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## ETHICAL ASPECTS OF DIGITAL INTERNAL CONTROL AND FINANCIAL ANALYSIS IN THE CONTEXT OF ARTIFICIAL INTELLIGENCE UTILIZATION

Extended abstract. The rapid development of artificial intelligence technologies is fundamentally transforming the practice of internal control and financial analysis in enterprises. The shift from retrospective verification to real-time predictive assurance creates new opportunities to improve the efficiency and quality of auditing; however, at the same time, it generates a complex set of interrelated ethical, security, and regulatory challenges. For Ukraine, which is actively pursuing its European integration course and implementing the EU AI Act as a benchmark for national legislation, addressing these challenges is becoming strategically important.

The article systematizes six key ethical issues related to the implementation of AI in auditing processes: algorithmic opacity, bias and discrimination, data confidentiality risks, blurred accountability for decisions, fragmentation of the regulatory framework, and deskilling—the gradual devaluation of auditors' professional skepticism. A systematic review by Murikah, Nthenge, and Musyoka (2024), covering 83 scientific publications, identified five main sources of bias in AI-based auditing systems: data scarcity, demographic homogeneity of samples, spurious correlations, inappropriate comparators, and cognitive biases.

A comparative analysis of regulatory frameworks (UNESCO/OECD, the EU AI Act, and the AI Concept of Ukraine) demonstrates a significant lag in domestic legislation: there is no classification of systems by risk levels, no mandatory algorithmic audits, and no sanction mechanisms. In contrast to the EU AI Act, which provides for fines of up to €35 million or 7% of annual turnover for violations, the AI Concept of Ukraine is advisory in nature.

Using the example of a hypothetical fraud detection case in a domestic retailer (2025), the practical application of Graph Neural Networks (GNNs) combined with Explainable AI (XAI) is illustrated. It is shown that such an approach transforms the “black box” into transparent audit evidence while preserving human oversight at all stages. The proposed three-level AI integration model (data collection — AI processing — ethical oversight) may serve as a practical guideline for enterprises in the context of European integration.

**Keywords:** artificial intelligence, economic analytics, financial analysis, internal audit, AI ethics, explainable AI (XAI), Graph Neural Networks (GNN).