

UDC (005.7+001.8) :: 81`32

## INNOVATIVE MANAGEMENT FOR PHILOLOGY RESEARCH PROJECTS IN CRISIS TIMES

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**Abstract.** *The paper explores innovative management of philological research projects in crisis conditions through digital transformation, flexible organizational models, and hybrid intelligent technologies. It outlines adaptive solutions—digitalization of resources, AI-based linguistic tools, and online collaboration—to overcome access and communication barriers. The approach enhances resilience, accelerates knowledge dissemination, and supports global integration of philological research under uncertainty.*

**Key words:** *innovative management, philology, R&D, crisis, hybrid intelligent technologies, digitalization.*

### **Introduction.**

Innovation management is a comprehensive system for managing the processes of creating, implementing and developing innovations in organizations, industries or at the level of the economy as a whole [1]. Its task is to ensure the effective transformation of scientific and technical ideas and creative ideas into competitive products [2], services or technologies [3]. In the conditions of dynamic changes in the world economy and accelerated technological progress, innovation management is becoming a key factor in sustainable development and increasing the competitiveness of enterprises [4]. Unlike traditional management, which is focused on the stability and reproduction of already worked out processes, innovation management is aimed at constantly searching for news, their adaptation and integration into the business model especially under conditions of uncertainty [5]. It covers both strategic and operational aspects: from the formation of an innovation strategy to the organization of specific projects and assessing their effectiveness [6]. Special attention is paid to the management of risks, resources and human capital, since it is these factors that determine the success of the implementation of innovations at the national, regional & industry scales [7].

Innovation management in crisis is a specialized approach to innovation

management aimed at supporting the sustainability of organizations [8], minimizing risks and finding new sources of growth in conditions of economic instability [9], political uncertainty or social upheaval. Unlike standard innovation management, which operates in a more predictable environment [10], a crisis situation requires special flexibility, accelerated response and readiness for radical changes in strategies and processes [11].

During a crisis, the role of innovation is especially growing [12]. Reducing demand, resource restrictions, supply disruptions and reducing competition for the provision of companies look for non-standard solutions: optimizing business models, implementing digital technologies [13], automating processes, moving to new markets or products. Innovation management becomes a survival tool that allows you to quickly adapt to changing conditions and find opportunities for development where traditional decision making management methods are ineffective & not accurate and incomplete [14].

### **The Main Part.**

Innovative management of research projects in philological sciences in times of crisis requires a combination of strategic thinking, digital technologies and flexible organizational approaches. In this area, innovations are understood not only as new scientific ideas and concepts, but also as modern methods of data collection, processing and dissemination, as well as formats of scientific communication that are able to work under conditions of limitations and uncertainty.

*The features of philological R&D in times of crisis are studied.* Philological sciences traditionally rely on textual and cultural material, which may require long-term field research, work with archives, libraries, and members of language groups. During crises (economic, social, political, military, environmental), such opportunities are often limited or unavailable. In response to this, the following solutions are used:

- transition to digital sources - use of electronic libraries, digitized archives, national and international corpora of texts;
- accelerated innovative digitalization and personalization of data [15] -

conversion of rare and unique materials into electronic format for preservation and remote access;

- virtual research expeditions - remote interaction with informants, online interviews, video conferences.

*The features of technological innovations of research projects in philological sciences in times of crisis are specified.* Modern technologies are becoming the most important tool, especially in crisis situations:

- computational linguistics and artificial intelligence - automatic morphological and syntactic analysis, semantic recognition, machine translation, analysis of large text arrays (Big Data in humanitarian studies).
- crowdsourcing - involvement of native speakers and volunteers for collection, marking and verification of language data;
- Digital collaboration platforms - Google Workspace, Overleaf, Trello, Notion, Zotero, which enable collaborative work on text corpora, articles and analytical reports;
- virtual conferences and scientific seminars - Zoom, Microsoft Teams, Hopin, GatherTown allow scientific communication and presentation of results to be maintained even with closed borders and travel restrictions.

*The specificity of organizational approaches and models of management of scientific research projects in the philological sciences during the crisis is formalized.* In the hour of crisis, the following methodologies will be used in the management of philological projects:

- ✓ agile - iterative organization of work with the possibility of reconsidering goals at every stage;
- ✓ scrum - division of tasks into short sprints, which allows you to quickly achieve intermediate results;
- ✓ kanban – visualization of all tasks and control of progress, which is especially useful for divided teams;
- ✓ project prioritization – a vision of projects that can produce a quick and practical effect (for example, the creation of an online dictionary or an

interactive database of data required by educational and cultural institutions).

*The specifics of international and interdisciplinary scientific research have been clarified within the framework of scientific research projects in the philological sciences during the crisis year.* Hours of crisis require expanded innovation and the search for new partners:

- 1) virtual up-to-date measures allow you to connect philologists, historians, cultural experts, IT specialists and translators;
- 2) full access to research results increases their value and accelerates advancement in world and cultural life;
- 3) grant activity with international organizations (UNESCO, Erasmus+, Horizon Europe) becomes a source of funding and exchange of information.

*There was further development of the specifics of risk management and the stability/resilience of scientific research projects in the philological sciences.* In crisis minds, it is necessary to plan ahead for actions in times of unforeseen situations: diversification of financial resources; reserving tribute from gloomy mongers; duplication of key functions between team members; The implementation of projects is carried out in stages to ensure that the results are often completed.

### **Summary and conclusions.**

Innovative management of research projects in philological sciences in times of crisis allows: to preserve and develop the scientific potential of the humanitarian sphere with limited resources; to accelerate the transition to digital formats for storing, analyzing, and disseminating knowledge; to expand the research audience through online access and open databases; to increase the resilience of research teams to external shocks; to stimulate interdisciplinary interaction and integration of humanitarian knowledge into the global scientific space.

### **Discussion.**

The author puts forward the following discussion thesis: the relevance and effectiveness of hybrid intelligent technologies for managing research projects in philological sciences during the crisis. After all, it is precisely hybrid intelligent technologies for managing R&D projects in philology, which combine both the

symbolic paradigm (built on logic and sets of rules [16]) and the sub-symbolic, connectionist paradigm (deep neural networks and traditional machine learning [17]), that enable (targeted, personalized, directed, etc.) solutions in dynamic, often stochastic factors of uncertainty (probabilistic and fuzzy) [18-20].

Hybrid intelligent technologies for managing research projects in philological sciences during the crisis represent a synergistic integration of various technologies [21]: classical machine learning [22], shallow & deep ANN [23], various Data Mining modes [24], Data Science with Big Data, natural language processing (NLP), and, finally, artificial intelligence (AI) [25] and traditional management tools into a single system that ensures effective planning, coordination and implementation of research in conditions of high uncertainty and limited resources. Thus, hybrid intelligent technologies act as a tool for the digital transformation of philological research, ensuring its sustainability, flexibility, and high productivity even under crisis restrictions. So, this is promising part of the author's future scientific R&D will be reflected in future publications.

### **References:**

1. Palyvoda O. O., Seliverstova, O. S. (2017). Management of innovative development of industry in the countries of the European Union based on the formation of cluster infrastructure. *Naukovyi visnyk Polissia*. 1(1(9)). 185–191 [In Ukrainian].
2. Mykytenko V.V., Hryshchenko I.S. (2008). Adaptive management system of innovative processes at enterprises. *Problems of science*, (4), pp. 32-37.
3. 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](https://doi.org/10.52058/2786-5274-2024-6(34)-435-449)
4. 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].

5. 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.

6. 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.

7. Maksym Kolesnyk & Olena Arefieva & Dmytro Onopriienko & Yuliia Kovalenko & Tetiana Ostapenko & Iryna Hrashchenko, 2023. "Current issues of innovative development and evolution of the circular economy at the regional scale," Chapters of Monographs, in: *Economic and cyber security*, chapter 6, pages 160-183, PC TECHNOLOGY CENTER.

8. Liavynets , H. (2024). The impact of innovations on anti-crisis management in the hotel and restaurant business. *Collection of Scientific Papers «SCIENTIA»*, (September 20, 2024; Bern, Switzerland), 27–35. <https://previous.scientia.report/index.php/archive/article/view/2070>

9. 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>.

10. S. Illiashenko, O. Bilovodska, T. Tsalko, O. Tomchuk, S. Nevmerzhytska, N. Buhas (2022). Opportunities, threats and risks of implementation the innovative business management technologies in the post-pandemic period COVID-19. *WSEAS Transactions on Business and Economics*. Volume 19. Pp. 1215–1229.

11. 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://researcheurope.org/product/book-31/> [in Ukrainian].

12. 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 (on the example of the oil and gas industry). *Moderní aspekty vědy – Modern aspects of science: svazek XXXVII mezinárodní kolektivní monografie*. Česká republika: Mezinárodní Ekonomický Institut s.r.o. pp. 185–203.

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](https://doi.org/10.52058/2786-5274-2024-7(35)-648-665) [in Ukrainian].

14. 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].

15. Krasnyuk, M., Kulynych, Y., Krasniuk, S., & Goncharenko, S. (2024). Design of innovative management information system. *Grail of Science*, 36, pp. 237-245.

16. Krasnyuk, M., Krasniuk, S. (2021) Association rules in finance management. *ΛΟΓΟΣ*, 2021. 9-10 <https://doi.org/10.36074/logos-26.02.2021.v1.01>  
DOI: <https://doi.org/10.36074/logos26.02.2021.v1.01>

17. Krasnyuk, M., & Krasniuk, S. (2020). Application of artificial neural networks for reducing dimensions of geological-geophysical data set's for the identification of perspective oil and gas deposits. *Scientific bulletin ΛΟΓΟΣ*, 18-19. <https://doi.org/10.36074/24.04.2020.v2.05>

18. Derbentsev, V. D., V. M. Soloviov, and O. V. Serdiuk (2005) Precursors of critical phenomena in complex economic systems. *Modeling of nonlinear dynamics of economic systems*. - Donetsk: DonNU, 1 (2005). pp. 5-13 [in Ukrainian].

19. Derbentsev, V. D., Serdiuk, O. A., Soloviov, V. M., & Sharapov, O. D. (2010). *Synergistic and econophysical methods of studying dynamic and structural characteristics of economic systems*. Cherkasy: Brama-Ukraine. - 2010 [in Ukrainian].

20. Derbentsev, V. D., B. O. Tishkov, O. D. Sharapov (2013). Systematic methodology for studying the dynamics of the current information economy in the minds of increasing instability. *Modeling and information systems in economics*. – 2013. – Vol. 89. – pp. 47-62 [In Ukrainian].

21. 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].

22. Naumenko, M. (2024). Effective application of classic machine learning algorithms when making adaptive management decisions. *Scientific perspectives*, 2024, 5 (47). [https://doi.org/10.52058/2708-7530-2024-5\(47\)-855-875](https://doi.org/10.52058/2708-7530-2024-5(47)-855-875)

23. Maksym Naumenko (2024). Regression analysis using shallow artificial neural networks in the management of an efficient and competitive enterprise. *Věda a perspektivy*, 7(38) (2024), pp. 17-32. [https://doi.org/10.52058/2695-1592-2024-7\(38\)-17-32](https://doi.org/10.52058/2695-1592-2024-7(38)-17-32)

24. Lyavinets G. M., Gubenya V. O., Lyulka O. M., Tkachuk Yu. M. (2024). Data Mining in Adaptive Management of Hotel and Restaurant Business. *International Scientific Journal "Internauka". Series: "Economic Sciences"*, 2024. – # 11. <https://doi.org/10.25313/2520-2294-2024-11-10404>

25. 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].

Article sent: 16.08.2025

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