

# Formation and implementation of an innovative program at cause-and-effect approach

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*Abstract – The article examines methodic aspects of the formation and implementation of innovative programs. Basic stages of these processes are defined. The essence of the concepts of "innovative idea" and "innovative intention" is considered. The essence of the concepts of "project utility" and "project efficiency" is revealed. The model of the formation and implementation of the innovative program at the cause-and-effect principle, which is based on primary preconditions, motives and stages, is proposed and scientifically reasoned.*

Key words: innovative program, innovative project, innovative idea, innovative intention, innovative potential.

## I. The essence of the formation and implementation of innovative programs

Efficiency improvement of national enterprises is impossible without a systematic and comprehensive introduction of innovations. Innovative activity at the enterprise is carried out through the process of the formation and implementation of innovative programs.

In our opinion, the cycle of the formation and implementation of innovative projects consists of three basic stages (intention, development and, in fact, implementation), which are based on structural and functional preconditions (idea, utility, potential) and are determined by motive reasons (intention, feasibility, possibility). It enables the introduction of the formation and implementation of the innovative project as a set of phases(stages), primary preconditions and motives (Fig. 1).

Each element of the proposed model is further considered in details.

## II. Formation of the innovative intention

An innovative idea is a form of theoretical knowledge, understanding of certain phenomena and processes for their further practical transformation considering certain regularities and relations. The idea has a well-defined purpose which at the initial stage is not supported by a concrete understanding of the further course of its implementation.

Sources of innovative ideas, according to P. F. Druker, are the following:

- an unexpected event (for an enterprise or industry) – unexpected success, unexpected failure or unexpected external event;
- incongruity– the discrepancy between reality(as it really is) and our perception of it ("as it should be");
- innovations based on the need of the process (its drawbacks and weaknesses that are to be eliminated);
- sudden changes in the structure of the industry or the market; demographic changes;

- changes in perception, mood and value guidelines;
- new knowledge (both scientific and non-scientific) [1, p. 48].

However, the production of an innovative idea does not always happen, based on rational considerations but also spontaneously, under the influence of internal impulses, regardless of exogenous factors. Motivation can be diametrically opposite – from altruistic (public goods, caring for the well-being of others) considerations to exclusively selfish (money reward, recognition, career growth). That is why the effective management of the innovative process involves not only the study of opportunities for the search of innovations, but also the provision of conditions for the generation of ideas by initiative, creative, innovatively-active employees. One of the possible mechanisms for achieving this goal, created by modern science, is entrepreneurship.

The activity of entrepreneurs can cover the entire management cycle at the enterprise and relate to the generation of innovative ideas aimed at technology development, human resource management, marketing, material support, logistics, etc. The creation of comfortable working conditions, implementation of incentive programs, formation of the necessary resource support are the priority tasks of management and support of innovatively-active personnel.

There is no universal method for generating ideas of an innovative nature. In scientific works, several dozens of them have been developed. Among them, the most used in practice are the following: brainstorming, heuristic, matrix, cost analysis, poll, etc. All of them have a common disadvantage associated with the creative component of the formation process of an innovative idea, which is often poorly structured, largely irrational and cannot be formally described.

In contrast to the idea, the intention contains an indicative plan of actions for the implementation of an innovative idea in practice. The idea belongs to one particular innovatively active and creative person, while the comprehension of the intention is carried out through the interaction of the author of the idea with the creative group. As a result, the innovative idea is specified, acquires the characteristic features, correlates with the individual experience of each of the group members.

According to P. Sheko, the innovative intention is the basis of the process of making an innovative decision. It is formed by talent, not so much under the influence of demand and economic conditions, as by the actions of specific components of intuitive forecasting, a potential portfolio of perspective developments that are in the field of vision of the entrepreneur, and ways to promote innovation on the market [2]. Thus, the intention is a concretized innovative idea, but it is not substantiated by analytical evidence of the possibility and feasibility of a project.

## III. Calculation of the expediency of the formation and implementation of an innovative project

The feasibility of implementation is a direct consequence of the utility that the project will bring to the society as a whole, and enterprises in particular. The utility relates to the ability to meet the specific needs of the end-user of innovations

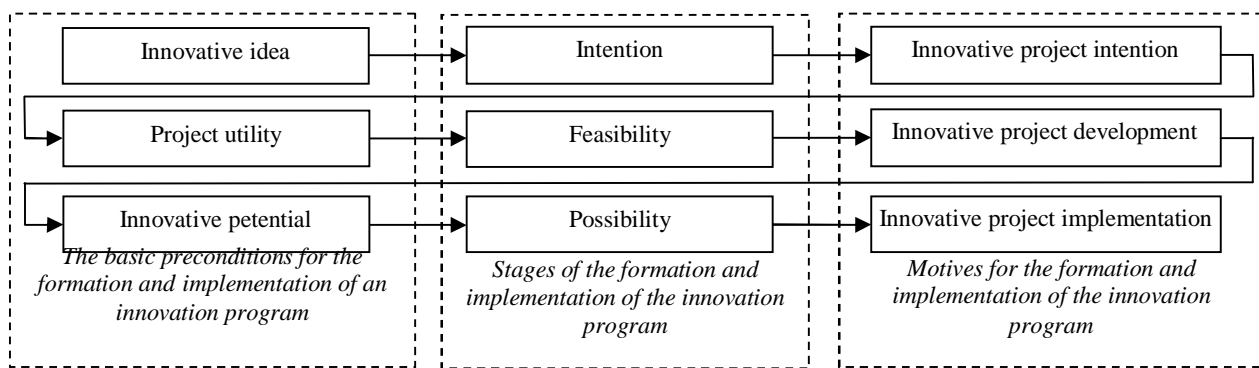


Fig.1 Cause-and-effect approach to the formation and implementation of the innovative program

The utility of an innovative project seems to be always determined by the utility of the final result – an innovative product, technology, organizational and managerial mechanism, etc. However, the utility of the innovative project and the final result of the implementation of the innovative program relate to each other as general to partial. That is, the creation of a useful innovative product is always a result of a successful innovative project, while the reverse statement is not always true. A negative result in the current period can lead to positive effects in the future. For example, failure of one innovative project can give impetus to new developments in a radically different direction, and they will be much more beneficial. Consequently, the notion of "utility of innovation" and "utility of an innovative project" should not be identified. The first term concerns the already developed product or measure and is determined by its consumer value. The second one concerns the organizational mechanism for achieving the goal of development and is determined by the outcome of the project. The latter may be positive (the goal was achieved), negative (goal not achieved) or conditionally negative (the goal was not achieved, but individual results may have practical value). Moreover, any innovative project, regardless of its result for a particular enterprise, brings some benefits in civilizational, industrial or regional dimensions, since it minimizes costs and allows acquiring the necessary experience to prevent mistakes in the future.

In our opinion, the notion of "project utility" and "project efficiency" should also be distinguished. The first is determined by the level of achievement of the final result, and the second – by comparing the result with the used resources. The phrase "useful but not effective" in this context will mean that the project has received a positive result (e.g. in the form of a finished innovative product), but the cost of its production exceeds the potential benefits of commercialization. That is why the feasibility of project implementation is determined not only by its utility but also by efficiency.

#### IV. Assessment of the ability to form and implement an innovative project

The development of an innovative project contains a number of stages, among which are the following: goal's formation; scientific and technical reasoning; technical section of the project; parametric analysis of experimental and industrial production; implementation of experimental and industrial production; feasibility study of industrial

production; adjustment works; administrative support; marketing and advertising.

The ability to develop an innovative project is determined by the innovative potential of the enterprise. In turn, each successfully implemented project ensures its growth. The assessment of the innovative potential remains a complex theoretical and practical problem, since it requires the analysis of a large number of diverse criteria that are summarized in the following components: technical and production (availability and efficiency of the use of fixed assets, production and sales, material resources), financial (financial condition of enterprises), personnel (number and qualification of employees), marketing (competitive position in the market), information and communication (the presence of modern information technologies), etc. In any case, the study of components of innovative potential should provide an answer to the question of the possibility of the formation and implementation of an innovative project.

Implementation of an innovative project involves the implementation of a set of measures aimed at achieving the goals declared in it. At this stage, it is important to carry out intermediate and subsequent monitoring of the project implementation, as well as to timely adjust the planned indicators in response to changes in environmental conditions.

#### Conclusions

Summarizing all above-mentioned information, it can be noted that the process of the formation and implementation of innovative programs at the enterprise requires a clear understanding of the essence of all components of the innovative program and the observance of the sequence of stages, the basic preconditions and motives for its implementation. The suggested model of the formation and implementation of innovative programs in this article allows formalizing, structuring and organizing the process of innovative activity at the enterprise, from the origin of the innovative idea and finishing with the implementation of the innovative project. Compliance with the principles of the proposed model is intended to provide enterprises with the maximum effect and utility of the implementation of innovative programs.

#### References

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