

Valentyna V. Stadnyk¹, Oksana V. Zamazii²

INNOVATIVE FACTORS IN THE SYSTEM OF VALUE-BASED MANAGEMENT OF AN INDUSTRIAL ENTERPRISE

The conceptual framework for value-based management of industrial enterprises is supplemented here with the methodological approaches to innovation management. The analysis of the contents and results of innovations at enterprises of Khmelnytskyi region is conducted to determine the contribution of these activities to the creation of customer value of a final product.

Keywords: innovation activities; innovation costs; business processes; value-based management; customer value.

Валентина В. Стадник, Оксана В.Замазій

ІННОВАЦІЙНІ ЧИННИКИ В СИСТЕМІ ЦІННІСНО-ОРІЄНТОВАНОГО УПРАВЛІННЯ ПРОМИСЛОВИМ ПІДПРИЄМСТВОМ

У статті розширено концептуальну основу ціннісно-орієнтованого управління промисловим підприємством з урахуванням методологічних підходів до інноваційного менеджменту. Проведено аналіз змісту і результатів інноваційної діяльності підприємств Хмельницької області з метою визначення внеску даної діяльності у створення споживчої цінності кінцевої продукції.

Ключові слова: інноваційна діяльність; інноваційні витрати; бізнес-процеси; вартісно-орієнтоване управління; споживча цінність.

Рис. 2. Табл. 2. Літ. 11.

Валентина В. Стадник, Оксана В.Замазій

ИННОВАЦИОННЫЕ ФАКТОРЫ В СИСТЕМЕ ЦЕННОСТНО-ОРИЕНТИРОВАННОГО УПРАВЛЕНИЯ ПРОМЫШЛЕННЫМ ПРЕДПРИЯТИЕМ

В статье расширена концептуальная основа ценностно-ориентированного управления промышленным предприятием с учетом методологических подходов инновационного менеджмента. Проведен анализ содержания и результатов инновационной деятельности предприятий Хмельницкой области с целью определения вклада данной деятельности в создание потребительской ценности конечной продукции.

Ключевые слова: инновационная деятельность; инновационные расходы; бизнес-процессы; ценностно-ориентированное управление; потребительская ценность.

Problem setting. Globalization of the world economy, accompanied by technological and information revolution, leads to large-scale changes in the competitive environment. Competition of goods and services is transformed into a competition of enterprises, the rivalry between them eventually is embodied in the market value of business.

Recent research and publications analysis. Analyzing the methodological approaches to the estimation of market value of business, laid down in the legislative framework of Ukraine, as well as research results of the scientists involved in this problem, we can observe the dominance of two interdependent, but slightly different approaches to this assessment, due to different purposes of management. On the one hand, it is the formation of methodological tools for determining the absolute value

¹ Khmelnytskyi National University, Ukraine.

² Khmelnytskyi National University, Ukraine.

of enterprise cost in order to sell it at the stock market. The main provisions of such an approach are incorporated in the domestic legal framework (the Law of Ukraine "On the assessment of property, property rights and professional valuation activities in Ukraine", National Standard number 1 "General framework for the assessment of property and property rights", 12.07.2001, #258-III). To achieve the most suitable embodiment of such an assessment, taking into account the domestic market realities A. Mendrul and V. Lartsev (2004), O. Mnyh (2009), O. Tereshchenko and M. Stetslo (2009) and others analyzed the advantages and disadvantages of the income approach, cost and comparative approaches. Scientists emphasize that it is important not only in a specific point in time to estimate the market value of a company, but also to be able to use the methodological basis of this assessment to identify the ways to increase this value.

For such purposes the most appropriate is the second approach. It is based on the works of foreign scholars such as T. Copeland et al. (2003), R. Kaplan and D. Norton (2005), A. Thompson and A. Strickland (2007) and others, which deal with the tools for factor analysis and qualitative indicators for the formation of market value of the company, as the indicators of management effectiveness. However, in their work the attention is focused on administrative tasks (mostly on the efficiency of resource use), but the target recognized is increasing company's profitability to investors, that is, it is assumed that the company value is formed at the stock market.

However, in sagging stock markets caused by the instability of conditions at contemporary enterprises, the existing tools for managing their market value, focused on increasing shareholders' equity, are ineffective. This is especially true in times of crisis, when enterprise viability is determined not so much by the value of equity but by how it is used, what economic results the company is achieving for each invested sub-unit of capital, what market position the company is achieving by investing in production of goods and services. The importance of solving this problem for today's enterprises requires rethinking the nature and conceptual approaches to value-based management, integration of innovative management tools into it. This predetermines the goal of this study.

The aim of this research is to expand the conceptual framework of value-based management of an industrial enterprise considering the methodological approaches to innovations management.

Key research findings. The ability of today's enterprise to build its economic potential and quantitative growth depends directly on what economic results it receives from the sale of its business processes, the main of which being production. It is clear that the company can obtain better economic results if the characteristics of its products in the target markets meet the structure of consumer preferences, both in price and functional properties. This allows increasing the sales, get larger profit. This is the main idea of the concept of value-based business management to create consumer values according to the priorities of consumer target groups.

Today, the practice of industrial enterprises has formed several approaches to increasing the customer value of products:

- improvement and development of functional properties of a product;
- improvement of internal processes and technologies to reduce the price of products keeping the acceptable level of quality;

- expansion of product functionality by modifying the basic design;
- development of after-sales services to support the functional parameters of the given product.

Solving each of these problems is impossible without purposeful innovation. From the standpoint of value-based management, it should be carried out in two main areas. On the one hand, it is the improvement of production system through the introduction of process innovations (both technological and managerial), that will give an opportunity to achieve new quality of production. On the other hand, it is a comprehensive, thorough and systematic study of the structure of consumer preferences at target markets and designing new models of products based on consumer priorities. Both presume certain financial investments in innovations. For every company it is important to correctly relate the areas of innovation expenditures to those results that can be obtained from the implementation of innovations. In our opinion, it is advisable to make a comparison from the position of value-based management: which contribution was achieved through innovations at enterprises in creating value for customers.

The starting point of this research, we believe, must be the analysis of the contents and results of enterprise's innovations. It is important to determine whether there is a connection between innovative activity of enterprises and the revenues from innovative products sales. Statistical data reflecting these processes in the industry of Khmelnytskyi region are shown in Figure 1.

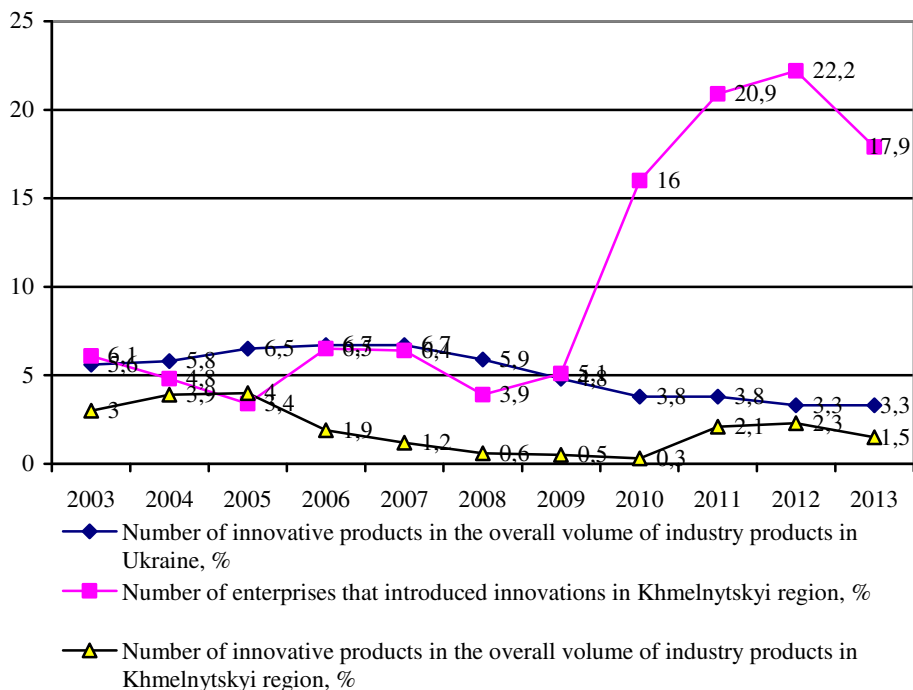


Figure 1. The dynamics of innovative activity and its results in Khmelnytskyi oblast industry (Khmelnytskyi region industry in the 2013 Statistical Yearbook)

In Figure 1 we can observe that the share of industrial enterprises of the region that implemented innovations before 2010 was very low and only in the last 4 years it increased. Most companies introduced innovations in 2012 – 22.2%. For these reasons, the share of innovation in total sales of industrial products is very low, especially in 2008–2010 when it was less than 1%. For comparison, in Ukraine in general in those years this figure was 5 times higher. Therefore, it is not surprising that during the global financial crisis the biggest losses of economic dynamics in the region were caused to industry.

Understanding the direct connection between innovations and the ability of the company to maintain its position at the market prompted the management of industrial companies in the region to intensify the efforts in creating innovations. In 2010–2012 there was a significant increase in the number of innovatively active enterprises. This helped to increase the share of innovative products in the total volume of sales for more than 7 times (from 0.3 to 2.3%), which affected the overall economic dynamics of the regional industry – In 2010–2011 it grew at 5.10% (Khamska et al., 2014: 13). However, in these years, the share of innovative products in its total sales in the oblast was much lower than in Ukraine as a whole.

In this regard, we suggested that the results of innovative activity of the oblast enterprises do not have sufficient impact on customer value products that they produced. As it can be seen in Table 1, from the total number of firms involved in innovative activities, only a third introduced new products (i.e, created new customer value). And the number of such companies is constantly decreasing, most notably in 2013.

From the analysis of the structure of innovation expenditures we see that enterprises mostly prefer to buy new equipment and on research they spend less than 1% of their total costs. In addition, this work is performed mostly by enterprise employees, not by external parties.

It should be noted that by the level of inventive activity Khmelnytsky oblast takes the one of the last places among Ukraine's regions, providing the average number of just 0.3% applications (about 31–34 per year for the last 5 years). And in the structure of innovative products in terms of its novelty, the predominant part make the products that are new only to the enterprise. And sales of products which are new to the market, are less than 1% at the oblast enterprises. And for the technologies being introduced, every year the number is decreasing, especially for resource-saving and low-waste ones.

Obviously, the result of these processes is the deterioration of the ability of companies to compete with other manufacturers that is reflected on their financial results. Because a significant impact on the value of products for consumer (which is the basis of business profits, because it is included in the selling price) makes the level of innovation. If the company is trying to pursuit innovators, the level of income will be significantly lower. On the other hand, the lack of attention to resource saving technologies makes it difficult to reduce production costs. This is also reflected in the selling price.

At the same time, the companies that have retained their ability to create own innovations, show steady economic dynamics. In the oblast one of these companies is state enterprise (SE) "Novator". It is one of the few enterprises that almost every

year produce new products for the market. As it can be seen from Table 2 built on the data of the entity's financial statements for 2010–2013, plus own calculations have been carried out, during the period of the crisis the plant and much more innovative activity, as evidenced by the increase in the respective costs and returns from them (calculated as the ratio of sales of innovative products to the total sum of innovation expenditures). This enabled the company switch to profitable operations. Although the share of innovative products in the structure of sales is low, due to company's versatility and the fact that the samples of new products have high customer value and their life cycle is quite long.

Table 1. The dynamics of innovations indicators in Khmelnytskyi region industrial enterprises

Indicator	Number of enterprises by years			
	2010	2011	2012	2013
Firms involved in innovation activities, total number	60	79	78	58
Including: the number of enterprises that spend funds on innovations	51	65	43	25
Implemented innovations	57	74	77	57
Introduced new kinds of products	21	36	25	16
Introduced new technological processes	34	40	32	21
Low-waste, resource-saving and waste-free	19	14	11	5
Implemented innovative products that were re-introduced or changed during the last 3 years	28	49	54	46
Overall expenditures on innovations, ths UAH	749588.2	898520.2	225196.2	113120.1
Expenditures on research and designs, ths UAH	17.5	0	151.9	0
Including internal research, ths UAH	17.5	0	151.9	0
Expenditures on machinery and equipment connected with innovations, ths UAH	58723.4	93741.2	96313.0	109367.0
The share of expenditures on purchase of machinery and equipment connected with the introduction of innovations, %	7.8	10.4	42.8	96.7
Other expenditures (preparation of production to implementation of innovations), ths UAH	690847.3	804779.0	128731.3	3717.6

Sources: Bulletin of Khmelnytskyi State Centre of Science; Innovations and Informatization; Innovative activity of industrial enterprises in Khmelnytskyi region in 2013: Statistical Yearbook.

Table 2. The dynamics of innovative activities results at SE "Novator", own calculations

Indicators	Years			
	2010	2011	2012	2013
Net income (revenue) from the sales of products and services, mln UAH	154.0	222.4	250.5	243.7
Revenues from the sale of innovative products, mln UAH	0.3	1.7	5.9	8.4
The share of innovative products in total revenue, %	0.19	0.76	2.36	3.45
The cost of innovation, ths UAH	2982.3	1059.9	4599.0	6300
Return of the costs invested in innovations, UAH	0.10	1.55	1.28	1.97
Net income (loss), mln UAH	-3.98	13.70	1.87	8.2

In general, the studies have shown that those enterprises of the region that were innovative and active, were also able to maintain positive economic development, even during the crisis. The growth rates of sales were within 115–125%, and in some periods even exceeding 200%. This demonstrates their ability to meet the needs of consumers target groups in the relevant market segments better than competitors. However, the fact that only some of them have come to the market with new products and rather low profitability of others evidence that their leadership preferred the cost leadership strategy.

And there is an explanation for that. Taking into account the saturation of most market segments with competing by their functional properties goods-analogues as well as subjective assessments of their value by consumers, the price factor becomes increasingly important in consumer choice (even at mature markets). The proof of this is the rapid growth of China's economy, which focuses on low-cost products through minimization of insignificant functional characteristics.

In terms of compression of effective demand at many markets, the strategy of price leadership is becoming increasingly popular. However, the ability of companies to use it to expand their presence at the market depends not only (and not so much) on cheap resources invested in production, but also on whether the products meet quality standards enabling their safe and cost-effective use by consumers. This is especially true for companies that plan to enter the markets of European countries – compliance with international standards on production quality is the obligatory condition for the access to these markets.

It can be concluded that an important prerequisite for sustainable and dynamic growth of industrial enterprises (and therefore their market value) is the ability of their management to build the right architecture of business processes – by components, stages and participants. Together they maximize the customer value of a final product that is the subject of sale. Expertise of company management lies in the ability to build business processes by this criterion.

Taking into account the tendency to spread dynamic network structures in the industrial economic sector, the participants of many business processes can extend beyond a single enterprise. For each company that decides to join this network (consumer value chain) it is important that in the result of implementation of operations to create the final product, its share was higher than the shares of other participants. Then, respectively, the value added share will grow increasing its economic performance in the form of income.

Based on these considerations, it can be stated that directly from the structure of customer value the industry enterprises should build their business model, choosing those links in the chain of creation, where they are able to form a key competitive advantage. It is displayed in the formalization of competitive strategy as presented in Figure 2.

Taking into account the dynamic market conditions and consumer preferences, the company may eventually lose the leadership in creating customer value and implementation of the chosen competitive strategy can be complicated. Therefore, the main focus of the competitive strategy must be reflected in innovative strategy – to maintain a set of strategic competitive advantages in terms of enterprise's business processes in response to changes in the structure of customer value of the final pro-

duct. Thus, the innovation potential of company can be implemented – both in technical and technological equipment for business processes and in management of material, information and financial resources related to competences of management personnel. Considering the contraction of effective demand at many markets the process innovation can be crucial in shaping the competitive advantages of industry enterprises.

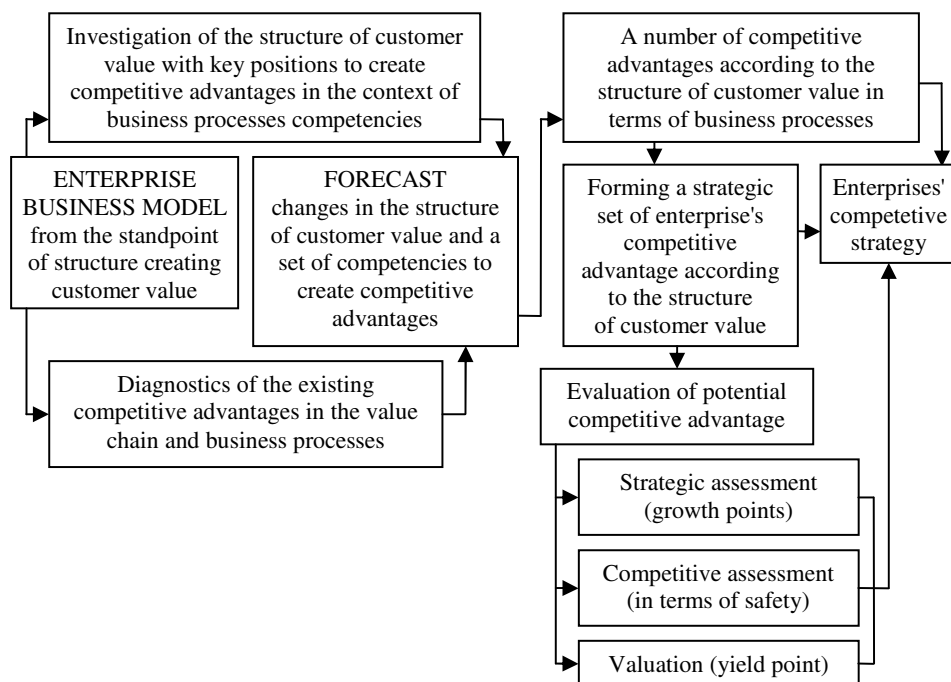


Figure 2. Formation of competitive strategy of an enterprise based on customer value structure of the final product, made by the author

As it can be seen in Figure 2, the main point in the formation of competitive advantage (they can be called critical, as they are crucial for consumer value) are the core competencies of the company. They are carried by enterprise's personnel with its unique knowledge and skills in the area of technological and market opportunities of the company. Therefore, today's enterprises should invest sufficient funds into the development of competences in order to generate competitive advantages in the long run.

Conclusions. The increasing globalization of economic processes and the deployment of the crisis in Ukrainian economy leads to increased competition in most industrial sectors of national economy. Effective counter-pressure to competitors and dynamic industrial growth can be achieved only through improvements of conceptual foundations of activities. Popular in developed economies concept of value-based management with a focus on the market value growth of the company at the stock market volatility cannot be fully implemented. Therefore, it is proposed to strengthen its conceptual framework with new methodological approaches to innovation management, in part concerning the choice of business model for the company

and building business processes based on customer value structure of the final product. It is noted that the company must carry out its innovation not only in the creation of new products with desired functional properties, but also to implement process innovation to ensure the maintenance of a set of strategic competitive advantages in terms of existing business processes in response to changes in the structure of customer value of the final product. It can be innovations in the field of technical and technological equipment of business processes and in the management of material, information and financial resources. It is emphasized that the key role in implementing the concept of value-based management plays the competence of personnel. The analysis of business process in machine-building enterprises aimed at determining their ability to form competitive advantages according to the structure of customer value of the final product, as well as their relationship with key competences at enterprises will be the subject of further research.

References:

Про оцінку майна, майнових прав та професійну оціночну діяльність в Україні: Закон України від 12.06.2001 № 258-III // zakon.rada.gov.ua.

Інноваційна діяльність промислових підприємств Хмельницької області у 2012 р. / За ред. В.В. Скальського // Вісник Хмельницького державного центру науки, інновацій та інформатизації. – 2013. – №3. – С. 5–7.

Інноваційна діяльність промислових підприємств Хмельницької області у 2013 р.: Статистичний збірник / За ред. Л.О. Хамської. – Хмельницький: Головне управління статистики у Хмельницькій області, 2014. – 161 с.

Каплан Р., Нортон Д. Стратегические карты. Трансформация нематериальных активов в реальные результаты. – М.: Олимп-Бизнес, 2005. – 512 с.

Коупленд Т., Коллер Т., Муррин Д. Оценка компании. – М.: Олимп-Бизнес, 2003. – 576 с.

Мендрюл О.Г., Ларцев В.С. Оценка стоимости нематериальных активов. – К.: Полиграф-Информ, 2004. – 264 с.

Мних О.Б. Маркетинг у формуванні ринкової вартості машинобудівного підприємства: Монографія. – Львів: НУ «Львівська політехніка», 2009. – 428 с.

Момот Т.В. Вартісно-орієнтоване корпоративне управління: від теорії до практичного впровадження: Монографія. – Харків: ХНАМГ, 2006. – 380 с.

Промисловість Хмельниччини у 2013 р.: Статистичний збірник / За ред. Л.О. Хамської. – Хмельницький, 2014. – 125 с.

Терещенко О.О., Стецько М.В. Управління вартістю підприємства в системі фінансового менеджменту // Фінанси України. – 2009. – №3. – С. 91–99.

Томпсон А., Стрикленд А. Стратегический менеджмент. – М.: Вильямс, 2007. – 928 с.

Стаття надійшла до редакції 20.04.2015.