UDC (004.92:005.7)::(37.09:81`32)

Advanced intelligent management and control of philological education in the era of instability and crisis

Svitlana Krasniuk

Kyiv National University of Technologies and Design, Kyiv http://orcid.org/0000-0002-5987-8681

Abstract. This publication analyzes the modern concept of intelligent management and control in philological education in conditions of crisis and instability. The authors argue that traditional management methods are ineffective in the modern world, which is characterized by a high level of uncertainty. The key idea is that intelligent management transforms ordinary control into a strategic process of monitoring and forecasting, which allows organizations to maintain stability in a changing environment. The conclusions note that the integration of innovative management tools into education is an important step towards its modernization. This changes the role of managers and teachers, who become not administrators, but strategists and moderators. As a discussion question, the author argues that hybrid technologies that combine classical management methods with intelligent systems are especially relevant for the sustainable development of philological education. Keywords: innovational management, intelligent management, philology education, instability & crisis.

Introduction.

The modern world is characterized by a high level of uncertainty [1, 2], frequent crisis processes and destabilizing factors [3, 4], which makes classical management methods insufficiently effective. In such conditions, improved intellectual mechanisms of administration and control, based on the use of complex innovative corporate information systems [5], corporate knowledge management systems [6], as well as artificial intelligence [7], analysis of large data sets, machine learning algorithms [8] and predictive analytics, are becoming increasingly valuable. Such innovative digital tools (information systems) allow building flexible strategies, identifying potential threats and developing measures to prevent them at early stages [9]. Innovative intelligent administration contributes not only to optimizing resource allocation, but also to increasing the accuracy of forecasting, adaptability of management decisions and reducing risk factors [10-12]. Control in such systems ceases to be just a formal verification procedure and is transformed into a strategic process of constant monitoring, analysis and prediction of adverse trends. This strengthens the competitive position of projects and organizations, as well as increases their ability to maintain stability in a complex, often crisis-ridden external environment [13, 14]. The manager in such a system ceases to perform the function of an administrator and acquires the quality of a strategist, capable of making balanced and long-term decisions, relying on intelligent technologies, in particular knowledge-based and data-driven AI [15]. Thus, improved and innovative intelligent management forms the foundation for the effective functioning and development of institutions, organizations (and projects) even in conditions of crisis and instability.

The Main Part.

The modern system of philological education faces a number of challenges associated with global transformations, digital changes, unstable socio-economic situation and rapid growth of educational demands of society. Classical methods of administration and control in this area in many cases turn out to be ineffective, since they do not provide proper flexibility and rapid response to changes in the external and internal environment.

In these conditions, the implementation of adaptive intellectual management and supervision based on the use of modern digital technologies, artificial intelligence algorithms, big data analytics and predictive modeling becomes particularly relevant. This approach allows you to identify key trends in advance, predict transformations, adjust educational trajectories and increase the effectiveness of managing the educational process and scientific and research activities in the field of philology.

Adaptive intellectual administration not only contributes to the rational allocation of resources and improvement of the organization of the educational process, but also forms new strategies for the development of educational programs. It is aimed at individualizing learning, improving the quality of knowledge, developing interdisciplinary competencies, and increasing the competitiveness of philological education in the international arena.

Conclusions.

Adaptive intellectual management and control in philological education are the most important direction of modernization of the educational system. The use of intelligent technologies allows to make the educational process more flexible, dynamic and oriented to the real needs of students and society as a whole.

Integration of innovative management tools ensures increased efficiency of monitoring, forecasting and regulation of educational processes, minimization of risks and sustainable development of the philological field. At the same time, the role of managers and teachers is changing: they become not so much administrators as strategists and moderators of intellectual interaction:

- 1. Intelligent management and control ensure flexibility and adaptability of educational processes in conditions of instability and crisis.
- 2. The use of modern technologies (artificial intelligence, big data analysis) increases the accuracy of forecasting and the effectiveness of monitoring.
- 3. This approach helps to optimize the distribution of resources and reduce risks in the educational system.
- 4. The role of the manager and teacher is transformed: they become strategists and moderators capable of making informed long-term decisions.
- 5. Intelligent management creates a basis for the sustainable development of philological education and increasing its competitiveness at the international level.

Thus, adaptive intellectual administration and control create the foundation for the formation of an updated model of philological education, which combines humanitarian traditions with the capabilities of digital technologies and ensures its sustainable development and competitiveness in the conditions of the modern crisis and rapidly changing world.

Discussion.

As stated above, modern philological education is developing in conditions of increased globalization, digital transformation, crisis phenomena and an unstable external environment, which creates new challenges and requires the implementation of innovative solutions. Traditional approaches to management and control in the educational sphere often do not provide the necessary flexibility, stability and operational response to rapid changes. In these circumstances, the use of hybrid technologies that combine classical management methods and modern intellectual systems is of particular importance. It is hybrid technologies that allow integrating artificial intelligence, big data analysis, cloud platforms, cognitive services and synergistic analysis methods with traditional practices [16]. Such a comprehensive approach to management and control ensures adaptability, predictability and risk minimization. The relevance of the use of hybrid technologies lies in their ability to form innovative strategies for the development of philological education, focused on individualizing educational trajectories, improving the quality of training and forming competitive specialists in the global educational market.

References

- 1. Nevmerzhytska S. M. (2018). Formation of a strategy for the innovative development of enterprises in conditions of uncertainty. *Scientific Bulletin of the Kherson State University. Series: Economic Sciences.* 2018. Vol. 32. pp. 99-103. URL: https://ej.journal.kspu.edu/index.php/ej/article/view/422/418.
- 2. Skitsko, V. (2009). Decision-making in conditions of uncertainty, conflict and the risk they entail. *Modeling and information systems in economics:* Collection of scientific papers. K.: KNEU, 2009. Vol. 79. pp.52-61 [in Ukrainian].
- 3. Karpenko, Oksana & Kravchenko, Olha & Palyvoda, Olena & Semenova, Svitlana. (2025). Evaluating the effectiveness of innovation implementation at transport enterprises under conditions of uncertainty. *Academy Review*, #2. 75-88. 10.32342/3041-2137-2025-2-63-5.
- 4. Palyvoda, Olena & Semenchuk, Tetiana & Rachkovskyy, Eduard. (2024). Modelling growth strategies of transport enterprises in the conditions of context uncertainty. *Baltic Journal of Economic Studies*. 10. 255-267. 10.30525/2256-0742/2024-10-3-255-267.
- 5. Krasnyuk, M., Kulynych, Y., Krasniuk, S., & Goncharenko, S. (2024). Design of innovative management information system. *Grail of Science*, 36, pp. 237-245.
- 6. Tuhaienko V., Krasniuk S. Effective application of knowledge management in current crisis conditions. *International scientific journal "Grail of Science"*. 2022. № 16. pp. 348-358.

- 7. Naumenko, M., & Hrashchenko, I. (2024). Modern artificial intelligence in anti-crisis management of competitive enterprises and companies. *Grail of Science*, (42), 120–137. DOI: https://doi.org/10.36074/grail-of-science.02.08.2024.015 [In Ukrainian].
- 8. Naumenko, M. (2024). Intelektualnyi analiz biznesovykh danykh yak faktor posylennia konkurentnoi pozytsii pidpryiemstva [Intelligent analysis of business data as a factor in strengthening the company's competitive position]. *Uspikhy i dosiahnennia u nautsi Success and progress in science*, 2024, 5 (5), https://doi.org/10.52058/3041-1254-2024-5(5)-746-762 (in Ukrainian).
- 9. Krasnyuk M., Kulynych Yu., Hrashchenko I., Krasniuk S., Goncharenko S., Chernysh T. (2023). Innovative management information system in post-crisis economic conditions on emerging markets. *Moderní aspekty vědy Modern aspects of science: svazek XXXVII mezinárodní kolektivní monografie*. Česká republika: Mezinárodní Ekonomický Institut s.r.o. pp. 185–203.
- 10. Hrashchenko I.S., Khmurova V. V. (2016). Innovative policy as a tool for organizational change. Economic development: theory, methodology, management. *Materials of the 4th International Scientific and Practical Conference*]. Budapest-Prague-Kyiv, 28-30 November 2016. 386, p. 361-369. [In Ukrainian].
- 11. Maksym Naumenko (2024). Modern concepts of innovation management at enterprises. *Scientific innovations and advanced technologies* No. 6(34) (2024). DOI: https://doi.org/10.52058/2786-5274-2024-6(34)-435-449
- 12. Mykytenko V.V., Hryshchenko I.S. (2008). Adaptive management system of innovative processes at enterprises. *Problems of science*, (4), pp. 32-37.
- 13. Naumenko, M. (2024). Methodology of determining factors of activity efficiency and competitive position of the enterprise on the market in crisis conditions. *Scientific innovations and advanced technologies*, № 7(35) (2024). DOI: https://doi.org/10.52058/2786-5274-2024-7(35)-648-665 [in Ukrainian].
- 14. Tsalko T. R., Nevmerzhytska S.M. (2023) Risk assessment in innovative activity. *Actual problems in economics, finance and management: materials of the International Scientific and Practical Conference*. East European Center for Scientific Research (Odesa, 25 october 2023). Research Europe, 2023. pp. 92-94 https://research europe.org/product/book-31 [in Ukrainian].
- 15. Naumenko, M. (2024). Models of business knowledge in artificial intelligence systems for an effective competitive enterprise. *International scientific journal* "*Internauka*". *Series:* "*Economic Sciences*". № 6. DOI: https://doi.org/10.25313/2520-2294-2024-6-10010 [In Ukrainian].
- 16. Krasnyuk, M. (2014). Hybridization of intelligent methods of business data analysis (anomaly detection mode) as a standard tool of corporate audit. *The state and prospects of the development Education and science of today:* materials of the III International science and practice conf. [m. Ternopil, October 10-11. 2014]. TNEU, 2014. pp. 211-212 [in Ukrainian].