PECULIARITIES OF THE UNIVERSITIES' MANAGEMENT LOCATED ON FRONTLINE TERRITORIES

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The article analyzes the peculiarities of the management of universities (including displaced ones) located on the frontline territories, in the conditions of the war between Russia and Ukraine. It has been found that universities in these regions face unique challenges that require adaptation and the development of new management strategies, such as ensuring physical security, psychological support, infrastructure restoration, providing access to communications, quality educational services, hybrid learning models, scientific activities, financing and adaptation to new conditions. It is justified that the research is determined by the need for prompt response to security threats, ensuring the continuity of the educational process, infrastructure restoration, personnel support, international cooperation, development of innovative solutions, and socio-economic stability of the regions. The analysis and systematization of specific aspects of the management of higher education institutions operating in the frontline territories aimed at identifying key challenges and developing effective strategies for overcoming them was carried out. It has been proven that university management includes normative-procedural, structural-functional, and strategic-organizational processes. Peculiarities of the processes of implementation of innovative educational activities and conducting scientific research in universities located in the frontline territories were studied. Synergistic, systemic, statistical, comparative, and functional methods were used for the research. It is found that the synergistic method integrates various management components such as organizational, financial, personnel, and infrastructure management to create a holistic picture of wartime management. The system method allows you to consider the university as a whole system interacting with the environment, using interviews, discussions, surveys, and statistical analysis to collect data. The statistical method evaluates the impact of various factors on university management through quantitative data using means, medians, variances, regression models, and statistical tests. The comparative method analyzes and compares management practices, identifying the best of them to improve efficiency. The functional method assesses the effectiveness of key management functions such as planning, organization, resource allocation, communication, and control. It was found that the methodology for researching the peculiarities of the management of universities in the frontline territories involves a comprehensive approach, which includes the collection of primary and secondary data, qualitative and quantitative analysis, the development of recommendations and their validation, which provides a deep understanding of the problem and the development of effective strategies for the support and development of universities in war conditions.

Key words: management, university management, relocated university, scientific, innovative, administrative and economic, information and social activities.

ОСОБЛИВОСТІ МЕНЕДЖМЕНТУ РОЗТАШОВАНИХ НА ПРИФРОНТОВИХ ТЕРИТОРІЯХ УНІВЕРСИТЕТІВ

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The study of the peculiarities of the management of universities located in the frontline territories acquires importance in the conditions of the war between Russia and Ukraine. Such universities face unique challenges that require adaptation and development of new management strategies.

The relevance of the study is determined by some factors. Firstly, universities located in frontline areas must respond promptly to security threats while ensuring the continuity of the educational process. The development and implementation of effective management strategies are critical for the protection of students, teachers, and staff. Secondly, in the conditions of hostilities, the infrastructure of universities can suffer significant damage. Therefore, the study of effective approaches to the restoration and preservation of buildings and equipment is important to ensure the effective functioning of institutions of higher education. Thirdly, due to the danger and difficult working conditions, many teachers and employees are forced to leave the frontline areas. Hence, research into methods of encouraging and supporting personnel, including financial and psychological assistance, is necessary to preserve the personnel potential of universities. Fourthly, universities located in the frontline territories need support from the international community. Therefore, studying and expanding international relations, and attracting grants and humanitarian aid are important to ensure financial stability and development of universities. Fifthly, military operations create new challenges that require innovative management solutions. Thus, the study of new management approaches and tools will help universities adapt to changing conditions and ensure high-quality education and research. Sixthly, universities are important economic agents influencing the development of regions. Studying their role in the context of military operations will help to understand how to preserve and support economic stability at the local and national levels. Seventhly, universities perform an important social function by promoting social cohesion and stability. Research into ways to support university communities, including students, faculty, and alumni, will help strengthen social ties and promote social stability.

LITERATURE REVIEW

The rapid increase in the level of turbulence in Eastern Europe after Russia annexed Crimea and its attack on the eastern regions of Ukraine in 2014, during and after the introduction of quarantine restrictions by almost all European countries in 2020-2021 due to the Covid-19 pandemic, after the start of a full-scale Russian-Ukrainian war
The study [1] examines various aspects of university management in turbulent conditions, in particular in connection with the war in Ukraine. In the work, the authors consider the problem of fake and displaced universities, which became relevant in the context of the war, which allows for a better understanding of the challenges faced by educational institutions in the conditions of a military conflict. The research [2] highlights an interdisciplinary approach to the analysis of educational services, which is important for the development of management strategies in conditions of instability. The paper [3] is devoted to the analysis of the role of academic business incubators in promoting entrepreneurship in the university environment, which is especially relevant in conditions of economic instability and military conflict. In the study [4], the authors study the development of entrepreneurship in the conditions of the eastern region of Ukraine, adapting to the challenges of the armed conflict and the pandemic, which highlights important points for managing universities in turbulent conditions. The research [5] analyzes the management experience of universities that were forced to move from occupied territories to territories controlled by the Ukrainian government, which emphasizes the importance of flexibility and adaptability in management strategies. Martynovych et al. examine how the information society affects the level of education of the population of Ukraine [6], which is critically important in the conditions of uncertainty during the war when information technologies become key to ensuring the continuity of education. In the paper [7], the authors analyze the socio-demographic problems of the development of united territorial communities in the eastern regions of Ukraine, which include challenges for educational institutions and teachers working in conditions of war and economic instability. The study of N. Havrylenko [8] is devoted to managerial aspects of accounting policy in economic activity, which is important for optimizing the resources of educational institutions in conditions of uncertainty during the war. In the article [9], the authors consider the development of management accounting based on a risk-oriented approach, which helps educational institutions to adapt to new challenges and minimize risks in the conditions of the Russian-Ukrainian war.

The study [10] is devoted to the organization of educational work of educational institutions during quarantine using information and computer technologies, which is important for managing universities in turbulent conditions, ensuring the continuity of the educational process and student support. H. Alikeksieieva's research [11] focuses on the use of interactive computer technologies in education, which helps universities implement innovative teaching methods and adapt to rapid changes in the educational environment. The work of Falko et al. is devoted to critically important aspects of university management in turbulent conditions. [12] – the study of tolerance to uncertainty as a key aspect of a person's vitality. The paper [13] analyzes the tolerance for uncertainty among teachers of displaced universities during martial law, and provides valuable recommendations for supporting the teaching staff and ensuring the stability of the educational process. O. Yuzy's study is devoted to the analysis of the implementation of media education in the training of future informatics teachers in Poland, which is important for the management of universities in turbulent conditions due to the need to integrate media technologies into the educational process, and to the comparative analysis of training programs for informatics teachers in Ukraine and Poland, which provides valuable insights for the development of adaptive and flexible approaches to professional training of teachers in conditions of instability [14, 15].


**The study aims** to define, analyze, and systematize specific aspects of the management of higher education institutions operating in the frontline territories. The study aims to identify the main challenges faced by universities in the context of war and to develop effective strategies to overcome them.

The conceptual and categorical apparatus of university management consists of key terms related to normative-procedural, structural-functional, strategic-organizational, and other processes of higher education institution management.

According to Article 28 of the Law of Ukraine "On Higher Education" "a university is a multi-disciplinary (classical, technical) or sectoral (professional, technological, pedagogical, physical education and sports, humanitarian, theological/theological, medical, economic, legal, pharmaceutical, agrarian, artistic, cultural, etc.) institution of higher education that carries out innovative educational activities at various degrees of higher education (including doctor of philosophy), conducts fundamental and/or applied scientific research, is a leading scientific and methodical center, has a developed educational infrastructure, scientific and scientific and industrial units, promotes the dissemination of scientific knowledge and conducts cultural and educational activities" [16].

*University management is determined by several main categories reflecting various aspects of its functioning:* organizational structure; management processes; budgeting, financial analysis, cost management, attracting financing, investments; strategic planning; personnel management; quality of education; scientific research activity; information systems and technologies; infrastructure; international cooperation; interaction with stakeholders; anti-crisis planning,
risk management, post-crisis recovery, security measures; internal communications, external communications, university marketing, branding, public relations, etc. [17].

The university management uses these categories to create an effective management system that ensures the achievement of the university's strategic and operational goals. The categories interact with each other, creating a holistic system that allows the university to adapt to changes in the external environment, effectively use resources, and provide high-quality educational services. The use of these categories helps the university management to develop strategies, make informed management decisions, optimize processes, and increase the competitiveness of the higher education institution both at the national and international levels [18].

**Frontline territory** is an area located near the front line or directly adjacent to the combat zone; is characterized by an increased risk for the civilian population and infrastructure damage (destruction of buildings, roads, bridges, energy, and utility networks) due to the possibility of shelling, hostilities, mines, airstrikes, etc. Frontline areas are characterized by business interruptions, problems with the supply of products and medicines, difficulties with access to medical and educational services; the forced movement of people to safer regions, which leads to a change in the demographic situation; the presence of a significant number of military personnel, checkpoints, and other military facilities.

To study the peculiarities of university management in the frontline territories, it is necessary to apply a comprehensive approach, which includes qualitative and quantitative methods of data collection and analysis.

**The synergistic method** in the study of the peculiarities of the management of universities in the frontline territories allows for the integration of various components and influencing factors to create a holistic picture of management in emergency conditions. The approach is based on the principles of systems thinking, where the synergy between individual elements of the system creates new qualities and opportunities for their effective interaction, such as the integration of different aspects of management (for example, organizational management studies the structural and administrative changes necessary to adapt to the conditions of the frontline territory; financial management analyses financial strategies and mechanisms to ensure the stability and development of the university; personnel management evaluates measures to maintain and support the academic community and educational support staff, in particular, financial and psychological aspects; infrastructural management studies ways to preserve and restore the material and technical base of the university); systematic analysis of the influence of external factors on the functioning of the university (military actions, political situation, international support); adaptability and flexibility (study of successful adaptive strategies implemented by universities to ensure the continuity of the educational process); innovative approaches (analysis of innovative solutions and practices that contribute to increasing the stability of universities in difficult conditions) [19].

**The system research method** is an effective approach to the analysis of complex and multi-component systems, it allows us to consider the university as a whole system that interacts with the environment, and to study the relationships between its various elements. The systematic method applies specific methods of data collection and analysis: in-depth interviews with key persons in the university to obtain detailed information about management processes and challenges; discussions with representatives of different groups (teachers, students, administration, stakeholders) to identify common problems and solutions; developing and conducting questionnaire surveys to collect quantitative data on the state of the university and management efficiency; use of statistical methods for data processing and identification of patterns and trends. The systematic method of researching the peculiarities of the management of universities in the frontline territories allows for a deep and comprehensive analysis of the functioning of universities in war conditions, which provides a comprehensive understanding of the relationships between various components of the management system and contributes to the development of effective strategies to ensure the continuity of the educational process, preserve the infrastructure, and maintain personnel potential.

**The statistical method** of research is a tool for analysing quantitative data, which allows you to assess the influence of various factors on the management of universities in the frontline areas. The use of statistical methods contributes to the objective analysis of data, the identification of patterns and trends, as well as the formation of well-founded recommendations to improve management efficiency. Specific methods of data collection and analysis are the development and creation of questionnaires to collect quantitative data from different groups of respondents (administration, teachers, students, staff, stakeholders, graduates); data collection through online surveys, paper questionnaires, or interviews; using mean values, medians, modes, variances, and standard deviations to analyse data characteristics; determination of correlation coefficients for studying relationships between variables; construction of linear and non-linear regression models to assess the dependence of outcome variables on factor variables; using statistical tests (for example, t-test, ANOVA) to test formulated hypotheses. The statistical method of researching the peculiarities of the management of universities in the frontline territories makes it possible to obtain an objective and quantitative assessment of the influence of various factors on the effectiveness of management. The use of this method contributes to the identification of significant regularities and trends, which are the basis for the development of sound recommendations and strategies to ensure the stable functioning of universities in wartime conditions.

**The comparative method** is an effective tool for analysing and comparing different management practices, strategies, and performance results of universities. The method allows for identifying common features and differences in management, as well as identifying best practices that can be used to improve management efficiency. The use of this method facilitates objective analysis and the development of sound recommendations that can be adapted by other
universities to ensure stable functioning and development in emergencies.

The functional method allows you to determine the key functions of management, evaluate their effectiveness and identify ways to optimize management processes in emergency conditions: analysis of planning processes in universities, including definition of goals, development of strategies and action plans; identification of problems in planning, such as lack of resources, uncertainty of the situation, influence of external factors; analysis of the organizational and management structure of universities, assessment of its effectiveness and flexibility; evaluation of processes of distribution of financial, material and human resources; analysis of leadership styles and motivational strategies of universities; evaluation of the effectiveness of communication processes between different levels of management; analysis of control systems for the implementation of plans and achievement of goals; evaluation of the effectiveness of control processes and adjustment mechanisms; analysis of coordination processes between different units of universities; identifying opportunities to increase synergy and efficiency through coordination of activities. The functional method of researching the peculiarities of the management of universities in the frontline territories contributes to increasing the efficiency of management in emergency conditions and ensuring the stable functioning of universities. Recommendations developed based on functional analysis will help universities adapt their management processes to complex conditions and ensure the continuity of the educational process.

Thus, the methodology for researching the peculiarities of the management of universities in the frontline territories involves a comprehensive approach, which includes the collection of primary and secondary data, qualitative and quantitative analysis, the development of recommendations, their validation and dissemination of results, which provides a deep understanding of the problem and the development of effective strategies for the support and development of universities in the conditions of war.

In the context of Russia's war against Ukraine, frontline territories are those located in the zone of active hostilities or along the contact line between Ukrainian forces and enemy forces, where hostilities are (were) ongoing and there is a threat of their resumption. As of June 2024, these territories include Donetsk, Luhansk, Kharkiv, Zaporizhzhia, Kherson, Mykolaiv, Chernihiv, Dnipropetrovsk, Odesa, and Kyiv regions [20].

The above-mentioned territories are subjected to regular shelling and are often (were) places of active hostilities. The management of universities located in these zones faces unique challenges in ensuring the safety of students and employees, preserving the infrastructure, and continuing educational and scientific activities in war conditions:

- Provision of physical security (shelter, organization of evacuation, and cooperation with the military and local authorities to ensure the protection of students and employees).
- Provision of psychological support for students and staff experiencing stress and trauma due to hostilities (supporting the morale of students and teachers, giving them a sense of stability and hope for the future).
- Restoration and modernization of damaged infrastructure to ensure normal conditions of study and living.
- Ensuring access to the university, especially if the transport routes are damaged or dangerous.
- Ensuring regular communication with students, teachers, and parents regarding the security situation and educational activities.
- Providing high-quality educational services (ensuring the continuity of the educational process, adapting educational programs to emergencies).
- Implementation of hybrid learning models (combining online and offline forms of conducting classes to account for safety and resource availability for students).
- Supporting scientific activity and improving the quality of scientific research (providing access to research resources, creating virtual laboratories, and supporting remote scientific cooperation).
- Preservation of scientific potential (attracting grants and support from international scientific organizations, and partnership programs with domestic and foreign universities for the continuation of scientific research).
- Provision of stable salaries for teachers and researchers, which helps retain personnel who are key to the functioning of universities.
- Searching for alternative sources of funding, including international grants and humanitarian aid.
- Creation of favourable conditions for scientific innovation and development of scientific programs, especially in areas related to security, medicine, and technology (use of new technologies and methods to improve the quality of education in emergency conditions).
- Quick adaptation to new conditions, maintaining faith and hope for further development.
- Use of modern technologies to support communication in conditions of unstable infrastructure.
- Assistance and support for students and workers who were forced to leave their homes due to hostilities.
- Intensification of efforts to establish international relations, which would provide support for students and teachers who were forced to go abroad and create foreign platforms for full-time studies.
- Ensuring access to education for all students, regardless of their social or economic status.
- Cooperation with local public organizations and businesses to solve logistical and financial problems.
- Activation of graduates around the world to provide humanitarian and financial aid, as well as the development of new projects and partnerships [21].

The joint efforts of the administration, teachers, and students of higher education institutions demonstrate a
high level of adaptability, stability, cohesion, and dedication to their work, which allows them to overcome challenges, helps maintain stability, and continue scientific, innovative, administrative-economic, informational and social activities in the conditions of military operations.

Taking into account the main provisions of the Law of Ukraine "On Scientific and Scientific-Technical Activities" [22], scientific activity in universities located in the frontline territories is focused on the continuation of scientific research, which helps to preserve and develop the intellectual capital of the university; adaptation of scientific research to new conditions using digital technologies; focusing on actual problems related, for example, to the impact of war on education, socio-economic consequences, psychological aspects, etc.; preservation and development of scientific potential, support of professional development; motivation of students and young scientists to stay at the university and continue scientific activity; establishment of cooperation with foreign universities and research centres for joint projects; attraction of international grants, funds from donor organizations, government programs and private funds to support scientific research; development of innovative technological solutions to overcome the challenges of war; support of high publication activity to maintain academic rating; organization and participation in international scientific conferences, webinars, seminars, etc.

The scientific activity of universities in the frontline territories is important for the preservation of the country's academic and scientific heritage. The management of such universities requires special flexibility and an innovative approach to overcome numerous challenges, ensure security, and create conditions for a continuous scientific process.

The Law of Ukraine "On Innovative Activity" defines "innovative activity as an activity aimed at the use and commercialization of the results of scientific research and development and leads to the release of new competitive goods and services to the market" [23]. Innovative activities of universities in the frontline areas are aimed at introducing new technologies, methods, and approaches that ensure the continuity of the educational process, improve the quality of education and research, as well as support the economic and social stability of the region. The main aspects of the innovative activity of universities in the frontline areas are the use of modern platforms for distance learning (Moodle, Google Classroom, Zoom, MeeTime); development and implementation of virtual laboratories and simulators for conducting practical classes in technical and natural sciences; creation of new courses that combine various disciplines to train specialists capable of solving complex problems; cooperation with local and international companies to develop training programs that meet the needs of the labor market; creation of support centers for startups and innovative projects that help students and teachers realize their ideas and find investors; attraction of grants from international organizations, governments and private foundations to support scientific research and innovation; participation in international research projects, which allows access to advanced technologies and methods; organization of academic mobility programs for students and teachers, which promotes the exchange of knowledge and experience; introduction of energy-efficient technologies in university buildings to reduce costs and increase resilience to energy crises; development and implementation of security systems, including digital technologies for risk monitoring and management; development of psychological support programs for students and staff to help reduce stress and adapt to war conditions; initiatives aimed at supporting local communities, including educational programs for immigrants and socially vulnerable population groups [24].

The administrative and economic activity of universities in the frontline territories is aimed at ensuring the continuity of their work and support for all participants in the educational process and staff. The university administration must develop and implement effective security plans, including evacuation procedures, and protection measures during security actions; ensure reliable supply and use of necessary resources (electricity, water, heating, comfortable conditions, etc.); rationalize expenses, find additional sources of funding and ensure the financial stability of the university; organize systematic monitoring of the condition of buildings, develop plans for their repair and restoration after possible damage; ensure uninterrupted access to educational materials for the educational process even in difficult conditions.

The information activities of universities in the frontline areas include several main aspects: prompt informing of students and employees about danger, changes in the situation at the front, evacuation measures, etc.; ensuring the continuity of the educational process using distance learning, online lectures and other digital resources; informing students about the schedule of classes, access to educational materials and technical support; informing about the possibilities of receiving psychological support for students and employees who are experiencing stress or trauma due to military actions; providing information on cooperation with local self-government bodies and international organizations to ensure humanitarian aid, security and community support; organizing information campaigns to raise awareness of the current situation, humanitarian needs and support that can be provided or received; constant monitoring of the situation in real time and provision of regular reports on the security situation, the state of the infrastructure, the needs of students and employees.

The social activities of universities in the frontline areas are aimed at the organization of psychological assistance services, where students and employees can receive advice and support in difficult times; creation of centres for the collection and distribution of humanitarian aid (for example, organization of volunteer programs, collection of food, medicine, clothing and other necessary items) for those in need; provision of temporary housing for internally displaced persons (IDPs), including students and their families; provision of legal assistance, processing of documents, job search and educational programs for IDPs; development and implementation of social projects aimed at supporting...
local communities (for example, educational programs, advanced training courses, cultural events and sports activities); organization of volunteer programs in which students and employees can participate in helping war victims (for example, participation in medical missions, providing first aid, helping with evacuation and other socially significant activities); attracting international aid and support through partnerships with foreign educational institutions, international organizations and foundations; organization of information campaigns to raise awareness of humanitarian needs and problems of the frontline areas.

Paying attention to the scientific, innovative, administrative-economic, informational, and social activities of universities in the frontline territories is necessary for their survival and development in the conditions of war. These areas of activity help universities not only to maintain their functionality, but also to make a significant contribution to the support and development of local communities, ensuring educational, scientific, and social stability in the region.

CONCLUSION

Russia's war against Ukraine had a significant impact on the management of universities, especially those operating in frontline territories or forced to move from occupied territories to regions controlled by the Ukrainian government. But thanks to the efforts of their community, they continue their activities, which shows the high adaptability, cohesion, and dedication of all members of the university community. Adaptation to the conditions of war requires quick and effective decisions from universities. Thanks to the cohesion of the university community, international cooperation, and alumni support, these institutions have been able to adapt to new challenges, maintain the quality of educational services and scientific activity, and are finding new development opportunities. Management of universities in frontline areas requires mobility, creativity, and effective use of resources to ensure the safety and continuity of the educational process. The academic community of universities remains optimistic about the future. They see war as new opportunities for development, which helps them not only survive but also grow.

The management of universities operating in frontline areas requires a flexible approach and the ability to quickly adapt to changing conditions. The study of the peculiarities of the management of such universities is due to the need to develop effective strategies to ensure security, preserve infrastructure, support personnel, and develop international cooperation, which will contribute to increasing the stability and adaptability of universities in difficult conditions, and will allow them to continue to fulfill their educational and scientific mission even in the most difficult times.

References


20. Novyi Perelik terytorii, na yakiх vedytsia (velysia) boiovi dii, abo TOT: roziasnennia shchodo zastosuvannia [New List of territories where hostilities are (were) conducted, or TOT: clarification on application]. (in Ukrainian).


