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INNOVATION POLICY OF BUSINESS IN THE CONTEXT OF DIGITAL TRANSFORMATION: STRATEGIC PRIORITIES AND IMPLEMENTATION TOOLS

Abstract. This article explores the peculiarities of forming and implementing innovation policies in enterprises amid digital transformation and external challenges, notably the war in Ukraine. Key barriers restraining innovation development are analyzed, including limited financing, workforce losses, infrastructure degradation, and institutional instability. The role of innovation policy as a strategic tool to ensure business flexibility, adaptability, and competitiveness is revealed. Principles for building an effective innovation strategy are identified, emphasizing market orientation, integration of digital technologies, change management, and the cultivation of an innovation culture. Particular attention is paid to practical innovation management tools such as digital analytics, project management systems, cross-functional coordination, and technology transfer platforms. The study is based on the synthesis of current scientific approaches and practical solutions enabling the formation of a coherent, sustainable innovation policy oriented toward development in a dynamic market environment.

Keywords: innovation policy, marketing policy, digital transformation, development strategy, innovation culture, change management, competitiveness, risk management, digital technologies, entrepreneurship, technology transfer.

ІННОВАЦІЙНА ПОЛІТИКА БІЗНЕСУ В УМОВАХ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ: СТРАТЕГІЧНІ ПРИОРИТЕТИ ТА ІНСТРУМЕНТИ РЕАЛІЗАЦІЇ

Анотація. У статті розглядаються особливості формування та реалізації інноваційної політики підприємств в умовах цифрової трансформації економіки на тлі викликів, пов'язаних із повномасштабною війною в Україні. Аналізуються сучасні проблеми національного бізнесу, серед яких руйнування виробничої інфраструктури, дестабілізація інвестиційного клімату, кадрові втрати та обмеженість фінансових ресурсів, що стримують рівномірний розвиток інноваційної діяльності. Визначається роль інноваційної політики як інструменту, що забезпечує не лише стимулювання, а й стабілізацію діяльності підприємств, їх адаптацію до швидких змін зовнішнього середовища та підвищення гнучкості управлінських рішень.

Увага приділяється теоретичним засадам інноваційної політики, базованої на принципах формування інноваційної культури, інтеграції цифрових технологій, міжфункціональної координації та стратегічного планування. Розглядаються проблеми опору змінам серед персоналу, розрив між науково-дослідною діяльністю та комерціалізацією, а також складнощі фінансування інноваційних проектів. Автори наголошують на необхідності застосування сучасних методів управління трансформаціями,

розвитку інноваційних екосистем, а також цифрових інструментів для інформаційного забезпечення процесів інновацій.

Стаття підкреслює, що інноваційна політика має бути комплексною, багатовимірною та тісно інтегрованою зі стратегією підприємства, враховувати специфіку галузі і вимоги динамічного ринку. Ключовим фактором успіху є підтримка з боку керівництва, створення атмосфери довіри, відкритий діалог і заохочення ініціативності працівників. Завдяки гармонійному поєднанню стратегічного бачення, цифрових технологій, кадрового потенціалу та ефективного управління підприємство може не лише адаптуватися до змін, а й формувати власну трасекторію розвитку, утримуючи лідерські позиції у конкурентному середовищі.

Ключові слова: інноваційна політика, маркетингова політика, цифрова трансформація, стратегія розвитку, інноваційна культура, управління змінами, конкурентоспроможність, ризик-менеджмент, цифрові технології, підприємництво, трансфер технологій.

Formulation of the problem. In the conditions of the full-scale war in Ukraine, the national business faces unprecedented challenges significantly transforming the economic environment. The armed conflict has caused massive destruction of production facilities, destabilized the investment climate, and increased risks in entrepreneurial activities. Simultaneously, these circumstances have accelerated the adoption of digital technologies, the reconsideration of traditional business models, and intensified innovation efforts.

Despite some successes in digitalization, innovation activity within enterprises remains uneven and fragmented. Primary restraining factors include limited financial resources, reduced demand for high-tech products, loss of skilled personnel, infrastructure degradation, and insufficient government support. In such conditions, innovation policy must serve not only a stimulating but also a stabilizing function - ensuring the adaptability of economic agents to change and their capacity for rapid response to crisis phenomena.

The urgency of the problem necessitates a systemic review of approaches to forming enterprise innovation strategies. Such strategies must meet the demands of the digital age, consider high uncertainty and threats, integrate international technological trends, and be based on principles of flexibility, resilience, and dynamic development.

Analysis of recent research and publications. Forming an effective innovation policy is a critical area of modern scientific research due to its key role in ensuring sustainable economic development and long-term enterprise competitiveness. Scientific discourse actively addresses issues of institutional support for innovation activities, mechanisms of state stimulation, integration of digital technologies into business processes, and strategic management under uncertainty and dynamic external changes.

Despite numerous publications, mechanisms for adapting innovation policy to the challenges of digital transformation remain insufficiently explored. Practical aspects of strategic planning, digital infrastructure development, risk management, and integration of innovation into enterprise management systems continue to be highly relevant.

Ukrainian scholars have made significant contributions to this field. For example, A.V. Peshko analyzes innovation management mechanisms and strategy formation [1], O.M. Sumets studies state support and institutional environment [2], Ye.M. Ignatov focuses on innovation security and digital economy risks [3], A.V. Nazarenko emphasizes innovation culture formation [4], O.I. Shamanska examines digital transformation of business models [5], V.P. Oliynyk investigates regional innovation policy in decentralization context [6], and N.V. Krasnokutska explores digitalization's impact on economic security and innovation efficiency [7]. R.V. Yakovenko analyzes innovation potential development and technology transfer [8]. The synthesis of these approaches provides a methodological basis for deepening research on innovation policy oriented toward digital transformation, enhancing flexibility and adaptability amid instability.

The purpose of the article. The article aims to identify specific features, form strategic priorities, and define key tools for developing effective innovation policy in business, focused on adaptation and growth in the context of digital economic transformation. Special emphasis is placed on analyzing mechanisms for integrating digital technologies and ensuring managerial flexibility under dynamic external changes.

The main material presentation. Enterprise innovation policy is a component of the overall business strategy regulating interactions among R&D, marketing, production, social, organizational, and economic activities during innovation implementation. It reflects management's attitude toward innovation, setting goals, directions, functions, and organizational forms enshrined in strategic, tactical, and operational plans.

According to Peter Drucker, a pioneer of management theory, innovation is not just invention but the

effective application of novelties that create additional business value [9]. Implementing innovation policy is both a technical and cultural challenge. Without active leadership support, a culture of trust, and encouragement of initiative, innovations remain declarative. This approach requires cultivating an innovation culture that stimulates creativity and risk-taking.

Innovation policy acts as an active instrument to ensure enterprise competitiveness and efficient use of economic potential. Industry specifics and competition level in domestic and global markets must be considered. Michael Porter notes that competitive advantages rely on the ability to innovate and adapt to changing environments [10]. High-tech industries face greater innovation speed pressure, while traditional sectors require gradual changes. Thus, innovation policy should be market-specific and focused on flexibility and adaptability to respond swiftly to environmental changes.

Effective innovation policy is based on several fundamental principles that create conditions for systemic and harmonious innovation development:

- creating a supportive innovation environment based on analysis of external environment and internal enterprise potential. Thomas Peters highlights the success of innovation depends on cultivating a culture supporting creativity and risk acceptance [11]. Conservatism and risk aversion often cause stagnation. Willingness to experiment and take risks is a key driver of progress, requiring training programs and employee motivation;

- market orientation as an integral element. Clayton Christensen stresses that successful innovations meet real user needs and solve problems [12]. Lack of marketing research integration in product development is a major issue. Systematic use of marketing data and regular product testing improve market fit;

- clarity of goals and strategic directions. Henry Mintzberg notes that without clear goals, organizations risk losing focus and resources [13]. Defining clear goals and transparent communication involve the whole staff in innovation;

- comprehensive innovation management. Lawrence Peters emphasizes different organizational parts must work as one system [14]. Lack of cross-functional coordination leads to effort fragmentation. Centralized innovation management and interdepartmental collaboration synchronize actions effectively;

- systematic and consistent implementation of innovation initiatives. Edward de Bono stressed that chaotic decision-making greatly reduces efficiency [15]. Consistent approaches with monitoring and control are essential;

- information support in the digital age. Gary Hamel notes digital technologies and analytics open new innovation opportunities [16]. Modern analytic platforms enable prompt and informed decisions.

Resistance to change among staff, caused by fear of instability and unfamiliarity with new technologies, is a major problem. Overcoming it requires internal communication systems, training and retraining programs, and motivational mechanisms supporting innovation initiatives. Change management models like Kotter's help conduct transformations systematically.

The gap between research and development (R&D) and the commercialization of results often becomes a key obstacle to the effective implementation of innovations. Enterprises frequently generate promising ideas that fail to find practical application due to the lack of market demand or effective technology transfer mechanisms. To address this issue, it is advisable to develop innovation clusters, establish open innovation platforms, and support the activities of business incubators and accelerators. An important tool is also the implementation of modern project management standards, which ensure systematic oversight, control, and efficiency in the realization of innovation processes.

The most common innovation development barriers and tools for overcoming them are summarized in Table 1.

Table 1
Common Barriers to Innovation Commercialization and Effective Tools for Overcoming Them

Category	Barriers	Tools and Solutions	Expected Outcomes
1	2	3	4
Organizational	Lack of coordination between R&D and marketing units; weak strategic planning	Implementation of innovation management systems (ISO 56002); creation of cross-functional teams	Improved communication and faster decision-making
Financial	Insufficient investment in R&D; lack of venture capital	Public-private partnerships; innovation funds; tax incentives for R&D	Increased access to financing and reduced financial risks

Continuation of Table 1

Technological	Outdated infrastructure; limited digital transformation	Adoption of Industry 4.0 technologies; digital twins; AI-driven analytics	Higher efficiency and technological competitiveness
Human capital	Shortage of skilled specialists; brain drain	Training programs; cooperation with universities; talent retention policies	Enhanced innovation capacity and workforce quality
Regulatory and institutional	Bureaucratic barriers; weak intellectual property protection	Simplification of patenting procedures; harmonization with EU standards	Greater transparency and stronger innovation ecosystem

Source: compiled by the author

Insufficient funding threatens timely project execution. Recommendations include phased financing with KPI control, venture capital attraction, government grants, and value-based budgeting.

Resource fragmentation and lack of coordination among departments pose challenges. Introducing cross-functional teams, centralized innovation portfolio management, and CRM/ERP systems improves synchronization and effectiveness.

Lack of systematic innovation implementation leads to chaotic decisions and resource loss. Employing agile methodologies (Scrum, Kanban), roadmaps, and regular KPI/OKR evaluations ensure consistency.

Information support tools such as Business Intelligence, Big Data, AI, and corporate data warehouses enable analysis of large data volumes and timely market response.

Marketing policy now requires integrating digital tools for deep consumer needs analysis. Behavior analytics, marketing automation, and A/B testing allow market-aligned product formation.

R&D policy must ensure close science-business interaction via open innovation platforms, technology transfer offices, and joint projects converting research into marketable products.

Managing structural changes requires active resistance management. Training leaders, communication campaigns, engaging change agents, and feedback systems reduce failure risks.

Technical policy focuses on infrastructure updates, IoT, cloud technologies, and regular technical audits, maintaining technological competitiveness and rapid adaptation.

Investment policy should address risk management through financial modeling, portfolio diversification, and scenario analysis, optimizing capital use and supporting sustainable innovation development.

These aspects demonstrate the multidimensional nature of innovation policy, requiring a comprehensive approach combining strategy, organization, culture, and technology. The direct link between innovation policy and competitiveness highlights its key role in sustainable enterprise development.

Human factors are critical, as innovation success largely depends on staff readiness and motivation. Lack of corporate culture support can undermine technical and financial efforts.

Change management tools, modern IT application, and marketing data integration create conditions for flexible and effective market response. Systematic planning and innovation implementation control reduce risks and increase project success probability.

Conclusions. Thus, the enterprise's innovation policy is an integral part of its overall business strategy and serves as a tool ensuring coherence between scientific and technical developments, marketing, production, social, and economic aspects of activity in the process of implementing innovations. It creates the foundation for forming an innovation culture within the organization by defining priorities, development directions, and implementation mechanisms, which is especially important for maintaining competitive positions in a dynamic market environment.

The effectiveness of the innovation policy largely depends on the level of support from management personnel, the presence of open dialogue within the team, trust between departments, as well as creating conditions for employee initiative. Innovations should be viewed not as one-time projects but as a continuous, holistic system of actions encompassing all structural elements of the enterprise and requiring flexible adaptation to changes in the external environment.

Achieving a high level of efficiency in implementing innovation policy is possible through a comprehensive management approach: considering the specifics of the particular industry, market conditions, implementing modern planning methods, coordination between functional departments, information support, and risk management. An important component of successful innovation implementation is the use of digital technologies and analytical tools that facilitate prompt decision-making and enhance organizational agility.

Among the main challenges complicating the implementation of innovation policy are internal resistance

to change, insufficient integration of scientific developments into practical activities, limited financial resources, and their inefficient allocation. Overcoming these challenges is possible by applying modern approaches to managing transformational processes, actively using marketing research data, building partnerships within innovation ecosystems, and implementing effective digital solutions in project management.

Overall, innovation policy is not only a technical tool but also a strategic and cultural factor in the enterprise's development. Its proper implementation requires a harmonious combination of strategic vision, modern technologies, professional human resources, and effective management decisions. Such a systemic interaction enables the enterprise not only to adapt to changes but also to shape its own development trajectory and occupy leadership positions in its industry.

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