

USING DIGITAL TOOLS FOR DIAGNOSING CRISIS PHENOMENA AT UKRAINIAN ENTERPRISES

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Abstract. Turbulent economic conditions, geopolitical risks, and accelerated market fluctuations increase the vulnerability of enterprises to crisis phenomena. In such an environment, the effectiveness of anti-crisis management is largely determined by the ability of organizations to forecast threats and adapt strategies in advance. Digital technologies significantly expand these capabilities. Tools such as big data analytics, machine learning, business intelligence platforms, scenario modeling systems, and real-time monitoring create conditions for earlier detection of destabilizing signals and more balanced decision-making. At the same time, the quality of anti-crisis strategies depends not only on technological readiness but also on the organizational culture that ensures the use of data, transparency of decisions, and coordinated response mechanisms. This corresponds to the broader paradigm of responsible and adaptive management, where learning, data ethics, and digital competences strengthen the sustainability of corporate practices.

The aim of this study is to determine the potential of digital technologies in forecasting anti-crisis management strategies and to identify the conditions under which these technologies are most effective for strengthening the resilience and adaptability of enterprises.

The research is based on system and comparative analysis. Scientific literature, industry reports, and case studies are reviewed to classify digital technologies used in anti-crisis management. The structural-functional approach is applied to examine how forecasting tools influence decision-making processes,

communication flows, and organizational behavior. The competence-based approach is used to consider the role of digital literacy and data management culture in enhancing the efficiency of technological tools.

The study identifies several groups of digital technologies that play a key role in forecasting anti-crisis strategies. Business intelligence systems integrate internal financial and operational data, allowing organizations to track deviations from planned indicators and identify early signs of crisis. Machine learning and predictive analytics create models of risk probability and assess the consequences of alternative strategic scenarios. Digital platforms for external monitoring track market dynamics, supply chain vulnerabilities, and regulatory changes. Scenario modeling systems support the formation of adaptive strategies under uncertainty, helping managers evaluate the impact of various intervention measures. Real-time dashboards enhance transparency and facilitate synchronized decision-making at different management levels. The study also emphasizes that digital forecasting tools are most effective when supported by an organizational culture focused on continuous learning, ethical data use, cross-functional cooperation, and psychological safety. These cultural conditions ensure that forecasting becomes not only a technical function but also an integral part of strategic thinking and proactive management.

Digital technologies significantly expand the forecasting capacity of anti-crisis management strategies. They increase the accuracy and speed of detecting risk factors, support scenario planning, and promote informed and timely decisions.

However, the effectiveness of these tools depends on organizational readiness, including digital competences, data governance systems, and a culture that values transparency and shared responsibility.

Future research should focus on developing diagnostic models to assess the maturity of digital forecasting systems, evaluating the economic impact of predictive technologies in anti-crisis management, and exploring cross-sectoral and cross-country differences in digital adaptation.

Keywords: anti-crisis management; digital technologies; forecasting; business intelligence; predictive analytics; scenario modeling; data governance; organizational resilience; digital transformation; risk management; strategic adaptation; decision support systems.

References:

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