



# **ARTICLE**

# THE USE OF ACCOUNTING INFORMATION ON COSTS IN MANAGING INNOVATION PROJECTS

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#### **ABSTRACT**

One of the problems preventing innovation development is the unsatisfactory level of data generation on the implementation of innovation projects in the enterprise, as well as the variability in the composition of innovation costs included in the cost price of the innovation project using various sources of financing. This article asserts the importance of accounting of innovative projects and disclosure information about this projects in financial statement. On example of companies of petrochemical industry article presents the process of generating information about the costs of innovative projects. The procedure for reflecting the costs of an innovative project according to international financial reporting standards is also highlighted. Various sources of funding for innovative projects, as well as the costs of the process of budgeting for innovative projects are considered. The authors proposed a justification for the allocation of costs for an innovative project, the order of their reflection in the financial statements. Also the procedure for reflecting the cost of an innovative project in accordance with international financial reporting standards is highlighted.

#### INTRODUCTION

#### **KEY WORDS**

Efficiency of innovations, innovative process, disclosure of information about innovative project in financial statement, innovative project.

Today the relevance of innovative development of the Russian economy is beyond doubt. This is confirmed by both statistical data and increased interest in this topic from the scientific community. One of the problems hindering innovative development is the unsatisfactory level of data on the implementation of innovative projects at the enterprise, as well as the variability in the composition of innovative costs included in the cost of the innovative project, using various sources of financing.

### MATERIALS AND METHODS

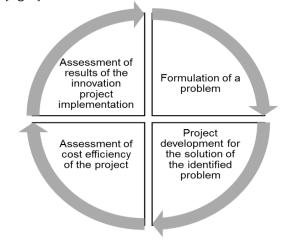
For the purposes of this study, an innovative project is considered as a form of target management of innovation activities; the process of innovation; set of documents.

The concept the innovative project is used in two meanings:

- As activity assuming implementation of a complex of any actions providing achievement of particular purposes;
- As a system of organizational, legal and financial documents required for the implementation of any actions.

Each project irrespective of the complexity and scope of the work necessary for its accomplishment, passes certain conditions in the development: from a condition when "there is no project yet", to a condition when "there is no project any more" [1].

The process of implementation of the innovation project goes through a number of stages provided in the [Fig. 1].



Received: 9 Aug 2019 Accepted: 11 Sept 2019 Published: 16 Sept 2019

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Fig. 1: Stages of implementation of innovation project.



During the implementation of innovation project much attention is paid for the project performance indicators [2]. Already at the planning stage it is possible to determine key indicators and to calculate the key economic indicators based on which the question of whether or not to implement such a project will be decided. These indicators will be included in the financial plan of the project which has the following structure [Fig. 2]:

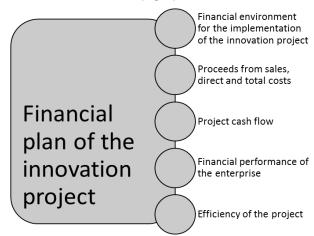


Fig. 2: Structure of financial plan of the innovation project.

At each stage cost items which subsequently form a cost of innovation project are created, in other words "costing" [3]. The object of our research is the development of proposals for improving the cost accounting at a stage of implementation of the innovation project. For this purpose, it is necessary to consider the current methodology of cost accounting.

# **RESULTS**

One of basic elements of the system of economic information about costs and results of innovation activity of the entity is financial accounting the development of which should go towards more comprehensive information service of various management functions for the purpose of making an optimal management decision [4].

In practice of accounting of the Russian industrial enterprises there are several approaches to the cost accounting on innovation activity [Fig. 3]:

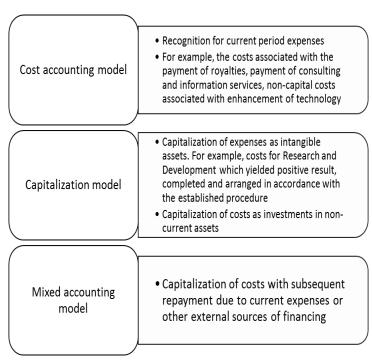


Fig. 3: Models of accounting for the costs on innovation activities in Russia.



In current accounting practice the costs for development of production of new products are reflected in different balance sheet accounts. Often it leads to a significant loss of information, violation of the accounting methodology, decrease in control over the level of costs, and persons who are responsible for their amount [5].

The general tendency of financial accounting in Russia in conditions of forming the market relations is associated, on the one hand, with the need for standardization of financial accounting, compliance with the main methodological principles, and on the other hand - with possibility of enterprises to solve many issues of accounting independently. Taking into account that fact, we consider it is necessary to dwell on certain issues of accounting methodology for cost and sources of financing of innovation activity in general and innovation projects, in particular in the enterprises of fuel and energy complex.

International Financial Reporting Standards and the regulatory framework of the Russian financial accounting define the elements directly related to measuring the financial situation and do not identify elements unique to special or additional reporting on investment activities and, in particular, on capital investments.

We suppose the disaggregation of financial statement elements for the purpose of allocation of information on the investments made in the form of capital investments should be conducted in the following directions [Fig. 4]:

# For reflection For reflection For reflection of assets: of liabilities: of the equity: Capital investments in fixed assets in the form of Liabilities to suppliers and The added capital created acquisition of separate customers as a result of revaluation of objects fixed assets Capital investments in fixed assets in the form of Liabilities to lessors construction of facilities The borrowed capital used to finance innovation activities Liabilities to the budget Leased fixed assets

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Fig. 4: Reflection of innovation activity costs in financial statement.

## DISCUSSION

In case of the solution which definition (asset, liability or equity) corresponds with the considered article, special attention should be paid to its economic essence and economic reality, but not just to the legal form.

In spite of the fact that the equity is determined as residual amount, in balance it can divided into subclasses. For example, in corporate reporting such article as "Funds deposited by shareholders", "Retained earnings", "Reserves representing the allocation of retained earnings" and "Reserves representing adjustments providing maintenance of the equity" can be shown separately. Such analytics can be relevant to meet the needs of users of financial statements at the decision-making stage, when determining the legal or other capabilities of an enterprise to allocate or use capital. The parties with different shares in the entity have different rights concerning receipt of dividends or compensation of the equity.

In this case reserves can be made to give the entity and its creditors an additional protection from consequences of losses.

It is profitable to create reserves when the national taxation law provides tax exemption (or their reduction) in case of transferring funds to reserves. Availability and the extent of such legal, authorized or tax



regulations represent information which can be relevant to users in decision making. Transfers to reserves in financial accounting of the Russian enterprises represent the use of retained earnings, but not expenses. This constrains the policy of forming reserves and at the enterprises of the

The amount of equity shown on the balance sheet depends on measurement of assets and liabilities. Typically, the total amount of equity only by chance corresponds to the total market value of the shares of enterprise or the amount which could be derived from the sale of either net assets in parts or the entire enterprise as an operating entity.

Profit is often used as a measure of efficiency or as a basis for other measurements, such as return on investment or earnings per share. Elements directly related to the measurement of profit are income and expenses. Recognition and measurement of income and expenses and, consequently, profit, depends partly on concepts of capital formation and maintenance applied by enterprises in the preparation of financial statements.

According to requirements of IFRS 25 "Accounting for investments" long-term investments are usually considered at cost. Reduction in the cost of long-term investment is possible. The estimate of investment can be obtained using its market value, assets and results of the activity of invested company and flows of a money expected from investment. Besides, risk is considered, as well as the type and size of the investor's share in the invested company. The cost of investment may be affected by restrictions on the distribution of the invested company, or on the sale of innovation products by the investor.

Many long-term investments are important for the investing company separately. Therefore, book value of long-term investments is usually determined on an individual basis.

Therefore, in practice, the decision to implement an innovation project is preceded by a careful comparison of expected costs for its implementation (considering assessment of technical and commercial risks) and the financial capabilities of the company, that reflects in the business plan. The financial position of company determines the possibility and efficiency of using borrowed funds for the implementation of innovations.

In modern conditions, an effective form of implementation of innovation is the management of capital invested in innovation, taking into account the features of the innovation process.

Features of innovation process provide conditions for mutual influence of innovation and investment cycles in the process of creating innovations and an opportunity for their interaction for the purpose of minimizing the amounts of investment resources and optimizing the use of advanced funds; reducing duration of investment and innovation cycles and achieving commercial effect from implementation of an innovation product [6].

As a rule, innovation activity traditionally assumes a sequence of investments, and not a parallel investment of all or several stages of the life cycle of innovations. At the same time, the loss of the commercial effect of innovation is due to the fact that interruptions in financing are sometimes of a lasting nature, both customers and specialization of future productions are changing.

The basis of the theory of combining the innovation and investment cycles is the position: innovation is the result of activity [7]. At each relatively independent stage of the innovation cycle, a certain result may arise, which can become an independent commodity. However, the result of each stage of the innovation cycle in the continuous chain of its interconversion acts in relation to the final innovative product only as its intermediate form, i.e. intermediate product.

Therefore, the investment policy of commercialization of innovations can be oriented towards the final product and to the effective reproduction of innovation on any of the relatively independent stages of the innovation process. Even the process of the innovation cycle movement in this chain can be terminated if the investor sees the expediency of conversion of intermediate result to a final product (research methodology, know-how of technology, etc.). In Russian accounting, sources of financing innovative activity are undistributed profits, amounts of accumulated depreciation, bank loans and borrowed funds, as well as funds received to repay the debts of founders for contributions to the authorized capital, budgetary and other special purpose funds. Of great importance is a separate account of the sources of their formation (accumulation) and use by species [8].

It should be noted that the amount of generated sources, when used in accounting, is not subject to reflection. Only the articles of the balance asset are changed (debits of accounts for fixed assets, accounts payable, credit of accounts for cash). Accounting records on balance accounts for used sources for capital investments are not given, which reduces the ability of accounting departments to analyze and control the composition of sources and their availability.

In connection with this feature of accounting, an accountant needs to have information about funding and usage of these sources by their types, composition, in order to prevent [9]:

Improper application of income tax benefits, if they are provided by law;



Immobilization of funds, which can lead to insolvency of the organization (use of funds intended for conducting the main activity). These data will also be needed to complete the report on the movement of funds for investment in innovative activities.

One of the main sources of capital investments in innovative projects are funds, accounted for in Account "Depreciation of Fixed Assets". However, the accounting for accumulated depreciation on this account does not give the accounting department the ability to provide information management services about which part of the accrued amount is used for its intended purpose and what its balance is.

For the purpose of controlling the use of accrued depreciation deductions, it is possible to propose the maintenance of a special sheet of analytical accounting.

Other sources of financing investments in non-current assets include [10]:

- Undistributed profit;
- Targeted financing;
- Borrowed funds (accounts for loans).

These sources also require monitoring and analysis.

### SUMMARY

In 2001, a new procedure for accounting for fixed assets and targeted financing received for industrial development was introduced, assuming the introduction of innovations, in which the order of recording the funds of targeted financing is reflected in the scheme.

From the contents of the scheme it follows that:

- a) construction costs for the innovative project form the cost of the facility put into operation:
  - Cost of construction and installation work under construction object; costs incurred for installation of equipment;
  - Equipment that requires installation is purchased for the object under construction;
  - Equipment is transferred to the installation;
  - Commissioned by the construction of the facility at its initial cost;

b) the received and used target funds are reflected in the accounts without the connection with the costs incurred:

- The amount of targeted financing from the construction budget for an innovative project has been credited to the settlement account;
- Commissioned by the construction of an object at the initial cost.

Such an accounting procedure does not provide an opportunity to monitor in a timely manner the compliance of the volumes of used financing with the accrued costs with respect to the stages of implementation of the innovation project.

It is known that earmarked financing is a means intended for financing specific targeted activities. These include funds received from other enterprises, subsidies from government agencies, cash contributions from parents for the maintenance of children in children's institutions (gardens, nurseries), etc.

Accounting of funds coming from the budget is conducted on the basis of the Russian accounting standard "Accounting for state aid" (RAS 13/2000), approved by the order of the Ministry of Finance of the Russian Federation of October 16, 2000 No. 92n.

The organization accepts budgetary funds, including property, from personal funds, to accounting, subject to the following conditions:

- It is a certainty that the conditions for the provision of these funds by the organization will be met. Confirmation can be agreements concluded by the organization, accepted and publicly announced decisions, feasibility studies, approved design and estimate documentation, etc.;
- It is a certainty that these funds will be received. Confirmation can be approved budgetary list, notification of budgetary allocations, limits of budgetary obligations, acts of acceptance and transfer of property and other relevant documents.

When budget financing is provided in the form of land plots, natural resources, property, they are subject to capitalization in an amount equal to the value of assets received or receivable. This value is determined by the organization based on the price at which, in comparable circumstances, it usually establishes the value of the same or similar assets.



# **CONCLUSIONS**

The process of budgeting, which we examined in the previous sections of the study, allows the accounting department to monitor the use of sources of financing innovative activities, comparing them with the production costs of innovative projects. When organizing the management accounting of innovative costs associated with the introduction of innovations in the technological process, the development of new equipment, it is possible to use a common methodological approach, in which the costs for each stage of the innovation project will be pre-collected on special account "Costs for Responsibility Centers" which we propose, and then the costs that can be attributed to the project as a whole will be charged to the special account "Costs on orders" proposed.

When forming the system of analytical accounting, it is stipulated that the main accounts, at which the valuation of the relevant object is carried out at its actual cost, are simultaneously calculating. The analytical features of the main accounts allow the identification of accounting objects.

The order for an innovative project in each case has an individual character and covers a different period of time. Therefore, the authors propose:

- To open an orders for a set of works, united in the center of responsibility;
- To group the costs by orders with internal details by type work performed.

Greater detail will ensure a gradual accumulation of costs, obtaining more analytical information that will allow monitoring the progress of work, the cost structure, the appropriateness of using resources at a specific responsibility center.

#### **CONFLICT OF INTEREST**

There is no conflict of interest.

#### **ACKNOWLEDGEMENTS**

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

#### FINANCIAL DISCLOSURE

None.

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