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ANALYSIS OF “GREEN ENTREPRENEURSHIP” TRENDS AND THE FORMATION OF A “GREEN APPROACH” IN ENERGY EFFICIENCY PROJECT MANAGEMENT ON THEIR BASIS

Abstract. *The article analyzes project management methodologies and standards (in particular, PMBOK, P2M, Agile) in the context of models and methods that can be used to create a “green” project management approach. On the other hand, the concept of “green” entrepreneurship and its principles were analyzed. On this basis, 7 principles of “green” project management were proposed for the further development of the “green entrepreneurship” approach (projects should create environmentally friendly products, goods and services; ensure the maximum possible use of environmentally friendly materials and adhere to the desire to gradually increase the environmental friendliness of products; the implementation of project activities contributes to the creation and development of a “green economy” in the state; project-oriented companies mainly implement socially responsible projects with a trend towards increasing their share in the company’s project portfolio; social responsibility should be both corporate and personal). Energy efficiency improvement projects are defined as a special case of “green” projects and as an object of scientific research. A classification model for energy efficiency projects is proposed for the further development of such classifications in the form of 11 classification features and project types within each feature (by project product, by use of artificial intelligence, by field of application, by use of “green” entrepreneurship principles, by project management methodology, by complexity, by type of project management team, by energy efficiency models, by degree of innovation, by geographical distribution, by scalability). 4 clusters of development of “green” project management are also identified, within which it is proposed to implement further research: “green” projects, “green” project management methodologies, “green” teams, “green” management tools. Each such cluster is characterized. A model of supplementing the classification model of project management systems (in its further development) is proposed, in which additional features of the classification of “green” project management systems are formulated - in the form of 5 additional features and types of projects within each classification feature. A model of the components of “green” project management is proposed, which contains four components: classic project management, flexible (Agile) project management, the concept of Lean production and “Green” community. As well as a multiple model of the “green” project management system in the form of a formal seven. A SWOT analysis of the formulated “green” project management approach is conducted, its strengths and weaknesses are highlighted, as well as opportunities and threats that may arise when using it. A conclusion is made regarding the potential effectiveness of such an approach. Areas of further research in the chosen direction are formulated. Conclusions from the conducted research are formulated.*

Keywords: *project and program management; project-oriented organization; “green (sustainable) entrepreneurship”; “green” (sustainable) project management*

Introduction

The rapid development of modern project management is taking place in the context of numerous large-scale and global challenges, including war, environmental degradation, accelerated digitalization, the dominance of cloud solutions, the development of

artificial intelligence, etc. At the same time, in contrast to the exponential increase in the turbulence of the project environment, new methodological approaches are being formed both in project management itself and in other industries, the developments of which are actively integrated into the project environment. There are more and more such approaches, as a result of which the

project world is increasingly enriched with new methodological tools. At the same time, a steady trend towards environmental friendliness of both business and economic sectors and their management systems has emerged.

The search for ways to survive and ensure further comfortable existence in the modern world has led to the emergence of a separate type of projects - projects to ensure energy efficiency or increase energy efficiency. For Ukraine, such projects are characterized by double relevance. They are relevant as such, given the need to ensure the efficiency of the economy and a thrifty attitude to the resources consumed by citizens, companies and the state. Also, their increased relevance is due to the war (caused by Russian aggression against Ukraine), the destruction of the energy sector and the reduction of the state's available energy resources.

The relevance of projects to ensure/improve energy efficiency determines the relevance of developing new models and methods of managing such projects that would take into account the specifics of these projects.

In addition, it is worth noting that in response to the challenges of our time (including those mentioned above), the concept of "green" entrepreneurship (sustainable businesses) has emerged and is actively developing in the world. Such a concept is generally defined as an activity that can be characterized by a focus on minimal negative impact on the global or local environment, society or economy; that is, entrepreneurship that seeks to combine an ecological attitude to the environment, a fair attitude to employees while maintaining the desire for economic success.

An important element of the concept of "green" entrepreneurship should be considered the use of appropriate models and methods of project management. However, it is worth noting that such a scientific topic is not sufficiently researched, and therefore the development of models and methods of "green" project management is an urgent scientific task. It is advisable to consider its applied field in the form of energy efficiency projects, as an adequate field, with the models and methods of which a set of models and methods of project management in this field should correlate.

This article is devoted to the conceptual analysis of such models. It can be assumed that such models can be further adapted to other industries, but taking into account their specificities. However, this should be attributed to the vectors of further research in the chosen direction.

Analysis of latest research

Both classical project management methodologies and the flexible Agile project management methodology, as well as hybrid methodologies created on the basis of their combination, offer a set of models and methods for solving different classes of project tasks. Let's analyze

those classes that are close to the topic of ecological ("green") project management, or lay the foundation for such management.

One of the main classical standards in the field of project management, the Guide to PMBOK, in its latest edition [1], implements a new ideology of the structure of this edition. Now the PMBOK consists of two parts. In the first of them (the Standard for Project Management), the value delivery system, which is an innovation of this edition, as well as some project management principles, are worth noting in the context of the studied topic. Among these 12 principles, almost all are directly or indirectly aimed at ensuring effective environmental management, which can be partially associated with "green" entrepreneurship. More precisely, within each such principle, a corresponding trend can be implemented, provided that there is a certain interpretation and extension of "green entrepreneurship" to the field of project management.

In particular, we are talking about principles that can be divided into two categories. The first category can be attributed to the so-called "soft" component of project management, which is associated with the human dimension of project activities: stewardship, team, stakeholders, value, systems thinking, leadership. The concept of "green" entrepreneurship fully corresponds to such declared principles, provided that they are supplemented and clarified with the help of separate "green" messages. In the second category, which can be attributed to the industry, related principles are: tailoring, quality, adaptability and resiliency, change. Conceptually, the PMBOK principles generally correspond to the "green" direction.

In the second part of the publication (A Guide to the Project Management Body of Knowledge), the following areas of project implementation should be identified as most important for the "green" interpretation: stakeholder performance domain, team performance domain, project work performance domain, and uncertainty performance domain, tailoring.

The new edition of the P2M standard of the Japanese Project Management Association [2] contains a Human Capability Foundation section, within which it is worth considering the "green" principles as a further development of the ideas of the standard. The new edition of the Prince2 standard [3] proposes the following changes to the standard: Sustainability has been added as another aspect of project performance; A digital approach to data management is now included; Content elements have been simplified to make it more accessible; A focus on people (soft factor) has been incorporated throughout the methodology. Such features (in particular the latter) bring PRINCE2 closer to the "green" concept, and allow the use of a sufficiently detailed and structured standard in the context of the development of "green" project management.

The widespread ISO standard for project management [4] is an interpretation of the PMBOK in the context of the recognized international ISO certification system, therefore it largely follows the shortcomings and advantages of the PMBOK.

The Agile flexible methodology [5], which appeared in 2001 and is currently actively developing, provides a basis for mobility, adaptability, and therefore modernity and democracy in project management systems, which corresponds to the values of “green” management. Particularly significant from the “umbrella” of Agile in this context is the Kanban method, known for its freedom for project participants, which, however, should be based on high responsibility of each team member. Hybrid project management methodologies [6] are mainly based on a combination of one of the Agile methods (for example, Scrum) and one of the classic project management standards (for example, PMBOK). Although hybrids are also called a combination of several Agile methods. It is worth noting that such a combination scenario outlines the directions for creating models for integrating the “green” approach into project management – both classic, Agile, and hybrid.

It is also important to note that both flexible and detailed classical approaches (e.g., [7]) are scalable for managing sets of projects – programs [8], portfolios [9], multinational projects [10]. This property is also the basis for the application of such models in the concept of “green” project management.

Regarding this concept itself, it is worth noting that the beginning of the formation of the “green” direction of activity can be attributed to 1992 (Rio Summit) and the emergence of ISO 14000 standards [11].

From the basic thesaurus of the “green” industry, two definitions should be highlighted. The first: “Green investing seeks to support business practices that have a favorable impact on the natural environment. Often grouped with socially responsible investing (SRI) or environmental, social, and governance (ESG) criteria, green investments focus on companies or projects committed to the conservation of natural resources, pollution reduction, or other environmentally conscious business practices” [12]. And the second, which is a clarification and further development of the first: “Green business is a type of commercial activity, the main goal of which is to generate profit from the sale of environmental goods and services, the production of which involves the use of methods and technologies that minimize the integral eco-destructive impact on the environment, and their use serves to create the most environmentally friendly living conditions for consumers in both the short and long term and leads to the formation of environmental awareness in society” [13].

Thus, in the context of the concept of “green business”, the following basic principles are distinguished:

- ecological goods and services;
- sustainable development;
- green economy;
- socially responsible investments;
- corporate social responsibility [13].

It is worth noting that such principles should be detailed, in particular, extended to project management teams (for projects) and staff (for companies, organizations and institutions). The beginning of the development of such an approach was outlined in the work of the authors [14].

It is worth adding that the concept of sustainable business is sufficiently researched in scientific works, in particular regarding the relationship between sustainable development, strategy and time dimension to ensure circularity (inexhaustibility) [15], models for ensuring the profitability of “green” entrepreneurship [16], the development of a “green” approach to the level of methodology [17], models of adjusted goal setting and the compilation of Canvas-type models taking into account the transition of enterprises to “green” investment and “green” entrepreneurship in the context of organizational transformation [18].

At the same time, the issue of models and methods of “green project management” is not sufficiently researched in the scientific literature. Therefore, it can be concluded that the topic of this article, which is devoted to the analysis of trends and approaches of “green” (sustainable) entrepreneurship and models of their application in project management, can be considered relevant.

Purpose of the article

The purpose of the article is to analyze the principles, trends, models and methods of green (sustainable) entrepreneurship and models of their application in project management, develop an approach and models of “green” project management, and identify future research directions in this context.

The main material of the article

We will proceed from the assumption that just as the energy efficiency industry itself should belong (although by its name it already theoretically belongs) to the “green” business industry, so the models and methods of project management in it should correspond to the principles of “green” entrepreneurship.

In further development of the definition of “green” investments and the principles of “green business”, we will propose 7 principles of “green” project management:

1. Projects should create environmentally friendly products, goods and services;

2. In industries where project products are limited by industry technologies and cannot fully comply with environmental friendliness, ensure the maximum possible use of environmentally friendly materials and adhere to the desire to gradually increase the environmental friendliness of products;

3. The implementation of project activities contributes to the creation and development of a “green economy” in the state;

4. Project-oriented companies mainly implement socially responsible projects with a trend towards increasing their share in the company's project portfolio;

5. Social responsibility should be both corporate and personal, which concerns each participant in project activities in the concept of “green” project management;

6. “Green” project management projects contribute to sustainable integrated development: of society, citizens, companies in which they are implemented, and employees of such companies;

7. “Green” projects are implemented in a “green” atmosphere – mutual assistance, promotion of each other's development, decency, environmental friendliness of relations and management processes prevail in “green” project management teams.

Projects that declare themselves as belonging to the field of “green” entrepreneurship must adhere to the specified principles. One of the varieties of such projects is energy efficiency projects. Their name already partially refers them to the field of “green” projects, however, adherence to the principles formulated above, as well as the use of individual relevant management models can consolidate them in the trend of “green” entrepreneurship.

Taking this into account, we will propose a classification model for energy efficiency projects for the further development of such classifications. We will formulate the characteristics of the classification and the types of projects within each such characteristic.

1. By the product of the project aimed at increasing energy efficiency:

- projects to increase energy efficiency of equipment;
- projects to increase energy efficiency of networks;
- projects to increase energy efficiency of technological processes;
- projects to increase comprehensive energy efficiency (equipment, networks, technological processes).

2. By the use of artificial intelligence (AI) in energy efficiency projects:

- projects without the use of AI;
- projects using AI elements;
- projects that are fully based on the use of AI.

3. By field of application:

- energy efficiency improvement projects in the energy sector;

- energy efficiency improvement projects in industrial enterprises;

- energy efficiency improvement projects in small enterprises/businesses;

- energy efficiency improvement projects in municipal facilities or enterprises;

- energy efficiency improvement projects in buildings;

- energy efficiency projects in other industries.

4. By the use of “green entrepreneurship” principles:

- projects that do not use “green entrepreneurship” principles;

- projects that partially use “green entrepreneurship” principles;

- projects that use all “green entrepreneurship” principles;

- projects that use all “green entrepreneurship” principles and further develop such principles and formulate new ones.

5. By project management methodology:

- based on the classical project management methodology;

- based on the Agile project management methodology;

- based on the hybrid project management methodology;

- based on the own project management methodology;

- without using the project management methodology.

6. By complexity:

- simple projects;

- projects of limited complexity;

- technically complex projects;

- organizationally complex projects;

- complexly complex projects.

7. By type of project management team:

- rigidly hierarchical teams;

- distributed democratic teams;

- Agile teams;

- non-hierarchical teams;

- “green” teams.

8. By energy efficiency models:

- technology improvement;

- equipment replacement (improvement);

- management system improvement;

- data exchange improvement.

9. By degree of innovation:

- low innovation: partial improvement of energy efficiency solutions;

- medium innovation: comprehensive improvement of solutions in one or more aspects of energy efficiency;

- high innovation: complete replacement of outdated solutions with new ones;
- proactive innovation: use of partially tested (untested) solutions that are ahead of their time (are risky).

10. By geographical distribution:

- local projects;
- regional projects;
- state projects;
- international projects.

11. By scalability:

- unique projects that are not scalable;
- projects whose elements can be scaled;
- projects that can be scaled in a limited number of industries/locations/applications;
- projects that are fully scalable (subject to full benchmarking).

We will also highlight 4 clusters of development of “green” project management, within which it is proposed to implement further research:

- “green” projects (energy efficiency projects, “green” projects and any projects that adhere to the “green” business paradigm);
- “green” project management methodologies (models and methods that correspond to the values of “green” entrepreneurship);
- “green” teams;
- “green” management tools.

The corresponding characteristics of the clusters, based on the results of the analysis, are given in Table 1. Each cluster is described in the context of the content of the cluster, the main document that regulates the cluster, and the artifacts of each cluster.

We will also formulate additional features of the classification of “green” project management systems, in the further development of the project management

systems classification model (model supplement to the project management systems classification model):

1. By the degree of application of the principles of “green” project management:

- projects that do not use the principles of “green” project management;
- projects that partially use the principles of “green” project management;
- projects that use all the principles of “green” project management;
- projects that use all the principles of “green” project management and carry out further development of such principles and formulate new ones.

2. By the degree of use of the “green” project management methodology:

- projects that do not use the “green” project management methodology;
- projects that use elements of the “green” project management methodology;
- projects that use a full-fledged “green” project management methodology;
- projects that use a full-fledged “green” project management methodology and carry out further development of such a methodology.

3. By the degree of use of the “green” approach in project management teams:

- teams that do not use elements of the “green” approach in project management;
- teams that partially use elements of the “green” approach in project management;
- teams that use exclusively the “green” approach in project management;
- teams that use exclusively the “green” approach in project management; and further develop this approach and formulate its new models and methods.

Table 1 – Characteristics of green project management development clusters

№	Cluster	Scope of cluster	Documents	Artefacts
1	“Green” culture	Formalization of the strategic vector of “green entrepreneurship” in the organization's activities	Corporate standard	Regulations, values, vision, mission and strategy
2	“Green” methodologies	Formalization of a project management system in an organization guided by the “green entrepreneurship” values	Corporate project management methodology	Knowledge base and regulations for its accumulation and use
3	“Green” projects	Implementation of the “green” strategic vector in a specific type of projects (sustainable) guided by the “green” methodology	Project charters	Formalized project portfolio
4	“Green” teams	A system of management and organization of work in teams based on the “green project management” principles	Team regulations	Role instructions, communication process regulations
5	“Green” management tools	Management tools (mostly IT tools) that are based on the environmental friendliness principles in processes and support “green” management	Description of tool functionality	Administration and tool usage guides, help

4. By the degree of application of “green” project management tools:

- projects that do not use “green” project management tools;
- projects that partially use “green” project management tools;
- projects that use exclusively “green” project management tools;
- projects that use exclusively “green” project management tools and carry out further development of such tools and create new ones.

5. By the “color” of proactivity:

- “red” proactivity: forecasting is almost not used in project management;
- “yellow” proactivity: forecasting is used in project management;
- “green” proactivity: proactivity based on values is used in project management to achieve “green entrepreneurship”.

We propose the model of the components of “green” project management (Figure).

The model involves basing “green” project management on four components: classic project management, agile project management, the concept of Lean production and “Green” community. Classic project management provides structured knowledge about concepts, processes, models and methods of project management. Agile project management provides modern approaches to ensuring the adaptability of the project management system, which includes models of incrementality, flexibility, constant interaction with the customer, etc. The concept of Lean production provides

models and methods of thrift, economy, ensuring expediency and sufficiency. “Green” community provides models and methods of ensuring environmental friendliness, comfort, environmental preservation, harmonious development. In general, “green” project management, which will be based on the above four components, forms a new direction of research in the field of management and project management, which will be the subject of further research by the authors.

We propose a multiple model of the "green" project management system in the form of a formal seven:

$$G^{pm} = \langle V^{gpm}, N^{gpm}, M^{gpm}, P^{gpm}, I^{gpm}, H^{gpm}, R^{gpm} \rangle \quad (1)$$

де G^{gpm} – “green” project management system; V^{gpm} – a set of values of “green” project management, including value-oriented artifacts (vision, mission, goals, strategy); N^{gpm} – a set of principles of "green" project management, including formalized artifacts of the corporate “green entrepreneurship” culture; M^{gpm} – a set of models, methods and methodological concepts used, including formalized processes for managing “green” projects; P^{gpm} – a set of “green” projects and their artifacts; I^{gpm} – a set of management tools used in “green” projects, including IT tools; H^{gpm} – a set of project participants, including the project management team and stakeholders; R^{gpm} – a set of “green” projects risks and risk responses.

Thus, as a result of the research, a “green approach” to project management was formulated with the aim of using it in energy efficiency projects. Let us conduct a SWOT analysis of the above approach. Let us highlight its strengths, weaknesses, opportunities and threats that may arise when using it.

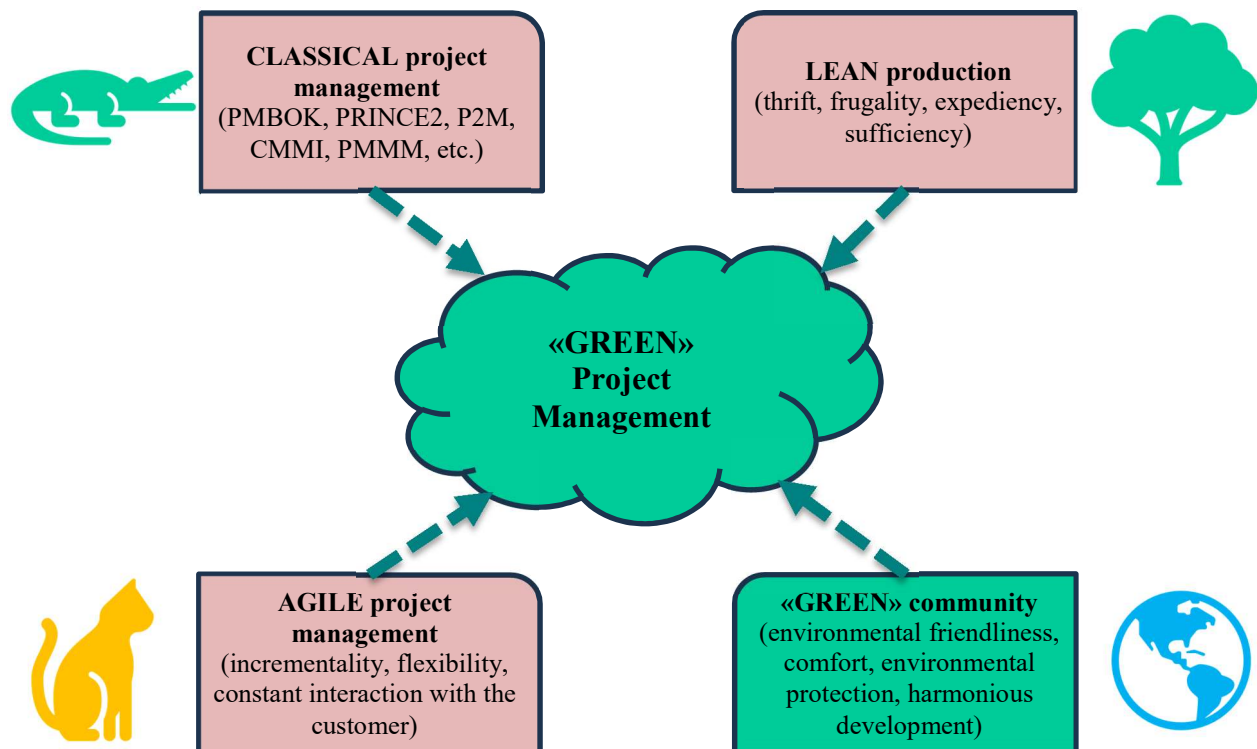


Figure – The model of “green” project management based on four components

Strengths.

– ensuring a thrifty attitude towards the environment, a humane attitude towards the team and project participants;

– innovativeness of the approach, its progressiveness and focus on the future;

– a solid foundation for the formation and implementation of a “green” approach has been formulated by the past development of project management.

Weaknesses.

– “green” principles conflict with ensuring the profitability of projects/businesses/organizations, so it is necessary to look for compromise models of their coexistence;

– insufficient research and testing in practice of models and methods of “green” project management;

– insufficient readiness of most project-oriented organizations for the full implementation of “green” project management.

Opportunities.

– providing a basis for sustainable development of organizations that practice “green” project management, as well as communities and the state as a whole;

– ensuring a good reputation among stakeholders as a result of the implementation of “green” project management, and the corresponding possibility of securing future projects for implementation;

– opportunities to scale the activities of organizations and implement international projects.

Threats.

– changing the emphasis of development, minimizing attention to “green” project management due to the escalation of hostilities and the prolonged war caused by russian aggression against Ukraine;

– resistance of middle management within the organization or stakeholders to new models and methods, as a result of which the implementation of “green” project management models may be unsuccessful, which will reduce the reputation of such models and hinder their future implementation.

– creation of new project management methodologies (in particular, those based on artificial intelligence), as a result of which “green” project management will lose relevance.

Based on the results of the SWOT analysis, it can be concluded that there is a high probability that the strengths of “green” project management will outweigh the weaknesses, and the opportunities will outweigh the threats.

Let us formulate the prospects for further research in the chosen direction based on the results of the conducted research:

1. Development of “green project” management processes based on the principles and concepts of “green” project management.

2. Development of “green” project management models that cover the main areas of project management – time management, content, cost, project quality, etc.

3. Development of “green” project management methods within the specified areas.

4. Development of approaches to the development of the “green” community, including models of organizational structures, the communication process in a “green” project, accumulation of a knowledge base of “green” projects, etc.

5. Application (testing) of “green” project management processes, models, methods in managing energy efficiency improvement projects, adjustment of the specified artifacts based on the results of such testing.

Conclusion

Modern challenges in their integral set require the creation of new approaches to entrepreneurship and project management. One of such approaches – “green entrepreneurship” – is worth attention in order to benchmark it in the field of management and project management. To do this, it is necessary to create and describe the concept of “green” project management, which would contribute to the environmental friendliness of both project products and project management processes, including team interaction. The development of such an approach in the current economic situation in Ukraine and the world is an urgent scientific task.

This article analyzes project management methodologies and standards (in particular, PMBOK, P2M, Agile) in the context of models and methods that can be used to create a “green” project management approach. On the other hand, the concept of “green” entrepreneurship and its principles were analyzed. On this basis, 7 principles of “green” project management were proposed for the further development of the “green entrepreneurship” approach. Energy efficiency improvement projects were identified as a special case of “green” projects and as an object of scientific research. A model for classifying energy efficiency projects was proposed for the further development of such classifications in the form of 11 classification features and types of projects within each feature. 4 clusters of “green” project management development were also identified, within which it is proposed to implement further research: “green” projects, “green” project management methodologies, “green” teams, “green” management tools. Each such cluster is characterized.

The model of supplementing the classification model of project management systems (in its further development) is proposed, in which additional features of the classification of “green” project management systems are formulated – in the form of 5 additional features and types of projects within each classification feature. A model of the components of “green” project management is proposed, which contains four

components: classic project management, flexible (Agile) project management, the concept of Lean production and “green” community. As well as a multiple model of the “green” project management system in the form of a formal seven. A SWOT analysis of the formulated “green” project management approach is conducted, its strengths and weaknesses are highlighted, as well as opportunities and threats that may arise when using it. A conclusion is made regarding its potential

effectiveness. Areas of further research in the chosen direction are formulated.

In general, it is worth noting that the “green” project management approach is relevant for development, and its implementation has potential practical value both for the further development of project management models and methods, for project teams, and for the environment as a whole.

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The editorial board received the article on January 28, 2025

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**АНАЛІЗ ТРЕНДІВ «ЗЕЛЕНОГО ПІДПРИЄМНИЦТВА» ТА ФОРМУВАННЯ
НА ЇХ ОСНОВІ «ЗЕЛЕНОГО ПІДХОДУ» В УПРАВЛІННІ ПРОЄКТАМИ ЕНЕРГОЕФЕКТИВНОСТІ**

Анотація. У статті проведено аналіз методологій і стандартів з проєктного менеджменту (зокрема РМВОК, P2M, Agile) у контексті моделей і методів, які можна використати для створення підходу «зеленого» проєктного менеджменту. З іншого боку, проведено аналіз концепту «зеленого» підприємництва і його принципів. На цій основі у подальший розвиток підходу «зеленого підприємництва» запропоновано сім принципів «зеленого» управління проєктами (проєкти мають створювати екологічні продукти, товари та послуги; забезпечувати максимально можливе використання екологічних матеріалів і дотримуватися прагнення поступового збільшення екологічності продуктів; реалізація проєктної діяльності сприяє створенню і розвитку «зеленої економіки» у державі; проєктно-орієнтовані компанії переважно реалізують соціально відповідальні проєкти із трендом до збільшення їх частини у портфелі проєктів компанії; соціальна відповідальність має бути як корпоративною, так і особистою). Проєкти підвищення енергоефективності визначено як окремий випадок «зелених» проєктів і як об'єкт наукового дослідження. Запропоновано модель класифікації проєктів енергоефективності у подальший розвиток таких класифікацій у вигляді 11 ознак класифікації та різновидів проєктів у межах кожної ознаки (за продуктом проєкту, за використанням штучного інтелекту, за галуззю застосування, за використанням принципів «зеленого» підприємництва, за методологією управління проєктом, за складністю, за типом команди управління проєктом, за моделями енергоефективності, за ступенем інноваційності, за географічною розподіленістю, за можливістю масштабування). Також ідентифіковано чотири кластери розвитку «зеленого» проєктного менеджменту, в межах яких пропонується реалізовувати подальші дослідження: «зелені» проєкти, «зелені» методології управління проєктами, «зелені» команди, «зелені» інструменти управління. Проведено характеристику кожного такого кластера. Запропоновано модель доповнення моделі класифікації систем проєктного менеджменту (у її подальший розвиток), в якій сформульовано додаткові ознаки класифікації систем «зеленого» проєктного менеджменту – у вигляді п'яти додаткових ознак і різновидів проєктів у межах кожної ознаки класифікації. Запропоновано модель складових «зеленого» проєктного менеджменту, яка містить чотири складові: класичний проєктний менеджмент, гнучкий (Agile) проєктний менеджмент, концепція Lean production та «зелена» спільнота. А також множинну модель системи «зеленого» проєктного менеджменту у вигляді формальної сімки. Проведено SWOT-аналіз сформульованого підходу «зеленого» проєктного менеджменту, виокремлено його сильні і слабкі сторони, а також можливості і загрози, що можуть виникнути під час його використання. Зроблено висновок щодо потенційної ефективності такого підходу. Сформульовано галузі подальших досліджень у вибраному напрямі. Сформульовано висновки з проведених досліджень.

Ключові слова: управління проєктами та програмами; проєктно-орієнтована організація; «зелене (циркулярне) підприємництво»; «зелений» (циркулярний) проєктний менеджмент

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