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IMPLEMENTATION OF VALUE-ORIENTED PROJECT PORTFOLIO MANAGEMENT FOR THE DEVELOPMENT OF COMPLEX SYSTEM

Abstract

The formation of a development portfolio is one of the key challenges facing any level of system. The aim of the article is to present a model of optimal value-oriented portfolio formation for the development of a complex system, taking into account mutual influence of portfolio components on each other. It analyses the methodology of portfolio development management of organizations, considers different approaches to forming a portfolio of projects, proposes the formation of a portfolio of organization development based on the value-oriented approach, considers multi-criteria model of project selection in the organization development portfolio, taking into account the mutual influence of the components of the portfolio on each other. As the basic method of forming a portfolio of regional community development using the value-based approach, taking into account the existing limits on the total value of the portfolio in the computable period is proposed. The problems of incomplete application of the portfolio management methodology in the system of public development management in Ukraine were reflected. The paper determined that although the project approach is increasingly used in Ukraine to manage the development of territories, for many acute problems portfolio development management is not used. The necessity of managers training for portfolio management of regional systems development has been substantiated. Suggested the use of value-oriented methodology of project management to manage regional development, which significantly improves the quality of planning and effectiveness of the implementation of development strategy through projects.

KEYWORDS: theory of development management, strategic goals, organizational system, portfolio formation, project portfolio management processes, synergetic effect

INTRODUCTION

In today's fast-paced business environment, project management has become a critical component of an organization's success, especially when it comes to the development of complex systems. Traditional approaches to project portfolio management can be insufficient, especially when priorities change rapidly and resources are limited. Therefore, value is becoming an increasingly important criterion when making decisions about project portfolio management. The aim of this paper is to investigate and implement a value-based approach in project portfolio management for the development of complex systems. The study will focus on identifying, analyzing, and prioritizing projects based on their potential value to the organization and optimizing resource allocation to maximize return on investment.

Recently there has been an approval of project management as a recognized methodology for implementing changes in the system at any level (Anderson & Merna, 2003, pp. 387-393; Bushuev & Bushueva, 2005, pp. 5-19; Turner & Mueller, 2003, pp. 1-7). The formation of a development portfolio is one of the key tasks facing the system of any level: whether it is an individual company, an entire industry or a region. However, the methodology of portfolio management still does not pay enough attention to the value essence of project activities, the synergistic effect of the joint application of hard and soft system approaches. The task of selecting projects in the portfolio that can not only maximize the current level of profit, but also ensure the stable development of certain values, remains unresolved. In particular, the methods for determining the optimal strategy for the development of companies, taking into account the synergistic effect of various components of project management, are poorly developed. The task of forming a portfolio of development is poorly formalized and connected with strategic planning. The possibilities of forming a strategic development portfolio on the basis of the value-based approach remains a relevant task of project management.

This article reviews previous studies related to the dependence of projects in the portfolio. The authors analyze the existing concepts, models and methodologies related to the development of companies through portfolios of projects, taking into account the influence of portfolio components on each other.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

Introducing a valuable approach to project portfolio management enables organizations to respond effectively to changing market conditions, adapt to new trends, and implement innovative solutions faster. In addition, in a context of increasing competition and limited resources, organizations must make strategic decisions about resource allocation to achieve maximum return on investment. Therefore, value becomes a key criterion when making management decisions, and therefore the topic of implementing valuable project portfolio management is current and important for modern organizations. Currently, there is a growing interest in valuable project portfolio management in the context of complex systems development. Organizations recognize that traditional approaches based on criteria such as cost, schedule, and quality do not always reflect the real value that a project can bring to the organization. For this reason, more and more companies are beginning to explore a methodology that allows them to identify and prioritize projects based on their potential impact on achieving strategic goals.

One of the key elements of current knowledge on this topic is to understand the various techniques and tools used to assess the value of projects and their integration into project portfolio management processes. Methods such as value analysis, cost-benefit analysis, strategic analysis, and multi-criteria decision-making models are used to evaluate projects for their business value. In addition, research on the effectiveness of project portfolio management processes in terms of value leads to the identification of best practices and guidelines for implementing this approach in organizations. There is also research on the role of leaders in promoting a values-based culture and building the commitment of project teams to the achievement of the organization's strategic goals. It is worth noting that the development of technology, including data analysis tools and artificial intelligence, also affects the development of valuable project portfolio management. These tools can support project evaluation, risk identification and forecasting of potential benefits, enabling more accurate and sustainable decision-making.

Since the end of the last century, the development of project management was carried out in the direction of expanding the application of the project approach to the sphere of intangible production and social activity (Bushuev, Bushueva, & Amirkhanova, 2006, pp.15-23). As a consequence, the complexity of the system description of the basic concepts of project management and the vagueness of their modeling has increased. This is most clearly manifested in the most complex form of project management today – management of portfolios of projects and programs. A project portfolio is a group of projects that share the same resources and compete for the same resources and are managed by an organization (Archer & Ghasemzadeh, 1999, pp. 207-216).

Portfolio management can be viewed as a dynamic decision-making process in which the list of active projects is constantly updated and revised (Cooper, Edgett, & Kleinschmidt, 1997, pp. 16-28). Appropriate regulatory frameworks and methods for evaluation, selection and prioritization, resource allocation, and knowledge sharing among projects have often been the focus of previous research on project portfolio management (Martinsuo & Lehtonen, 2007, pp. 56-65). The classical approach, originating from operations research, views projects as a sequential series of directed and planned actions that lead to predetermined outcomes (Blomquist & Müller, 2006, pp.52-66) and assumes that participants contribute harmoniously to project goals. This classical approach has been the dominant approach to project management. Research by Fricke and Shenhar (2000) showed that clear goals, management support, responsibility, resource allocation, and prioritization can be success factors in a portfolio. Individual projects in a portfolio cannot be viewed as isolated entities, but they are influenced and influenced by the complex and uncertain nature of their context. Project management effectiveness is influenced by portfolio management structure (Bosch-Rekveldt & all, 2011, pp.728-739) or individual project management techniques (Martinsuo & Lehtonen, 2007, pp. 56-65). Professional organizations such as the Project Management Institute (PMI; 2017) or the Association for Project Management (APM; 2004) have developed their own standards and guidelines for portfolio management.

Project portfolio management is a level of mature project management in an organization that meets the laws of evolutionary development of any level system. During the development of project portfolio management approaches, the Project Management Institute emerged that different management principles should be applied to different types of projects (PMI, 2017). Three approaches are used to address the interconnectedness of projects in a portfolio. The first approach treats projects as independent elements and suggests that they should be managed according to their task requirements. Some scholars (Lenfle, 2016, pp. 47-61; Maniak, Midler, Lenfle, and Le Pellec Diron, 2014, pp. 55-66) argue that in particular, research projects should follow different management principles than operational projects. The second approach is based on the premise that projects in portfolios some should start or terminate in a certain sequence. A qualitative study by (Pellegrinelli, Murray-Webster, and Turner 2015, pp. 153-164) shows that executing a sequence of innovative projects can lead to an organization's strategic market breakthrough. The third approach states that the first project is a research project which creates alternatives that are then used in subsequent projects (Maniak & Midler, 2014, pp. 55-66; Midler, 2013, pp. 24-35).

The modern concept of portfolio management is to create an organization, the activity and development of which can be represented as a set of different components of the portfolio, which provide a constant increase in the value of the organization. This concept pays considerable attention to the management system of the enterprise through the development portfolio, which has certain priorities and dynamically changes depending on internal and external conditions of the organization (Pellerin & Perrier, 2019, pp. 2160-2178). Different concepts and models of portfolio management of organizational development have common shortcomings: – mathematical support of portfolio project management lacks methodological unity and requires refinement of the conceptual model of organizational development through projects; – the high degree of generalization leads to a lack of specificity and difficulties in a detailed description of the value portfolio of projects; – management of the life cycle of the organization and management of organizational transformations through portfolio management does not have a complete set of necessary tools.

When identifying the specific tasks in project portfolio management, the following additional functions are found, which determine the distinctive features of such management: – prioritizing and aligning portfolio management components with strategic goals; – measuring organizational value growth through the use of market-based tools; – providing key shareholders with timely assessment results, identifying the impact of portfolio components on organizational performance.

The value-based approach considers the portfolio as a commitment to create certain values due to the specific mission of a particular organization. Values, as a rule, are spoken about in the context of working out the strategy of development of the company. Several studies have examined the *value of project management* from an organizational perspective (Eskerod & Riis, 2009, pp. 6-13; Thomas and Mullly, 2007, pp. 74-89; Winter & Szczepanek, 2008, pp. 95-103). These studies examine the *value* of the project management function in terms of organizational effectiveness and developing value through

organizational measures such as knowledge sharing and employee satisfaction. In management the chosen values allow to define a vector of development of the company. Our approach focuses on the value created by projects in the firm's portfolio. However, different interpretations of *value* create a serious misunderstanding problem when the overall picture is blurred by the term *mission* and *vision*. These notions entered the lexicon of managers long ago and determine the stable development of the company in the future. But everyone understands that the proclamation of the mission and vision does not guarantee their realization. For this specifically, project management serves as the main inventory of practical activities, by virtue of its own focus on the final result. Exactly the project portfolio is a tool that allows defining clear tasks for executors, so that an optimistic vision of the company's future becomes a reality.

As a result, current knowledge of valuable project portfolio management focuses on integrating various techniques for assessing the value of projects, identifying best implementation practices, and using modern tools and technologies to streamline project portfolio management processes and achieve organizational strategic goals.

The aim of the article is to set the problem of forming the optimal value-oriented portfolio of the development of a complex system, taking into account the mutual influence of the components of the portfolio on each other.

STATEMENT OF THE BASIC MATERIAL

Portfolio management is a standardized approach to effective change management in the system. This approach allows you to clearly define: the end goal and the end result; allocated resources; hourly constraints. Financial portfolio approaches are the most popular, but tend to produce questionable results over the long term. Businesses that focus less on financial approaches and more on strategic methods produce better portfolio results than businesses that use only financial methods.

In recent decades, competitiveness has taken a leading position in economic science as one of the main factors that ensure sustainable development. Management, aimed at increasing the competitiveness of the enterprise, constant development, seems to be the main task of management. In the global economy a broader interpretation of the concept of competitiveness is applied – it is the ability of the system to constantly increase the value and quality of life. Thus, the category *values* becomes one of the key ones at formation of a portfolio of projects of development of the organization.

Modern managers recognize the close connection between strategic planning and professional management of project portfolios, starting from defining the organization's development strategy and finishing with the implementation of individual projects. More often than not, the causal link between strategy implementation and portfolio components turns out to be the most unclear aspect of portfolio management methodology. Structural changes in an organization tend to depend on intangible things that are difficult to measure and even more difficult to implement practically.

The modern state of management indicates the transition from an economy of financial performance to an economy of value. According to the Japanese standard P2M (Handbook for Managing Innovative Projects and Programs, 2009) the project is the obligation to create value, caused by the specific mission of the organization. In modern methodology the main idea of project management is the creation of new value through the implementation of strategy in programs and projects. However, the general principles and models of value-based project management remain understudied. This problem is particularly acute in the portfolio management of organizational development.

The first step in the process of value-based management based on the P2M standard is the description of the mission, which forms the vision of organizational value, for the increase of which the appropriate strategy is developed. Next, the strategy should be transformed into the main goal of the project portfolio and determine the resources necessary for its implementation. The basic principles of portfolio formation, among other things, should determine: the desired composition of projects and programs within the portfolio; the level of risk to which the company is ready in connection with the implementation of the project portfolio, standards and limitations, as well as set key performance indicators in order to monitor them later. According to evolutionary model of human value by spiral dynamics (Don E. Beck, & Chris K. Cowan, 2010) the company forms the development strategy, based

on organizational value system, as it is the deep motives that guide the behavior of managers of the company. The dominant level of environmental value should also be taken into account in the construction of the strategic focus of the campaign development, only in this way it is possible to realize the unique properties of the organization to create its competitive advantage.

The strategic goals of the enterprise and the portfolio of its initiatives are inextricably linked and influence each other. When forming a portfolio of the organization it is necessary to define a system of criteria for assessing the organization's goal and the procedure for selecting elements of the portfolio in the space of given criteria. Only those projects that bring the greatest benefit, satisfy resource constraints and meet the strategic goal of the organization should get into the portfolio. In the PMI knowledge system (Project Management Institute, 2008) project portfolio management is represented by two groups of processes: - The group of alignment processes includes those portfolio management processes that collect portfolio components, categorize them, and subject them to evaluation for inclusion or rejection in the portfolio. This group of processes is activated at the time of actualization of the strategic goal of the organization as part of the formation of annual budgets and plans for the future or in case of changes in the business environment. The group of monitoring and control processes are the processes based on the key performance indicators, with the help of which the portfolio components are periodically reviewed and aligned against the strategic goal. Indicators such as strategy alignment and risk can be monitored by aggregating information on portfolio progress.

Today, the main concept of portfolio formation is a value-based approach (PMI, 2017). This approach involves the formation and periodic review of portfolio components in order to establish its compliance with the increasing organizational value. The main purpose of portfolio planning is to manage along with the continuous development and build-up of strategic organizational value.

In order for the portfolio to create new value, the organization must recognize what its essential value is at this stage and what it lacks for sustainable development, quantify the value, then combine experience, information, data and other resources that the organization possesses to create and obtain the planned value. For a holistic view of the essence of the value-based portfolio management methodology, let's look at each of the processes in detail, presented in order with the inputs and outputs of the respective processes. (Table 1).

Process	Input	Output
Identification	Strategic plan for the definition of components, basic descriptions of components	A list of components, value descriptions of each component, a list of rejected components
Categorization	List of components, basic descriptions of the category of components	List of components categorized by groups
Evaluation	Strategic plan, list of categorizing components, basic descriptions of the component	List of components categorized by groups, quantitative assessment of each component, recommendations, based on the results of the assessment
Selection	Strategic plan, list of grouped components with their quantitative assessments, recommendations for evaluation	List of grouped, evaluated and selected components
Prioritizing	List of grouped, evaluated and selected components	List of grouped, evaluated and selected components according to the strategic category
Balancing the portfolio	List of grouped, evaluated and selected components in accordance with the strategic category, portfolio management criteria, constraints and assumptions, recommendations for portfolio regrouping based on the reporting review	The list of approved components of the portfolio, the final updated list of the main components of the portfolio, the allocation of resources among the updated components of the portfolio
Authorization	A list of launched portfolio components, budget requirements for each portfolio component, resource requirements for each portfolio component	Addition to the list of portfolio components, updating expectations, portfolio component resources, portfolio management milestones
Periodic reporting and portfolio management review	Resource allocation and constraints, corporate management and control standards, evaluation and selection criteria, strategic goal and portfolio management criteria	Guidance on portfolio components, recommendations for portfolio regrouping, recommendations for business, updated key indicators, goal achievement report
Strategic changes	Periodic reporting and revision of the strategic plan	Dynamics of strategic criteria

 Table 1. Portfolio management process

Before starting to form a portfolio of projects for organizational development, it is worth understanding the organization's mission and strategy, and then translating them into the basic principles of portfolio formation. These basic principles, among other things, should define: the desired composition of projects and programs within the project portfolio; the level of risk to which the company is ready in connection with the implementation of the project portfolio, standards and restrictions, as well as establish key performance indicators in order to monitor them later.

Methods of forming a portfolio, which are focused on obtaining maximum income from the investment portfolio, are based on well-known financial indicators (ROI, NPV, DPP, PI). For such a portfolio, the problem of maximizing the total return of all projects, taking into account budgetary, resource, risk and hourly constraints.

The list of candidate projects should include numerical indicators of their likely financial results obtained through preliminary project analysis. But from a value-based perspective, the metrics to be improved need not be directly related to financial returns. A value-based portfolio can use any other indicators that are a measure of the portfolio's value. This is especially important for a wide range of projects that are socially related. Such portfolios have to solve the multi-criteria decision-making problem and deal with a plurality of alternatives, a plurality of criteria and a plurality of scales for evaluating the criteria. If a company fails to build a portfolio, it may not succeed even if it successfully completes all of the projects in the portfolio. The success of an incorrect or poorly conceived portfolio may end up destroying corporate value. Building a project portfolio is one of the key challenges facing any company. Only those projects that add the most value, meet resource constraints, and, most importantly, align with the organization's strategic goals should be included in the portfolio. Portfolio formation begins with the collection of strategic initiatives to identify future portfolio components and then the portfolio components are analysed for compliance with the main strategic goal, which in turn is broken down into sub-goals. Based on the results of this analysis, the projects are grouped in groups according to the priority aspects of the organization's development (Fig. 1).



Figure 1. Model for the formation of an organization's development portfolio

The projects of each group of the portfolio have an appropriate set of value criteria, and the evaluation can be based on a system of benchmark metrics or on weighting coefficients. The breakdown of projects into a group allows you to link projects to a specific subgoal in a certain way. The integral assessment of the project value is determined taking into account the relative importance of the group's values in the planning period and is calculated by the formula (Srivannaboon & Milosevic, 2006, pp. 493-505):

$$\mathbf{V} = \sum_{i=1}^{I} V_{in} g_{in} , \qquad (1)$$

where: V_n – point estimates of the value of a particular project or program; g_n – weighting coefficient of the relative importance of the value parameter of the portfolio component for the time horizon of the strategy implementation; n – number of the core value in the classification, $n = \overline{1, N}$.

Thus, at the input of this model, the following information is needed: – about possible projects (with dependencies); – about the criteria of the goal; – about available resources (limitations); – about the time parameters of the model.

At the outputs of this model, it is required to obtain: – optimal set of components (projects/programs) that form a portfolio; – schedule for the implementation of portfolio components; – resource utilization plan; – indicators of the total value and risk of the portfolio.

It is better to solve this complex problem using mathematical programming methods in the following sequence: 1. The task of selecting the optimal portfolio of companies; 2. Development of a calendar plan for the implementation of projects; 3. Align projects to optimize resource utilization.

The second and third tasks are usually solved with the help of specialized software products for project management, for example, Microsoft Project. For the first task, there is no standard approach, for a large number of projects it is solved using linear programming. Let $C_1, ..., C_n$ be the cost of implementing projects $P_1, ..., P_n$. P_i variables take two values: 0 if the project is rejected and 1 if the project is part of the portfolio. $V_1, ..., V_n$ – the corresponding value values for each project. B is the amount of funding available. Then the task is formulated as follows:

$$V_1P_1 + V_2P_2 + \dots + V_nP_n \to \max;$$

$$C_1P_1 + C_2P_2 + \dots + C_nP_n \le B$$
(2)

As a result of the solution (for example, by the simplex method), we get a set of projects that should make up the portfolio. However, this model can only be applied if the projects are independent. Taking into account the interdependence of projects in the portfolio is a very important point, which reflects the possibility of creating a synergistic effect in the implementation of the project portfolio. Therefore, at the beginning it is possible to evaluate the indicators of the total value of the portfolio without taking into account the interdependence of its components, and then calculate the total effect from the implementation of all components of the portfolio as a whole (synergistic effect).

The synergistic effect of the portfolio is understood as the case when the value of the implementation of the entire portfolio of projects as a whole exceeds the value from the implementation of individual projects of the

portfolio. To take into account the interdependence of its components, the model (2) uses a dependency matrix to determine the additional value obtained from the implementation of dependent portfolio projects. This model was developed by Dickinson, Thorntony and Grave (2001).

A project dependency matrix is a square dimension matrix $n_p x n_p$, where n_p – number of projects. The values of the dependency coefficients are determined by the expert method. Each element of the matrix d_j It can take a value from 0 to 1 depending on the degree of sanctity of the projects. Such a matrix can be represented as follows:

If the coefficient takes the value 0, then the implementation of the project i does not depend on the successful implementation of the project j. A value of 1, on the other hand, means that projects i and j are dependent and the success of one project directly depends on the implementation of the other project, in other words, both projects should be included in the portfolio.

After the matrix of interdependence is formed, it is necessary to determine how the value obtained in the process of implementing project activities is distributed among dependent projects. To do this, you can enter a new model parameter M_i , which shows the proportion of expected value in the case of project *i*, while dependent projects will not be funded. For example, if the proportion of the expected value of the project *i* is M_i = 0,8 and project *i* will be implemented alone, and the expected value from the implementation of project i and dependent projects is 100 units, then the expected value of the portfolio in this case will be equal to 80 units. The remaining part of the value from the implementation of the project i and dependent projects in the amount $(1-M_i)$ is distributed among the dependent projects in proportion to the values of the relationship coefficients d_{ij}. The total share of revenue attributable to dependent projects is reflected in the model by W_{ij} coefficients as follows:

$$W_{ij} = (1 - M_i) \times \frac{d_{ij}}{\sum_{a=1}^{N} d_{ia}}$$
(4)

As mentioned earlier, each project is assigned only one strategic goal by the expert method. The correspondence of strategic goals to projects is described in the N_{im} matrix, the elements of which are binary values, where *i* represents the project and m is the strategic goal. Since in a real situation one project can contribute to the achievement of several goals, in addition to the main value by which the project will be assigned to a certain subgroup, its additional values are determined by experts, which will be taken into account when determining the synergistic effect.

With an estimated value of each project in the portfolio in the planning period, the formula will be calculated using the formula (5):

$$V = (V_n g_{in} + \sum_{i=1}^{I} v_{in} g_{in})$$
(5)

where: V_n , v_{in} – respectively, points of the main and additional value of the project; g_n – weighting coefficient of the relative importance of the value parameter of the portfolio component for the time horizon of the strategy implementation; n – number of the core value in the classification, $n = \overline{1, N}$.

The budget refers to the maximum amount of cash resources allocated for the implementation of portfolio projects in each calendar year $B_t t$. To estimate the effect of a project in a calendar year, it is necessary to enter an intermediate binary variable Y_{it} , which shows whether the project *i* is funded at time t (Y = 1) or not (Y = 0). The total expenditure of the portfolio in each year cannot exceed the annual budget. The value of R_{it} represents both the total project income from project *i* in calendar year t. The model takes into account budget constraints as follows:

$$\sum_{i=1}^{n_p} C_{it} Y_{it} - B_t \le 0, \ t = 1, 2, ..., n,$$
(6)

where n – duration of the portfolio period.

In this model, based on empirical and expert evaluations, each project is assigned a probability of success Pi. The selection of projects for financing in each calendar year is based on maximizing the total value of portfolio *V*, provided that the set limits are met. To simplify the model, the objective function does not take into account the discount factor. Under these conditions, the objective function is as follows:

$$\sum_{t=0}^{n_t} \sum_{i=1}^{n_p} Y_{it} R_{it} P_i (V_i + D_{it}) \to \max$$
(7)

The subsequent search for the optimal solution is determined by the type of problem being analyzed. For a structured problem described by an objective model, methods of additive or multiplicative convolution, selection of the main criterion and mapping of other criteria in the form of a constraint are used. From this information, it is necessary to compose a portfolio of projects that will provide maximum value to the organization. This optimization can be done using Excel.

The advantage of this model is that it takes into account the interdependence of the portfolio components. The value obtained from the implementation of dependent projects is distributed between them according to the coefficients of interdependence, which are evaluated by experts. The disadvantages of the model include the fact that the projects in the model are represented by indivisible units. However, in project management it is customary to divide projects into phases or stages, and at the end of each stage the project can be suspended, and sometimes even closed.

In today's environment, when the volume of information is constantly increasing, project managers are poorly prepared to function in the synergy of the information society. By applying project selection, coordination, and evaluation techniques, as well as reviewing and improving strategy, the organization is addressing the conflicting requirements to maximize the organization's total value through portfolio management. Thus, project managers must develop synergistic (holistic) thinking to embrace the complexity of the problem, to properly understand the connections between phenomena and processes that are relevant to the different levels of project management.

PRESENTATION OF THE STUDY MAIN MATERIAL

Let's consider the formation of a portfolio for the development of a complex system of territorial community in the context of decentralization in Ukraine. When studying a territorial community, aspects of the qualitative characteristics of the living environment are most often distinguished – the economic aspect (job security, average income per family, housing, etc.), the environmental aspect – the study of the community in the natural and geographical space (spatial location, the influence of natural factors on the nature of activities, etc.); cultural aspect, which considers the community as a carrier of a certain way of life, general cultural characteristics, cultural space. The sociological approach considers the territorial community as a social system and describes social values typical of certain groups both within the community and in relations with the external environment.

When constructing a theoretical model of a territorial community, it should be borne in mind that a community is a complex form of social organization, a set of people associated within a certain territory and united by diverse features of a systemic nature. A provision can be applied to the territorial community that it is based on the desire to realize the advantages that join forces gives, leading to an increase in the effectiveness of actions, the ability to defend their interests and thereby create conditions Have a better life. The most important characteristics of a capable territorial community, such as close internal ties and spatial self-identification of residents, are associated with the awareness of their belonging to this group. When analyzing the subjective relations of the community, it is necessary to clearly outline the nature of value interaction and, based on the conceptual model, formalize the vector of development of the territorial community as a socio-economic system. Schematically, the process of creating a strategic plan for the development of a territorial community consists of several consecutive steps (Fig. 2).



Figure 2. Stages of creating a strategic plan for the territorial community development

The model world is an information system that reproduces the subject's perception of the surrounding reality, including the knowledge of other subjects of this reality. You can imagine a territorial community, first of all, as a communication, information system that has a huge number of feedback links and on this basis creates basic self-organizing institutions of life. At the same time, the nature of information feedback is manifested primarily in decision-making sphere, which ensures the integrated behavior of the entire system.

One of the priority activities that should be given priority attention to self-government bodies of territorial communities is strategic planning, focused on at least 3-5 years. Only six communities in Ukraine are successfully coping with this task (Technology of Economic Breakthrough, 2020). However, the development and approval at the session of the relevant settlement council of the territorial community development strategy is only the first stage in achieving a strategic vision for the future. At the tactical level, a project approach should be applied to implement the strategy. The strategy has not been brought to the tactical planned level, without appropriate operational support it cannot be fully implemented volume and most often it remains only in the form of empty slogans and wishes. The strategic goals of the territorial community and the tactical portfolio of projects for its implementation are inextricably linked and influence each other. The definition of strategic intentions of the territorial community serves only as the foundation for the further creation at the tactical level of the appropriate portfolio of projects (Fig.3):

Figure 3. Tactical project portfolio management processes



However, for many managers, for a number of reasons, the combination of strategic and tactical development planning processes remains a dark spot and does not find appropriate professional application. According to a survey on local economic development of the Dnipropetrovsk region conducted in February 2021, more than 90% of respondents said they did not know how to transform the strategy into a portfolio of projects at the tactical level. Consequently, the above predetermines the need for further comprehensive scientific research of transformational tools for the development of territorial communities. Given the dynamics of environmental change, it is absolutely clear that the current model of advanced training in the local self-government sector does not satisfy the need for training both quantitatively and qualitatively. A review of a capable territorial community as a form of realization of social life contains an integrating potential for considering the development of a territorial community through the prism of social dynamics processes. Capable territorial communities of Ukraine should become a driver of direct, positive changes in the system with the constant application

of advanced achievements of modern management. The alarming situation in which Ukrainian society is immersed today does not allow us to approach the development of a strategy for the development of a territorial community as another bureaucratic document. Ensuring the methodological basis for sustainable development mechanisms in Ukraine should be carried out with the introduction of advanced achievements of world and Ukrainian scientists. Since 2003, the All-Ukrainian competition of projects and programs for the development of local self-government has been held by the State Fund for Regional Development (Projects for the plan, 2021). Over the 20 years of the Contest, more than 2,000 projects have won and received state funding. After researching the products of projects created as a result of the implementation of the winners of the competition, it was revealed that among the winning projects prevail with four areas of value: water supply, health care and social protection, road infrastructure and educational projects. Although educational projects occupy a significant share among the winners of the competition, it should be noted that in most cases educational projects include capital/current repairs of educational institutions (see Fig. 4-5).







Figure 5. Qualitative composition of winning projects in 2020

Thus, the dominant values created as a result of the implementation of these projects on the scale of the evolutionary theory of values (Don E. Beck, & Chris K. Cowan, 2010) belong to the lowest level of values - the level of survival (repair of old infrastructure). It is likely that due to the implementation of such projects, the investment attractiveness of the territories is growing, but they can hardly be called development projects. The obtained data indicate that the main goal of most projects is the restoration of obsolete infrastructure, which of course is required by any region of Ukraine. But the law of system development states that long-term use of an outdated system guarantees the stability of the deterioration of its indicators, because the implementation of such projects does not ensure significant development of the region, but only its survival. If we want radical changes in the system, it must be based on a new principle of operation. Under the principle of action, we will understand the peculiarities of using phenomena and consequences aimed at introducing innovations. Therefore, if we want rapid economic development in Ukraine, the qualitative composition of projects should be completely different, the largest share among the winners' projects should be innovative projects that will ensure the rapid development of the regions. These should be projects

that create values at the European level or the fifth or sixth level according to the classification according to spiral dynamics theory (Don E. Beck, & Chris K. Cowan, 2010). Today, Ukraine needs to improve the legislative framework for government programs/projects and organize mass retraining of managers at all levels to master the systemic methodology for implementing the strategy through projects, applying the best and world practices and portfolio management of projects. It is necessary to further introduce into the practice of building Ukraine the methodological foundations for the development of systems based on the integration of strategic and portfolio value-oriented management.

Conclusions

This article provides a basic methodological framework for portfolio management of organizational development. The conceptual framework for portfolio management has been formalized, where portfolio management processes are considered as a means of implementing strategic decisions. The article provides a model for forming an optimal value-oriented organizational development portfolio, taking into account the mutual influence of portfolio components on each other. Implementation of professional project management can improve the efficiency of innovation activities and control over resource expenditure at the national level. The success of development portfolio management should not only be measured by the economic component, but also by the values that influence the sustainable development of the region. The current legal framework for the design and implementation of public projects in Ukraine is not up to date, as confirmed by the findings of international experts and domestic scientists. The prospect of further research in this direction is to identify the specifics of implementation of the proposed method of forming a project portfolio depending on the level of organizational values.

There is a need to create a methodological arm for organizational development portfolio management that takes into account both economic and value aspects. A conceptual portfolio management model was introduced, which treats portfolio management processes as a tool for the implementation of strategic decisions. This model takes into account the mutual influence of portfolio components on each other, suggesting the need for a holistic approach to project portfolio management.

The article emphasizes that the effectiveness of development portfolio management should not only be measured by the economic component, but also by the values influencing the sustainable development of the region. In addition, it is pointed out that there is currently an insufficient legal framework for public projects in Ukraine, which poses a challenge to the effective implementation of the portfolio management approach described.

Therefore, the conclusion is the need for further research that will allow to identify the specificity of the implementation of the proposed method of forming a portfolio of projects depending on the regional context. In addition, it is important to further improve the legal framework in order to create a conducive environment for effective project management that will contribute to the sustainable development of the region.

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