same time strengthens the company's reputation in the market.

Thus, the application of digital technologies in the audit of logistics processes is characterized by the following main features: integrity and depth of analytics, integration of control and management, preventive risk assessment and event forecasting, as well as increased transparency and trust in processes. These features form a new qualitative level of audit activity, where control becomes more strategic, analytical and focused on the sustainable development of logistics systems.

References

1. Desyatnyuk O., Krysovatyy A., Ptashchenko O., Kyrylenko O., Kurtsev O. (2025) A Framework for Digital Logistics Transformation: Innovation Implementation with Financial Interest Protection. (2025). *African Journal Of Applied Research*, 11(7), 45-65. https://doi.org/10.26437/1tt1jf75

2. Krysovatyy, A., Desyatnyuk, O., Ptashchenko, O. (2024). Digital Innovations and their Ramifications for Financial and State Security. *African Journal Of Applied Research*, 10(1), 431–441. https://doi.org/10.26437/ajar.v10i1.713

3. Бурак М. П, Яремко І. Й. Автоматизація аудиту фінансової звітності у воєнний період. *Економіка та суспільство*. 2024. Випуск 60. С. 1-7. URL: https://doi.org/10.32782/2524-0072/2024-60-13

4. Янковська К. Вплив цифрових технологій на проведення аудиту. *Аграрна економіка*, 2023. Т. 16. № 3. URL: https://doi.org/10.31734/agrarecon2023.03-04.068