ISSN 2522-9818 (print)
ISSN 2524-2296 (online) *Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)*

UDC 311.2:658 DOI: https://doi.org/10.30837/2522-9818.2024.29.104

O. IASTREMSKA, L. MALYARETS, V. SAMOILENKO, O. BUDARIN

MANAGEMENT OF INNOVATIVE PROJECTS TO ENSURE INNOVATIVE DEVELOPMENT OF ENTERPRISES

The **subject** of the study is theoretical provisions, methodology of adaptive management of innovation projects and innovative development of enterprises, methodological basis, practical proposals for its research in modern conditions. The **purpose** of the article is to summarize generalization of the theoretical basis of the features of innovative projects, the expediency of using organizational structures for managing the processes of their formation and implementation, analysis of adaptive methodologies for managing innovative projects to ensure the employment of workers, their innovative development, and development of practical recommendations on these issues for a working enterprise. The purpose is revealed by solving the following **tasks**: generalize the features of innovative projects that determine the success of their implementation; determine the feasibility of using organizational structures of enterprise management for the formation and implementation of innovative projects to ensure innovative development; identify and propose the use of adaptive management methodologies for innovative projects to achieve successful innovative development of enterprises; develop a hybrid organizational structure for innovation management; the main directions of innovative personnel management of enterprises to promote their employment and management of innovative development are proposed. To solve the tasks, the following **methods** were used: theoretical generalization, analysis, synthesis, induction and deduction, structural and logical analysis, systemic and situational approaches, the method of working day photography, Agile adaptive management methodology, graphic method, and the authors' own practical experience. The **conclusions and results** of the article are as follows: it is proved that the management of innovation projects should take into account their features, be based on the use of project, matrix and hybrid organizational management structures and the application of adaptive methodologies for managing innovation development and the formation and implementation of innovation projects, such as Agile, Scrum, Kanban, Lean. For the operating enterprise Nebozvid LLC, using adaptive management methodologies, a hybrid organizational structure of the project department has been developed to ensure the innovative development of the enterprise through the implementation of innovative projects with the organization of small project teams. The main trends in innovative personnel management of enterprises are proposed, the use of which contributes to the success of innovative project management to ensure the innovative development of enterprises.

Keywords: innovative project; innovative development; organizational management structures; adaptive management methodologies; trends; innovative personnel management; employment of workers.

Introduction

In the complex world of business and technological progress, the role of innovation projects is becoming increasingly important. These projects, which differ significantly from traditional ones, such as investment projects, focus on creating new products, services, or processes with the potential to have a significant impact on markets and societies. The essence of these projects lies not only in their novelty, but also in their ability to expand the boundaries of socioeconomic realities and stimulate qualitative changes in business processes. This is a particularly important feature of innovative projects in the current military environment and the future post-war period, as the implementation of innovative projects will enable enterprises to increase profits and focus their activities on creating unique products or introducing advanced technological processes that are difficult to copy, which will be a certain protection for the competitiveness of business entities.

The management of innovation projects is characterized by dynamism, focusing on the complexity of the modern business environment. These projects often involve exploring uncharted territories, which requires a unique combination of creativity, strategic thinking, and adaptability. Unlike conventional projects, which can focus on achieving clearly defined outcomes within specified parameters, innovation projects, being predominantly exploratory, deal with a higher degree of uncertainty and risk. This makes the role of project management crucial, as it involves not only guiding these projects to implementation, but also managing the inherent unpredictability that characterizes them.

The impact of innovation projects on business operations and markets is profound. In an era when technology is evolving rapidly and consumer demands are constantly changing, innovation is becoming a cornerstone for businesses to stay relevant and competitive. Businesses that succeed in managing innovation projects are leaders in their industries, setting

ISSN 2522-9818 (print)
Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29) ISSN 2524-2296 (online)

trends and defining future standards. Thus, these projects are not only about creating new products or services, they can ensure the success of future businesses and markets.

One of the key aspects of managing innovation projects is understanding the balance between creativity and feasibility. While innovation requires out-of-the-box thinking, it also requires a pragmatic approach to ensure that ideas are not just imaginative, but are also realizable and aligned with business goals. This balance is critical to turning creative ideas into successful projects that deliver real value. In addition, managing innovative projects requires staff to have specific professional competencies and continuous learning. Project managers in this field must be able to handle ambiguity, make decisions with incomplete information, and be able to lead and motivate diverse teams. They also need to be proficient in a variety of project management methodologies, from Agile to Lean, each of which offers different benefits and is suitable for different types of innovation projects. In the field of innovation project management, the importance of different methodologies and the role of technology and leadership are becoming increasingly evident. Agile and Lean methodologies, which focus on adaptability and efficiency, play a crucial role in managing the unique requirements of innovation projects. The challenges of aligning these innovative approaches with organizational culture, securing resources, and managing diverse teams are central to the discourse on innovative project management. The integration of management technologies for innovative projects is gradually becoming transformative. Tools such as artificial intelligence, big data analytics, and the Internet of Things are not only facilitators but also enablers that increase the scale and efficiency of innovation projects. Balancing the technical aspects with the indispensable human element of creativity and intuition is a critical challenge facing businesses in managing innovation projects. Business internationalization is the main driving factor that contributes to the intensification of the development and implementation of innovative projects that become the basis for innovative development [1]. Based on the National Economic Strategy 2030, the national state agency for the development of Industry 4.0, the Digital Innovation Hub network, and a network of innovation clusters, especially in the IT industry, are being developed, but the issue of determining the feasibility of using adaptive methods of managing innovative projects, taking into account their modern features, to ensure the innovative development of enterprises that can ensure the success of their activities through the latest management methodologies is not yet resolved. Therefore, it is advisable to analyze current proposals related to these issues to take them into account in the process of managing innovation projects to ensure the innovative development of business entities.

Analysis of recent research and publications

The dissemination of modern methods of managing innovation projects for the innovative development of enterprises is a topical issue that is being studied by the global scientific community. Based on the latest publications for the period from 2022 to 2024 in the most professionally developed and well-known scientometric database Scopus, the following generalizations can be made about the state of the research problem and the achievements of scientists in this area.

An important area of publications and proposals is the management of innovative projects through organizational structures and the introduction of modern digitalization achievements that affect the acquisition of certain new features by innovative projects.

Feng and Yiming (2024) explore the landscape of digital transformation, characterized by profound changes in organizational structures and operating models [11]. Central to this transformation is the role of artificial intelligence (AI), which creates many challenges and opportunities. This study examines the use of AI technologies to promote organizational innovation, with a focus on their impact on structural change. The author emphasized that in modern conditions, there is a lack of comprehensive analysis and assessment of the organizational aspect to quickly identify and integrate knowledge into project management. This conclusion confirms the relevance and necessity of analyzing the organizational component of managing innovation projects and innovative development of enterprises.

This topic will be continued by Zhang, Juliana J. Y. et al (2023), who reasonably consider the process of managing innovative projects for innovative development in terms of digitalization as a modern trend in the global economic space [41]. The authors analyze the organizational aspects of implementing and managing chatbots to manage the development of enterprises, organizational factors of influence. We can agree with the article's conclusions about using the benefits of digitalization to transform the management of innovative

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

development and applying the advantages of the IT industry to this process and management methodology.

Since qualified specialists are involved in the functioning of project teams, scientists are exploring the peculiarities of innovative management of personnel and other economic resources of enterprises in the process of innovative development. The resource component of innovative projects is highlighted in the article by Alhaqbani, Sultana Fayez et al (2024), which examines the factors that contribute to the successful implementation of technological innovations in Saudi Arabia in the context of factors influencing the implementation of innovative projects, the results of the study revealed the negative impact of project leadership on the effectiveness of technological innovation and the positive significant impact of financial resources and senior management style [8]. That is, considering innovative projects as a set of economic resources, the authors' research shows their inequality and the need to prioritize the management of those types of resources that have the largest share in terms of volume, which relates to the organization of project management of resource intensity as their important modern feature.

Haim, Kurt & Aschauer, Wolfgang (2024) investigated the issues of human resource management in the context of human project management and concluded that it is necessary to train employees in advance to promote the development of creative problem-solving skills in the context of sustainable development [13]. They suggest using the Innovation Focus program, which uses a two-stage approach that combines flexibility, originality, creative personality development, and strategic planning. Such an organization of innovation project management to ensure the innovative development of enterprises indicates the need to apply strategic adaptive management in organizing the formation and implementation of innovative projects.

Nowak, Radoslaw M. (2023) devoted an article to the study of the resistance of employees of an innovation project to the changes that will accompany it, which can affect different stages of the innovation process [23]. To identify methods of reducing resistance, the paper presents a new model that theoretically substantiates three mitigating effects of resistance to change on different elements of absorptive capacity: design/methodology/approach. The article presents specific practical implications for managers and the social consequences of working in a project team that show a decrease in resistance, namely, originality and value of work. These findings are useful for managing innovative human resources projects and identifying the main trends in innovative methods of managing them.

Schneider, Malte Hans Georg et.al (2022) emphasize that achieving high and consistent use of innovation requires enterprises to focus on project team members and their individual characteristics rather than on organizational design [31]. In addition, a middle management-centered approach that combines implementation leadership and dialog facilitates effective innovation adoption. In summary, the study contributes to innovation adoption by providing a framework to guide future research while helping practitioners to implement innovations more effectively.

A number of publications on project management pay attention to the interaction of performers, organizational structures, and adaptive management methodologies, which is important for innovative development.

A separate issue is the study of the methodology for managing innovative projects and innovative development, which proves the importance of this aspect. Thus, Myronenko and Oleksii (2024) addressed the very important issue of choosing a project management methodology and determined the impact of research and development costs on the income of enterprises in the field of innovation engineering in the context of changing project management methodology [22]. The paper proves that a change in project management methodology significantly affects the costs, timing, and end result associated with research and development, as well as the use of resources, which ultimately affects the company's performance. The results of the study show that the use of project management methodologies such as Waterfall and Agile has a positive impact on the quality of project management and financial performance. Projects implemented according to the Agile methodology are more efficient, reducing the number of canceled and closed projects. Both methodologies lead to the successful completion of most projects, but the percentage of successfully completed projects using the Waterfall methodology is higher than that of Agile. The use of Agile allows to achieve a significant reduction in project implementation time and increase the efficiency of costs and resources. This conclusion is the basis for the use of the Agile adaptive management methodology at domestic enterprises as the preferred one, the implementation of which should be further investigated.

ISSN 2522-9818 (print)
Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29) ISSN 2524-2296 (online)

Sitenko, Diana et al (2023) analyzed the effectiveness of the implementation of existing mechanisms for the implementation of innovative projects in the field of renewable energy through auctions [32]. In addition, they identified their shortcomings and provided suggestions for improvement. The analysis uses data from the Kazakhstan Bureau of National Statistics. The analysis of barriers to the implementation of innovative renewable energy projects revealed contradictions in the price regulation of innovative projects, the lack of market-based pricing mechanisms, and the unpreparedness of market infrastructure to integrate with the proposed project sources. The results of the study confirm the need to use adaptive project management methodologies for the success of innovative development and the regulatory role of government institutions in innovation processes.

Stahiv O.V. et al. (2023) have formed scientific and methodological principles and practical recommendations for identifying problem areas and aspects of the implementation of innovation and investment projects [33]. One of the key features of the effectiveness of investment and innovation projects is systematicity, which involves a combination of measures to intensify and develop investment and innovation activities in the organizational, institutional, economic, product and service, social and psychological components. Such proposals can be useful for highlighting the features of innovative projects and basing the process of building organizational structures that can flexibly respond to changes in the environment of innovative projects.

The article by Akhmetzhanova, Aikun Kh. et al (2023) discusses the issues of economics and management of an innovative enterprise through the management of innovative projects [3]. They highlight the main feature of innovation project management as coordination, which is essential for the successful implementation of innovative activities at any level of the enterprise. Such coordinated interaction should facilitate the development and implementation of an effective system for the distribution of productive capital, both tangible and intangible assets. Such an emphasis on the coordination of actions of various organizational systems of the enterprise confirms its importance and the need to take it into account as a feature of innovation projects.

Vysochan, Oleh et al (2022) investigated the use of multicriteria analysis tools to determine the relative effectiveness of the implementation of a set of projects in the program of innovative development of domestic enterprises [39]. This indicates the expediency of using economic and mathematical methods in the process of managing their formation and implementation and adaptive management methodologies that involve the use of these methods to make management decisions on the implementation of innovative projects.

Zhao, Na et al (2022) found that as the complexity, breadth of experience, and number of agents involved in megaprojects increase, collaborative innovation models become invaluable in helping to achieve sustainable project development and enterprise innovation [42]. The researchers developed a multi-agent simulation model, CIMP, which was developed using the NetLogo tool and covers behavioral factors and interaction rules that affect the process of managing innovation projects. That is, this article combines the human factor and economic and mathematical management tools and takes into account their mutual influence. It is advisable to agree with this proposal and use it, especially when using the Agile methodology when working in small project teams.

The article by Hron, Michal et al (2022) discusses how to develop radical innovations and suggests distributing innovation efforts [15]. The authors conducted a long-term study of a radical innovation project in a digital company that created a separate organization to develop radical innovations, but over time, innovations moved from radical to incremental. It proved difficult to keep the organization separate. In explaining the events in this case study, the authors argue that new theories of digital innovation can be developed with reference to the specific properties of digital artifacts, the diffusion of innovations can contribute to their drift, i.e. the tendency of radical innovation ambitions to drift gradually towards more incremental realizations. Therefore, the authors propose to turn to adaptive methodologies for managing innovation development to support the effective implementation of innovation projects.

Summarizing the areas of research of the international scientific community in recent years on addressing the issues of managing innovation projects for the innovative development of enterprises, we can conclude that they are multidirectional and lack complete agreement in the use of methods to achieve successful management, which will allow us to conclude that it is advisable to continue and develop research on the above mentioned topics.

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

Unsolved issues. The purpose and tasks of the work

The diversity of research on the characteristics of innovative projects, innovative development of enterprises and methodologies for adaptive management of their practical use has confirmed the lack of agreement between scientists and practitioners on the integrated application and development of practical proposals on these issues. That is, the use of Agile methodology for managing innovation projects to ensure the innovative development of enterprises and building organizational structures based on Agile principles remains insufficiently resolved. This confirmed the existence of an objective need to continue further research in a systemic context. Therefore, the purpose of the article is to summarize the theoretical basis for the features of innovative projects, the feasibility of using organizational structures to manage the processes of their formation and implementation, analyze adaptive methodologies for managing innovative projects to ensure the innovative development of enterprises, employment of workers, and develop practical recommendations on these issues for an operating enterprise.

Given this goal, the article solves the following main tasks to achieve it:

– the features of innovative projects that determine the success of their implementation are summarized;

– the expediency of using organizational structures of enterprise management for the formation and implementation of innovative projects to ensure innovative development is determined;

– methodologies for adaptive management of innovation projects to achieve the success of innovative development of enterprises are identified and proposed;

– a hybrid organizational structure for managing innovation projects based on an adaptive project management methodology for a specific operating enterprise has been developed;

– the main trends in personnel management to improve the efficiency of project teams in the process of innovative development of enterprises are identified;

– the main directions of innovative personnel management of enterprises to ensure the employment of workers and management of their innovative development are proposed.

The object of research is the process of managing innovative projects to ensure the innovative development of enterprises.

The subject of the study is the theoretical provisions of adaptive management of innovative projects and innovative development of enterprises and employment of workers, methodological basis, practical proposals for their research in modern conditions.

Matertials and methods

The methodological basis of the article is the work of domestic and foreign scientists and practitioners on the problems of innovation, innovation development, and innovation project management, which are the theoretical basis and research materials. The article is based on the results of the authors' independent research on the practice of building and using organizational structures, managing innovative projects and the work of their developers at medical enterprises, in particular, Nebozvid LLC, where they studied photos of the working day of employees who participated in the work of project teams.

In the process of conducting research and writing the article, the following methods of scientific cognition and search were used:

– methods of theoretical generalization, analysis, synthesis, and a systematic approach were used to analyze and summarize the literature, highlight the types of adaptive technologies based on Agile;

– to improve and present the main features of innovative projects, organizational management structures, directions of innovative personnel management to ensure the innovative development of enterprises and the introduction of adaptive management technologies, structural and logical analysis, systemic and situational approaches, and the authors' own practical experience were used;

– to develop proposals for improving the management of innovative projects to ensure the innovative development of a particular enterprise, the methods of working day photography, induction and deduction, and the Agile adaptive management methodology were used;

– a graphical method was used to visualize the proposals and results of the study.

The materials and methods used allowed to expand the directions and offer recommendations for solving the identified unresolved issues identified in the analysis of literature sources in a systemic context.

Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29)
ISSN 2522-9818 (print)
ISSN 2524-2296 (online)

Results and their discussion

The management of innovative projects should take into account their features that distinguish this type of project from other traditional ones. Based on the authors' own experience and a synthesis of scientific literature [2, 6, 9, 24, 25], the following relevant features of innovation projects are identified.

These projects are characterized by an increased level of novelty, uncertainty, and complexity, which requires a specialized and innovative approach to management [22]. Innovative projects are aimed at implementing a fundamentally new object aimed at meeting the latest or even clearly non-existent consumer needs, using new methods, technologies that have not been used or explored before [33, 40]. That is, novelty and uniqueness, which are unprecedented, are one of the features of innovative projects [2, 4].

The novelty and uniqueness of innovative projects give rise to the second feature – uncertainty and risk [20], i.e. they are unpredictable, and changes in business conditions, such as regulatory, technological, organizational and managerial restrictions, technologies and implementation methods, increase the risk of implementing project ideas. Overcoming these challenges requires a shift from traditional risk management to proactive risk management. This often involves the use of advanced risk management strategies and tools that can anticipate and mitigate potential pitfalls, ensuring that projects remain on track for success [40].

Such uncertainty is associated with complex networked relationships between project implementers, which requires the use of the latest organizational structures and management technologies. Since the combination of different areas of activity is aimed at obtaining and implementing innovations, this adds a synergistic feature to innovation projects that takes into account the complex nature of different areas of activity and a nuanced approach to their management [4–6].

Synergism supports the next feature of innovation projects – interdisciplinarity, which is due to the synergy of different areas of knowledge that ensure the novelty of innovative projects, such as information technology, social sciences, materials science, management technologies, psychological methods of influence and support for developers and implementers to solve complex and diverse problems that accompany the development and implementation of such projects [9, 10].

The fluid and ever-changing nature of innovation projects requires an adaptive and dynamic management approach that ensures the ability to change strategies in response to new ideas, challenges, and opportunities that emerge during the project life cycle. It is the adaptability and dynamism of management that is the next feature of innovative projects.

Innovative projects are usually characterized by intense demand for resources. They require significant investment, time, capital, and specialized competencies, often involving long development cycles and a significant allocation of human and financial resources. This emphasizes the need for strategic planning and resource management to ensure their optimal use and efficiency [21]. That is, an important feature of innovative projects is resource intensity.

A defining feature of innovative projects is their focus on creating a meaningful and significant impact on the objects and subjects of management [16]. This can manifest itself in various forms, from technological breakthroughs and market leadership to significant social contribution and the formation and implementation of innovations that become budgetary for individual territories [3].

A deep understanding of the specifics of innovation projects is not only useful, but necessary for their effective management. These features emphasize the unique challenges and opportunities that such projects present. They serve as important navigational indicators for project managers, directing them to focus primarily on the strategic implications of project formation and the formation of a team of like-minded individuals to foster an innovative environment in enterprises [17]. This helps to align organizational goals with the transformational potential of innovation projects, promoting growth, increasing competitiveness, and ensuring sustainability in an increasingly dynamic and rapidly changing external business environment [2, 19]. That is, a feature of innovative projects is the teamwork of like-minded people. Effective stakeholder engagement is essential in the field of innovation projects. This involves not only the project team and customers, but also a wider range of investors, regulators, and sometimes the wider community [17]. Navigating this complex network of interests and expectations is essential to the success of innovation projects. This requires a deep understanding of stakeholder dynamics and the development of strategies that can harmonize these diverse perspectives and needs [28].

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

Innovation projects act as harbingers of change and progress, often leading the introduction of innovative technologies or rethinking existing business models, as exemplified by blockchain technologies [10], which have introduced a new technological paradigm and revolutionized certain sectors of the economy, such as finance and supply chains, characterizing the scalability of innovation projects, which spans industries of different focus, transforming them and changing the market landscape [21].

The internal complexity of innovation projects often lies in the complex interaction and integration of various technological, market, and organizational elements. Successfully managing this complexity is not a simple task; it requires a comprehensive and nuanced understanding of these multifaceted components [17]. Project managers need to use sophisticated and holistic project management methodologies that can orchestrate these different elements into a coherent and functional whole. Therefore, the next feature of innovative projects is complexity, which is manifested in ambition [18].

Summarizing the identified relevant features of innovation projects, it is reasonable to conclude that their management should be adaptive, dynamic, proactive, interdisciplinary, synergistic, and strategically oriented. Understanding and effectively navigating the peculiarities and taking them into account is important for project managers and enterprises and not only contributes to the successful implementation of innovative projects, but also develops a culture of continuous improvement and adaptability, which are vital in the modern business landscape, which creates conditions for the innovative development of enterprises, territories, and countries.

In order to take into account the identified features of innovation projects, it is advisable to determine an effective organizational structure for their management, as organizational management structures play a key role in determining how projects are planned, implemented, and monitored. In the context of innovation projects, choosing an appropriate and workable governance structure is crucial to meet the unique challenges and dynamics that innovation projects present to ensure the innovative development of business entities.

Since innovation projects have a specific nature that is reflected in their characteristics, traditional organizational structures that divide the enterprise into separate functional areas, such as marketing, finance, human resources, and that operate independently with their own management and specialized teams, are inappropriate because they do not take into account such features as synergies, impact, and teamwork. Such structures contribute to the accumulation of deep experience and efficiency in specific functional areas, as employees are organized into teams by function and related competencies. Therefore, when it comes to innovation projects, traditional organizational structures can pose significant challenges, as these projects often require the integration of knowledge and skills across multiple domains. The siloed nature of traditional structures can impede effective cross-functional communication and collaboration. This can be especially detrimental in scenarios where innovative solutions require combining ideas from different functional areas. In addition, the decision-making process becomes slower, as approvals and input from multiple functional departments are often required, which can hinder the flexibility needed for innovative projects to move forward quickly. In turn, the allocation of resources in a traditional structure may not meet the dynamic requirements of innovative projects, leading to situations where critical resources for an innovative project are used to fulfill the normal tasks of the unit, thereby limiting the project's potential [37].

Unlike traditional organizational structures, the project organizational structure has been shown to be inherently designed and used widely enough in Ukraine to serve individual projects as organizational units with teams created specifically for their implementation. This structure provides project managers with significant autonomy and authority, allowing them to make quick decisions and respond quickly to project requirements, which is an important advantage in managing innovative projects and takes into account their management features such as teamwork and impact. The project structure ensures that the innovation goals are achieved, and teams focus on achieving the goals. This focus is especially useful for innovation projects, where clarity of vision and purpose stimulates creativity and problem solving. However, this structure can also lead to problems in resource utilization. Since resources are intended for specific projects, there may be cases of underutilization or overutilization, especially when several projects are running simultaneously or when projects are at different stages of their life cycle [2, 34]. In addition, the project structure often leads to the use of a temporary workforce, where team members can move between projects. While this can provide a variety of experiences for employees, there are increasing problems with this work organization in terms of building a cohesive team culture and retaining knowledge within the team [2].

ISSN 2522-9818 (print)
Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29) ISSN 2524-2296 (online)

A more adapted organizational structure for managing the formation and implementation of innovative projects, taking into account their characteristics, is a matrix structure that combines the specialized capabilities of functional departments with the flexibility and focus of project teams. In this hybrid structure, employees have a dual reporting line – they are members of both functional departments and project teams, reporting to both functional managers and project managers. In a matrix structure, the convergence of project and functional relationships requires increased coordination. This complex environment forces project managers to develop a detailed understanding of the organizational workflow, requiring a balance between the requirements of functional managers and the dynamic needs of different projects. The matrix structure also plays a crucial role in developing a strong project culture. Employees participating in various projects gain exposure to different aspects of the business, contributing to a well-rounded perspective and a broad skill set. This diversity is especially beneficial in innovation projects, where different perspectives can lead to more creative and effective solutions [13]. The features of innovative projects supported by matrix structures are teamwork, cross-functionality, efficient use of resources due to their flexibility of application, focus, balance of interests, and goals of decision-making processes.

However, matrix structures do not take into account the vast majority of features of innovative projects, and to this end, proposals have emerged to expand organizational design through the use of flexible project management structures. Such structures support the use of the Agile methodology, which is adaptable and was developed to manage projects, especially innovative ones. Then, according to the Agile methodology [5], a unique organizational structure is formed for each enterprise based on the interaction of small teams of an innovative project that interact on its formation or implementation. Their advantages correspond to matrix structures, and their disadvantages depend on the success of building them at each individual enterprise. In Ukraine, the spread of both the Agile methodology and flexible organizational structures is still not widespread and limited, but promising, so it is advisable to pay attention to their characteristics, which depend on the chosen adaptive methodology based on the Agile idea.

One of the world's most widespread adaptive management methodologies that allows you to successfully use the Agile methodology to build flexible organizational structures for managing innovative projects is the Scrum Framework, which is designed for dynamic projects whose requirements are constantly changing. In this case, the project is divided into separate phases or sprints, with each sprint leading to a final product segment. This approach is especially useful for complex projects that require frequent adjustments and rapid development. The key emphasis of Scrum is on team collaboration. This requires a high level of discipline and commitment from all team members, supported by effective communication and collaborative problem solving. This focus on teamwork is essential to fostering a productive and cohesive project environment. The Scrum Framework is highly adaptable, allowing teams to respond quickly to changing requirements or market changes. Flexibility makes the organizational structure effective for managing projects with a high level of innovation. The adaptability of the Scrum Framework is one of its most important strengths, allowing teams to change as needed to achieve project goals. Regular retrospectives and reviews are a critical component of the Scrum process, fostering a culture of continuous feedback and process improvement. This focus on continuous improvement is vital to maintaining the quality and effectiveness of innovation project deliverables. Scrum principles have been adopted across industries, moving beyond its origins in software development. Its flexibility and customer-centric approach make the organizational structure appropriate for use in a wide range of sectors. In software development, for example, Scrum facilitates rapid development cycles, allowing teams to quickly adapt to customer feedback and market changes. While Scrum is often considered the most appropriate management methodology for small and medium-sized projects, it can also be effectively applied to larger, more complex projects. An example of this is the Scrum of Scrums platform, where multiple Scrum teams collaborate and combine their efforts to effectively manage large-scale projects. Maintaining a balance between flexibility and discipline is a key aspect of Scrum. Teams need to be adaptable, but they also need to strictly adhere to Scrum principles and practices to ensure the effectiveness of the agile structure. This balance is necessary for the successful implementation of the Scrum methodology. Adoption and use of the adaptive Scrum management methodology resembles mini-startups within an enterprise, which allow the company to constantly innovate and improve, while maintaining its competitive advantage in the market [4, 9].

The Kanban methodology is a key Agile methodology, and is mainly focused on visualizing the

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

workflow of an innovation project, effectively managing work in progress, and optimizing the overall flow of tasks. This methodology is characterized by the use of Kanban boards, which serve as visual tools for tracking the progress of individual tasks, providing transparency and a comprehensive overview of project progress. This visual tracking is crucial for identifying bottlenecks and optimizing project efficiency, making the workflow smoother and more consistent. One of the significant advantages of Kanban is the flexibility that is achieved in handling tasks. Unlike Scrum, which has more structured sprint cycles, Kanban allows for greater adaptability in task management. This flexibility is especially useful for projects with changing priorities, where tasks may need to be reorganized or reassigned in response to changing project requirements. Kanban design is inherently focused on continuous output, making it ideal for projects that require a steady stream of deliverables. In addition to its traditional applications in the IT and software development industries, Kanban has found utility in a number of other sectors, including marketing, human resources, and manufacturing. For example, in manufacturing, Kanban helps to optimize workflow and inventory management, leading to significant waste reduction and overall productivity. This wider applicability emphasizes the versatility and effectiveness of Kanban in various organizational contexts. A key feature of Kanban is its role in facilitating continuous improvement for teams and projects. By providing a visual representation of work and facilitating easy identification of process bottlenecks, teams using Kanban can iteratively improve their workflows. This continuous improvement process increases both efficiency and productivity, contributing to the overall success and flexibility of the project management process. The adaptability of Kanban boards is another aspect that increases the effectiveness of the methodology. These boards can be widely customized to meet the specific needs of a project or team. Customization can include variations in workflows, types of work items, and the level of detail displayed on the boards. This ability to adapt the Kanban system to the unique requirements of a project makes it an incredibly versatile and valuable tool in the arsenal of project management methodologies. As such, the Kanban methodology stands out as a highly effective project management methodology, especially known for its visual approach to project management, flexibility in task management, and suitability for continuous output. Its widespread use across industries and role in driving continuous improvement mark Kanban as a critical tool for modern project management that meets a wide range of project types and organizational needs [14].

Based on the principles of lean manufacturing, lean project management, i.e. the Lean project management methodology, aims to maximize value while minimizing waste. That is, optimizing processes, reducing waste, and accelerating delivery times, which makes this methodology particularly suitable for time-sensitive innovation projects. The focus of Lean is on value creation, ensuring that every component of the project positively contributes to the overall goals. Adopting Lean principles often requires a cultural change in enterprises when implementing projects and improving management processes to ensure innovative development. Originally developed for manufacturing, Lean principles have been applied to various other sectors, such as healthcare, construction, and services. For example, in the healthcare sector, Lean innovation project management methodologies have been used to improve patient care processes, leading to increased efficiency and patient satisfaction. The application of Lean extends to services and intelligent work, where its focus on delivering value and eliminating non-essential activities significantly increases efficiency. Lean principles can be effectively integrated with other project management methodologies, such as Agile in its purest form, to create a comprehensive approach that maximizes value and minimizes waste. This integrated approach is particularly effective in managing complex innovation projects where efficiency and adaptability are critical.

Combining different structures and methodologies for managing innovation projects can create a more adaptive and robust organizational management structure. Combining methodologies such as Scrum with Lean principles can combine the adaptability of Scrum with the efficiency of Lean, creating an approach that is well suited for fast-paced innovation projects. The integration of these methodologies should be customized to meet the unique needs and context of each project. This may include a hybrid structure that combines the resource allocation and cross-functional collaboration of a matrix structure with the flexibility of the Agile methodology for project execution [18]. Integrating different project management organizational structures can significantly increase their adaptability and reliability. A synergistic mix of flexible organizational structures and adaptive management methodologies will allow to take into account all the above features of innovative projects. Customizing integrated adaptive methodologies is crucial

ISSN 2522-9818 (print)
Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29) ISSN 2524-2296 (online)

and should be aligned with the specific requirements and context of each project. This may involve developing a hybrid structure that combines the strengths of a matrix or hybrid organizational structure in resource allocation in cross-functional collaboration with the flexibility offered by agile adaptive management methodologies.

The integration of hybrid organizational structures and adaptive methodologies for managing innovation projects can ensure the success of the innovative development of enterprises, as enterprises are faced with the task of managing innovative development based on innovative activities, which is ensured through the implementation and development of innovative projects – internal and external, customer-oriented, which help them develop and implement innovations (Fig. 1).

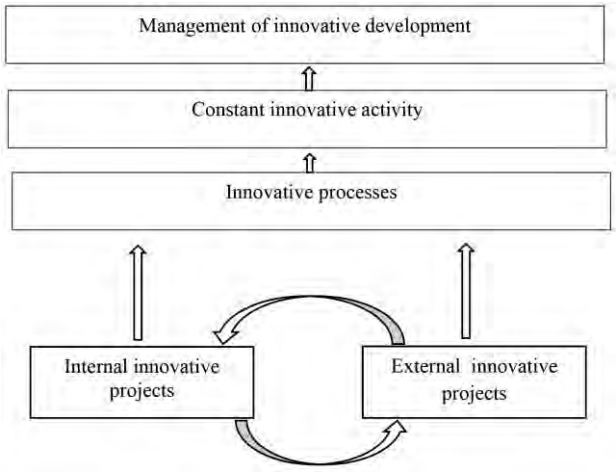

Fig. 1. Interrelation between innovation development management and enterprise project management (generalized by the authors based on practical experience and analysis of enterprise activities)

Projects consist of several stages that are difficult to coordinate (for example, the start date of one stage depends on the timing of the previous stages). Effective project management requires well-established organizational processes based on open communication and workflow control. One of the main advantages of applying agile management methodologies is achieving goals at each stage of the work while remaining flexible and open to change. Thus, agile development answers the question that many large companies face – how to achieve control over project development while introducing innovative ideas and maintaining creativity.

Most projects involve some risk. One way to minimize risk is to be open to change during the project development process. By encouraging individual responsibility and collaboration among team members, agile development ensures adaptability in project management. In addition, a workflow based on agile development principles encourages creativity, thus ensuring that the project management process evolves. The most effective way to execute successful innovation projects is to form a small project team and manage it using Agile methods. Small project teams are an organized group of people united by common processes and goals. Social ties are formed within the group, meaning that group members are in direct contact with each other, which is the basis for the emergence of emotional connections and relationships, as well as group norms of behavior. A significant advantage of small project teams is the flexible distribution of roles and responsibilities depending on the current tasks. This is an important factor, as many tasks can be loosely regulated, and the speed of finding the right solution and the efficiency of processes depend on how flexible and active employees are. A small group is created for a certain period of time, namely to develop a specific project. Since any project has a clear deadline, organizing a small project team requires more careful planning. The need for careful planning arises when small project teams work on atypical projects. In this case, the group needs to resort to new development methods as well as new tasks. It is necessary to take into account the fact that some employees may be involved in the development of several projects at the same time. Effective planning in this situation will allow you to distribute tasks in such a way as to minimize time overlap.

Small project teams are quite effective in the project, but there are a number of problems that may include:

– communication difficulties;

– planning difficulties;

– negative retrospective experience of executors working on already completed projects.

Communication is an important element in the work of small project teams that is often overlooked. Effective communication should be established between all members of the same project team. This way, less time is spent on solving atypical tasks. Ineffective communication can be encountered at the stage of communicating with the client and collecting initial information. Often, small project teams do not recognize this as a problem, which can cause the project to go beyond the deadline. The specifics of small project teams require careful planning of the work of the performers. A common problem is the project manager's lack of competencies and flexibility. In such a situation, the workload of small project team members may be

ISSN 2522-9818 (print)
ISSN 2524-2296 (online)
Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

distributed inefficiently, which can lead to further exhaustion of employees and failure to meet deadlines.

A project retrospective allows you to evaluate the quality of work of each project team member, the degree of complexity of the tasks implemented and the methodologies used, as well as the effectiveness of planning. This is an important element that allows you to summarize the experience gained, systematize it, and use it in future work. However, this is often overlooked in the work of project teams due to the lack of necessary resources, such as the competence of executors to analyze project retrospectives and understand the need for its implementation [20].

Conducting a retrospective involves collecting and processing a large amount of information. It is necessary to take into account the fact that the collection of information should be carried out as tactfully as possible in relation to the members of the project team, and the effective processing of the information received will allow an accurate assessment of the processes taking place within the formed group. Problems in such groups arise due to a high degree of process orientation. In this case, they can be solved with the help of Agile tools and methodologies. In this article, the authors will consider the Agile manifesto [26] as one of the methodologies. Thus, the focus will be shifted from processes to people and results. To implement this approach, it is necessary to establish interaction between members of small project teams and the manager (director of innovation development). You can increase the effectiveness of communication between group members by holding daily structured meetings, which will result in information about the current state of project development and problems that have arisen. It is important to build direct communication between the manager and project team members, eliminating unnecessary connections. Planning efficiency can be improved by visualizing processes. Since project activities are often heterogeneous and unpredictable, planning for project implementation and the work of performers must be flexible [12].

Agile tools are associated with the tasks and processes of project activities, as shown in Fig. 2, using Agile; Scrum; Kanban; Lean management methodologies. An analysis of the problems of small project teams helped to identify the tasks that will be solved using the selected Agile tools. Fig. 2 shows the correlation of Agile tools with the tasks set, and also shows how the solved tasks fit into the processes of project activities. The use of agile management, according to which employees are organized into self-organized project teams with no hierarchy and a clear focus on customer needs, helps to accelerate the innovation process, increase its adaptability and profitability. Table 1 shows the comparative characteristics of traditional and agile management by key features.

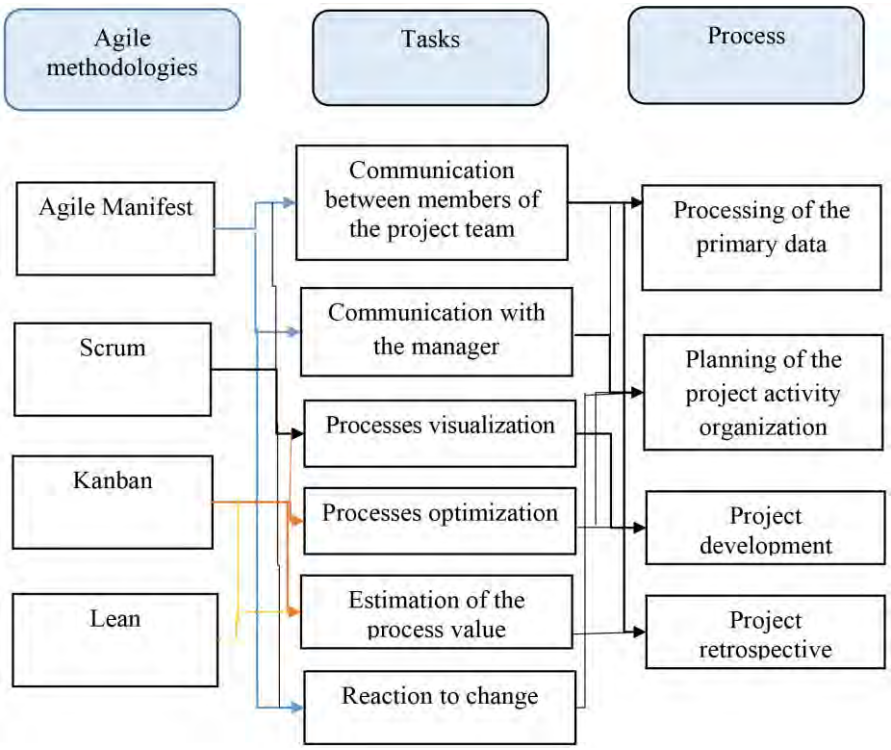

Fig. 2. Selection of Agile methodologies and tools for tasks and processes in a small innovation project team (proposed by the authors)

Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29)
ISSN 2522-9818 (print)
ISSN 2524-2296 (online)

Table 1. *Comparative characteristics of traditional and agile management (summarized by the authors after [4, 5, 19, 24, 25])*

Comparative feature	Agile-management	Traditional management
Terms of use	The market situation is constantly changing.	It can be used under any conditions, but in an unstable market situation, its effectiveness is significantly reduced.
Planning of activities	It is complicated by a high degree of uncertainty about the main problems, ways to solve them, and many characteristics of the innovative product.	Each stage of creating an innovative product is carefully planned: key executives are appointed, and the scope of work is distributed in accordance with the tasks set.
Organization of work	The work can be divided into separate parts and performed in quick, repeating cycles. Cross-functional cooperation is effective.	Processes are carried out sequentially at the stages of product creation. Each specialist performs their tasks according to the plan.
Ability to make changes	Changes can be made at any stage of the process, even at the final stage.	Late changes are undesirable because they can lead to undesirable consequences, including loss of resources and time.

Agile projects have proven to be more successful than traditional projects. The results of the 2019 surveys, based on a survey of 1,319 employees of organizations around the world (most respondents are from three industries: IT (25%), banking (19%), and professional services (10%)) showed that agile approaches are rapidly spreading outside the United States – in Europe and Asia; Agile is becoming increasingly popular, particularly in the banking sector and professional services, with the top 5 Agile tools being the most used (daily meetings, sprint/iteration planning, retrospectives, sprint/iteration review, short iterations) [3, 4].

The authors analyze the use of an adaptive methodology for managing innovative projects to ensure innovative development on the example of LLC "Nebozvid". Having studied the main problems in the management of innovation development of LLC "Nebozvid", the ways to overcome them are identified, which are aimed at reorganizing the structure of innovation management, implementing Agile management and creating a project department. Today, in the activities of LLC "Nebozvid", there is a need to organize a set of elements and subsystems that could fully and effectively meet the activities of the enterprise. Thus, it is necessary to consider reorganizing the structure of innovation management at the enterprise using Agile management, which will be realized by ensuring that structural elements and processes meet certain requirements and principles, in particular:

– Implementation of an active innovation strategy of the enterprise aimed at rapid response to changes and market needs during the war in Ukraine and the economic instability caused by it;

– ensuring appropriate conditions for active implementation of innovations in the company's activities;

– determination of motivational levers and employee behavior aimed at meeting the needs of employees;

– creating attractive conditions for strategic decision-making by innovation development managers;

– optimization of enterprise functions.

Formation of a new organizational structure is an effective tool for ensuring efficient innovation activity of an enterprise. The optimal organizational structure of LLC "Nebozvid" will be able to adapt the management and production units of the enterprise in accordance with rapid changes in the market environment and the emergence of new competitors. The next stage in the formation of the management structure of LLC "Nebozvid" for the management of innovative development is the creation and launch of investment and diagnostic units that will analyze and evaluate the innovation climate, set preliminary innovation parameters in accordance with the needs and resources of the consumer, and perform feasibility studies. Thus, the proposed organizational changes at LLC "Nebozvid" will be able to rationalize the process of introducing innovations into the company's activities.

The next problem observed in the activities of LLC "Nebozvid" is the low level of innovation and automation of communication processes. To eliminate this problem and improve the indicators of innovation activity, it is necessary to improve the existing enterprise management complex. In order to improve the company's innovation activities and accelerate the pace of innovation, it is advisable to introduce a new project unit at the company. This department of LLC "Nebozvid" will be responsible for the implementation of certain innovative tasks, which are schematically presented in Fig. 2.

To form an effective project unit, it is necessary to attract highly qualified and responsible specialists with creativity, creative potential, and the ability to develop innovative products. A significant advantage of introducing this unit into the activities of LLC "Nebozvid" is its

ISSN 2522-9818 (print)
ISSN 2524-2296 (online)
Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

ability to ensure the integration of science and enterprise, which will allow us to fully meet the needs of possible consumers. In addition, the design of the department will help simplify the procedure for making innovative decisions at the enterprise and accelerate the introduction of new products.

Fig. 3 lists and schematically shows the innovative tasks of the new project unit. Such tasks include the formation and development of innovative projects, organization and cooperation of innovative programs, implementation and coordination of the innovative development of LLC "Nebozvid".

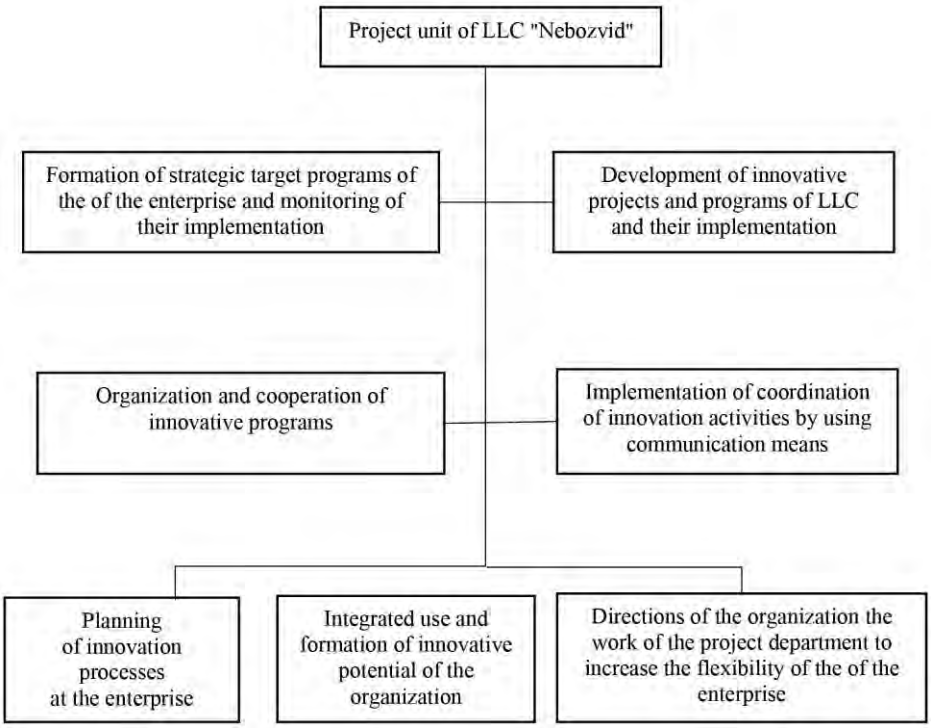

Fig. 3. Innovative tasks of the project unit

The project department of Nebozvid LLC should include personnel focused on the innovative development of the enterprise. From an economic point of view and in order to avoid high costs for the creation and operation of this department, at the first stages it should include a head of the department, a specialist in innovative development of the enterprise and 4 innovation managers. According to the Agile methodology, these employees will form 2 flexible teams, whose members will move from one team to another depending on the needs of the project.

Fig. 4 shows the structure of the proposed unit based on the Agile methodology.

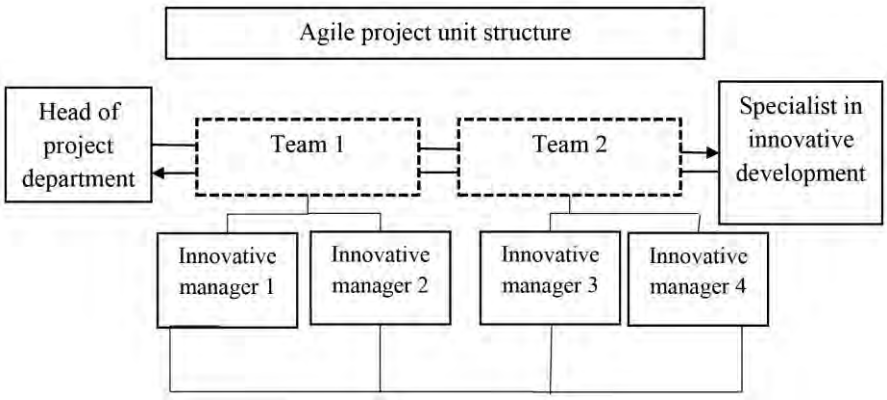

Fig. 4. Structure of the proposed unit based on the Agile methodology

Structures built with the Agile methodology in mind differ significantly from traditional hierarchical structures. The emphasis is on flexibility, collaboration, and the ability to respond to change, fostering a culture that is

Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29)
ISSN 2522-9818 (print)
ISSN 2524-2296 (online)

consistent with the iterative and customer-centric principles of the Agile methodology. The transition to an Agile structure also involves a cultural change, emphasizing collaboration, communication and adaptability, which should be done in accordance with innovative HRM methods. To use innovative methods of HR management in accordance with the Agile methodology, the main trends that will determine the HR landscape and affect the cooperation between employees in project teams to ensure the innovative development of enterprises have been identified (Fig. 5).

Innovative development of enterprises based on the implementation of innovative projects managed according to the Agile methodology necessitates the use of the latest methods in human resources management. At the same time, the main focus of HR management should be on the introduction and development of personnel technologies, innovative ideas, and the intensification of the creative activity of employees, and, above all, project teams, which will ensure the success of project activities and create conditions for achieving constructive innovative development.

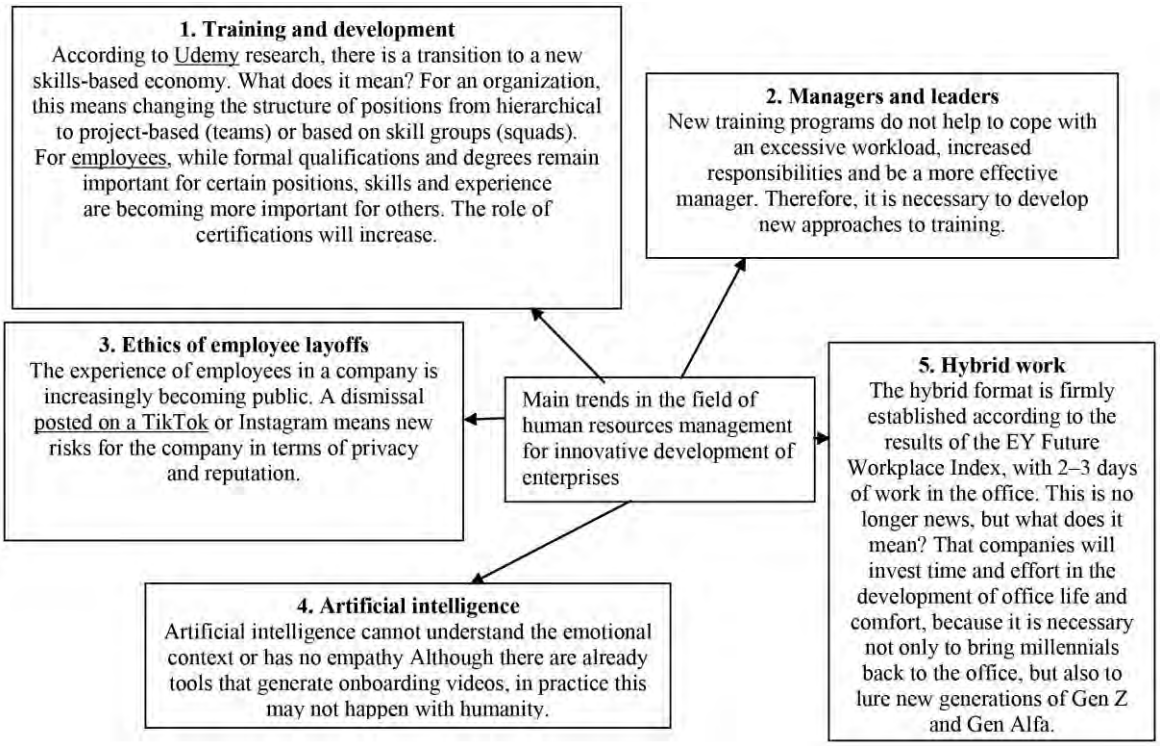

Fig. 5. Analysis of the main trends in the field of human resources management for employment (summarized by the authors)

Conclusions and prospects for further development

The conducted research has confirmed the existence of complexity and multidimensionality of the problem of managing innovation projects to ensure the innovative development of enterprises in modern conditions. The basis of the proposals presented are the generalized features of the formation and implementation of innovative projects, which are analyzed in relation to the existing types of organizational structures of enterprise management; traditional, project, matrix and concluded that hybrid structures are formed using different types of methodologies for adaptive management of innovative projects to ensure the innovative development of enterprises. As varieties of methodologies for adaptive management of innovative projects for the innovative development of enterprises, the Agile methodology and its most common varieties Scrum, Kanban, Lean were studied directly. Based on their application, proposals have been developed to create a hybrid organizational structure for managing innovation projects, which involves the formation of small project groups using the Agile adaptive management methodology for the enterprise LLC "Nebozvid". In order to achieve successful management of innovative projects for the innovative development of enterprises, the main trends in innovative HR management of enterprises are formed to ensure employment and provide an innovative HR landscape.

Directions for further research on this topic are the development of methodological proposals for the integrated simultaneous use of the analyzed adaptive

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)

management methodologies for large-scale innovation projects implemented by several enterprises on the basis of such organizational forms as an association or consortium.

References

1. Sobolevska Lesia. "Innovations during the war: is it on time?" available at: https://www.clusters.org.ua/en/blog-about-clusters/innovations-during-the-war-is-it-the-time/
2. ["Instytut upravlinnia proektamy, upravlinnia proektamy. Praktychnyi posibnyk Agile. SShA, Instytut upravlinnia proektamy"], 2017, S. 7–9.
3. "Adopting Agile: The Latest Reports About The Popular Mindset, 2019", Adeva: available at: https://adevait.com/blog/remote-work/adopting-agile-the-latest-reports-about-the-popular-mindset
4. "High Quality Learning - World-class Universities" available at: http://extension.berkeley.edu/spos/agile.html
5. ["Serdiuk A. Agile-likbez: shcho take agile ta dlia koho vin pidkhodyt"]. available at: https://www.management.com.ua/notes/agile.html
6. ["Khaismit, Dzh. Hnuchke upravlinnia proektamy: stvorennia innovatsiinykh produktiv. Velyka Brytaniia: Pearson Education"], 2009. S. 25–29.
7. Akhmetzhanova, Aikun Kh. Mukhanova, Gaini Kh.; Nazikova, Zhanagul A.; Malaeva, Raushan A.; Beisekova, Zhanna I. (2023), "Economy and Management of an Innovative Enterprise", *International Journal of Interdisciplinary Organizational Studies*, Vol. 18 No. 1, P. 119–131. DOI: https://doi.org/10.18848/2324-7649/CGP/v18i01/119-131
8. Alhaqbani, Sultana Fayez; Abdelwahed, Nadia Abdelhamid Abdelmegeed (2024), "Enablers of the successful implementation of the strategy of technological innovation in higher education", *Corporate and Business Strategy Review*, Vol. 5 No. 2, P. 18 – 28. DOI: https://doi.org/10.22495/cbsrv5i2art2
9. Christensen, C. M., & Raynor, M. E. (2003), "The Innovator's Solution: Creating and Sustaining Successful Growth." Harvard Business Review Press. available at: https://www.hbs.edu/faculty/Pages/item.aspx?num=15473
10. Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016), "Blockchain technology: Beyond bitcoin". Applied Innovation Review. available at: https://www.scirp.org/reference/referencespapers?referenceid=2525044
11. Feng, Yiming (2024), "Digital Transformation and Organizational Restructuring: Assessing the Impact of Artificial Intelligence on Organizational Innovation", *Journal of System and Management Sciences,* Vol. 14 No. 2, P. 339–354. DOI: https://doi.org/10.33168/jsms.2024.0221
12. Freeman, R. E. (2010), "Strategic Management: A Stakeholder Approach". Cambridge University Press.
13. Haim, Kurt; Aschauer, Wolfgang (2024), "Innovative FOCUS: A Program to Foster Creativity and Innovation in the Context of Education for Sustainability", *Sustainability (Switzerland)*, Vol. 16 No. 6, 2257 p. DOI: https://doi.org/10.3390/su16062257
14. How Kanban simplifies workflow – 2020. available at: https://stealthesethoughts.com/2020/02/19/kandan–boards–simplify–work/
15. Hron, Michal; Obwegeser, Nikolaus; Müller, Sune Dueholm (2022), "Innovation drift: the influence of digital artefacts on organizing for innovation", *Innovation: Organization and Management*, Vol. 24 No. 1, P. 168–200. DOI: https://doi.org/10.1080/14479338.2021.1937185
16. Iastremska O. (2019), "Investment and innovative development of industrial enterprises as the basis for technological singularity" / O. Iastremska, H. Strokovich, O. Dzenis, O. Shestakova, T. Umans, *Problems and Perspectives in Management.* Volume 17, Issue 3, P. 477–491. DOI: doi: http://dx.doi.org/10.21511/ppm.17(3).2019.38
17. Iastremska, O., Strokovych, H., Iastremska, O., Kalantaridis, C., Nagy, S., & Somosi Veresne, M. (2021), "Formation of Mutual Relations Between Enterprises and Business Partners in the Process of Preparation and Production of New Products", *Marketing and Management of Innovations,* 2021, 1, P. 196–211. DOI: http://doi.org/10.21272/mmi.2021.1-15
18. Küpper, S. (2016), "The impact of agile methods on the development of an agile culture: research proposal: [the agile evolution]". In Proceedings of the 20th International Conference on Evaluation and Assessment in Software Engineering , 2016, P. 1–4. DOI: https://doi.org/10.1145/2915970.2915977
19. Lester D.L., Parnell J.A., Crandall W., Menefee M. (2008), "Organizational life cycle and performance among SMEs: Generic strategies for high and low performers"/ D.L Lester, J.A Parnell, W. Crandall, M. Menefee *International Journal of commerce and Management*, Vol. 18, No. 4, 2008. P. 313–330. DOI:10.1108/10569210810921942
20. Loch, C. H., DeMeyer, A., & Pich, M. T. (2006), "Managing the Unknown: A New Approach to Managing High Uncertainty and Risk in Projects." *Wiley.* 304 p. DOI: 10.1002/9780470172377
21. Malyarets L., Iastremska O., Tutova A., Dorohov O. (2023), "Analytical Method of Stimulation for Labour of Top-Managers", *TEM Journal*. Volume 12, Issue 2, P. 1118–1129, DOI: 10.18421/TEM122-58
22. Myronenko, Oleksii (2024), "Estimating the influence of research and development expenditures on the income of companies revenue in the field of engineering of innovative developments under the conditions of changing project management methodology", *Eastern-European Journal of Enterprise Technologies*, Vol. 2 No. 13-128, P 66 – 74. DOI: https://doi.org/10.15587/1729-4061.2024.302149

ISSN 2522-9818 (print)
Сучасний стан наукових досліджень та технологій в промисловості. 2024. №3 (29) *ISSN 2524-2296 (online)*

23. Nowak, Radoslaw M. (2023), "How resistance to change impairs innovation", *Journal of Strategy and Management*, Vol. 16 No. 4, P. 609–629. DOI: https://doi.org/10.1108/JSMA-08-2022-0144
24. Pisano, G. P. (2010), "The Development Factory: Unlocking the Potential of Process Innovation." Harvard Business School Press.
25. Prakash, B., & Viswanathan, V. (2017), "A survey on software estimation techniques in traditional and agile development models". *Indonesian Journal of Electrical Engineering and Computer Science*, 7(3), 114 p. DOI: 10.11591/ijeecs.v7.i3.pp867-876
26. "Principles behind the Agile Manifesto". available at: http://agilemanifesto.org/principles.html
27. "Professional Sequence in Agile management/UC Berkeley Extension". available at: http://extension.berkeley.edu/spos/agile.html
28. Project Management Institute. (2017). "A Guide to the Project Management Body of Knowledge (PMBOK Guide) Sixth Edition."
29. Puleo, L., Strategies for Innovative Project Management: Improving Enterprise Performance, *Elektronikk* , 2004, No. 2, 156 c.
30. Schilling, M. A. (2015), "Strategic Management of Technological Innovation". McGraw-Hill Education. available at: http://ndl.ethernet.edu.et/bitstream/123456789/87807/5/Strategic%20Management%20of%20Technological%20Innovation%2C%20Fourth%20Edition%20%28%20PDFDrive.com%20%29.pdf
31. Schneider, Malte Hans Georg; Hofmeister, Johannes; Kanbach, Dominik K. (2022), "Effective innovation implementation: a mixed method study", *International Journal of Innovation Management*, Vol. 26 No. 6, Art.no. 2250042. DOI: https://doi.org/10.1142/S1363919622500426
32. Sitenko, Diana; Gordeyeva, Yelena; Sabyrzhan, Ali; Syzdykova, Elmira (2023), "Implementation of innovative technologies in Kazakhstan: A case of the energy sector", *Problems and Perspectives in Management*, Vol. 21 No. 4, P. 179–188. DOI: http://dx.doi.org/10.21511/ppm.21(4).2023.14
33. Stahiv O.V.; Biletska I.M.; Perepolkina O.O.; Avgustyn R.R.; Mykytyn O.Z. (2023), "Efficiency of the implementation of innovation and investment projects at healthcare institutions: integral analysis and ways of enhancement", *Science and Innovation*, Vol. 19 No. 5, P. 18–33. DOI: https://doi.org/10.15407/scine19.05.018
34. Takeuchi, H., and Nonaka, I. "The New New Product Development Game". Harvard Business Review. available at: https://hbr.org/1986/01/the-new-new-product-development-game
35. "The Kanban Methodology and why you need it for your Software Team! 2020". available at: https://community.atlassian.com/t5/Jira–Software–articles/The–Kanban–Methodology–and–why–you–need–it–for–your–Software/ba–p/1553608
36. "The Latest Reports and Stats About Agile 2019", Adeva: available at: https://adevait.com/blog/remote–work/adopting–agile–the–latest–reports–about–the–popular–mindset
37. "The State of Agile study 2019". available at: https://www.pmservices.ru/projectmanagement-news/opublikovano-issledovanie-state-ofagile-2019/
38. Vance, A. (2015), "Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future". Ecco. available at: https://www.academia.edu/41363337/Ashlee_Vance_Elon_Musk_Tesla_SpaceX_and_the_Quest_for_a_Fantastic_Future
39. Vysochan, Oleh; Vysochan, Olha; Hyk, Vasyl; Boychuk, Andriy (2022), "Multi-criteria evaluation of innovative projects by means of electre application", *Business: Theory and Practice*, Vol. 23 No. 2, P. 445–455. DOI: https://doi.org/10.3846/btp.2022.15001
40. "Walk-Morris T. Study: Consumers like chatbots but prefer human interaction Importants, T. Walk-Morris . 2019". available at:: https://www.marketingdive.com
41. Zhang, Juliana J. Y.; Følstad, Asbjørn; Bjørkli, Cato A. (2023), "Organizational Factors Affecting Successful Implementation of Chatbots for Customer Service", *Journal of Internet Commerce*, Vol. 22 No. 1, P. 122–156. DOI: https://doi.org/10.1080/15332861.2021.1966723
42. Zhao, Na; Lei, Congcong; Liu, Hui; Wu, Chunlin (2022), "Improving the Effectiveness of Organisational Collaborative Innovation in Megaprojects: An Agent-Based Modelling Approach", *Sustainability (Switzerland)*, Vol. 14 No. 15, Art.no. 9070. DOI: https://doi.org/10.3390/su14159070

Надійшла (Received) 05.09.2024

Відомості про авторів / About the Authors

Ястремська Олена Миколаївна – доктор економічних наук, професор, Харківський національний економічний університет ім. С. Кузнеця, завідувач кафедри менеджменту, логістики та інновацій, Харків, Україна; e-mail: Iastremska_om@hneu.net; ORCID ID: http://orcid.org/0000-0002-5653-6301

Малярець Людмила Михайлівна – доктор економічних наук, професор, Харківський національний економічний університет ім. С. Кузнеця, завідувач кафедри економіко-математичного моделювання, Харків, Україна; e-mail: malyarets@ukr.net; ORCID ID: https://orcid.org/0000-0002-1684-9805

ISSN 2522-9818 (print)
ISSN 2524-2296 (online) *Innovative technologies and scientific solutions for industries. 2024. No. 3 (29)*

Самойленко Вікторія Вікторівна – кандидат економічних наук, доцент, Харківський національний економічний університет ім. С. Кузнеця, доцент кафедри менеджменту, логістики та інновацій, Харків, Україна; e-mail: svita4448@gmail.com; ORCID ID:https://orcid.org/0000-0002-4702-7193

Бударін Олексій Сергійович – Харківський національний економічний університет ім. С. Кузнеця, аспірант кафедри економіко-математичного моделювання, Харків, Україна; e-mail: budarin@ukrenergymachines.com; ORCID ID: https://orcid.org/0000-0001-9399-9914

Iastremska Olena – Doctor of Sciences (Economics), Professor, Simon Kuznets Kharkiv National University of Economics, Head at the Department of Management, Logistics and Innovation, Kharkiv, Ukraine.

Malyarets Lyudmyla – Doctor of Sciences (Economics), Professor, Simon Kuznets Kharkiv National University of Economics, Head at the Department of Economic and Mathematical Modeling, Kharkiv, Ukraine.

Samoilenko Viktoriia – PhD (Economic Sciences), Associate Professor, Simon Kuznets Kharkiv National University of Economics, Associate Professor at the Department of Management, Logistics and Innovation, Kharkiv, Ukraine.

Budarin Oleksii – Simon Kuznets Kharkiv National University of Economics, Postgraduate Student of the Department of Economic and Mathematical Modeling, Kharkiv, Ukraine.

УПРАВЛІННЯ ІННОВАЦІЙНИМИ ПРОЄКТАМИ ДЛЯ ЗАБЕЗПЕЧЕННЯ ІННОВАЦІЙНОГО РОЗВИТКУ ПІДПРИЄМСТВ

Мета статті – узагальнення теоретичного підгрунтя особливостей інноваційних проєктів, доцільності використання організаційних структур управління процесами їх формуванням і впровадженням, аналіз адаптивних методологій управління інноваційними проєктами для забезпечення зайнятості працівників, їх інноваційного розвитку та розроблення практичних рекомендацій з цих питань для працюючого підприємства. Мета розкрита на основі вирішення таких **завдань**: узагальнено особливості інноваційних проєктів, що зумовлюють успішеість їх реалізації; визначено доцільність використання організаційних структур управління підприємствами для формування і впровадження інноваційних проєктів для забезппечення інноваційного розвитку; виявлено і запропоновано впроджувати методології адаптивного управління інноваційними проєктами для досягнення успішності інноваційного розвитку підприємств; розроблено гібридну організаційну структуру управління інноваційними проєктами на основі адаптивної методології управління ними для конкретного працюючого підприємства; запропоновано основні напрями інноваційного управління персоналом підприємств для сприяння їх зайнятості та управління інноваційним розвитком. Для вирішення завдань застосовано такі **методи**: теоретичного узагальнення, аналізу, синтезу, індукції та дедукції, структурно-логічний аналіз, системний та ситуаціний підходи, метод фотографії робочого дня, методолоігю адаптивного управління *Agile*, графічний метод, власний практичний досвід авторів. **Висновки і результати** статті полягають у такому: доведено, що управління інноваційними проєктами повинно враховувати їх особливості, грунтуватися на використанні проєктних, матричних та гібридних організаційних структур управління та застосуванні адаптивних методологій управління інноваційний розвитком та формування і реалізації інноваційних проєктів, таких як *Agile*, *Scrum*, *Kanban*, *Lean*. Для працюючого підприємства ТОВ "Небозвід" з використанням адаптивних методологій управління розроблено гібридну організаційну структуру проєктного відділу для забезпечення інноваційного розвитку підприємства на основі впровадження інноваційних проєетів з організацією роботи малих проєктгтх команд. Запропоновано основні тренди інноваційного управління персоналом підприємств для досягнення успішності управління інноваційними проєктами для забезппечення інноваційного розвитку підприємств.

Ключові слова: інноваційний проєкт; інноваційний розвиток; організаційні структури управління; адаптивні методології управління; тренди; інноваційне управління персоналом; зайнятість працівників.

Бібліографічні описи / Bibliographic descriptions

Ястремська О. М., Малярець Л. М., Самойленко В. В., Бударін О. С. Управління інноваційними проєктами для забезпечення інноваційного розвитку підприємств. *Сучасний стан наукових досліджень та технологій в промисловості*. 2024. № 3 (29). С. 104–120. DOI: https://doi.org/10.30837/2522-9818.2024.29.104

Iastremska, O., Malyarets, L., Samoilenko, V., Budarin, O. (2024), "Management of innovative projects to ensure innovative development of enterprises", *Innovative Technologies and Scientific Solutions for Industries*, No. 3 (29), P. 104–120. DOI: https://doi.org/10.30837/2522-9818.2024.29.104