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PROJECT MANAGEMENT MODELS FOR DEVELOPMENT PROJECTS IN SELF-MANAGED ORGANIZATIONS IN A SYNCRETIC CONTEXT

The relevance of developing models and methods of syncretic management for development projects of self-managed organizations is justified. The practical value of such models for infrastructure restoration projects in Ukraine is emphasized. The methodological approach of syncretic management to the implementation of infrastructure restoration projects was proposed. An analysis of the environment for the implementation of development projects of self-managed organizations was carried out, including the characteristics of the environment of the management models of development projects, suitable models of the life cycle of development projects and the main elements of the self-managed approach for use in the studied projects. Three characteristics of the life cycle model for development projects of self-managed organizations are defined, and a four-phase model is proposed: initialization, implementation, testing, and closure. The main elements of the self-managed approach were identified for use in the studied projects, consisting of seven such elements: the use of the principle of self-management, collegial decision-making, the absence of a formal leader, the assumption of responsibility by members of a self-managed team, self-determination of motivation, the use of holacracy models and methods, independent development of competence by participants teams. Two models were proposed - α -model and β -model of management of development projects of self-managed organizations in a syncretic context. Visualization of the specified models, their description and comparative characteristics were provided. In the development of this approach, a complex model of management of development projects of self-managed organizations was also formalized in a syncretic context, in the form of a formal eight using set theory. A SWOT analysis of the proposed models was carried out, their strengths and weaknesses, opportunities and threats that may arise as a result of their use were highlighted. A conclusion was made based on the results of the SWOT analysis. Prospects for further research in the chosen direction were formulated. It was determined that the qualified implementation of the mentioned developments in the practice of infrastructure restoration projects will potentially increase the effectiveness of such projects and portfolios of such projects.

Keywords: project and program management, self-managed organizations, development projects, syncretic methodology, project management models, infrastructure restoration projects of Ukraine.

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МОДЕЛІ УПРАВЛІННЯ ПРОЄКТАМИ РОЗВИТКУ САМОКЕРОВАНИХ ОРГАНІЗАЦІЙ В СИНКРЕТИЧНОМУ КОНТЕКСТІ

Обґрунтована актуальність розробки моделей і методів синкретичного управління для проєктів розвитку самокерованих організацій. Підкреслена практична цінність таких моделей для проєктів відновлення інфраструктури України. Запропоновано методологічний підхід синкретичного управління до реалізації проєктів відновлення інфраструктури. Проведено аналіз середовища реалізації проєктів розвитку самокерованих організацій. Зокрема проаналізовано особливості середовища існування моделей управління проєктами розвитку, придатні моделі життєвого циклу проєктів розвитку та основні елементи самокерованого підходу для використання в досліджуваних проєктах. Визначено три характеристики моделі життєвого циклу для проєктів розвитку самокерованих організацій, запропоновано модель з чотирьох фаз: ініціалізація, реалізація, тестування та закриття. Було ідентифіковано основні елементи самокерованого підходу для використання в досліджуваних проєктах у складі семи таких елементів: використання принципу самокерованості, колегіальне прийняття рішень, відсутність формального лідера, взяття на себе відповідальності учасниками самокерованої команди, самовизначення мотивації, використання моделей та методів холакратії, самостійний розвиток компетентності учасниками команди. Було запропоновано дві моделі – α -модель та β -модель управління проєктами розвитку самокерованих організацій в синкретичному контексті. Було надано візуалізацію зазначених моделей, їх опис та порівняльну характеристику. У розвиток цього підходу також було формалізовано комплексну модель управління проєктами розвитку самокерованих організацій в синкретичному контексті, у вигляді формальної вісімки з використанням теорії множин. Був проведений SWOT-аналіз запропонованих моделей, виділені їх сильні та слабкі сторони, можливості та загрози, що можуть виникнути внаслідок їх використання. Зроблений висновок за результатами SWOT-аналізу. Були сформульовані перспективи подальших досліджень у обраному напрямку. Визначено, що кваліфіковане впровадження зазначених напрацювань у практику реалізації проєктів відновлення інфраструктури дозволить потенційно підвищити ефективність таких проєктів та портфелів таких проєктів.

Ключові слова: управління проєктами та програмами, самокеровані організації, проєкти розвитку, синкретична методологія, моделі управління проєктами, проєкти відновлення інфраструктури України.

Introduction. The development of project management systems has been progressing rapidly in recent decades and years. The latest trends of such development are worthy of being studied and implemented in the field of reconstruction projects of Ukraine, which is still suffering from the Russian invasion and significant destruction of infrastructure as a result. Infrastructure restoration projects of Ukraine are a priority for the President of Ukraine and the Government [1], they are considered in a comprehensive manner both with the aim of ensuring the recovery and development of the economy, and with the aim of strengthening the defense capability. Among the latest trends worth noting are the democratization of project management and project-oriented organizations in general, as well as the search for

effective corporate project management methodologies based on a mix of methodological constructs.

Scientific and practical research in these contexts determines the prospects of the specified directions. This allows us to assume that the indicated directions are not only situational trends, but also defining guidelines for increasing the efficiency of project management in modern conditions. The infrastructure restoration sector of Ukraine really needs such an increase. Because reconstruction is not only a large-scale task (given the significant destruction caused by the aggressor), but also takes place in the extreme conditions of war. And therefore, project management in the field of infrastructure restoration is simply forced to look for non-trivial ways, at least simply to successful implementation.

At the same time, the overarching task should be considered efficient, effective and productive implementation of restoration projects.

At the intersection of the relevance of the practical task of ensuring the effectiveness of restoration projects and modern scientific trends regarding self-organization and methodological mixing, the scientific task of researching syncretic management as a methodology within the scope of using such a methodology by self-managed organizations (or organizations that use elements of self-management in the management system) in the context of project implementation appears restoration of the infrastructure of Ukraine.

Among other trends of modern project management, it is also worth noting the digitization of management processes, the use of artificial intelligence elements in management systems, the use of visualizations and dashboards of the manager for effective monitoring of project implementation and the appropriate timely and adequate response to project deviations from the planned indicators in terms of implementation time, cost and quality products of the project, as well as processes of its implementation. A separate case is distinguished by the modern demand for deeper and more comfortable cooperation of the project management team with stakeholders.

We will try to cover and take into account most of the indicated trends in the models and methods of the syncretic methodology of managing projects, programs and project portfolios.

Analysis of recent research and publications.

Models of project management in general and management of development projects in particular have been considered in many studies. First of all, they are created on the basis of traditional models presented in project management standards. Such standards themselves are a generalization of common and proven practices in the field of project management. In particular, the latest edition of the most well-known industry standard PMBOK [2] contains a project management standard and a guide to the project management body of knowledge. The standard includes a separate block describing the system of value delivery through projects and 12 principles of modern project management. The body of knowledge contains a description of models and methods for 8 areas of project implementation (stakeholders, team, approach to development and life cycle, planning, project work, delivery, measurement, uncertainty) and a separate block describing approaches to tailoring PMBOK methodological developments to specific projects.

A separate area of standardization in project management is the competence of project participants. In particular, the Project Manager Competency Development Framework standard [3], which contains relevant competency models. There are also many other standards regarding the management of labor resources of projects, including the development of their competence.

Recently, in connection with the development of project management in both the practical and theoretical plane, when using standards and methodologies for

managing many projects in organizations (project programs, project portfolios), the need for more complex methodological structures arises. In particular, this need is due to the emergence of the flexible Agile project management standard [4,5], which has already spread far beyond the IT industry in which it originated. Thus, the combination of various standards and their elements within the corporate methodology of project management for project-oriented organizations becomes an actual direction of theoretical and practical developments. One of the possible approaches to such a combination is hybridization, within which methodological mixes are used at the corporate methodology level, consisting of separate elements of different methodologies (models and methods), which are adapted both to each other and to the specifics of the organization in which are implemented [6].

This approach is widely used both for large sets of projects managed by the organization [7], and for choosing an adequate methodological approach using appropriate information technologies [8].

Besides, in this context, the work [9] is interesting, which examines the approach to project portfolio management in connection with a project-oriented organization maturity and formulates appropriate models.

In addition, an essential element of modern project management systems is the self-management of project teams or project-oriented organizations as a whole. Research in this direction was initiated by the work [10], in which the "turquoise organization" was considered as the next stage of the evolution of organizational development, as well as the description and characteristics of such organizations were provided. Subsequently, the functioning of self-managed organizations began to be described within the new scientific paradigm of "Holarctic management" [11, 12], where the models and methods of self-management gained further development, in particular, regarding the models of processes of self-managed organizations and the motivation of its participants. A significant characteristic of self-managed organizations, according to the cited studies, is democratic management, reduction (or even disappearance) of the role of a formal leader, self-determination of self-managed team members both in terms of tasks and responsibility for their implementation, and in terms of motivation for completing/failing to complete project tasks.

The analysis of the mentioned scientific works made it possible to investigate the possibility of using the mentioned developments in projects to restore the infrastructure of Ukraine and to justify the feasibility of such use. In particular, on the basis of such an analysis, a new approach was proposed to combine the specified features of modern project management, namely, the approach of syncretic management [13]. The conceptual difference of such management from the hybridization of methodologies should be defined as the possibility of separate use of methodologies in separate parts of the project (or portfolio of projects) without mixing them at the level of corporate methodology. It remains possible for individual self-managed teams to choose a project management methodology for team use. However, a

project team (within a portfolio or program) may also decide that it is appropriate to use a hybrid methodology, but other teams in other projects choose a standard, approach or methodological hybrid regardless of the methodological decisions of other teams. As already mentioned, the syncretic approach acquires special relevance in project portfolios with many participants, which may represent different countries - which confirms the practical value of such an approach specifically for infrastructure restoration projects of Ukraine [14].

So, let's formulate four principles regarding the development of models for managing development projects of self-managed organizations in a syncretic context:

- simultaneous execution by project-oriented organizations of several projects, which can optionally be combined into a portfolio or program (or a set of such programs, portfolios and/or projects);

- simultaneous use of several standards and/or methodologies in the activities of a project-oriented organization;

- use of a syncretic approach by a project-oriented organization: not mixing methodologies used by individual projects of the organization; the possibility of project teams choosing their own management methodology;

- the use of elements of self-management in a project-oriented organization or activities in general based on the principles of self-management.

With the use of these principles, and taking into account the justified relevance of the corresponding scientific task, we will develop management models of development projects of self-managed organizations in a syncretic context for infrastructure restoration projects.

The purpose of the article is to develop project management models for the development of self-managed organizations in a syncretic context, taking into account their application to infrastructure restoration projects.

To realize the set goal in this article, the authors solve the following scientific tasks:

- to conduct an analysis of the environment for the implementation of development projects of self-managed organizations, in particular, the peculiarities of the environment of development project management models, suitable models of the life cycle of development projects and the main elements of the self-managed approach for use in the studied projects;

- to propose the α -model and the β -model of management of development projects of self-managed organizations in a syncretic context, provide a description and comparative characteristics of these models;

- to formalize a complex model of management of development projects of self-managed organizations in a syncretic context;

- to analyze the proposed models and formulate vectors for further research in the chosen direction.

Presenting main material. In order to develop management models for development projects of self-managed organizations in a syncretic context, we will take

into account the following features of the environment of such models, namely:

- the life cycle of development projects, the model of which is implemented using elements of various methodologies, standards or approaches;

- simultaneity or cascading (shift in time) of launching development projects;

- multiplicity of methodologies used by project-oriented organizations when implementing projects;

- the feature of self-management of organizations, according to which the formation of a methodological approach (contextually: methodological mixes) occurs spontaneously at a certain phase of the life cycle of projects.

Discussions about the decomposition of life cycle elements have been going on since the beginning of project management as a science. The evolution of the model took place from the original division into three classic phases of the classic PMBOK standard, "initialization", "implementation", "closure" to flexible life cycles. With the emergence of the concept of hybridization, life cycle models acquire a combined character and can combine elements of both waterfall and flexible approaches.

Therefore, we will offer the following life cycle model for development projects of self-managed organizations, which has the following characteristics:

- 1) decomposition of models of the life cycle of projects of a self-managed project-oriented organization into four typical parts (phases): initialization, implementation, testing, closure;

- 2) use of flexible principles within the phases; just as the life cycle model in Agile is generalized to the waterfall triad "Pre-game – Game – Post-game" (while the flexible component is foreseen only in the Game phase, when the phase is divided into flexible periods, usually identified as sprints; while itself the triad is a classic waterfall: a contract is prepared in the Pre-game phase, only after that the "Game" implementation phase takes place, only after the end of which the contract is closed in the Post-game phase) - in the case of the studied projects, it is possible to determine as flexible in advance the phases of implementation and testing, while the overall project life cycle model will be waterfall; therefore, in this way, a hybrid approach to the formation of a model of the life cycle of development projects in self-managed project-oriented organizations is implemented;

- 3) the flexibility of the life cycle model itself, according to which it (the model) can be improved during the implementation of project activities by a self-managed organization; for example, it can be based on the results of final meetings or, according to the Agile methodology, the so-called "retrospective of retrospectives".

Finally, since the implementation of infrastructure restoration projects will take place in the environment of organizations that will use elements of self-management or be fully self-managed, it is worth identifying the main elements of the self-managed approach for use in the studied projects. In particular, we identify them below.

1. A self-managed organization can either fully carry out activities based on the principles of self-management,

or use individual elements of a self-managed approach; in the latter case, one or more self-managed teams can work in the organization, the interaction between which can be carried out on the principles of self-management, and between them and the management of the organization – on the principles of hierarchical subordination.

2. Decision-making in a self-managed team is collegial.

3. There is no formal team leader role. The role of situational moderator can be used when, during meetings or discussions, the most competent team member on the issue under consideration, by mutual agreement, assumes the role of moderator of the discussion.

4. Responsibility for the performance of tasks and the very formulation of tasks occurs through the manifestation of one's own initiative by team members; the same applies to tasks related to the development and improvement of team management models and methods (that is, not only project tasks as such, but also development tasks).

5. Models and methods of motivating team members can be determined (initiated) by the team members themselves, which is agreed upon (with the achievement of consensus) at joint operational or project meetings.

6. When managing a self-managed team, models and methods of holacracy and appropriate management are used.

7. A self-managed team independently identifies missing competencies, and then forms a corresponding request and expands the team either through the selection of the necessary performers, or through training (increasing the competence) of existing team members.

Thus, based on the results of the study of the environment of the investigated projects, we will propose two models:

- α -model of management of development projects of self-managed organizations in a syncretic context (Fig. 1);
- β -model of management of development projects of self-managed organizations in a syncretic context (Fig. 2).

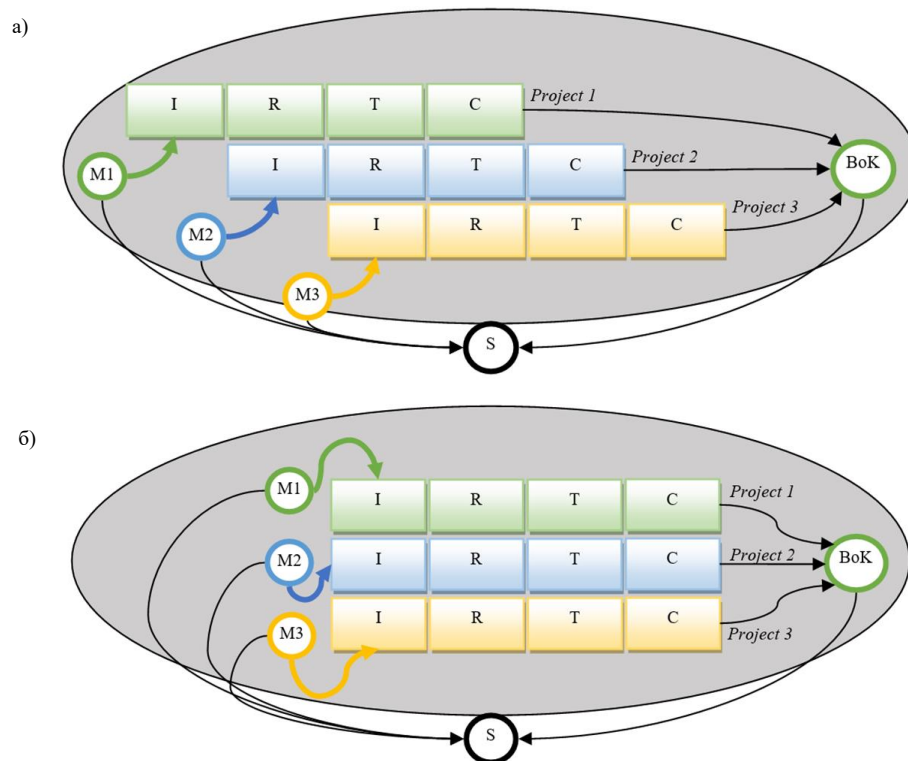


Fig. 1. α -model of management of development projects of self-managed organizations in a syncretic context
 a) in the cascade version of the ratio of life cycles of portfolio projects
 b) in the parallel version of the ratio of life cycles of portfolio projects

In these models, the life cycle of restoration projects is decomposed into four phases, denoted as: I – initialization, R – implementation, T – testing and C – closure.

The project management methodologies used by the first, second, and third portfolio project teams (the number of portfolio projects taken in the example models) are labeled M1, M2, and M3, respectively. Moreover, in accordance with the principles of syncretic management, methodologies M1, M2 and M3 do not mix with each other. Although if one of the methodologies of one of the projects is a hybrid (for example, Agile + CMMI), its

elements can be used in the methodology used to manage another portfolio project. However, this fact does not negate the integrity of the management methodology for each project and denies their direct mixing at the level of the corporate management system of a self-managed organization that implements a portfolio of infrastructure restoration projects.

So, let's first describe the α -model of managing development projects of self-managed organizations in a syncretic context, then the β -model, after which we will define their distinguishing features.

In the proposed α -model (Fig. 1), the selection of the management methodology for each portfolio project is carried out by the project team during the initialization phase. This should be preceded by a discussion and formalization of the project idea, a formal description of the project in the form of a charter or other artifact, and selection of the project team. In self-managed organizations, unlike traditional hierarchical ones, there is no appointment (or selection) of the project manager.

The results of the project in the form of artifacts (models, methods, lessons, best practices) are constantly transferred to the knowledge base of project activities of the self-managed organization (BoK - base of knowledge).

In turn, the core of the syncretic methodology (S) is outside the projects and forms influences on the portfolio based on the principles of syncretism. At the same time, S

is in constant contact with the knowledge base (which, in turn, is constantly updated). In addition, S communicates with projects through their methodologies (M1, M2, M3) through appropriate interfaces. Thus, S carries out the following information exchange with portfolio projects:

- receives information on the progress of portfolio project implementation;
- receives information about project management models and methods and evaluates their effectiveness;
- carries out, if necessary, correction of each methodological concept within the framework of the methodology based on the results of evaluating their effectiveness; at the same time, the integrity of the methodologies is not violated, there is no mixing of methodologies.

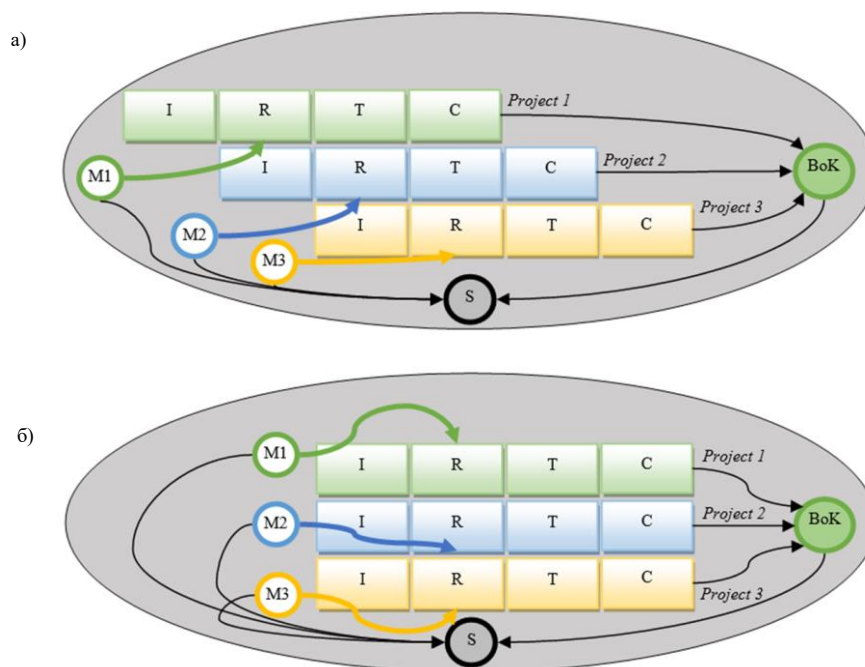


Fig. 2. β -model of management of development projects of self-managed organizations in a syncretic context
 a) in the cascade version of the ratio of life cycles of portfolio projects
 b) in the parallel version of the ratio of life cycles of portfolio projects

In the proposed β -model of project management of the development of self-managed organizations in a syncretic context (Fig. 2), there is a spontaneous crystallization of the management methodology of each portfolio project in the implementation phase. Spontaneity here is due to the self-directed nature of management. The discussion and use of various methodological concepts at the initialization phase of the project and at the beginning of the implementation phase leads to the gradual formation of best practices and the use of certain management models and methods. Each element of the methodology can be contributed by each member of the self-managed team. At a certain stage of the implementation phase (it can be assumed that this happens at the beginning of the phase, but not immediately), the self-managed team agrees on the project management methodology that it will use. It can be a mono-methodology or a hybrid. In such a formulation of the

problem, it may seem that the most likely choice is a hybrid, but this is not mandatory. In the event that the team members will represent the same school of project management (related, for example, to the predominant use of the PMBOK standard of the American Project Management Institute, PMI), the choice of the team may fall on this standard as the basis of the project management methodology managed by this team.

The knowledge base of project activities (BoK) in a self-managed organization is filled in the same way, and it is also a source of data for S – the core of the syncretic methodology of managing project activities of a self-managed organization.

However, this core is in the direct process of project management and exerts not only a methodological, but also a managerial influence on projects, intervening in the course of their implementation based on monitoring results.

Thus, S within the β -model carries out the following information exchange with portfolio projects:

- receives information on the progress of portfolio project implementation;
- receives information about project management models and methods and evaluates their effectiveness;
- carries out, as necessary, correction of each methodological concept within the framework of the methodology based on the results of evaluating their effectiveness; at the same time, the integrity of the methodologies is not violated, there is no mixing of methodologies.
- exerts a managerial influence on portfolio projects based on the results of processing information about their implementation and on the basis of comparison with target indicators;

So, based on the results of research, we will formulate the common and distinctive features of the α -model and the β -model.

The following should be identified as common features:

- 1) project portfolio management within the self-managed organization;
- 2) use of syncretic methodology;
- 3) availability and constant updating of the project activity knowledge base; the knowledge base is used by the core of the syncretic methodology.

We identify the following as distinguishing features:

- 1) the choice or spontaneous crystallization of the project management methodology occurs at different phases of the life cycle – at the initialization phase for the α -model and at the implementation phase for the β -model;
- 2) syncretic methodology is implemented in different types of management (in accordance with the analogy with the types of project offices – a project office of methodological support and a project office of direct management), in particular, within the limits of the α -model, methodological support of portfolio projects and the corresponding correction of project management methodologies are implemented, while in within the β -model, the project portfolio management team exerts a direct influence on the management of each portfolio project, in addition to methodological support;
- 3) the predominant model of forming the management methodology of each project for the α -model is team selection, while for the β -model it is spontaneous crystallization.

We will analyze the proposed approach in the context of comparing a self-managed organization that uses syncretic management and a traditional hierarchical organization that implements classical project management. For this comparison, we identify four vectors of organizational maturity of project-oriented organizations, namely:

- methodological flexibility,
- organizational flexibility,
- required level of competence of project team members
- acceptable level of predictability of the project environment.

The results of the evaluation, which was carried out by the method of surveying experts, are shown in Fig. 3. The assessment was conducted among universities lecturers who participate in real projects. 30 lecturers were interviewed. The overall assessment was formed as a weighted one. The weight of experts varied depending on the scientific degree. The sum of the experts' weight was equal to 1. The fourth vector of organizational maturity (acceptable level of predictability of the project environment) meant the minimum level of predictability at which the project management system expertly remains effective.

Based on the results of the evaluation, it is possible to come to a conclusion regarding the greater organizational and methodological flexibility of the proposed approaches compared to the traditional ones and a lower threshold for the unpredictability of the environment at which the management model remains effective. At the same time, the requirements for project team members remain equally high. A somewhat greater importance of the requirements for the competence of team members implementing syncretic management is determined by the necessary expansion of their knowledge regarding the models and methods of syncretic management itself.

We will offer a set description of the α -model and β -model in the form of a complex model of management of development projects of self-managed organizations in a syncretic context (in the form of a formal eight):

$$Q = \langle V, S, O, P, M, I, E, B \rangle, \quad 1)$$

where V – is the set of values and strategic value concepts of a self-managed project-oriented organization (mission, vision, strategy, values);

S – is the set of models and methods of syncretic methodology;

O – the set of organizational models and methods used by a self-managed organization (including models and methods of holistic management based on the use of the holacracy concept);

P – the set of projects implemented by a self-managed organization within the portfolio of its projects;

M – the set of methodologies used by projects belonging to the project portfolio of a self-managed organization; and each of these methodologies can be both a mono-methodology and a methodological hybrid (Agile + CMMI, Scrumban, etc.);

I – the set of interfaces between the core of the syncretic methodology and the methodologies of each project included in the portfolio of projects of the self-managed organization;

E – the set of IT tools that implement the specified models within the syncretic methodology; including the types and functional orientation of such tools, as well as the possibility of their integration with each other and with other IT systems of the self-managed organization; an important requirement for such tools is the requirement (especially in modern conditions of war and the aggressor's attempts to carry out large-scale IT attacks) to ensure a sufficient level of cyber security and cyber protection;

B – the knowledge base of project management, which in particular includes indicators of project use, best practices, performance indicators, experience in using

models and methods, adjusted models and methods, KPI (Key Performance Indicator), KSI (Key Success Indicator) models with history and dynamics their changes, etc.

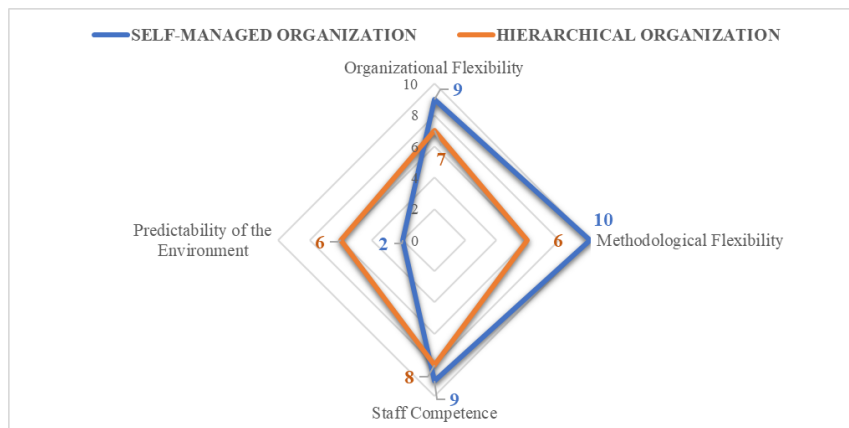


Fig. 3. Comparative analysis of organizational approaches to managing project-oriented organizations

We will conduct a SWOT analysis of the proposed models (α -models and β -models of development project management using syncretic methodology) for use by self-managed organizations in portfolios of infrastructure restoration projects. Let's highlight their strengths, weaknesses, opportunities arising from their application, and threats that may arise.

Strengths.

St-1. A syncretic approach, within which the use of α and β models is proposed, which preserves the methodological integrity of the management system of each project. This allows project teams (especially if they represent different management cultures, possibly different countries of origin) to further work and improve familiar methodological concepts, as well as models, methods and tools associated with them.

St-2. The multiplicity of models (α and β) and variations in the use of models (cascade version, parallel version), which simplifies the selection of a management model for adaptation (tailoring) to the conditions of a specific project-oriented organization.

St-3. Using the knowledge base of project-oriented activities and ensuring the constant and updated connection of the knowledge base with the core of the syncretic methodology of managing the project portfolio of the self-managed organization. Which creates the basis for improvement, adaptation, constant updating and constant improvement of the level of technological maturity of a self-managed organization in the field of project, program and project portfolio management.

Weaknesses.

We-1. Scientific development and formalization of these models are at the initial stage, which does not provide a sufficiently complete picture of the possible nuances and specifics of using the proposed models in most typical cases that the project portfolio management system of a self-managed organization may encounter.

We-2. The use of syncretic methodology in practice takes place in a limited context, which does not provide an opportunity to determine statistically reliable results of its practical approbation. This general provision applies in particular to the α and β models of project management of

the development of self-managed organizations in a syncretic context.

We-3. Syncretic methodology in general and, in particular, α and β models of managing development projects of self-managed organizations in a syncretic context are difficult to apply. Therefore, their use by untrained, insufficiently competent teams can cause difficulties and lead to failure.

Opportunities.

Op-1. Implementation of methodological flexibility, as a result of which portfolio project teams can choose their own project management methodology, which will remain intact throughout the entire life cycle. In addition, providing feedback to the knowledge base provides an opportunity to improve each methodology used by the portfolio projects of the self-managed organization.

Op-2. Organizational flexibility, as a result of which the choice of methodology can occur at different phases of the life cycle of projects. In addition, team self-management opens opportunities for changing team members, team roles, team member competence, team responsibility, team management models, and other organizational settings during project implementation, which can increase the effectiveness of their implementation.

Op-3. Constantly increasing the level of technological maturity of the self-managed organization (and self-managed teams within the organization) in the field of project, program and project portfolio management thanks to the use of syncretic project management methodology in general and, in particular, α and β project management models of the development of self-managed organizations in a syncretic context. Technological maturity will provide the basis for better efficiency in the implementation of subsequent projects and increase the competitiveness of a self-managed organization in the market of project management services.

Threats.

Th-1. The threat of non-acceptance or misunderstanding of syncretic project management methodology in general and, in particular, α and β project

management models of the development of self-managed organizations in a syncretic context. As a result of the corresponding stereotype, resistance to the implementation of the methodology in a self-managed team will increase, which will increase conflict in the team and cause an unhealthy working atmosphere. This, in turn, will have a negative impact on the performance indicators of the self-managed organization's portfolio projects, and will lead to an increase in the team's efforts in implementing the specified models and methodology.

Th-2. If used unsuccessfully or unprofessionally, the effectiveness of the syncretic methodology in general and, in particular, α and β models of managing development projects of self-managed organizations in a syncretic context, may be low. Moreover, it can cause a temporary decrease in the effectiveness of the project management system of the self-managed organization as a whole. What can distract the team from experiments and for a certain time can close the way to continuous development and improvement of the project management system in the organization.

Th-3. Methodological confusion at the level of the corporate methodology of project management in a self-managed organization, as a result of which the project methodologies will be mixed, the integrity of the syncretic methodology will be violated, which will negatively affect the progress of the portfolio projects and the achievement of the planned indicators and results by the portfolio projects, or will lead to the projects going beyond the limits established restrictions.

In general, the results of the SWOT analysis show that the opportunities of the proposed models within the proposed approach potentially outweigh the threats, and the strengths potentially outweigh the weaknesses. That is, in general, it is possible to assert the prospects of research in the chosen direction.

Therefore, it would be expedient to formalize the vectors of further research in the chosen direction and outline their prospects. Below are the main ones among such vectors.

1) Development of project management methods for the development of self-managed organizations in a syncretic context, as well as project management methods of self-managed organizations in general, taking into account the use of syncretic methodology in the project management system. A set of relevant methods of syncretic methodology should add completeness to the toolkit of a syncretic approach. Methods can be proposed for the further development of existing project management methods, taking into account the specifics of the studied projects and the context of their implementation.

2) Research and formalization of syncretic project management methodology interfaces. It is the interfaces that make the connection between the methodologies that manage the projects of the self-managed organization and the core of the syncretic methodology that are the most complex element of the mentioned approach. The integrity and non-contradiction of the syncretic methodology in general depends on the completeness of their formalization. The purpose of the interfaces is to ensure

the interpretation of models and methods from the methodology of each portfolio project in the models and methods of each other portfolio project. This should be done at the core level of the corporate project management methodology of the self-managed organization and should not cause project methodologies to mix with each other.

3) Development of the value aspect in the management of development projects of self-managed organizations, implemented on the basis of syncretic methodology. A set of values and strategic value concepts of a self-managed project-oriented organization (mission, vision, strategy, values) must be formalized and detailed. Interrelationships between the concepts of value management in the context of syncretic methodology and proposed models and methods of value management in the context of the researched type of projects should be determined.

4) Formalization of KPI (Key Performance Indicator) models and KSI (Key Success Indicator) models for projects of self-managed organizations implemented according to syncretic methodology. It is important that the specified models (or processes for processing the results of calculation of the specified models) provide for the possibility of accumulating historical data of these indicators and monitoring the dynamics of their changes, including the analysis of the factors of such changes. This will provide not only a current assessment of the effectiveness of project activities, but also provide the possibility of proactively influencing such effectiveness.

5) Formalization of models and methods of formation and development of the knowledge base of project activities of a self-managed organization that performs syncretic management. In particular, the analysis of the possible uses for the specified knowledge base of neural network models and methods, artificial intelligence, Big Data theory, Data Mining methods, etc. The use of the specified models and methods will allow (under the condition of adequate support by relevant modern IT tools) to create an up-to-date and constantly updated and modernized, effective information system supporting the functioning of the syncretic project management system (programs and project portfolios) in self-managed organizations.

Conclusions. There is a growing need for new methodological approaches to the management of complex modern projects and their aggregates in the conditions of the increasing turbulence of the project environment and the greater dominance of the BANI world (Brittle, Anxious, Nonlinear, Incomprehensible). The war in Ukraine, caused by the aggression of the Russian Federation, has already caused and continues to cause more and more destruction. Infrastructure restoration projects are relevant, for the implementation of which, in particular, due to insufficient budget funds, experienced foreign partners are and will continue to be involved. The scale of infrastructure restoration projects determines the possibility of multiple participation in each of these projects. Different participants with different management cultures, with different tested (within their

experience) methodologies, should be able to effectively cooperate in restoration projects to achieve their greater efficiency.

The syncretic project management methodology is aimed at fulfilling such tasks. One of the characteristic features of the syncretic methodology is the provision of the ability to manage different parts of the project (or different projects in the project portfolio) using different methodologies. In this way, each of the many participants in infrastructure restoration projects can use their methodological developments without changing the usual established practice of developing their efficiency.

Today, one of the typical models developing and improving in the organizational context of project and program management is the self-management of project teams and self-managed project-oriented organizations. This aspect should be taken into account when creating modern methodologies for the management of infrastructure restoration projects in Ukraine.

In this article, the authors formulated a methodological approach of syncretic management to the implementation of infrastructure restoration projects and proposed management models for development projects of self-managed organizations in a syncretic context.

In particular, an analysis of the environment for the implementation of development projects of self-managed organizations was carried out, including the characteristics of the environment of development project management models, suitable life cycle models of development projects and the main elements of the self-managed approach for use in the studied projects. Three characteristics of the life cycle model for development projects of self-managed organizations are defined, and a four-phase model is proposed: initialization, implementation, testing, and closure. The main elements of the self-directed approach were identified for use in the studied projects, consisting of seven such elements.

Two models were also proposed - the α -model and the β -model of managing development projects of self-managed organizations in a syncretic context. Visualization of the specified models, their description and comparative characteristics were provided.

In the development of this approach, a complex model of management of development projects of self-managed organizations was also formalized in a syncretic context, in the form of a formal eight using set theory.

Next, a SWOT analysis of the proposed models was carried out, their strengths and weaknesses, opportunities and threats that may arise as a result of their use were highlighted. A conclusion was made based on the results of the SWOT analysis. Vectors of further research in the chosen direction were formulated.

Qualified implementation of these developments in the practice of infrastructure restoration projects will potentially increase the effectiveness of such projects and portfolios of such projects. This will allow maintaining the trend of projects to comply with project limitations, supports a creative atmosphere in project teams, promotes the improvement of the competence of the members of such teams, and will increase the probability of success of projects to restore Ukraine's infrastructure and, we hope, indirectly, but bring Ukraine's victory closer.

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Received (надійшла) 15.02.2024

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