

## EXTENSION OF THE STAGES OF INVESTMENT PROJECTS` EFFECTIVE MANAGEMENT ON THE BASIS OF OPERATIONAL ACTIVITY`S RATIONAL ORGANIZATION

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**Abstract.** *Problem issues of enterprises` investment projects introduction have been studied. Structure of every enterprises` investment projects management stage and their characteristics have been defined. Goal of every investment project`s introduction stage taking into account investment resources need and information processing as for the applied investment projects have been marked. Stages of business investment projects `efficient management regarding development of efficient system of decision making control of managerial system have been suggested. System of investment projects` management not identical to existing ones has been submitted. It has been implied to study it as set of elements, which determine planning process, analysis, organization, introduction and monitoring of an investment project, planned budget, project timing, considering environmental threats and risks to take meaningful decisions, avoiding mistakes and improving organizational structure of an investment project.*

**KEYWORDS.** *THREATS, RISKS, ORGANIZATIONAL STRUCTURE, INVESTMENT PROJECT, INVESTMENT RESOURCES, STAGES, PHASE, IMPROVEMENT.*

**Definition of the problem.** With ratification of the Law of Ukraine "About enterprises in Ukraine" and as a result of privatization the amount of small enterprises, private creative workshops, self-supporting groups engaged in planning has increased substantially.

Many enterprises do not have a stable structure and permanent technical management, and their manufacturing staff performs two jobs. The quality of project documentation of such enterprises is low.

Quite often such enterprises develop projects at their own discretion without reasonable technical decisions and technical economic indexes, without following the state norms in relation to project documents. Technical researches are not often performed, protection of underground parts of building from floods are absent in projects, energy supply is designed without the pre-project previous tests.

For this reason the corresponding laws of Ukraine stipulate licensing of separate types of building activity.

However it is necessary to underline that licensing in building has the qualifying character, especially - only enterprises or individuals which are technically and professionally able to execute the declared types of works can get the corresponding license. To execute such estimation on the basis of documents presented to authorities by an applicant in accordance with the new law is impossible. Besides nobody can perform such estimation: one or two specialists are in the staff of local authorities.

In 1996- 2018 the State Construction Committee of Ukraine jointly with the National Standard of Ukraine created the System of certification of products of building complex (UkrSCPBC), about 20 bureaus of certification and over 100 testing laboratories [1, 2, 3].

The experience in certification showed, that this process enables to constantly take measures in improvement of quality and technical level of products, protection of domestic producer due to some limitation of import of commodities for the production of which Ukraine has its own potential.

Taking into account all the above stated the State Construction Committee of Ukraine supported the initiative of National Standard of Ukraine in relation to the necessity of the detailed elucidation of clause 12 of the Decree of the President of Ukraine on deregulation of entrepreneurial activity, which proclaims that "commodities (products), except for food, the quality of which is confirmed by certificates granted outside Ukraine according to the international standards of ISO and other international standards, do not need the certification in Ukraine".

Such version of clause 12 of the Decree of the President of Ukraine limits the opportunities of a domestic producer, does not take into account the requirements of the laws of Ukraine in the

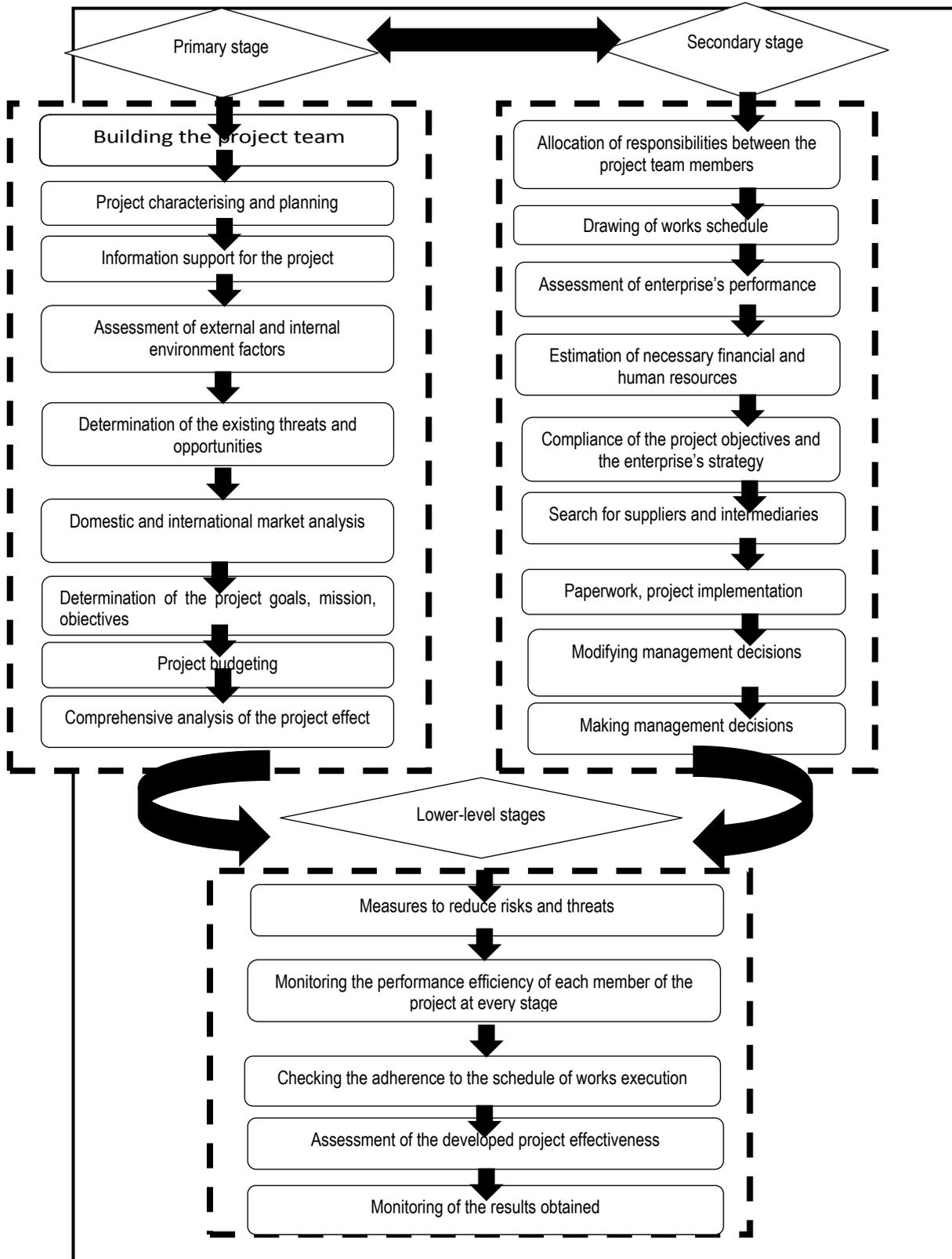
sphere of safety of certain products, creates uncontrolled ways of getting into Ukraine of off-grade or even dangerous (according to our requirements) products.

This concerns the development of the structure of construction; this entrepreneurial activity cannot be carried out without capital investments. Budgetary facilities and foreign investments are needed for this purpose. The problem of the search of such additional double impulse of development of economy through building investments deserves consideration. The analytical principle of building investments can be formulated the following way: the primary increase of profit, which is caused by their increase, results in presentation of quota of consumption which provides the next increase of profit and the consequent increase of welfare. The effect influences not only the increase of profit but also the increase of additional investments of building organizations with the purpose of satisfaction of growing consumer demand. By means of realization of investments and enterprise on the developed infrastructure Ukraine will bring an own economy.

In the industrially developed countries over three quarters of capital investments are building investments in new construction, reconstruction and expansion of production capacities. They reinvest the specific building industry. One-time character of building investments provides stabilization of the market and economic cycles.

**Presentation of key topics.** At present, the nature and division of investment project management into stages have not been researched in full. In addition, there is no single approach to distinction of management stages among domestic and foreign scientists

Based on the analysis made, we complemented and extended the stages of the investment project management process at the enterprise. Contrasted to those recognised, we divided the stages of investment project management into primary, secondary and lower-level stages, since they provide an opportunity to rationally organize the process of investment project management, allocate responsibilities, establish the interaction between the management object and project managers, take into account capabilities of the enterprise, which will facilitate efficient project management and successful project implementation, establishment of the industrial enterprise`s activities, and as well determines the level of impact on the environment, formation of the state budget, a social component. The suggested stages of management process are based on substeps, which enables planning and allocating tasks among project team managers in order to rationally organize the process of investment project management. We should consider in detail the structure of each stage of management process, which is given in Picture 1.



Picture 1 Stages of business investment cycle [developed by the author based on [6, 112; 7, 85; 8, 246; 9, 176-178; 10, 66-67]

Simultaneously, project implementation will be successful only with development of an effective system of monitoring management decisions, availability of protective measures against threats from the environment, based on the experience of already implemented investment projects and systems of their monitoring.

The primary stage. The purpose of this stage is to determine the need for investment resources, collecting and processing of information on suggested investment projects, selection of project. This stage is comprised of nine substeps and

involves the following activities: building the project team – this substep involves allocation of responsibilities, determination of each participant’s responsibilities, depending on the size of investment, selection of project and units managers, and determination of the project team composition; project characterising and planning – definition of the project idea, formulation of the problem, building of the project structure; information support for the project – collection and processing of information on implemented investment projects, determination of

weaknesses and possible threats to these projects, primary analysis of the enterprise's financial position, reviewing the accuracy of documents; assessment of external and internal environment factors – identification of environment factors that affect the enterprise's activities and offset their impact; determination of existing threats and opportunities – evaluation of potential threats and development of measures to reduce adverse effect of identified risks, shaping possibilities of investment project implementation; domestic and international market analysis – this substep involves data collection and assessment of enterprise's competitiveness in the market, which affects project tasks formation; determination of project objectives, mission, tasks – this substep purpose is to clearly define the enterprise's needs, strategy and rationale of its participation in the project.

At this stage the decision is made regarding the enterprise's participation in the project and, accordingly, objectives and tasks are set; project budgeting – according to the objectives, the amount of financial support for the project is estimated, the expenditure is analysed and revenues are forecasted. In addition, the expenditure should not exceed the total allocated budget as this will determine the need for borrowing sources and reduce the project effectiveness; a comprehensive analysis of the project effect – social analysis is carried out, i. e. the project impact on the population is determined, benefits and adverse effect of the project are evaluated, analysis of the environment is made to reveal the project impact on the environment, and profits or loss for the local budget from the project implementation are estimated.

Secondary stage. The purpose of this stage is a detailed analysis, project development and implementation, organization of the project management process, interaction between the enterprise and project team.

The secondary stage is carried out by performing the following substeps:

1) allocation of responsibilities between the project team members, determination of their performance time – heads of each project unit allocate the tasks to employees and establish the terms for the tasks completion. At this substep, if necessary, training of personnel is conducted; employees should interact and collaborate to improve the quality of works performance;

2) drawing of works schedule, determination of the project completion terms – each phase of works and the tasks volume should be performed within the specified terms as delayed completion of works will adversely affect the final result, so the schedule of works for each project substep is drawn;

3) enterprise's performance assessment, conducting a financial analysis – a deeper and more detailed analysis of financial sustainability, solvency, business activity and profitability of the enterprise is made, the balance sheet, statement of financial performance, statement of cash flows, validity of the signed agreements are verified;

4) estimation of necessary financial and human resources – assessment of the level of financial resources availability is made and the need for borrowed funds attraction is estimated; if necessary, the selection of international representatives is made to exchange experiences and attract innovative technologies;

5) establishment of compliance of the project goal and enterprise's strategy – at this substep the project goal and enterprise's objectives are checked with the aim of establishing the interaction of the enterprise's management and project team;

6) search for suppliers and intermediaries – provided that the project goal is organisation and extension of production, changes in a product range, increase in production capacity, there is a need to develop supply of raw materials and conclusion of contracts with suppliers;

7) paperwork, project implementation – at this substep documents are prepared and legally defined, management structure is determined, production technology is selected, contracts with suppliers and investors are prepared, marketing events are held. In case the enterprise's is constructed, land and equipment are purchased, construction works are carried out;

8) modifying management decisions – in case of

identifying deviations from the plan or a lack of financial resources caused by threats and risks, management decisions are modified and agreed with project managers through relevant decision-making;

9) making management decisions – the final substep which should ensure the effectiveness and profitability of the project.

3. The lower-level stages consist of the following: measures to reduce risks and threats – they are developed on the basis of the analysis of the enterprise's activity, assessment of the identified factors of external and internal environment impact on the production process and functioning.

These measures are used at each project stage, which reduces risk and increases safety of development; monitoring the efficiency of each member of the project at every stage – this stage increases the level of responsibility of employees for quality performance of tasks and provides financial incentives for early works completion; constant monitoring of achievement of the set objectives, compliance with the works schedule – all tasks should be performed within a specific period of time, according to the plans; assessment of the developed project effectiveness; monitoring the obtained results – on condition of a high level of the project efficiency or inefficiency estimation and analysis of the estimates in order to determine the reasons for such a result and use such experience in implementation of investment projects.

In our view, only on condition of sequential execution of each substep of the project management process, adherence to the set requirements and interaction of the project managers, investment project will be a success. In addition, successful management of an investment project depends on the following: well-formulated project objectives; estimated amount of the necessary financial resources and investment size; adherence to the schedule of works execution; rationality of responsibilities allocation at each stage of project management; establishing the responsibility of project managers; determining the compliance of the project completion date with the accepted schedule; efficiency of the designed measures for protection from risks; reliability of the project reports; effectiveness of project monitoring and making adjustments to the plans.

The system of investment project management is a set of actions and methods aimed at organizing investment project work, development of recommendations for management process improvement, avoidance of potential mistakes, making correct management decisions to achieve the planned effect. The author developed the system of investment project management, which includes six parameters, namely: input parameters; output parameters; management object; instruments; management bodies; external environment. In his research management system principles are analysed as well, and it can be noted that only under condition of interaction of these system elements, the project participants will achieve a desired effect.

In our opinion, the system of investment project management is a mechanism, consisting of related elements, which takes into account risks of external and internal environment, needs of project participants and amount of financial resources, estimates the project duration with the view to avoid errors in project implementation and reach the success desired within the planned budget. The issue of the management system for investment activity at industrial enterprises has not been investigated in full; the structure and elements of the management system have remained unrevealed. Therefore, we suggested a system of investment project management, which, unlike the existing ones, is a complex of elements, which define the process of planning, analysis, design, implementation and monitoring of investment project given the planned budget, project duration, threats and risks from the environment with the aim of making effective management decisions, avoid errors and improve the investment project organizational structure.

The given management system is an open system since it takes into account the impact of external and internal environment factors, enables risks assessment, development of measures and ways to avoid their adverse effect. In addition, the management

system involves a set of related elements, which enable achievement of the set objectives and goals for development.

Environment factors and external environment affect the management object, i.e. the enterprise by shaping input and output parameters. The management object is only the enterprise's managers and staff who utilize investment resources in accordance with the purpose of the activity. External environment includes suppliers, competitors, consumers, lenders, intermediaries and other organizations. Environment factors affect raw materials, financial resources, fuel, engineering support, which are delivered to the enterprise and determine the parameters and requirements for volume, quality and range of products, services and innovative technologies. Provided that unplanned changes in the functioning of the management system elements take place, this will adversely affect the final performance.

The internal environment factors only affect the management object, i.e. the process of formation, utilization and allocation of financial resources, circulating assets, organization of production process, replacement of obsolete equipment, organizational structure, development strategy, allocation of responsibilities and interaction of staff, speed and quality of production, timely payment of tax obligations, marketing policy and so on. The consideration of these factors is important in determining the compliance of the enterprise's strategy and objectives of the investment project.

The project team consists of a project manager and team, i.e. investors, customers, managers, suppliers, intermediaries, a designer, subsidiary structures and organizations, managers of project units and personnel. Project managers can be not only investors but also representatives of enterprises (clients) who are equally responsible for the project results, objectives attainment, intended use of financial resources, compliance with the project's schedule. Project managers receive necessary informational support for the enterprise's activities, that is, financial statements, contracts, documentation to assess financial position and make appropriate decisions. After processing the data on the enterprise's activity, evaluating the project prospects, management subsystems are formed by each project unit, i. e. building of subsystems for managing the implementation time, human resources, risks, finances, sales, raw materials supply, allocation of resources, production process and project objectives. The reasons for project termination can be as follows: increasing threats from external environment; violation of the schedule terms; conflicts between investors and executives of the enterprise; lack of financial resources; reduced effectiveness of the project and increased costs; development of more efficient investment projects. The project team affects the management object by making management decisions, adhering to the functions, principles and management methods.

The management process begins with definition of the purpose and shaping of the goals and objectives, without which no investment project is feasible and there are no reasons for its implementation. Goals and objectives of the investment project should correspond to the interests of the enterprise. Then the analysis of the enterprise's financial activity results is made with the aim of concluding new contracts and obtaining loans.

In the project management process a significant role is played by methods, since they are applied to assess risks and threats of the environment, determine the project duration, main purpose, goals and objectives, create a project team, estimate funds, determine the volume of financial resources needed, estimate costs, generate the project budget, monitor and evaluate the effectiveness of the implemented project, make management decisions, sign contracts with suppliers. Thus, the process of organization of the project management system depends on the rational use of management methods.

**Conclusions.** Each management system should be based on the following principles: reduction of risks; increase in revenues; creation of conditions for achieving the desired result; costs

evaluation and reduction; project adjustment and modification; balanced management decision-making; consideration of corporate strategy; adaptation to the environment variability; compliance of the project objectives with the enterprise's objectives; assessment of efficiency of investment project management; monitoring results.

The main functions of project management include planning, analysis and control. Methodology of investment project management is based on the following functions: planning; control; accounting and analysis; management; motivation; organization. Adhering to the functions, implementing the principles and applying the methods, the project team effectively plans, makes and modifies management decisions.

The next element of management system is assessment of threats and risks, determination of their impact in order to develop the ways to counteract and eliminate the adverse effects of such an impact. In addition, early detection of threats provides an opportunity to reduce costs and increase project profitability and effectiveness as well as sustainable development of the enterprise. Budgeting of the project is carried out only after detection and analysis of all possible threats of the market environment, assessment of financial stability and estimation of the required amount of borrowed resources.

In case of changing the goals of the investment project or due to disruptions in the production process at enterprises caused by environment factors, the project team can modify the objectives and management decisions. The given changes are made to improve the effectiveness and profitability of the investment project.

At the final stage management decisions, which affect the enterprise's activities, are made. Therefore, every decision is discussed, possible consequences are assessed, and the decision is made provided the effect of its implementation is positive. Then the analysis, evaluation and monitoring of the results obtained are carried out. The project team evaluates the compliance of the results obtained to the goals set, determines the efficiency of the system of investment project management.

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