
Chapter 2. MANAGEMENT, ECONOMICS AND SERVICE

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INTEGRATION OF INNOVATION AND INVESTMENT STRATEGIES OF INDUSTRIAL ENTERPRISE

Abstract. *Integration of the innovative and investment strategies of the industrial enterprise based on the intensity of innovative and investment strategies is ensured. In the process of research used: methods of theoretical synthesis and comparison, analysis and synthesis (to determine the content of the concept of “innovation and investment strategy”), statistical (for analysis of innovation and investment indicators of industrial enterprises), matrix (for the formation of a map of integration of innovation and investment strategies of industrial enterprises and the modified GE/McKinsey matrix for the definition of the innovation-investment strategy of the industrial enterprise). Innovation-investment strategy is an integrated system of interrelated directions of methods and instruments for achieving strategic goals by balancing the scientific, technical, market and investment policies in the direction of capacity development at a newer, qualitative level in accordance with the requirements of the environment. At the same time, an investment strategy can be developed not depending on the innovation strategy, but the implementation of an innovation strategy is impossible without the use of investment resources. Based on the study, a map of the integration of innovative and investment strategies of an industrial enterprise is proposed, which contains the information on the conformity of a particular type of innovation strategy to a particular type of investment strategy; on the basis of these data, innovation-investment strategies for the industrial enterprise with the help of the modified GE/McKinsey matrix are proposed. Ensuring the integration of innovative and investment strategies will allow for an effective management decision on innovation and investment activities in an industrial enterprise. The integration of innovative and investment strategies of an industrial enterprise is proposed, which, in contrast to the existing methods, should provide the definition of the innovation-investment strategy of the industrial enterprise on the basis of the intensity of the investment strategy and the intensity of the innovation strategy. The results are aimed at improving the strategic management of innovation and investment activities of the industrial enterprise.*

Introduction.

Under the conditions of gradual integration of Ukraine into European market structures, the questions of investment support of innovative development of domestic enterprises, which require increase of competitiveness, quality and innovative level of products, are extremely pressing. One of the ways to solve this problem is to develop an effective investment and innovation strategy that takes into account the specifics of the operation and development of the enterprise and its claim to a role in the external environment. In this regard, the practical need of domestic enterprises in developing effective strategies, projects and programs of investment and innovation development [1].

The investment-innovation strategy is one of the alternative options for achieving the strategic goals of the enterprise, based on attracting and directing investment in innovative developmental areas. In today's conditions, it is this way that gives the opportunity to form competitive advantages and create conditions for effective activity in the long run [1, p.186]. Development of an investment strategy plays a significant role in ensuring the effective development of the enterprise, including innovation. The investment strategy for industrial enterprises is proposed to be positioned in the strategic set according to the functional principle [2, p.365]. According to the opinion of L.A. Nekrasova and O.V. Monich, investments and innovations become the main element of management in the enterprise. New ideas, advanced technologies and organizational decisions determine the success of entrepreneurial activity, and ensure the survival and financial stability of enterprises. Therefore, the system of management of innovation and investment activity of the enterprise, which is oriented on the long-term perspective and strategic success, becomes important [3, p.204]. Thus, the problem of identifying and agreeing innovation and investment strategies today is an integral part of the strategic development of the enterprise.

1. Theoretical analysis of innovation and investment strategies

Recently, a lot of attention has been paid by domestic scientists to the study of the problems of identifying innovation and investment strategies of the enterprise. In particular, a number of scientists are engaged in the study of investment strategies. Thus, K.V. Orekhova studied the modern approaches to the definition of the "investment strategy"; it is determined that the investment strategy of the enterprise is a system concept that fully reflects the features of investment activity and aims at its development both in the short and long-term prospects; the main features and types of investment strategies of the enterprise are found [4, p.14]. The work of B.B. Loyko and I.B. Bordyuk is dedicated to another issue of the essence of the concept of the "investment strategy" and the definition of the role of this strategy for industrial enterprises, also these authors analyzed the place of the investment strategy in the "strategic set of enterprise" and indicated its interconnection with other types of strategies [2]. B.V. Pogritschuk, I.T. Kishchak, I.Yu. Rud dedicated their research to the issue of forming a strategy for investment activities at enterprises; study of the stages of development of the investment strategy at enterprises; to identify certain aspects of the process of forming an investment portfolio of enterprises [5] A.V. Peshko and

A.V. Nazarenko devoted his studies to the definition of investment strategies, depending on the risk level. The authors I.O. Vidomenko and K.O. Kalugina examines the relationship between the creation of competitive advantages and investment strategy; study the process of forming an investment strategy for winemaking enterprises; offer a logical scheme for implementing the process of the enterprise investment strategy formation [6]. According to the opinion of O.M. Trydid: “The development and implementation of an investment strategy as a long-term action plan for mobilizing investment resources can become an effective tool for enterprise development”. A number of scientists have focused on researching innovative strategies. So, the author of G.S. Chernovanova believes that the possibility of developing an innovation strategy is determined by the presence of the potential of the enterprise (innovative potential) to its implementation and a set of conditions that promote or, on the contrary, hinder the implementation of innovations. According to the opinion of O.I. the strategy of innovations - as a certain strategic set (portfolio) of solutions for ensuring the innovation process at the enterprise at all its levels and for all components of business processes - is a guarantee of long-term success of any enterprise and a means of ensuring its competitiveness [7, p.44].

The author N.V. Redko reviewed the topical issues of formation of the enterprise innovative strategies; the most significant problems of formation of effective innovative strategies of enterprise development are given; the stages of the algorithm of formation of innovation strategy are analyzed; the directions of improvement of mechanisms of formation of innovative strategies are proposed [8]. In the work of T.I. Kopniets the stages of forming the innovation strategy of the enterprise have been substantiated and proposed a methodology that will enable managers to select the innovation strategy that will ensure the optimal long-term development of the enterprise [9]. O.M. Semenyuk believes that improving the choice of innovation strategy will enable industrial companies to adequately assess the innovative projects and more boldly implement them; in general, will promote optimization of innovation activity in industry and improvement of the economic situation in the country. It should be noted that some authors pay attention to the definition of innovation and investment strategy in the enterprise. Thus, K.A. Prib, believes that the investment strategy is closely interconnected with all of the enterprise strategies, but this strong linkage is especially strong for an innovation strategy, since separate issues in these strategies are mutually agreed upon, because innovative strategies highlight the forms and directions of the introduction of the latest technology and technology, the use of know-how, progressive information, management and communication systems and the whole set of innovations, while the investment strategy reflects the total volume of resources, necessary for these purposes of the resources, concretize the sources of their involvement, cost, expected efficiency, etc. [10].

The author K.M. Khaustova, gives an overview of the scientific approaches to the definition and classification of investment and innovation strategies offers an approach to their classification [1].

The studies of L. Nekrasova and O. Monich are devoted to innovation and investment process in the system of the modern social reproduction; formation of innovation and investment strategy of the enterprise; to substantiate the key areas that should be provided by this strategy [3]. Consequently, the analysis of the theoretical studies has shown that the issue of identifying innovation and investment strategies are of interest to modern scientists and are guided by the effective development of the enterprise.

2. Analysis of innovative activity of industrial enterprises.

The industrial enterprises in Ukraine are the basis of the national economy, the result of their activities predetermines the development of the economy of the region and the country. Thus, in December 2016 compared to November 2016 the index of the industrial output was 101.9% (seasonally adjusted - 102.4%) and December 2015 - 104.5%. In 2016 compared to 2015 this indicator was 102.4%, including in mining and quarrying - 99.7%, processing industry - 103.5%, electric power, gas, steam and air conditioning supply 102.6% [11]. Innovation in industrial enterprises is a prerequisite for success, therefore, under the modern terms and conditions, requires considerable attention.

In 2015 824 enterprises engaged in innovation activity in industry, or 17.3% of surveyed industrial enterprises. Among the regions above the average in Ukraine, the share of innovatively active enterprises was in Mykolaiv, Kharkiv, Kirovograd, Ivano-Frankivsk, Zaporizhzhia, Kherson, Sumy, Odessa, Lviv and Ternopil regions. In terms of types of economic activity, it is necessary to distinguish enterprises producing basic pharmaceuticals and pharmaceuticals (47.5%), motor vehicles, trailers and semitrailers (38.2%), computers, electronic and optical products (37.5%), other vehicles (36.1%), coke and refined products (28.6%), and electrical equipment (28.2%). Own funds of enterprises remain the main source of financing of the innovative expenses – UAH 13,427.0 million (or 97.2% of the total amount of expenses for innovations). The state budget funds were received by 11 enterprises, local budgets - 15, totaling UAH 589.8 million (0.7%); domestic investors received 9 enterprises, foreign ones - 6; in general, their volume amounted to 132.9 million UAH (1.9%); 11 enterprises benefited from loans, amounting to UAH 113.7 million (0.8%)

In 2015 the industrial enterprises implemented 3136 innovative products, of which 548 - new exclusively for the market, 2588 - new only for the enterprise of the total number of products introduced 966 - new types of machines, tuning, devices, devices, etc. The largest number of innovative types of products was introduced at the enterprises of Ternopil (27.2% of the total number of introduced types of innovation products), Zaporizhzhia (12.7%), Lviv (8.0%), Kharkiv (6.6%) and Kyiv (14.4%); by types of economic activity - in enterprises producing machinery and equipment, not included in other groups (22.9%), paper and paper products (16.2%), food products (11.3%), metallurgical production (5, 5%).

The number of implemented innovative technological processes (new or improved methods of processing and production) was 1217, the largest of which were enterprises of Kharkov (17.4%), Sumy (15.2%), Zaporizhzhia (9.4%), Dnipropetrovsk (6, 3%) and Kyiv (12.5%); by types of economic activity - in enterprises producing machinery and equipment,

not referred to other groups (25.3%), other vehicles (12.3%) and food products (7.8%) of the total number of implemented innovative technological processes, 458 are low-waste and resource-saving. In 2015, 570 enterprises implemented the innovative products at UAH 23.1 billion. Among such enterprises, 37.4% sold products outside Ukraine, amounting to UAH 10.8 billion. Every fourth company sold products that were new to the market. The volume of such products amounted to 7.3 billion, almost two thirds of the enterprises put up for export. A significant number of enterprises (86.0%) sold products that were new exclusively for the enterprise. Its volume amounted to UAH 15.8 billion. One in three enterprises sold 40.1% of such products outside Ukraine. In order to implement innovations, 181 enterprises acquired 1131 new technologies, of which 66 are outside Ukraine. Of the total number of technologies, 439 were purchased with tuning, of which 43 - outside of Ukraine; 393 - as a result of research and development (12); 120 - under contracts for the acquisition of rights to patents, licenses for the use of inventions, industrial designs, utility models (8); 37 - for contracts for the acquisition of technology and know-how (3); 129 - together with the purposeful recruitment of qualified specialists. As a result of innovation activity, 9 enterprises have created new technologies, of which 98 were transferred to other enterprises, in particular, 20 out of Ukraine [11]. Thus, the given statistical data do not leave doubt about necessity of application of innovative-investment strategies at industrial enterprises.

3. Findings

We consider that for an industrial enterprise it is necessary to propose to define an innovative strategy depending on “managerial behavior” (classification K. Firman): traditional, opportunistic, imitative, offensive and defensive: traditional strategy - improving the quality of the existing products on the existing technological base; opportunistic strategy - product orientation - a leader in the market, which does not require high R&D expenses; simulation strategy - purchase of licenses with minimal expenses for own R&D; defensive strategy - not to lag behind others without pretending to dominate; offensive strategy - to be the first in the market due to the high level of innovation process, skilled personnel, opportunities for distribution of risk and other advantages. As we see, the enterprise efforts in the innovation activity increase with each proposed strategy from traditional to offensive, that is, there is a growing intensity of innovation strategies. Each of the proposed innovation strategies requires a decision on investments, therefore we propose to the industrial enterprise to determine the investment strategy: conservation strategy - inherent, for the most part, for investors who are unsure of their investment activity, the terms of investment, and also do not want to risk capital; the accumulation strategy is aimed at increasing the investments, investors do not want to risk, the stable financial and investment activity of the organization prevails, which leads to gradual accumulation of capital; moderate growth strategy - focusing on high income organizations with minimal risk of investment activity, continuous monitoring of the market of competitors' activities, use of their mistakes as indicators of improving their own activities; strategy of aggressive growth - involves maximizing income in a relatively

short period of time, the existence of high risks in the implementation of investment activities, a high propensity to bankruptcy and the collapse of the organization [12].

Thus, the proposed investment strategies differ in terms of funding, risk, and volume of revenue, that is, the intensity of these strategies grows from conservation strategy to aggressive growth strategy. Thus, build a map of the integration of innovation and investment strategies of the industrial enterprise (Figure 1). The proposed map of the integration of innovative and investment strategies of the industrial enterprise contain information on the conformity of a particular type of innovation strategy to a particular type of investment strategy.

		Investment strategies			
		Storage	Accumulation	Moderate growth	Aggressive growth
Innovation strategies	Traditional	TS	TA	TM	TAg
	Opportunistic	OS	OA	OM	OAg
	Imitation	IS	IA	IM	IAg
	Defensive	DS	DA	DM	DAg
	Offensive	OS	OA	OM	OAg

Fig. 1. Map of the integration of innovative and investment strategies of the industrial enterprise

We offer the following innovation-investment strategies for industrial enterprises.

“Innovation Pit” is characterized by the traditional innovation strategy and investment strategies for saving or accumulation, hence innovative strategic actions are not intense and investments are insufficient and high risk, this strategy is inherent in industrial enterprises that have the purpose of leaving the market or eliminating a business entity.

“Innovation Contour (1)” is characterized by the traditional and opportunistic innovation strategies and investment strategies of accumulation and moderate growth, i.e.

“Innovation Springboard” is characterized by opportunistic and simulation innovative strategies and investment strategies for accumulation and moderate growth, that is, this strategy is a “springboard” for the successful implementation of innovation and investment development of the enterprise and can provide implementation of the strategy of modification and focus on the industrial enterprise.

“Investment Platform” is characterized by opportunistic traditional and innovative strategies and aggressive investment strategy, i.e. the intensity of innovative implementations are insufficient, but the intensity of investment is quite strong, that is a condition for the effective development and innovation within existing investments, so through this innovation -investment strategy is appropriate to implement a strategy of modernization of the enterprise.

“Innovation Platform” is characterized by defensive and offensive strategies and innovative investment strategy of accumulation, i.e. the degree of change is high innovation and investment strategy characterized by stability and the absence of risk, and there are conditions for successful innovations at this innovative investment strategy it is possible to implement commercialization of the developed innovations not only in their own enterprise,

but also in the market of innovations, therefore it is expedient to create venture structures that will provide result from the commercialization of innovations.

“Innovation Breakthrough (1)” is characterized by innovative simulation and defensive strategies and aggressive investment strategy, therefore, the presence of innovative component and the investment component sufficiency make it possible to provide “innovative breakthrough” in the enterprise, if compliance with this innovative investment strategy should ensure industrial enterprises The implementation of moderate growth and growth strategies, and access to new markets.

“Innovative Breakthrough (2)” is characterized by defensive and offensive innovation. The innovative component of the operation of the enterprise is at the initial level, and investment strategies are dynamically developing, this strategy can take place at enterprises that implement a general strategy of reduction or diversification.

“Innovative Contour (2)” is characterized by opportunistic, simulation, defense, offensive innovation strategies and investment strategy of conservation, this strategy is typical for companies that implement various innovative strategies, but do not have sufficient investment opportunities, as this strategy should be used in industrial, which operate within diversification or differentiation.

Strategies and investment strategy of the moderate growth, that is, the sufficiency and availability of innovative component of investment component make it possible to provide “innovative breakthrough” in the enterprise, while this strategy might talk about the transfer of innovations outside of the industrial enterprises and the creation of innovative niche;

“Innovation Pole” is characterized by the most intense offensive innovation strategy and the most intense aggressive investment strategy, that is, the enterprise has the maximum intensity of the strategic introduction of innovation and investment activities, this strategy is ideal from the perspective of innovation and investment in an industrial plant, because it is inherent in companies that are leaders in the market and want to provide intense and integration growth both within the framework of the existing markets and within developing markets. In the existing rapidly changing and highly competitive conditions, the ideas of an integrated approach [13] are the most suitable and suitable for successful implementation of the strategies of innovative development of domestic enterprises [13], that is, the process of formation of innovation and investment strategy of industrial enterprises should be determined by coordinated innovative and investment strategic directions of development.

Conclusions.

Our study made it possible to make the following conclusions: the investment strategy is closely interlinked with the innovation strategy, because separate issues in these strategies are mutually agreed, because innovative strategies highlight the forms and directions of the introduction of the latest technology and technology, application of know-how, progressive information, management and communication systems and, in general, the whole set of innovations, while the investment strategy reflects the total volume of resources needed for these purposes, specifies sources the and conditions of their attraction,

cost, expected effectiveness; ensuring the integration of innovation and investment strategies of the industrial enterprise, taking into account the intensity of innovation and investment strategies and identifying the most innovation-investment strategies will make it effective managerial decision on innovation-investment activity at the industrial enterprise.

Prospects for further research in this area are the agreeing upon the innovative and investment strategies with functional strategies and business strategies of the industrial enterprises, as well as their economic justification.

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