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Innovative technology for assessing the quality of management of construction contractors

Increasing the influence of market mechanisms in the economy of Ukraine, deepening integration processes and entering world markets as a result of the transition from a planned economy to market forms of management, strengthened the task of domestic enterprises to achieve and maintain a high level of competitiveness. Solving this problem requires in-depth functional analysis and adoption on its basis of a balanced multi-criteria structured solution using the mechanism of assessing the effective formation and use of resources of construction companies as specific operating systems of development management.

The requirement to build an economic model of investment support of the construction company is the use of multiple sets of factors of activity (including the level of development as an innovation and investment infrastructure of the construction project), which has a dual purpose: on the one hand - acts as an objective indicator of competitiveness. allows the investor to have a clear idea of the level of investment attractiveness of the enterprise as an object of foreign investment; on the other hand - as a tool for diagnosing the state of implementation of the investment program and making appropriate functional and investment decisions.

The organization of construction is a complex, time-consuming multi-stage process that requires coordination of all types of work and their performers both in time and in relation to the use of material, technical and other resources. Construction is two interconnected parallel asynchronous processes: providing resources and performing a sequence of works. Moreover, the process of work depends on the availability of resources, therefore, it is subordinate. One way to optimize the

execution of construction works is to coordinate individual works and provide resources, and the provision of resources must precede the execution of works.

Obviously, changing circumstances on the construction site may require significant adjustments to the implementation of the plan, but in any situation, the construction manager must have a clear idea what to do in the coming days, weeks, months. The normal course of construction is possible only when it is thought out in advance, in what sequence the work will be carried out, how many workers, machines, mechanisms and other resources will be needed for each job [1; 2].

In the conditions of real construction the task of planning of stages and operations of realization of the project is urgent, constantly arising, and therefore actual. Rational use of resources and time requires their improvement and finding the most appropriate and optimal methods of their use.

The effectiveness of further improvement of construction management largely depends on how well developed the base of resource standards for construction processes.

The quality of resource standards for construction depends on:

- first, from the extent to which the primary uniform, departmental and local production norms of resource consumption at the level of elementary processes and operations developed by the methods of technical standardization meet the modern requirements of construction production;
- secondly, from the extent to which there are methods of their transformation into consolidated production or estimate standards and indicators of resource costs of different levels take into account specific production conditions, variability of design, spatial planning, as well as technological and organizational solutions;
- thirdly, from how timely the regulatory framework is updated, ie obsolete norms, standards, indicators are excluded, new ones are developed, existing ones are listed taking into account modern methods of technology and construction organization [3].

The old regulatory framework, created for the functioning of the construction industry in a planned economy, is unsuitable for the market and not only slows down construction, but also increases the number of errors, which leads to undesirable results. The proposed approach involves the organization and conduct of computational experiments on a simulation model to compare and evaluate existing standards of resource consumption in construction. Simulation modeling allows to increase the level of automation of production preparation, to develop standards of resource consumption for typical and individual projects. A large amount of work to clarify the existing standards of resource consumption can not be carried out without the use of computer simulation.

The specificity of modeling systems is determined by the technology of work, a set of language tools, service programs and modeling techniques. Simulation of a controlled process or controlled object is a high-level information technology that provides work on creating or modifying a simulation model, as well as the operation of the simulation model and the interpretation of results. Simulation modeling allows you to create models of construction processes, which simplifies the creation of a resource regulatory framework. Estimation-level processes consist of elementary processes for which norm-setting factors can be calculated much more specifically.

References.

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