

Литвинов Олексій Миколайович, д.ю.н., професор
в.о. ректора Національний аерокосмічний
університет «Харківський авіаційний інститут»

Шевченко Ірина Олександрівна,
д.е.н., доцент, професор кафедри менеджменту та
бізнес адміністрування Національний аерокосмічний
університет «Харківський авіаційний інститут»

Lytvynov Oleksii, Doctor of Law, Professor, Acting Rector
of the National Aerospace University «Kharkiv Aviation
Institute», <https://orcid.org/0000-0003-2952-8258>

Shevchenko Iryna, Doctor of Economic Sciences, Associate
Professor, Professor of the Department of Management and
Business Administration National Aerospace
University "Kharkiv Aviation Institute",
<https://orcid.org/0000-0001-8188-3551>

ДВОКОНТУРНА КРІ-ОКР МОДЕЛЬ УПРАВЛІННЯ РЕЗУЛЬТАТИВНІСТЮ УНІВЕРСИТЕТІВ У РЕЗИЛЬЄНТНОМУ СЕРЕДОВИЩІ DUAL-LOOP KPI-OKR MODEL FOR UNIVERSITY PERFORMANCE MANAGEMENT IN A RESILIENT CONTEXT

Литвинов О. М., Шевченко І. О. Двоконтурна КРІ-ОКР
модель управління результативністю університетів у
резильєнтному середовищі. *Український журнал
прикладної економіки та техніки*.
2026. Том 11. № 1. С. 12 – 17.

Lytvynov O., Shevchenko I. Dual-Loop KPI-OKR Model for
University Performance Management in a Resilient
Context. *Ukrainian Journal of Applied Economics and
Technology*.
2026. Volume 11. № 1, pp. 12 – 17.

У сучасних умовах глобальних дисбалансів виникає необхідність у створенні дієвого резильєнтного середовища для функціонування системи вищої освіти. Університети трансформуються у інноваційні, захищені, безпечні кампуси через глобальні проблеми. Саме тому з'являється підґрунтя для реформування існуючої системи управління університетами. Метою статті є теоретичне обґрунтування та розроблення інтегрованої резильєнтної моделі управління результативністю закладу вищої освіти на основі поєднання КРІ та ОКР, яка забезпечує одночасно інституційну керованість, стратегічну узгодженість і адаптивну спроможність університетських систем в умовах невизначеності, кризових впливів і трансформації освітнього середовища. Методологічну основу дослідження становить міждисциплінарний підхід до аналізу управління результативністю у закладах вищої освіти. Наукова новизна одержаних результатів полягає у розробленні та теоретичному обґрунтуванні інтегрованої двоконтурної моделі управління результативністю закладу вищої освіти на основі КРІ та ОКР. На відміну від наявних підходів, модель інституційно поєднує вимірваність, ітеративність, багаторівневу узгодженість і керовану гнучкість у межах єдиного управлінського механізму. Практична орієнтованість моделі проявляється у можливості її застосування в управлінні університетами, системах внутрішнього забезпечення якості, стратегічному плануванні та формуванні політик результативності у сфері вищої освіти.

Ключові слова: управління результативністю університету, резильєнтність університету, КРІ, ОКР, адаптивне управління, стратегічне управління у вищій освіті.

In the current conditions of global imbalances, there is a need to create an effective, resilient environment for the functioning of the higher education system. Universities are transformed into innovative, protected, safe campuses due to global problems. That is why there is a basis for reforming the existing university management system. The purpose of the article is to theoretically substantiate and develop an integrated resilient model of performance management of a higher education institution based on a combination of KPI and OKR, which simultaneously provides institutional manageability, strategic coherence, and adaptive capacity of university systems in conditions of uncertainty, crisis influences, and transformation of the educational environment. The methodological basis of the study is an interdisciplinary approach to the analysis of performance management in higher education institutions. The scientific novelty of the results lies in the development and theoretical substantiation of an integrated two-loop KPI-OKR model for performance management in a higher education institution. Unlike existing approaches, the model institutionally combines measurability, iterativeness, multi-level coherence and managed flexibility within a single management mechanism. The model's practical orientation is evident in its applicability to university management, internal quality assurance systems, strategic planning, and the formulation of performance policies in higher education.

Keywords: university performance management, university resilience, KPI, OKR, adaptive management, strategic management in higher education.

Statement of the problem

The current stage of higher education development is characterized not only by the acceleration of institutional transformations, but also by a profound change in the very nature of the educational environment. Universities increasingly operate in a space of multidimensional uncertainty, where factors of global competition, digital transformation, demographic shifts, socio-economic crisis processes, and military challenges operate simultaneously. In such conditions, higher education institutions cease to be stable hierarchical systems with predictable development trajectories and become open, adaptive organizations sensitive to rapid changes in the external context. This necessitates a rethink not only of university development strategies, but also of the very principles governing their performance.

The traditional management paradigm in higher education has long been based on relatively stable performance criteria that rely on quantitative indicators. However, under turbulent conditions, these metrics increasingly demonstrate limited explanatory and predictive power. They capture achieved states, but do not sufficiently reflect the system's ability to adapt, self-recover, and strategic maneuver. As a result, a methodological contradiction arises between the measurability of the result and the organization's viability: what is easily measurable does not always reflect what is essential to sustainable development.

The increasing complexity of management decisions in higher education objectively increases the role of performance management systems. Management can no longer be limited to monitoring the implementation of planned indicators; it takes on the character of continuous coordination of goals, resources, risks, and opportunities. Performance in this context appears not only as the achievement of planned values, but also as the organization's ability to maintain functional capacity and strategic orientation under conditions of instability. Thus, the category of performance is gradually shifting from the plane of static measurement to the plane of dynamic capacity.

Classical KPI (Key Performance Indicators) models, which have become widely used in university management, were historically formed in the logic of industrial and post-industrial organizations with relatively predictable production cycles. Their strengths are structuring, comparability, and operational manageability. At the same time, in an unstable environment, their systemic limitations are also revealed: inertia, a focus on past results, a tendency to formalize complex educational processes, and the risk of replacing



This is an Open Access article distributed under the terms of the Creative Commons CC-BY 4.0

© Lytvynov Oleksii, Shevchenko Iryna, 2026

meaningful goals with indicator values. Excessive rigidity in KPI systems can lead to a loss of strategic flexibility and a narrowing of the space for innovative solutions.

Against this backdrop, there is growing interest in adaptive approaches to goal setting and progress measurement, in particular the OKR (Objectives and Key Results) model, which combines strategic ambition of goals with short iterative cycles of results verification. Unlike traditional indicator systems, OKRs focus not so much on control as on aligning efforts, transparency of priorities, and collective coherence of actions. Such an approach potentially better aligns with the nature of the university as a complex organization, where a significant portion of the results are delayed, nonlinear, and interdisciplinary.

At the same time, none of the models in their pure form provides a full management response to the challenges of resilience. University resilience involves not only achieving goals and measuring indicators, but also the presence of structural and process mechanisms for adaptation, rapid learning, resource reallocation, and maintaining strategic integrity under the pressure of external disturbances. This requires a transition from isolated measurement tools to integrated performance management models that can combine the stabilizing role of indicators with the dynamics of target benchmarks.

Therefore, the scientific and practical task of developing university performance management models that combine KPIs and OKRs, while meeting the requirements of a resilient environment, arises. The development of such models requires conceptual coordination of metrics, goals, and adaptive management mechanisms, which determines the problem area of this study.

Literature Review. Resilience of universities as a management category in times of crisis and war.

The initial theoretical framework for understanding the university as a system that must not only "work" but also withstand and recover is formed by the concept of organizational resilience. In the work of S. Ducheck, resilience is conceptualized as a capability-based property of the organization. The study discusses the ability not only to react but also to predict, learn, and restructure. This provides grounds for interpreting resilience not as a metaphor for "resilience", but as a managed organizational capability that can be built into management mechanisms (Ducheck, 2020).

The Ukrainian context of the war concretizes this theoretical line: in the works of Lytvynov and Shevchenko, resilience appears as a practically lived experience of an institution operating in frontline conditions, where rapid process recovery, quality preservation, the stability of academic communities, and managerial flexibility become key. This perspective is complemented by the report Science at Risk (2024), which documents structural risks to science and higher education in Ukraine and emphasizes the need for systemic mechanisms to maintain the sector's functionality. Resilience in these sources moves from a description of the state to the plane of organizational design, directly justifying the need for your model, where effectiveness is associated with adaptation, learning, and stabilization simultaneously.

KPI and "indicative rationality": the power and limits of classical performance management.

The line of performance management indicators is represented by two sources: fundamental management classics (Kaplan & Norton, 1996) and an applied case study of a Ukrainian university (Sereda et al., 2021). Kaplan and Norton have established a paradigm in which indicators serve as the "language" of strategy. The logic of the Balanced Scorecard translates the mission and strategic goals into a system of measurable benchmarks and control indicators. This legitimizes KPIs as tools for manageability, accountability, and comparability.

However, the case of Sereda et al. (2021) is important because it demonstrates the reality of KPI tools in Ukrainian higher education. KPIs serve as a mechanism for streamlining activities but require proper design, a culture of use, and linkage to management decisions; otherwise, they can become a formality. These sources allow us to fix KPIs as a necessary stabilizing framework, but at the same time, the logic of KPIs remains mainly regulatory and reporting, and less sensitive to high turbulence.

OKR is an adaptive mode of goal setting and progress measurement.

The OKR approach on the list is presented by Doerr (2018), who describes OKR as a system in which goals should be ambitious and key results measurable, with short cycles, transparency, and regular review.

The essential difference between OKRs and classic KPIs is that OKRs are not so much a performance indicator system as a change management regime: they organize attention, synchronize priorities, and ensure iteration. This method resonates with Ducheck (2020), who bases resilience on the ability to learn and adapt. OKR in the literature acts as a natural basis for an adaptive loop that counteracts the lag effect and reactivity of traditional KPIs.

Normative and qualitative frameworks of higher education as boundaries and conditions of management models

Importantly, the current study emphasizes that universities cannot be guided solely by internal management tools. Here, ENQA ESG (2015) adds a logic of management systems for educational organizations that emphasizes processes, measurability, and improvement.

Discourse of the third mission, international networks, and sustainability as an extension of the concept of effectiveness

In the works of Litvinov and Shevchenko, university effectiveness is conceived more broadly than teaching and science: the third mission, international networks of resilience, the role of universities as educational hubs in crises, and their economic and strategic function become important. This shifts effectiveness to the plane of social utility, network interaction, and long-term effects.

However, the existing body of sources lacks an integrated solution to the problem: how to institutionally combine accountability and measurability (KPI) with the ability to strategically adapt (OKR) precisely in the resilient environment of universities, and in a way that works at scale at four levels (institutional, structural, project, team-individual).

Methodology. The methodological basis of the study is an interdisciplinary approach to the analysis of performance management in higher education institutions, combining principles from the theory of organizational resilience, strategic management, performance management, and educational management. The study is focused on developing a conceptual and modeling solution; therefore, its design is theoretical, analytical, and constructive in nature.

The starting methodological position is to consider the university as a complex, open social and organizational system that functions in conditions of high uncertainty and multifactorial influence of the external environment. Within such a vision, effectiveness is understood as a multidimensional concept encompassing not only the achievement of formalized indicators but also the institution's adaptive, strategic, and restorative capacities. This led to the use of systemic, adaptive, and process approaches as the study's basic framework.

The study's methodological toolkit includes a set of complementary methods.

First, a systems analysis was applied to identify the structure and functions of performance management systems in higher education, defining their elements, relationships, and constraints in a resilient environment. This allowed us to consider KPIs and OKRs not in isolation, but as components of a broader management architecture.

Secondly, a comparative method was used to conceptually compare KPI and OKR approaches based on the criteria of managerial logic, time dynamics, flexibility, behavioral effects, and suitability for conditions of uncertainty. The comparative analysis became the basis for concluding that they are complementary and can be integrated in a hybrid model.

Third, structural-functional analysis was applied to determine the roles of stabilizing and adaptive circuits in the performance management system, as well as to justify the multi-level configuration of indicators (strategic, structural, project, and team-individual levels).

Fourth, the conceptual modeling method (framework design) was used, resulting in the development of an integrated two-circuit KPI–OKR model for performance management in a higher education institution.

Fifth, the methods of generalization and scientific abstraction were applied to develop resilient requirements for performance management systems and to derive a generalized model suitable for adaptation across various institutional contexts, particularly in the context of the transformation of Ukrainian higher education.

The logic of the research is consistently analytical and constructive: from the theoretical understanding of the problem and identification of methodological limitations of traditional indicator systems to the development of the author's integrated model and determination of its practical implications. Such a design ensures consistency between theoretical provisions, analytical conclusions, and the proposed managerial conceptual framework solution.

The purpose of the research

The goal is to theoretically substantiate and develop an integrated, resilient model of performance management for a higher education institution based on a combination of KPIs and OKRs, which simultaneously ensures institutional manageability, strategic coherence, and the adaptive capacity of university systems in conditions of uncertainty, crisis impacts, and the transformation of the educational environment.

Presentation of the main research material

Limitations of traditional KPI models in a resilient environment

Performance management systems based on KPIs have historically been developed in conditions of relative structural stability in organizational environments, characterized by linear cause-and-effect relationships, predictable planning cycles, and moderate risk variability. In this logic, key performance indicators served as a tool for rationalizing management: they ensured the measurability of processes, the comparability of results, and the discipline to achieve goals. However, in a resilient environment characterized by high dynamics, uncertainty, and a multiplicity of influences, the very epistemological basis of the indicator approach is experiencing significant stress. Several systemic limitations in KPI models are revealed, reducing their explanatory and regulatory capacity.

First, it is about the **structural rigidity** of KPI systems. The classic architecture of indicators involves setting target values for a given planning period and cascading them down to lower management levels. Such a design is effective under stable environmental conditions, but in situations of rapid change, it transforms from a tool of orientation into one of inertia. The organization continues to remain faithful to the indicators even when the context changes, even though these indicators have lost their strategic relevance. The rigidity of metrics creates a “target fixation” effect, in which management attention is focused on maintaining formal values rather than on rethinking the goals themselves.

The second fundamental problem is the **lag effect** inherent in most traditional KPIs. Most indicators reflect results that have already been achieved, such as financial results, completed publications, formed applicant pools, and implemented projects. They are retrospective in nature and record the consequences of management decisions with a time delay. In a resilient environment, where speed of reaction and proactive adjustment of actions are valued, such a delay reduces the system's management sensitivity. Indicators signal a problem when it has already acquired an institutional form, and the space for soft adjustment is narrowed. Therefore, KPIs often measure not the state of adaptation, but the consequences of its absence or insufficiency.

The third limitation is the **reactive nature** of indicator management. KPI systems, by their logic, are focused on controlling deviations from planned values. Management action is triggered by the recorded difference between the plan and the facts. Such a regulation model is useful for maintaining operational discipline, but it is insufficient for strategic adaptation. In resilient systems, management should be both reactive and proactive. That is, able to predict, model, and test alternative development trajectories. KPIs are mainly built into the logic of “after-the-event” analysis, rather than anticipatory design.

Finally, a fundamental methodological limitation is that **metrics do not equate to adaptation**. Measurability does not guarantee viability, and quantitative increases in indicators do not necessarily reflect growth in organizational capacity. University, as a complex social-knowledge system, produces a significant part of the results in forms that are not reducible to immediate quantitative representation: the development of academic communities, interdisciplinary connections, cultural capital of trust, and institutional learning. Excessive focus on formalized KPIs can reduce multidimensional quality to a set of simplified indicators and, as a result, shift managerial priorities. The organization begins to optimize what is easily measured instead of what strategically determines its sustainability.

Thus, in a resilient environment, traditional KPI models retain their value as an element of the management navigation system, but lose their status as a sufficient tool for effective management. Their rigidity, lag nature, reactivity, and reductionist measurement approach necessitate supplementing or integrating with adaptive target approaches that can reflect the dynamics of change and support the strategic flexibility of university systems.

Comparative model of KPI and OKR for university management

Managing university performance in a resilient environment requires not only measurement tools but also distinct logics for goal setting and action coordination. KPI and OKR represent two distinct management rationalities: indicator-control, oriented towards stabilization and accountability, and target-dynamic, oriented towards focus, coherence, and development. For HEIs that combine regulated procedures and creative and research processes, it is critically important to understand not only the differences between these approaches, but also the possibilities of their integration.

To conceptually compare the managerial potential of KPIs and OKRs in the university management system, it is advisable to consider them against key criteria: goal logic, planning horizon, metric nature, managerial dynamics, behavioural effects, and suitability for conditions of uncertainty. (Table 1).

A comparative analysis shows that KPIs and OKRs should not be interpreted as mutually exclusive management tools. They are more appropriately considered as different dimensions of performance management: KPIs as a tool for institutional stabilization and comparability, and OKRs as a mechanism for strategic focus and adaptive movement. The hybrid model allows for the formation of a two-loop system: the stabilizing loop ensures normative performance and accountability, while the adaptive loop supports development initiatives, innovative projects, and rapid goal alignment in a changing environment.

In Ukrainian realities, such integration takes on special importance. The higher education system operates under the influence of both strict regulatory requirements (accreditation, licensing, quality indicators, and financial reporting) and high external instability caused by military, demographic, and economic factors. In these conditions, an exclusively KPI-oriented model risks becoming a formalized reporting mechanism disconnected from strategic adaptation, while a pure OKR model may not provide sufficient regulatory coherence and control.

Table 1. Comparative analysis of KPI and OKR as management tools in the university management system

Criterion	KPI	OKR	Hybrid
Management logic	Monitoring the implementation of established indicators	Achieving ambitious goals through measurable results	Balance of control, stability, and development
Orientation type	Performance-based	Purposeful and progressive	Dual focus: indicators + strategic goals
Planning horizon	Mostly annual/medium term	Short cycles (quarter, semester)	Multi-level: strategic KPI + iterative OKRs
Flexibility	Low or moderate	High	Managed flexibility
The nature of metrics	Stable, normalized	Dynamic, viewable	Stable core + variable key results
Sensitivity to environmental changes	Limited	High	Adaptive while maintaining basic guidelines
Management dynamics	Reactive	Proactive and iterative	Combined
Behavioral effect	Orientation to plan implementation	Focus on achieving breakthrough results	Focus on responsible growth
Formalization risk	High	Lower	Reduced due to mutual compensation
Suitability for innovation	Limited	High	Supported within the strategic framework
Transparency of goal alignment	Often vertical	Mostly horizontal-vertical	Cascade + network
Suitability for an academic environment	High for reporting and accreditations	High for development and transformation	Optimal for comprehensive management

A hybrid performance management model adapted for Ukrainian universities should include: maintaining a mandatory core of KPIs synchronized with national and institutional quality requirements; introducing OKR cycles at the level of strategic development areas, faculties, and project teams; regular review of key results, taking into account risks and resource constraints; and developing a management culture focused not only on reporting, but on conscious, targeted growth. It is this configuration that creates the prerequisites for the transition from formal efficiency to resilient university performance.

Resilient requirements for performance management systems.

To systematize resilient requirements for university performance management systems, it is advisable to present them in a structured format. This allows us to move from a descriptive characteristic to an operational model suitable for designing management practices. The table summarizes the key requirements, their managerial content, and practical manifestations in the university environment.

Table 2. Resilient requirements for university performance management systems

Requirement	Management content	Manifestation in the performance management system of HEIs	Risk in the absence
Adaptability	The ability of the system of indicators and goals to be revised in accordance with changes in the environment	Regular audit of metrics, scenario-based adjustment of target values, flexible sets of indicators	Preservation of outdated goals and metrics
Iterativity	Short cycles of goal setting and progress assessment	Quarterly/semester goal cycles, interim measurements, corrective sessions	Accumulation of strategic errors by the end of the reporting period
Multilevelness	Coordinated system of indicators at different levels of management	Cascading goals: university - department - project - team	The gap between strategy and operations
Quick feedback	Prompt data acquisition for management decisions	Dashboards, short monitoring cycles, regular review sessions	Delayed management reactions
Strategic alignment	Linking local results to strategic priorities	Transparent logic of the contribution of indicators to strategic goals, agreed OKR levels	Fragmentation of efforts and loss of strategic focus

The presented structuring demonstrates that resilience in the context of performance management is not reduced to increasing the number of indicators or the frequency of measurement. It is about a qualitative restructuring of the system's logic. A resilient performance management system combines review flexibility, learning cycles, multi-level coherence, and strategic semantic integration. This configuration establishes the methodological prerequisites for effectively combining KPIs and OKRs within the university management model.

Higher education institution performance management model: resilient KPI-OKR framework.

Based on the previous analysis of the limitations of traditional indicator systems and the adaptive potential of target approaches, it is advisable to propose an integrated performance management model for a higher education institution that combines a stabilizing KPI loop and an adaptive OKR loop. Conceptually, such a model is based on the idea of a university as a complex open system in which the regimes of normative stability and strategic flexibility should coexist.

This study proposes, for the first time, an integrated two-loop model of performance management for a higher education institution, combining a stabilizing indicator loop (KPI) and an adaptive target loop (OKR) within a single resilient management architecture. The model is considered not as a set of measurement tools, but as a holistic regulatory mechanism that simultaneously ensures institutional manageability, strategic coherence, and adaptive capacity of the university system in conditions of uncertainty, crisis disruptions, and high dynamics of change.

Conceptually, the model is grounded in the provisions of the systemic and adaptive approaches to the management of knowledge organizations and assumes that the university's performance has a dual nature. On the one hand, it is a normatively measured compliance with standards and obligations; on the other hand, it is a dynamic ability to develop, transform, and renew. That is why the performance management architecture should be double-circuit.

As shown in the proposed model, vertical coherence and horizontal flexibility are achieved. The stabilizing KPI contour in the proposed model serves as an institutional framework for performance. It ensures manageability, accountability, regulatory compliance, and comparability of results over time. Its purpose is to fix the basic parameters of the quality of educational, scientific, financial, and organizational activities. A feature of this contour is the use of a limited, methodologically verified set of key indicators, cleared of excessive metrics. KPI revisions are carried out regularly, but within formalized procedures that prevent chaotic changes to indicators. The indicator core also includes risk metrics that reflect critical operational stability parameters.

The adaptive OKR contour serves as the system's strategic dynamizer. It is focused on the formation of ambitious, meaningful development goals and measurable key results of their achievement. Unlike the indicator contour, the OKR contour operates in short, iterative cycles and allows controlled variability in goals and progress parameters. Its managerial role is to focus efforts, align horizontal and vertical actions, stimulate innovation, and accelerate organizational learning. OKR in the proposed model does not replace strategic planning, but complements it with a mechanism of controlled strategic experimentation.

The adaptive loop operates through a formalized iterative cycle that includes: setting Objectives aligned with the university's strategic framework; defining measurable Key Results; implementing within a short management period (quarter or semester); conducting interim progress assessment sessions; ensuring transparency of results for stakeholders; reflective

analysis of achievements and deviations; and adjusting the next cycle of goals. This cyclicity creates a continuous feedback and learning loop.

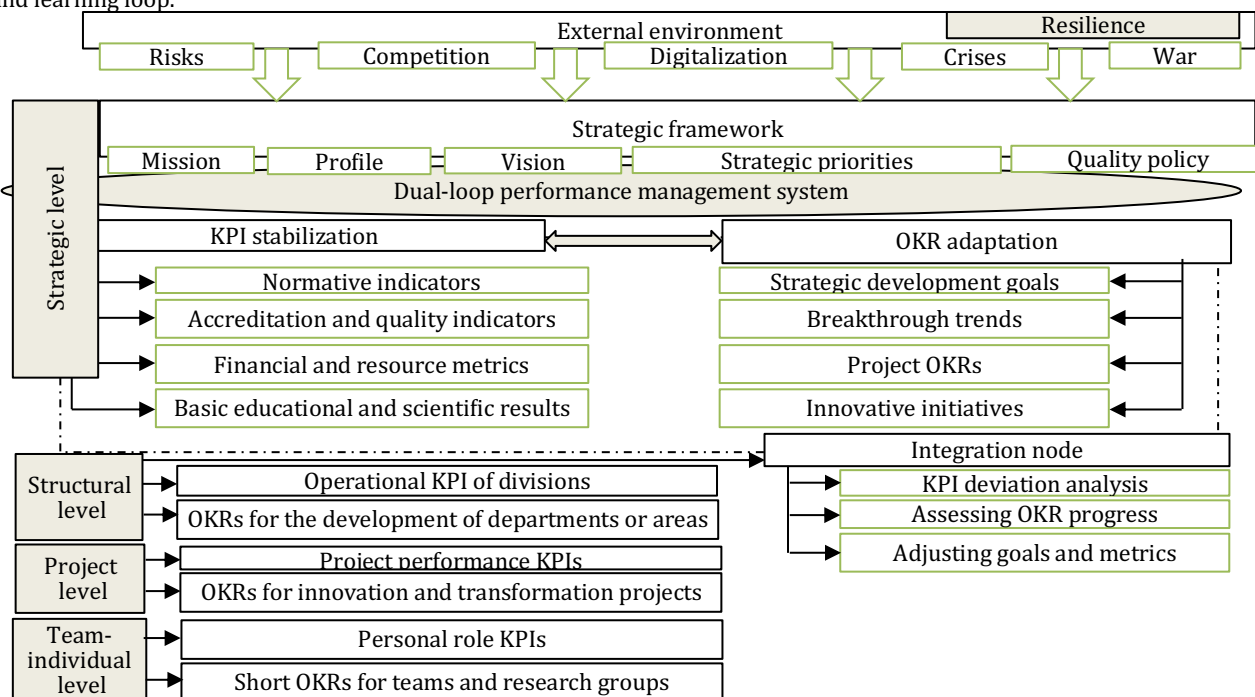


Fig. 1. Integrated dual-loop performance management model of a higher education institution: KPI-OKR resilient mechanism (author's vision)

It is fundamentally important that neither circuit functions as a parallel, isolated mechanism. Their integration is ensured through a common strategic framework for university development, a single analytical database, and regular integrated procedures for the management review of performance. The model provides for a special adaptation mechanism that acts as a connecting node between the KPI and OKR circuits. It includes regular integrated sessions, analysis of gaps between the indicator state and target progress, trigger conditions for reviewing goals and metrics, scenario-based adjustment of indicators, flexible redistribution of resources, and procedures for accumulating organizational learning. A key feature of the mechanism is the admissibility of adjusting not only management actions but also indicators and key results within the strategically defined field of permissible changes.

The novelty of the proposed model also lies in the implementation of a four-level system of indicators and results, which ensures both strategic coherence and operational sensitivity.

Strategic level. Covers integral KPIs and strategic OKRs of the university as a whole. Here, the basic parameters of the quality of education, research, international activities, financial sustainability, social impact, as well as the strategic goals of transformation are recorded. Indicators at this level serve a navigational function and define the boundaries of permissible management decisions.

Structural level. Includes indicators and OKRs of faculties, institutes, schools, and centers. At this level, strategic guidelines are interpreted, taking into account disciplinary and functional specifics. Cascading of goals and metrics is supported, with the option to adapt them to the context.

Project level. Covers indicators of educational programs, research and innovation projects, and partnership initiatives. OKR logic dominates here with short cycles and measurement of specific results. KPIs are used to constrain resources, deadlines, and performance quality.

Team-individual level. Contains indicators of team, department, research group, and individual contributions. Combines role-specific KPIs with short-term OKRs to align individual performance with the organization's strategic goals.

This allows us to treat strategy not as a fixed document, but as a managed process. OKRs operationalize strategic priorities as measurable, short-term results, while KPIs monitor boundary conditions and basic sustainability parameters. In practical terms, this increases the implementability of strategies, reduces the risk of declarativeness, and strengthens the connection between strategic intentions and everyday management activities.

At the state education policy level, the model has implications for rethinking how to assess the effectiveness and accountability of higher education institutions. It justifies the feasibility of combining normative indicator systems with the space of institutional target autonomy. The practical consequence may be the establishment of a regulatory framework that supplements the mandatory KPI core with permission and methodological recommendations for implementing adaptive OKR practices at the university level.

This approach promotes a transition from a unified indicator-based regulation to a differentiated model of managed autonomy, in which the state determines the basic requirements for sustainability and quality, and universities serve as tools for achieving strategic goals. This becomes especially important in times of crisis and post-crisis transformations, when the ability of institutions to adaptively self-adjust becomes an element of national educational resilience.

In summary, the practical implications of the proposed model are to form a manageable, multi-level, and adaptive performance system suitable for real implementation in university management practices and compatible with the requirements of the modern regulatory and competitive educational environment.

Conclusions and prospects for further research

The study shows that the transformation of the higher education environment, driven by increasing uncertainty, crisis impacts, military risks, digital dynamics, and global competition, objectively changes the requirements for university performance management systems. Traditional indicator models, built primarily on static KPIs, retain their value as tools for accountability and regulatory oversight but are less suited to fostering adaptability and strategic flexibility. In a resilient

environment, performance should be interpreted not only as the achievement of planned values, but also as the institution's ability to maintain manageability, integrity, and development capacity under conditions of change.

The paper substantiates the feasibility of integrating two management logics: indicator (KPI) and target-iterative (OKR), within a single architecture for managing the performance of a higher education institution. It is shown that their combination enables the formation of a two-loop system in which the stabilizing mechanisms of accountability and quality interact with adaptive mechanisms of strategic focus, short learning cycles, and goal adjustment.

The study's scientific contribution is the development of theoretical and methodological principles for university performance management through the prism of resilience. A conceptual expansion of the concept of performance is proposed. Resilient requirements for performance management systems are systematized, the limitations of traditional KPI models in a turbulent environment are substantiated, and the complementary role of the OKR approach in university management is determined. The scientific novelty of the results obtained lies in the development and theoretical substantiation of an integrated two-loop KPI-OKR model of performance management of a higher education institution, which includes: a common strategic framework, a stabilizing indicator loop, an adaptive OKR loop, a formalized mechanism of inter-loop adaptation, and a four-level system of indicators (strategic, structural, project, team-individual levels). Unlike existing approaches, the model institutionally combines measurability, iterativeness, multi-level coherence, and managed flexibility within a single management mechanism.

The model's practical orientation is evident in its applicability to university management, internal quality assurance systems, strategic planning, and the formulation of performance policies in higher education.

Further research should be directed at empirical verification of the proposed model on samples of universities of different types and scales, development of quantitative and mixed methods for measuring resilience of performance, modeling of digital analytical tools to support dual-loop management, as well as studying behavioral and cultural factors of implementing KPI-OKR systems in academic organizations. It is also promising to study the relationship between resilient models of performance management and universities' institutional autonomy across different regulatory contexts.

Література

1. Литвинов О.М. Забезпечення стійкості прифронтового університету: 15 есе про досвід ХАІ. Право. 2025. URI: <http://dSPACE.library.khai.edu/xmlui/handle/123456789/9214>.
2. Литвинов О.М., Шевченко І.О. Третя місія університету як механізм стійкого розвитку: нова парадигма вищої освіти України. *Часопис економічних реформ*. 2025. № 4(60). С. 85–99.
3. Литвинов О.М., Шевченко І.О. Модель університету стійкого типу: інноваційні підходи до внутрішнього забезпечення якості освіти в умовах війни. *Пропілеї права та безпеки*, 2025 № 8. С. 22-33. DOI: <https://doi.org/10.32620/pls.2025.8.02>.
4. Duchek S. Organizational resilience: A capability-based conceptualization. *Business Research*. 2020. № 13(1). P. 215–246. DOI: <https://doi.org/10.1007/s40685-019-0085-7>.
5. European Association for Quality Assurance in Higher Education (ENQA). (2015/2020 use edition). Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). 2015. URI: https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf.
6. International Organization for Standardization. ISO 21001:2025 Educational organizations-Management systems for educational organizations — Requirements with guidance for use. ISO. 2025.
7. Lytvynov O., Shevchenko I.O. Knowledge hubs in times of crisis: the economic and strategic role of universities in international resilience networks. *Actual Problems of International Relations*. 2025. Vol. 1 No. 165 (2025). DOI: <https://doi.org/10.17721/apmv.2025.165.1.123-136>.
8. Lytvynov O., Shevchenko I.O. Managing sustainability in higher education: the impact of international economic relations on institutional strategies. *Actual Problems of International Relations*. 2025. Vol. 1 No. 164 (2025). DOI: <https://doi.org/10.17721/apmv.2025.164.1.106-116>.
9. Science at Risk Initiative. Science at risk: Monitoring report on Ukraine's research and higher education sector. 2024. URI: <https://science-at-risk.org/>.
10. Sereida H., Kyrychenko K., Petrenko O. Performance management at a Ukrainian university: A case of the KPIs use. *Problems and Perspectives in Management*. 2021. № 19(2). P. 274–283. DOI: [https://doi.org/10.21511/ppm.19\(2\).2021.22](https://doi.org/10.21511/ppm.19(2).2021.22).
11. Kaplan R.S., Norton D.P. The balanced scorecard: Translating strategy into action. Harvard Business School Press, 1996.
12. Doerr J. Measure what matters: How Google, Bono, and the Gates Foundation rock the world with. 2018. OKRs.Portfolio/Penguin.

References

1. Lytvynov, O.M. (2025). Zabezpechennia stijkosti pryfrontovoho universytetu: 15 ese pro dosvid Khai. Pravo. [Ensuring the sustainability of a front-line university: 15 essays on the experience of Khai. Law]. Available at: <http://dSPACE.library.khai.edu/xmlui/handle/123456789/9214>.
2. Lytvynov, O.M., Shevchenko, I.O. (2025). «The third mission of the university as a mechanism of sustainable development: a new paradigm of higher education in Ukraine». *Chasopys ekonomichnykh reform*. № 4(60). pp. 85–99.
3. Lytvynov, O.M., Shevchenko, I.O. (2025). «The model of a sustainable university: innovative approaches to internal quality assurance of education in wartime». *Propilei prava ta bezpeky*, № 8. pp. 22-33. DOI: <https://doi.org/10.32620/pls.2025.8.02>.
4. Duchek, S. (2020). «Organizational resilience: A capability-based conceptualization». *Business Research*. № 13(1). pp. 215–246. DOI: <https://doi.org/10.1007/s40685-019-0085-7>.
5. European Association for Quality Assurance in Higher Education (ENQA). (2015/2020 use edition). Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Available at: https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf.
6. (2025). International Organization for Standardization. ISO 21001:2025 Educational organizations-Management systems for educational organizations — Requirements with guidance for use. ISO.
7. Lytvynov, O., Shevchenko, I.O. (2025). «Knowledge hubs in times of crisis: the economic and strategic role of universities in international resilience networks». *Actual Problems of International Relations*. Vol. 1 No. 165 (2025). DOI: <https://doi.org/10.17721/apmv.2025.165.1.123-136>.
8. Lytvynov, O., Shevchenko, I.O. (2025). «Managing sustainability in higher education: the impact of international economic relations on institutional strategies». *Actual Problems of International Relations*. Vol. 1 No. 164 (2025). DOI: <https://doi.org/10.17721/apmv.2025.164.1.106-116>.
9. Science at Risk Initiative. Science at risk: Monitoring report on Ukraine's research and higher education sector. (2024). Available at: <https://science-at-risk.org/>.
10. Sereida, H., Kyrychenko, K., Petrenko, O. (2021). «Performance management at a Ukrainian university: A case of the KPIs use». *Problems and Perspectives in Management*. № 19(2). pp. 274–283. DOI: [https://doi.org/10.21511/ppm.19\(2\).2021.22](https://doi.org/10.21511/ppm.19(2).2021.22).
11. Kaplan, R.S., Norton, D.P. (1996). The balanced scorecard: Translating strategy into action. Harvard Business School Press.
12. Doerr, J. (2018). Measure what matters: How Google, Bono, and the Gates Foundation rock the world with. OKRs.Portfolio/Penguin.

Стаття надійшла до редакції / Received 25.01.2026

Прийнята до друку / Accepted 15.02.2026

Опубліковано / Published 25.02.2026