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THE PRACTICE OF MAKING DECISIONS IN THE REAL ESTATE DEVELOPMENT PROJECTS

The practice of making design decisions in the light of decisions of search tools that can be applied to real estate development projects to ensure effective management of product creation project, taking into account features such projects. Fig.1, tabl. 2, ref. 35.

Keywords: real estate development project, decision making, strategic decision, uncertainty, risk, decision-making methods.

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ПРАКТИКА ПРИЙНЯТТЯ РІШЕНЬ В ПРОЕКТАХ ДЕВЕЛОПМЕНТУ НЕРУХОМОСТІ

Розглянуто практику прийняття проектних рішень у світлі пошуку інструментів прийняття рішень, які можуть бути застосовані в проектах девелопменту нерухомості для забезпечення ефективного управління створенням продукту проекту з урахуванням особливостей таких проектів.

E.H. Гладкая

ПРАКТИКА ПРИНЯТИЯ РЕШЕНИЙ В ПРОЕКТАХ ДЕВЕЛОПМЕНТА НЕДВИЖИМОСТИ

Рассмотрена практика принятия проектных решений в свете поиска инструментов принятия решений, которые могут быть применены в проектах девелопмента недвижимости для обеспечения эффективного управления созданием продукта проекта с учетом особенностей таких проектов. Рис. 1, табл. 2, ист. 35.

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INTRODUCTION

Statement of the Problem. During the project decision-making is an integral part throughout the life cycle. When planning a project formed to perform work tasks and milestones are allocated for the adoption of certain design decisions, which are defined as basic. But if all the projects during implementation went according to schedule, that did not arise during the implementation of certain abnormalities or changes, it seems indicated milestones would be enough to confidently make decisions throughout the project. In fact, having the same deviation and changes that need in a short time to make decisions that affect the part of the project that remain, as well as the product itself project.

And as if the thing was only on the initiative of people who make decisions in accordance with their mandate, we would have considered another problem - who manages the project and there is enough in these figures competence. But with practice, it follows that there is a problem in the project may cause significant delays associated with 'understanding of who is considered competent to take a decision as it may affect, for example, the strategic goals of the organization.

Significantly longer duration of implementation, compared with other development projects in Ukraine, the country's economic instability, lack of predictability of the market leads to the need for more frequent than in other projects, review the feasibility and possibility of extending their implementation. In itself, such decisions relating to policy, and their decision is the prerogative of the customer.

Analysis of recent research and publications, the selection of the unsolved problems. In view of the existing books and articles in professional journals and periodicals [1-9], the issue of decision-making in project management will only affect planned situations that must be secured appropriately in the project document. Not address this issue leads to increase in terms of projects and conflicts during implementation.

Isolation of previously unsolved parts of the problem which the article is devoted. Theory of project management real estate development is not considered the question of the time points during the project life cycle, where appropriate to take strategic decisions.

Existing approaches and tools promoted and strategic decision-making by the customer does not allow to take into account the state of the elements of the internal and external environment of the project, defining the customer an idea of the current value of the product of the project. This prevents the customer with sufficient validity to define a strategy for further development of the project.

The goal of the paper is study of the practice of making design decisions through the prism of the search decision-making tools that can be used in real estate development projects to ensure effective management of product creation project taking into account the features of such projects.

THE MAIN RESULTS

The methodological basis of the work is a collection of methods of scientific knowledge, methods and techniques used in the research process, including: analysis, synthesis, induction and deduction.

Consider the practice of making design decisions in the light of decisions of search tools that can be applied to real estate development projects to ensure effective management of product creation project based on features that were found in previous studies:

- implementation of real estate development projects affecting the interests of many participants in economic activity and population, changing flow conditions of economic and social processes in the territory, which includes high levels of state and public attention and control over the development of real estate;
- real estate development project success largely depends on how they meet the socio-economic conditions of the region, the requirements of potential users, whether they are competitive with respect to existing projects;
- real estate development projects are implemented in an undeveloped market, and since they are mostly innovative, their implementation is associated with considerable uncertainty and a whole set of risks;
- initialization of real estate development projects associated with the presence of land as a basic product configuration project;
- part of the customer is an integral part in making decisions on planning and implementation of development properties.

Decision making is an integral part of project management [10, p. 4]. Today there are quite a number of publications as on project management [7, 11] and for decision-making [12, 13]. Based on the concept of the "3M" [14] the authors study in "Project management as a decision-making: the construction of a matrix of people who make decisions within the project life cycle" [15] expediency consideration of several levels of decision-making:

- strategic (company owner / CEO);
- tactical (senior project management office / business manager);
- operational (project manager / project team);
- personal (contractors of the project).

This classification is appropriate for use in the management of real estate development projects (figure 1).

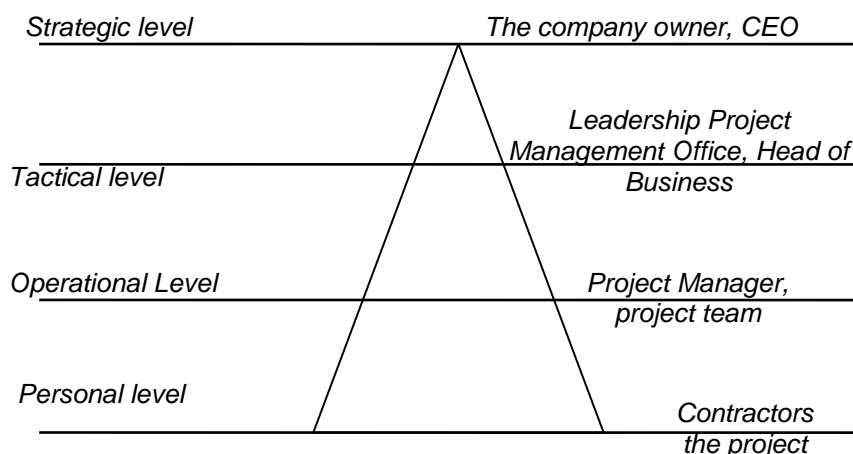


Fig. 1. Level design and matching individuals decision makers

According to the work of "Making design decisions" Balybina V. M., "decision-making – most charge and intellectual sphere of human activity in project management" [10, p. 7]. Balybin V.M. considers the task of choosing the best options projects with limited funding and other resources. A scientist isolates the following features of the problem:

- acceptance of erroneous decisions are often associated with high material costs;
- many tasks are unique because there are no universal mathematical model for their solution ;
- in selected solutions should be considered major constraints and individual performance data , that the task is difficult from the standpoint of mathematical calculation;
- to solve most problems there are no reliable data , that there is a need to make decisions under uncertainty ;
- most tasks require prompt resolution;
- to solve many problems need a large enough reference material (databases);
- in many cases to make the right decisions previously could be used only qualification, experience and intuition expert (the expert).

Balybin V.M. believes that the success of solving these problems largely depends on how clearly and correctly formulated, which selected methods for their solution and how well the results are interpreted solutions. Clearly, the author singles out a number

of "typical" design problems, where the most appropriate to use methods of decision-making, but that the definition of "design solution" is missing.

Also, the authors suggest to use the classification decisions made by the criterion of importance to the enterprise and the severity of the consequences if they turn out to be false:

Strategic decisions are long-term projects and to the direction taken by the top level:

- tactical decisions relating to projects of medium length and made mid-level;
- operational decisions regarding short-term project tasks taken managers at various levels.

But with the classification can not understand what a "strategic design solution", and what are the features of its adoption.

Also in the "making design decisions" is a method of making design decisions based on the phase of the life cycle and the conditions in which decisions must be made [10, p. 43]. When choosing the methods used to make decisions, you need to first of all consider the conditions and phases of the project life cycle (table 1).

As can be seen from the proposed guidelines, it is believed that the total uncertainty and vagueness of decision-making conditions, available only at the stage of concept development. But in real estate development projects complete uncertainty exists throughout the project life cycle, which exists as a result of rapid formation of the real estate market Ukryiny. Also the structure of the life cycle of real estate development is very different from this one.

According to the work of "Project Management" Mazur I.I., Shapiro V.D., decision-making is one of the functions of project management and is carried out in all phases of project management [7, p. 56]. But when we look at the work elucidated the function is not given separately [7, p. 303-392]. In the "Development" of isolated only as functions of monitoring and control of the project, which identify five main possible courses of action (design decisions) that are commonly used in the case of deviations from the plan [16, p. 373]: find an alternative solution, the value of viewing and view the terms and view the content of work, completion of the project.

Among these options for design decisions only in the latter states that it is "most difficult decision" that "is connected with overcoming psychological problems caused by the interests of the various stakeholders". In other words, the authors of this study, as the authors of the previous work did not specify the concept of "design solution", but it does not allow to know which position we should analyze the situation arising in the course of the project, and what do you need to take design decisions and moments of time.

Table 1

Recommendations by the methods used decision-making

Aggregated stages of the life cycle of the project	Terms of decision-making			
	complete uncertainty	uncertainty	partial uncertainty	certainty
Concept	methods of peer review, game theory	methods of peer review, game theory	Bayesian methods	analytic hierarchy process
Planning	-	Methods Hurwitz, Savage, game theory	Bayesian methods, game theory	analytic hierarchy process
Designing	-	Methods Hurwitz, Savage, game theory	Bayesian methods, game theory	methods of Operations Research

Production	-	-	methods of mathematical statistics	methods of mathematical programming
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As the authors Mazur I.I., Shapiro V.D. making design decisions associated with the occurrence of certain predictable situations during the project, you should consider the tools offered by them for risk management in the project. Risk management is a separate subsystem project management. The paper noted that "the decision-making processes in project management there is usually in the presence of a degree of uncertainty ..." [7, p. 514]. Thus once again the definition of the project design and its place in the management of projects are given. Only states that quantitative risk analysis based on mathematical models of decision making [7, p. 528].

The paper by J. Rodney Turner "The handbook of project-based management" issue decisions, including strategic, considered within the usage patterns of distribution of responsibility [17, p. 131]. This tool is usually used in the planning of the project. The authors of this study propose that the division of responsibilities at three main levels:

- project level – Procedural diagram of the distribution of responsibilities;
- strategic level – the scheme of distribution of responsibility for control events;
- tactical level – the schedule of work.

To determine the level of responsibility introduced the concept of "roles and responsibilities of project participants" and "ways of decision-making" (table 2) [17, p. 131].

Also in the states that these designations are offered breast K. Breast and T. Haug and meet most design requirements. But it is unclear on what the requirements referred to how determined and nominated role in some cases it is necessary to make decisions, methods and models used for this purpose.

From table 2 do not understand why at the court considered only three.

Table 2

Methods of decision-making

Method of making a decision	Person			Exposition
	A	B	C	
D1	D	-	-	A decides unilaterally
D2	-	d	d	B i C together participate in the decision. If they reach an agreement, the decision is made - if not, they turn to a higher level under normal management channels
D3	D	d	d	B i C may reject the proposals and make recommendations. And with the power to make final decision
D4	D	d	C	Conclusion C should be considered (but can be ignored). B may reject the proposal. A has the right to make final decision/

Work A.V. Boyko "Project management using support systems for collective solutions" dedicated development and research models, methods and algorithms for building an effective support system for collective management solutions project [18]. The author gives a comprehensive information technology support collective decisions in the management of projects, simulating the intellectual work of the manager and the project team on the basis of computer representation and processing of knowledge management processes projects. Designed on the basis of the proposed integrated mathematical model of software system for collective decision support STURM-2000

allows you to design and make management decisions that affect the implementation of the project at various stages of its life cycle. But the work does not specify exactly which types of management decisions designed model who and how is participation in development and decision making. In addition, this paper does not take into account the specifics of the projects, which is proposed to apply the specified system.

In this paper, D.S. Molchanov "The process of strategic decision in an organization active in the Russian real estate market", stated the specific definition of some key concepts relating to the property market, the nature of mediation, the strategy of serving the real estate industry, having in some cases, certain methodological significance [19]. The strategy of using the balanced scorecard model in making strategic decisions. A study and synthesis of practical experience in implementing an adapted model of the balanced scorecard in a large Russian company by the necessary conditions for its use and algorithm implementation of the balanced scorecard based on the most probable difficulties that arise in practice, and made practical recommendations for improving the methodology of implementation. Also formulated the principles of the formation evaluation criteria and the choice of strategic alternatives for companies operating in the real estate market and the necessity duplication of project teams working in the design and evaluation of strategic alternatives.

But the issue of strategic decision-making in this paper relate only to the strategic development of the organization. In addition, the paper contains a deep analysis of existing approaches to strategic decision-making and reasonable use of the most appropriate one in practice, in particular the balanced scorecard. This paper addresses issues not related to the implementation of selected strategic alternatives through the implementation of relevant projects.

In this paper, O.B. Lisitsyna "Methods and models of product-based planning of development projects", a new approach to the planning of development projects in the conditions of unstable economy, based on the principle of non-critical planning, aimed at determining the timing of works that will allow the project to obtain the product during the growth of real estate prices and to do the same work at a time when the price of resources is minimal [20]. Also formalized model cost-benefit in the implementation of development projects during the unstable economy. A mathematical model of structural and product planning projects based on stochastic formalization of the following links in the product structure development projects, provides a problem-oriented design methods and tools for optimizing actions developer in a crisis. The authors have developed a new method for structural planning of product development projects. The method allows to model situations associated with the implementation of the work plan according to the variants of the network graph and determine the actual turnaround project. The result of using this method in the process, simulating the performance of work in development projects is the rational model of the network topology and rational values of the actual time of the start of work of the project.

However, the proposed approach is based on model selection strategy for managing development projects in crisis, unspecified times making strategic decisions, where an intermediate product configuration project has a local maximum market value, and decisions are made by comparing project costs, the cost of intermediate product configuration design and the cost of resources for its implementation, taking into account the stage of the economic cycle of the country. Thus the value of the intermediate product configuration project is determined only by its performance value.

In this paper, S.M. Maximov "Property Management" questions the economic foundations of decision-making in real estate are considered based on market analysis and assessment of project cost management [21]. But this is only the

decisions taken at the stage management (operation) of the property in terms of getting maximum yield from it.

In "Development", edited by I. Shapiro decision is considered in terms of choosing the best scenario achieving the intermediate objectives of the project (eg, selecting the best marketing strategy to promote a product of the project) or in terms of the rationale for the project (to obtain the greatest economic benefit to the customer and/or investor) [16]. That is not taken into account in decision making. Specify decisions are only operational level.

In works Mhberе CH.O. the problems of strategic real estate development project evaluation under uncertainty, which leads to a dynamic environment, and examines the strategy decision-making model based on "valuation of real choice of investment projects development company" [22, 23]. But the proposed methodology focuses only on maximizing the value of investment real estate development project.

One of the main processes that accompany the implementation of real estate development projects, there is a change management process and quality [24]. In the works Bilokin A.I. stated that the project management methodology as an effective tool for introducing new technical solutions in real estate development projects are actively used in practice [25, 26]. In this implementation is not done formally, it affects the organizational structure. Question the effectiveness of organizational structure of project management real estate development is not completely resolved. There are two approaches to this issue: the first – the creation of the internal structure of the real estate development companies in the group, the second – to attract foreign real estate developer [27]. But regardless of the organizational structure of the process, which must operate in the implementation of development projects remain unchanged. In this case, the criteria to be considered for strategic decision-making in projects is not clear.

In works Danchenko O.B. is devoted to a database of automated budgeting construction projects of complex energy facilities, risk-based methodology and current change management in projects [28 – 34]. But making design decisions in these works are based on the determination of quantitative values budgetary risks and the calculation of the possible scenarios of the project.

In "Knowingly speak of risk: investment decisions in real estate development" raises questions of risk management development project and rational decisions during its implementation [35]. The author believes that participation in development projects – a conscious risk. Real estate development projects have to manage the risk of developing the idea phase to the phase of the operation of the property and its sale. This paper investigates the most investment risks throughout the project life cycle. A number of quantitative models for risk and investment decisions. But making investment decisions under consideration are associated with the choice of the most suitable conditions for the further implementation of the project on the basis of reducing or taking risks.

DISCUSSION

Justification of the results. When searching for answers to the main research question: "How to make strategic decisions in real estate development projects?" revealed the existence of cognitive imbalance that manifests itself in:

- uncertainty points in time strategic decision-making and the criteria that are used at the same time ;

- absence of existing approaches and models of evaluation value of the product real estate development project performance evaluation list that would take into account the specifics of such projects;

- imperfections Dataware evaluation value of the product real estate development project in the absence of correct tools providing information about the task of organizing customer, the actual state of the property market and property created.

Conclusions. Analysis of the nature of the detected imbalances proved that the best way to remove it is to develop a method of preparing the information to make strategic milestone decision in real estate development projects in order to justify the choice of one of the possible strategies for further development of the project.

Prospects for further research in this direction. The analysis results indicate the need for further development of tools for decision-making in real estate development projects.

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