

D. KOBYZSKYI

ORGANIZATIONAL AND ECONOMIC POTENTIAL OF RE-ENGINEERING BUSINESS PROCESSES IN THE CONTEXT OF MARKETING ACTIVITY OF AN INDUSTRIAL ENTERPRISE TO ENSURE ITS EFFICIENT INNOVATIVE ACTIVITY

The **subject** matter of the study is the principle of organization of innovative activity of domestic industrial enterprises and functional links between marketing and innovation activities in the process of re-engineering business processes. The **goal** of the article is to reveal the organizational and economic potential for attracting business process re-engineering in the marketing activities of industrial enterprises to ensure efficient innovative marketing in particular and effective innovative activity in general. The following **tasks** were solved in the article: statistical indicators of innovative activity of domestic industrial enterprises and corresponding sources of financing were investigated; scientific works on the topic of innovative marketing, innovation marketing, the innovative component of re-engineering and re-engineering of business processes in marketing activities were studied and analyzed. The following **methods** were used: the comparative analysis, system approach, statistical analysis. The following **results** were obtained. Ukrainian industrial enterprises lack innovations. Enterprises should independently find out how to ensure efficient innovations using the available resource potential. Innovations is a clearly defined benchmark for the industry and moreover, innovations should take place not only in technologies and the final product but also in management. All these factors require involving radical innovations which include the re-engineering of business processes. In the period of crucial changes in both internal and external business environment, marketing should become responsible for adapting the enterprise to new principles of operation. Thus, a number of activities in the area of marketing and innovation were listed, the innovative function of marketing of industrial enterprises was specified and the theoretical and methodical approach to the innovative marketing of industrial enterprises in the process of re-engineering business processes was upgraded. **Conclusions.** Re-engineering business processes in the context of industrial enterprise marketing include a significant organizational and economic potential that can be used to ensure the efficient innovative marketing in particular and the efficient innovative activity in general.

Keywords: re-engineering of business processes; marketing, innovative marketing; the organization of business processes; industrial enterprises.

Problem statement

The slowdown in the rates of economic growth in 2014–2015 significantly deepened the shortage of new technologies in the Ukrainian industry as a whole, and in particular in the machine-building industry. Therefore, under the lack of real state support and in the conditions

when the flow of funds from existing customers was blocked because of their leaving the area of activity, manufacturing enterprises faced severe challenges at the time of a sharp shortage of funds. Thus, instead of a powerful innovative development, industrial enterprises significantly reduced their spending on new technologies (table 1).

Table 1. Indicators of innovative activity of industrial enterprises in 2007-2016 (compiled basing on [1])

Years	Share of enterprises engaged in innovations, %	Total cost, mln.hrv.	Directions, mln.hrv.				
			Research and developments (R&D)	Including		Acquiring other external knowledge	Purchase of equipment and software
				internal R&D	external R&D		
2007	14,2	10821,0	986,4	793,5	192,9	328,4	7441,3
2008	13,0	11994,2	1243,6	958,8	284,8	421,8	7664,8
2009	12,8	7949,9	846,7	633,3	213,4	115,9	4974,7
2010	13,8	8045,5	996,4	818,5	177,9	141,6	5051,7
2011	16,2	14333,9	1079,9	833,3	246,6	324,7	10489,1
2012	17,4	11480,6	1196,3	965,2	231,1	47,0	8051,8
2013	16,8	9562,6	1638,5	1312,1	326,4	87,0	5546,3
2014	16,1	7695,9	1754,6	1221,5	533,1	47,2	5115,3
2015	17,3	13813,7	2039,5	1834,1	205,4	84,9	11141,3
2016	18,9	23229,5	2457,8	2063,8	394,0	64,2	19829,0

The analysis of above data shows that when the value of the national currency fell by about 60% in 2014 [2], the total amount of expenses on innovative activities of industrial enterprises was only 53% of the same indicator in 2011, respectively the expenses on acquiring new technologies were 14.5%, on purchasing equipment and software – 48.8% in hryvnias. The dramatic decline in

the expenses for acquiring external knowledge, machines and related software vividly illustrates why such necessary and expected new sales markets were not developed. Nowadays, Ukrainian machine-building does not have finished products to enter the EU-type sales markets. First of all, the regulatory framework and technological capabilities need to be updated. A new product cannot be

developed and implemented without creating a new process that comes along with the creation of a product. New product requires new rules that would cover all areas of the enterprise. At the same time, the expenses for acquiring new knowledge, which also includes managerial innovations, were more than 5 times less in 2016 than in 2011. It is worth noting that Ukrainian manufacturers are aware of the acute need for intensive innovation. So in 2016, the relative number of domestic enterprises which

introduced innovations, including new technological processes and new innovative types of products, reach the maximum level over recent ten years (table 2). At the same time, it is important to draw attention to the very negative trends in the implementation of innovative products, which should have formed the basis of the economic development of enterprises, so in 2015 the share of innovative products implemented in the industry was 4.8 times less than in 2008.

Table 2. Implementing innovations in manufacturing enterprises in 2007-2016 (compiled basing on [1])

Years	Share of enterprises implemented innovation, %	New technological processes introduced, pcs.	Innovative types of products manufactured, pcs.	Share of innovative products sold in industry, %
2007	11,5	1419	2526	6,7
2008	10,8	1647	2446	5,9
2009	10,7	1893	2685	4,8
2010	11,5	2043	2408	3,8
2011	12,8	2510	3238	3,8
2012	13,6	2188	3403	3,3
2013	13,6	1576	3138	3,3
2014	12,1	1743	3661	2,5
2015	15,2	1217	3136	1,4
2016	16,6	3489	4139	—*

* - no official statistics is available.

Saving the number of enterprises trying to innovate in a difficult economic period, even if there are a few of them, shows that Ukrainian manufactures aware the requirements of the modern business environment, while the structure of expenses for innovation activities indicates the inverse trends. When there is no external financial support but there is a lack of free own funds for acquiring external knowledge, domestic manufacturers tend to focus on research development at the expense of their own personnel potential (in 2015, the expenses for internal R&D were almost 9 times greater than the expenses for external R&D; in 2014, the expenses for acquiring other external knowledge decreased by 6.88 times compared to 2011). Statistics also prove a lack of proper external

support for the innovative activity of Ukrainian manufactures. Thus, in 2015, own expenses of enterprises for innovative activities were 34.7 times greater than the expenses from all other sources of financing [Table 3].

Domestic manufacturers have a strong potential in the form of a scientific and technical base, experience and skilled personnel but this potential should be effectively used and successfully aimed to improve the competitiveness of the industry at the international level as fast and qualitatively as possible. At the same time, workers employed in industry and in machine-building in particular, feel very low motivation because of low wages. They are little motivated not only to develop new knowledge but also to perform their official duties.

Table 3. Sources of financing the innovative activity of manufacturing enterprises in 2007-2016 (compiled basing on [1])

Years	Total cost	Including incoming receivables from			
		own	national budget	foreign investors	other sources
mln. hrv.					
2007	10821,0	7969,7	144,8	321,8	2384,7
2008	11994,2	7264,0	336,9	115,4	4277,9
2009	7949,9	5169,7	127,0	1512,9	1140,9
2010	8045,5	4775,2	87,0	2411,4	771,9
2011	14333,9	7585,6	149,2	56,9	6542,2
2012	11480,6	7335,9	224,3	994,8	2925,6
2013	9562,6	6973,4	24,7	1253,2	1311,3
2014	7695,9	6540,3	344,1	138,7	672,8
2015	13813,7	13427,0	55,1	58,6	273,0
2016	23229,5	22036,0	179,0	23,4	991,1

As it has already been mentioned, Ukrainian mashing-building enterprises lack innovations. Hopes for outside help in the existing realities of the economy of the

country are useless. Enterprises should independently learn how to build an effective innovation work using the existing resource potential. A clear benchmark for the

industry is innovation. Moreover, innovations are not only technologies and end products but also managerial innovations, innovations in the organization of all areas of activity – innovation of dialogue and cooperation of initial and end points of interaction, innovations in the exchange of information, innovations in the work with personnel, innovations in corporate culture and attitudes towards production commitments. Modern challenges require changing vectors of activity, require the development of new markets, the creation of new products. In order to enter the new market, Ukrainian enterprises have to get rid of the dissonance of the internal principles of the organization with the principles that are available in new markets. All this unambiguously requires involving significant innovative and transformational measures which include the re-engineering of business processes [3, 4]. In the period of transformations, according to the author, marketing should become responsible for adapting enterprises to new principles of operation [5, 6, 7]. In the conditions of the re-engineering of business processes, marketing should also change and then a new marketing should create a new enterprise.

The analysis of recent studies and publications

Apparently, Ukrainian manufacturers have heard statements about the importance of attracting innovations many times but these are just populist statements but not real advances. In this context, it is worth quoting M. Hammer and J. Champy who wrote in their book: "Innovation is rather the result of well-designed processes than the one happens on its own. The weakness of many companies is that they failed to look at their business through the prism of processes. Without this, all attempt to improve business will be reduced to meaningless work like rearranging deck chairs on the deck of Titanic which has already started to sink" [3, c.288]. Therefore, the unique value of re-engineering is to reveal the very practical aspects associated with the organizational and economic features of building an enterprise with an effective innovation policy.

The unique property of marketing and innovation cooperation lies in the fact that marketing can be both a subject and an object of innovative policy. There is even a separate direction of studies – the marketing of innovations and innovative marketing, which will be discussed in details below. Such scientists as L. Balabanova, V. Baranchev, M. Beiker, V. Bozhkova, O. Vinogradov, N. Goncharova, A. Grynirov, Yu. Drachuk, P. Drukker., N. Illyashenko, S. Illyashenko, Yu. Karakay, V. Kardash, N. Karpenko, B. Kiwi, M. Kirnosova, F. Kotler, I. Kotliarevska, R. Kuper, J. Levinson, T. Maksymova, V. Morokhova, V. Nyanko, P. Pererva, T. Prymak, O. Teletov, A. Ukrainets, N. Chukhray and others contributed greatly to studying the of marketing and innovative activities. Besides, the concepts of innovative marketing and the marketing of innovations were introduced into the scientific discourse by S. Illyashenko [8].

An important task of new marketing is to ensure favourable conditions for innovative activities of an enterprise. E. Utkin calls these conditions "innovative

climate" that is referred to as properly developed conditions in which a person feels free, completely motivated, prepared for creative work [9, p. 41]. Therefore, one of the tasks of re-engineering the marketing activity of a machine-building enterprise is to provide organizational and economic changes that create an efficient innovative climate.

Among the scientists who have studied the issues of innovative marketing at Ukrainian enterprises in the most profound way, N. Illyashenko [10] should be mentioned. Her works contain valuable recommendations for the practical implementation of innovative marketing taking into consideration the available peculiarities of domestic manufacturing enterprises.

Along with the works that study innovative marketing, economic literature also contains studies that focus more on marketing innovation, that is, on such interaction between marketing and innovations where innovations are an object in relation to marketing and moreover represent themselves as a product of manufacturing. Actually, marketing prepares, promotes manufacturing and sells such kind of innovation. Thus, Yu. Drachuk considers this interaction as marketing support of innovations at manufacturing enterprises and specifies it as a component of institutional environment of a manufacturing enterprise, which is a set of tools, forms and methods of innovative marketing and information technologies to manufacture, promote and market goods that are qualitatively improved, modified or innovative [11]. To support his opinions, he suggests the concept "industry marketing system" introduced by A. Kushneruk [12]. According to this approach, the whole process of creating a product, from its design to consumption and disposal, should meet the requirements of a consumer. The range of tasks of re-engineering marketing activities is determined exactly in this way and is considered as an efficient methodological tool for implementing such important changes in the system of values of industrial enterprises. I. Vinichenko supports this idea and states that the policy of re-directing innovative activities to marketing involves increasing the role of the market when both manufacturing and trading are aimed at studying the demands of specific customers and at satisfying them to the greatest extent [13].

The feasibility of changing the marketing methods used by Ukrainian machine builders is also confirmed by other researchers who study the perspectives of the practical introduction of innovative marketing. Thus, studying possibilities of implementing the concept of innovative marketing in the machine-building enterprises of Lviv region, A. Ukrainets mentions a very important thing – under modern conditions such goals as decreasing prime cost and price of products, improving technical and economic characteristics of products or encouraging consumers to buy goods are neither sound nor and basic among the priority of development. If the level of innovative potential is rather high, achieving leadership taking into account both the needs of consumers and own needs of an enterprise should become a priority task, which is the main task of introducing the concept of innovative marketing in the enterprise [14]. In this aspect,

attention should be paid to the previously discussed issue that, well-designed, arranged and mutually agreed business processes of an enterprise are of significant value to the enterprise in the far future in contrast to goods or services, which again emphasizes the necessity of re-engineering.

Practical recommendations for innovative marketing are mostly focused on the topic of using such information technology as the Internet environment or other special software products. A modern consumer, as T. Elvin claims, wants to have an access to the necessary information at any time, from any device, at any location [15].

At the same time, for most machine-building enterprises, the Internet is primarily an information platform that contains general information about companies, their scientific and manufacturing potential, contact information, nomenclature, latest news, background information, news about current successes and innovative developments of machine-building enterprises. On the other hand, machine-building enterprises receive information on the potential demand for products using online procurement sites of individual organizations or entire countries. At the same time, the functional set of capabilities of the Internet environment for other sectors (financial, service, retail sales, various entertainment) is much wider.

Practically, all recommended measures aimed at improving the process of disseminating information are already available. Everything that differs from ideas that are the basis of re-engineering should be "rather rooted out than automated" [3]. The use of universally developed information technology implies that they are not as effective as possible in any particular industry in particular in machine building. The essence of the feasibility of attracting information technology or other modern means of technology is revealing new unique, mutually beneficial opportunities in the context of the dialogue between a consumer and a manufacturer in the machine-building sector. This approach completely matches the inductive approach that underlies re-engineering [16, p. 28]. The Russian scientist, N. Abdikeev, emphasizes it, paying attention to the statement made by M. Hammer and J. Champy concerning the necessary condition for using the capabilities of information technologies, that is the capability of company managers to think inductively but not deductively. Thus, the deductive mode of thinking that is mostly used by managers lies in the fact that they specify a task, then search and assess different ways to solve this task. However, re-engineering must use the inductive mode of thinking, that is the capability to find an efficient solution and then search problems this solution can handle [16, p. 29].

A common mistake many companies make is to study the potential of information technologies within existing processes. At the same time, it has been proved that the automation of existing activities and the simple implementation of information technology on existing processes do not lead to the real transformation or to the upgrade of business. It is important to understand that the

correct question is "What technology should be used to help us do the things we have not done earlier?"

Re-engineering business processes is the innovation that is used to solve the problem of the organization of innovative marketing activity of Ukrainian machine-building enterprises and to teach us to use the available innovative potential and information technologies, in particular.

The Ukrainian scientists K. Myronenko, who studies the potential of re-engineering business processes in the context of the implementation of ERP-systems in innovation-active enterprises, makes a similar conclusion. In her works, she considers re-engineering business processes as the basis for implementing ERP-systems in innovation-active enterprises [17].

J. Bekker makes an important note regarding the implementation of the ERP system, he states in particular, that the implementation of the ERP-system often leads to changing entire processes and to re-grouping or even cancelling separate tasks [18]. Therefore, it is quite appropriate to combine the implementation of the ERP system and the re-engineering of business processes to improve qualitatively the organization of processes and efficient resource planning. At the same time, K. Myronenko considers that the most effective is the simultaneous re-engineering of business processes and implementing the ERP-system. Moreover, she emphasizes that the use of these systems helps not only automate business processes but also prepare them for the introduction of innovations [17].

The practical potential of introducing the ERP-systems in re-engineering marketing activities was also studied in the work "ERP and the Re-engineering of Industrial Marketing Processes. A Prescriptive Overview for the New-Age Marketing Manager" written by S. C. Gardiner, J. B. Hanna, M. S. La Tour [19].

M. Attaran [20] and A. Micu [21] focused on using the capabilities of information technologies for re-engineering as a whole, and marketing activities in particular.

The author believes that ERP-systems can also be used as the administrative and resource base for implementing tasks of innovative management in the system of the enterprise business processes; these tools can encourage an enterprise to operate according to the rules and priorities of innovative marketing. Therefore, finding optimal structures for business processes, in particular, their re-engineering and the creative involvement of organizational and economic capabilities of information technology is an integral part of building an innovative marketing system for the efficient operation in the innovation market.

As numerous studies show, many scientists have identified correct and progressive benchmarks for improving marketing activities for the Ukrainian industry and machine building, in particular. The only question is how to achieve the goals. Taking into account the similar nature of the priorities, the author is deeply convinced that re-engineering should reveal and specify the practical algorithm for solving the above systemic problems of domestic engineering and its marketing activities.

Thus, the **goal** of the study is to reveal the organizational and economic potential of involving re-engineering business processes in marketing activity of manufacturing enterprises to ensure the efficient innovative marketing, in particular, and efficient innovative activity, in general.

To achieve the set goal of the study, the following **methods and materials** were used – the comparative analysis to study the organizational and economic prerequisites for re-engineering business processes of industrial enterprises; systematic approach to study the works of domestic and foreign scientists on the problems of re-engineering business processes in general, and in marketing activities in particular; statistical analysis to study the innovation activity of the industrial complex of Ukraine in 2007-2016. The methodological basis of the study is the modern concepts of managing innovation and marketing activities.

The results of the study

To understand precisely the basics of the interaction of marketing and innovations, the following characteristic points and the definition of some studies are suggested:

- marketing of innovations: marketing should be considered as the basis of innovation activity of a manufacturing enterprise that provides the enterprise with information about the needs of consumers and ways to meet them, the state and prospects of market development, the conditions of competition (this kind of information is the basis for selecting the areas of the innovative development of industrial enterprises) and with the necessary marketing tools for the creation and commercialization of innovations (trade and price policy, distribution and promotion of innovations, tools of marketing strategy planning, organization and control);

- innovations in marketing: it is understood as the implementation of advanced marketing tools, innovative methods of marketing research and various innovations within marketing [22].

It is obvious that the interaction of marketing and innovation is a standard process which is implemented in most industrial enterprises and its specificity lies in the type of interaction. But more often manufacturers provide the interaction of marketing and innovation in such a format where marketing is only a certain element in the chain of the innovative process. "Marketing of innovation commercialization" as well as "marketing in selecting the direction of innovative product" occur in such a way in real conditions. The innovations that have had a similar one-way interaction with marketing are referred to as "the ones that are generated in the laboratory" (Developing → Manufacturing → Marketing → Consuming innovations) and "the ones that are attracted my market" (Marketing → Developing → Manufacturing → Consuming innovations) [22]. Such formats of interaction have one common drawback – this is their one-sidedness as in the context of such interaction there is a high probability that the complex of concurrent factors will remain unaccounted, which will surely affect the success of the measures at subsequent stages of the innovation implementation. That

is why special attention of Ukrainian machine-builders should be focused on the interaction between marketing and innovations in a so-called "broad sense".

It is marketing that has the most common points with innovations. Let us identify the main points that in general describe the potential for the efficient use of the symbiosis of marketing and innovations:

- determining the prerequisites for attracting innovations;
- selecting, assessing the innovation efficiency and risks;
- preparing an enterprise for innovation;
- ensuring the priority of the selected innovation in the system of values of the enterprise operational activities;
- promoting innovations;
- protecting innovations;
- implementing innovations (providing information, promoting and selling);
- utilizing innovation.

Taking into account the previously highlighted emphasis of Ukrainian machine-building enterprises on their own resource potential in the form of highly skilled personnel, one of the most important issues is to ensure the priority, encouragement and protection of innovations.

The main disadvantage of marketing work with innovations in real domestic machine-building enterprises is the weak feedback and the limited scope of interaction. Ukrainian machine-building industry needs a comprehensive interaction of marketing and innovations, which should take place in the pairs of two-way interconnections. Such scientists as V. Morokhova and L. Borzakovska describe the following pairs of interaction that are appropriate for a manufacturing enterprise:

"marketing-development" – is the coordination of the marketing department and R&D department while developing an innovation (I level of the product – "core product");

"marketing-manufacturing" – the interaction of marketing and manufacturing departments (II level of the product – "actual product");

"marketing-consuming" – the interaction of an enterprise and a customer including the complex of marketing means aimed at delivering a product to a customer, after-sales service and the development of partnership relations to meet the needs of a consumer and their use as the basis of next innovations (III level of the product – "augmented product") [22].

It is obvious that with the growth of conditionally accepted levels of the product, the quality of ensuring the interaction of marketing and innovations in Ukrainian machine-building enterprises is getting lower and lower. In other words, the most important point of interaction "marketing-consumption" is implemented in the worst way. As performers do not understand the key role of consumers, additional marketing activities to meet the needs of innovation should be suggested:

- "marketing-motivating" makes personnel aware of proposed changes and priorities and builds the system of values and corporate innovation culture ("product as an idea").

Besides, the current changing conditions of the business environment significant impact of indirect, non-productive and non-consumptive factors requires even more sectoral expansion of marketing objectives for protecting innovations:

- "marketing-finances" – the interaction that involves substantiating the feasibility of innovation implementation and encourages finding the source of financial support as well as supporting the process of implementation, protection against unforeseen troubles, temporary difficulties and support in waiting for the financial return of the innovation ("product in monetary terms");

- "marketing-law" – one of the broadest and most important directions of interaction under the current conditions of severe competition and complex geopolitical circumstances that provides support and protection of innovation in the areas of patent protection, certification, customs and product national restrictions ("product in legal terms").

V. Morokhova states that two-sided interaction between the marketing and innovative activities is very important since marketing is the basis for ensuring the innovative development of a manufacturing enterprise and innovations are the way to improve and develop marketing [22].

Among the most important issues in research on innovative marketing at Ukrainian industrial enterprises, special attention can be paid to the idea expressed by Ilyashenko N.S. [10] who believes that Ukrainian manufacturing enterprises act in two directions in the context of innovative marketing:

- import of foreign innovative technologies (including new manufacturing enterprises opened on the territory of Ukraine by foreign manufacturers);

- development and implementation of own innovations – organizing own scientific laboratories in domestic enterprises and continuous careful work of marketing services to create innovative products that meet the requirements of domestic customers [23].

The above analysis of the structure of innovative activity of Ukrainian manufacturing enterprises confirms the prevailing forced orientation on their own innovative developments, which emphasizes the importance to retain and value skilled personnel potential. Taking into account its own powerful scientific and technical potential, the Ukrainian industry is experiencing a shortage of imports and implementation of rather organizational and managerial innovations than technical ones. Technical innovations after their import are much easier adopted and implemented in Ukrainian machine-building enterprises, while organizational managerial ones face the established functional system and mental characteristics, even though imports of such innovations are less demanded.

To support the above opinion, N. Ilyshenko emphasizes that the implementation of the basic principles of innovative marketing involves developing and implementing innovative projects which cannot be always managed within the existing organizational structures; so, if an enterprise selects the concept of innovative marketing, its organizational and managerial structure should be rearranged [23]. The author believes that the

considered directions of the innovative activities of manufacturing enterprises should be supplemented by a strategically important aspect – the export of innovations. This area of activity is a key factor for achieving the ultimate goal for Ukrainian machine building that seeks the improvement of the economic situation through the qualitative updating of the nomenclature and the development of new export markets. It is important to note that Ukrainian machine-building innovations are potentially demanded in foreign markets. There are many statements about the prospects to open joint industrial enterprises in Ukraine with the corresponding import of innovations but few intentions to export Ukrainian innovations and to open joint enterprises in foreign markets on the basis of Ukrainian technical innovations.

And it is the marketing of an enterprise that should be interested most in the development of the economy based on innovations. Moreover, the innovativeness of the economy should be not only in the development of high-tech products (innovations) but also in the use of innovations in all spheres and areas of activity. Therefore, both the marketing itself and the enterprise as a whole should be sufficiently innovative in order to solve the problems of innovation. O. Gaponenko, who studies cognitive management, continuously claims that the main thing for the economy based on knowledge is not to create knowledge but to use it efficiently [24].

Innovations have a significantly higher price and value than raw materials and low-tech products, which means that the export of a high tech product or the whole production cycle is more economically attractive. So, the objectives of the complex organizational and managerial aspects should be changed, which would allow the exported products to be efficiently implemented in a new business environment. Therefore, the pattern of involving innovation attraction, suggested by the author, seems reasoned. Within this pattern, organizational and managerial innovations are imported to establish the domestic policy of developing innovations in the most efficient way and to export successfully the generated innovations on the basis of the new innovative organization of the enterprise. The schematic algorithm is as follows (fig. 1).

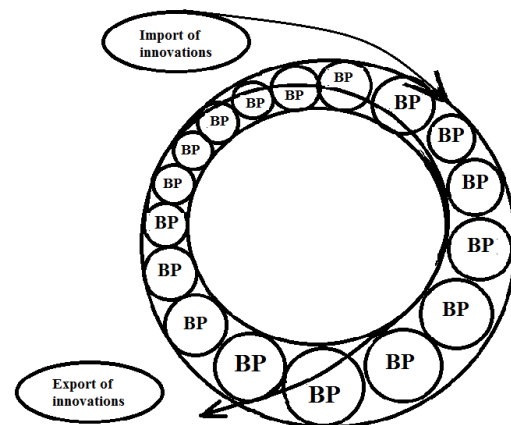


Fig. 1. The algorithm of innovation movements in an enterprise while re-engineering business processes (designed by the author)

Imported innovations should cover every business process that needs to be changed, rebuild the optimal structure of business processes and make the necessary number of appropriate iterations of interactions with the business processes of an enterprise.

Taking into account the above material, re-engineering the marketing activities of industrial enterprises can be considered as the innovation that is being imported. So, similar to the studies that single out innovative marketing and the marketing of innovation, re-engineering can be studied as an innovation in marketing as well as a technique for setting effective marketing to innovations, that is, one innovation is imported for the successful export of other innovations.

G. Forti, in his work "Re-engineering Marketing Strategies" [25], considers marketing the most efficient environment for the implementation of re-engineering activities in an enterprise.

Similar to the author who stated earlier that marketing should ensure introducing basic principles of re-engineering in all spheres of the enterprise activities, scientists that study innovative marketing claim that it should harmonize internal innovative climate in manufacturing enterprises. Thus, N. Illyashenko writes about creating the subsystem of innovative marketing that lies in improving the organizational subsystem, the subsystem of personnel motivation and mainstreaming research activities as well as building the complex of innovative marketing. She supplements traditional components of the marketing complex such as trade, price, sales and communicative policies of an enterprise with such important elements as "people" and "culture". The essence of these additional elements lies in harmonizing interrelations with main competitors and communication in the enterprise as well as in building the corporate culture that is aimed at innovations, their continuous generation and implementation [23].

The in-depth disclosure of the content of these elements points to a fundamental similarity to the tasks of re-engineering business processes; there is the only difference that lies in the fact that re-engineering answers the questions about the practical achievement of the set

tasks, while preserving the principles of the radical transformations and the significance of the improvements.

Therefore, taking into account the above-mentioned judgments on end-to-end and simultaneously circular movements of innovation in an enterprise, the pattern of the components of innovative marketing, suggested by N. Illyashenko, can be supplemented with the element "enterprise business processes" as well as with such element as "information technologies, in particular their organizational and economic capabilities", which is very important and essential for the successful implementation of the re-engineering of the marketing activities (fig. 2). Business processes and their features are not always obvious and typical. But the author believes that it is not important to pay much attention to their entire list, more important is to ensure a conscious and efficient interaction of each business process with innovations. Obviously, this is a new fundamental and strategic goal of innovative marketing. While the re-engineering of the marketing activities of a machine-building enterprise is a methodological tool for its successful implementation. It is important that attention should be paid to the new specific role of information technologies. Thus, in the context ideas suggested by N. Illyashenko, about the concept "people", that is about internal and external links of enterprises where information is the major product of production and an article of consumption, the following major tasks should be fulfilled:

- information on main subjects an enterprise cooperates with should be collected and analyzed;
- long-term agreements with counter-agents should be set, the efficiency of cooperation with them should be increased;
- the level of communication with the personnel of an enterprise should be improved [23].

At the same time, the new role of information technology in the context of re-engineering marketing activities is the creation of a new structure and new business processes, the initiation of activities that have not been carried out earlier to improve the consuming characteristics of the activities of individual structural units and enterprises in general.

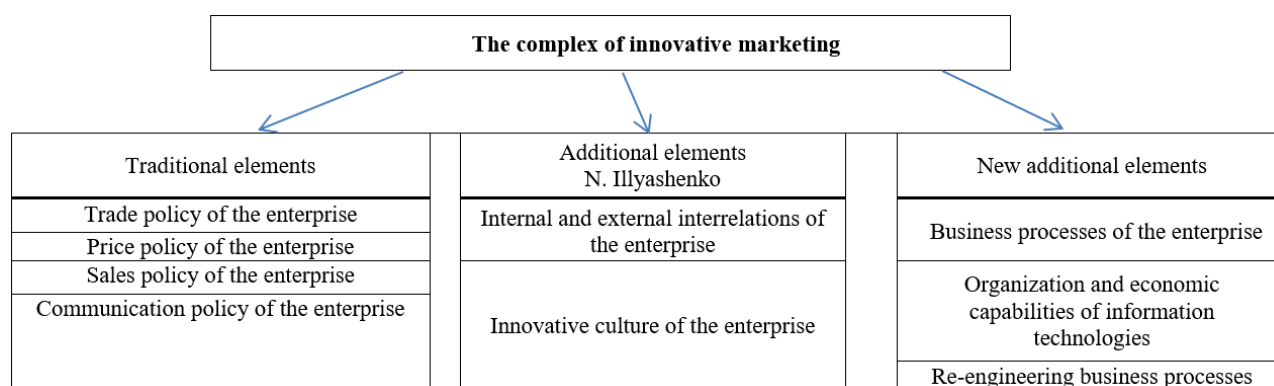


Fig. 2. The complex of innovative marketing (added basing on [23])

Thus, N. Illyashenko [23] makes the conclusion that a necessary prerequisite for the transition of the activity of an enterprise to innovative marketing is to prepare an enterprise, that is to ensure the advanced organizational

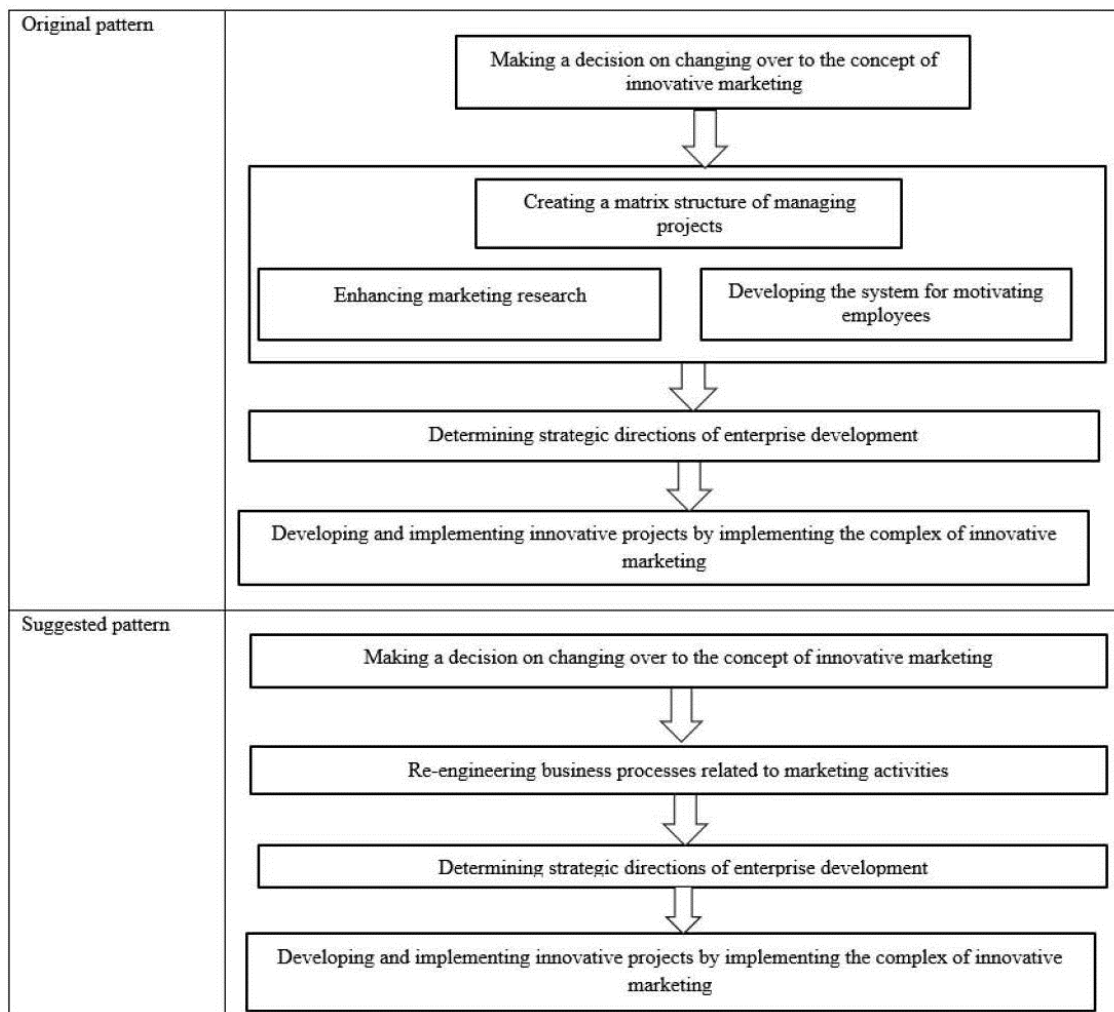
system, the subsystem of personnel motivation, mainstreaming research activities, which should be carried out by re-engineering marketing activities of an enterprise and business processes related to it. Taking into account

everything mentioned above, the author suggests changing the pattern of implementing innovative marketing in an enterprise presented in available studies [23] (Table 4).

The described above principles and priority directions in the re-engineering of marketing activities provide a broader, radical and fundamental spectrum of transformations in the enterprise than the original pattern suggested. The current circumstances in the business environment and corresponding organizational and

economic conditions of the machine-building enterprises of Ukraine require that the principles of the activity organization should be fundamentally changed. Therefore, innovation marketing should be introduced in each workplace and appropriate material base should be provided to transmit necessary information in the most appropriate ways by re-engineering business processes of the enterprise.

Table 4. The pattern for implementing innovative marketing in an enterprise (finalized basing [23])



The main tasks that are set for re-engineering business processes to establish innovative marketing in machine-building enterprises should be formulated as follows:

- to build and coordinate business processes of an enterprise and to involve organizational and economic capabilities of information technologies, which will help ensure:
 - using internal innovation intellectual capital efficiently and completely;
 - monitoring advanced sectoral innovations;
 - importing necessary innovations timely, economically and reasonably;
- to create a positive innovative climate of an enterprise, to encourage increasing internal innovation

capital, to adopt imported innovations and encourage the export of manufactured innovations;

- to build the organizational and methodological base for managing, planning, protecting and using innovations for all business processes of an enterprise:
 - directing internal information flows optimally and efficiently to innovations;
 - directing external information flows optimally and efficiently to innovations;
 - preparing innovations for export in the optimal information, resource, commercial and legal way;
 - exporting innovations profitably on the strategic level (within the market);
 - supporting and ensure standard (trouble-free) using of the exported innovation;
 - utilizing innovations (as an item of nomenclature).

Conclusions and the prospects of further research

The conducted statistical analysis of the innovative activity of industrial enterprises of Ukraine in 2007-2016 clearly demonstrates the rapid deterioration of the conditions under which enterprises carry out innovative activities, as well as the reduction of innovative products in the total volume of industrial products that were sold in 2014-2016. To conduct successful innovation activities, enterprises should make every effort to use available scientific, technical and human resources completely. The author believes that the efficient solution to this problem lies in re-engineering the business processes of the marketing activities of industrial enterprises. The author suggests expanding the list of points of interaction between marketing and innovations. On the basis of the studies of innovative marketing and marketing of innovations as well as the main concepts of re-engineering business processes, the author suggests revealing the innovative function of marketing industrial enterprises

while re-engineering their business processes. While specifying the innovative function, the theoretical and methodical approach to innovative marketing of industrial enterprises during the re-engineering of business processes was improved; this innovative marketing, unlike available ones, contains a set of elements of innovative marketing to redesign radically business processes and study re-engineering as a managerial innovation which is imported for further preparation and implementation of efficient export of food and technological innovations. Accordingly, the pattern for introducing innovative marketing in the industrial enterprise is supplemented by stages related to re-engineering business processes; the main tasks of re-engineering in the area of efficient innovative activity are determined. Further studies should be aimed at developing more detailed methodological recommendations on re-engineering activities in marketing activities that are directed at developing the innovative potential of real industrial enterprises.

References

1. *Materials of State Statistice Service of Ukraine*, available at : <http://ukrstat.gov.ua/>.
2. *Archive of Basic Trends of Money Exchange Market, National Bank of Ukraine* : web-site, available at : https://bank.gov.ua/control/uk/publish/category?cat_id=40823
3. Hammer, M., Champy, J. (1997), *Reengineering the Corporation: A Manifesto for Business Revolution* : translated from English, St.-P. : St-P, University Publish House, 332 p.
4. Davenport, T. (1993), *Process Innovation : Reengineering Work through Information Technology*, Harvard Business School Press, 201 p.
5. Taraniuk, L. M., Kobyzskyi, D. S., Taraniuk, K. V. (2016), "Organizational and Economic Opportunities of Reengineering Business-processes as Part of the Effective Functioning for Native Machine-building Branch Recreation", *Mechanism of Economic Regulation*, No. 4, P. 68–76.
6. Kobyzskyi, D. S. (2017), "Preconditions of Marketing Activity Reengineering at Ukrainian Machine-building Enterprises" ["Peredumovy vprovadzhennja reinzhynirynu marketyngovoji dijalnosti ukrajinskix mashynobudivnyx pidpryjemstv"], *Mechanism of Economic Regulation*, No. 3, P. 76–84.
7. Kobyzskyi, D. S. (2018), "Organizational and Economic Provision of Marketing Activity Reengineering at Ukrainian Machine-building Enterprises" ["Organizacijno-ekonomichne zabezpechennja reinzhynirynu marketyngovoji dijalnosti ukrajinskix mashynobudivnyx pidpryjemstv"], *Business-Inform*, No. 2, P. 319–325.
8. Illjashenko, S. M. (2008), *Marketing of Innovations and Innovations in Marketing* : Monograph [*Marketynng innovacij i innovaciji v marketyngu* : Monografiya], ed. by S. M. Illjashenko, Sumy, University Book, 615 p.
9. Utkin, E. A. (1998), *Business-reengineering : Business Renew*, Moscow, Tandem, 219 p.
10. Illjashenko, N. S. (2011), *Organizational and Economic Basis of Innovative Marketing of Industrial Enterprises* : Monograph [*Organizacijno-ekonomichni zasady innovacijnogo marketyngu promyslovyx pidpryjemstv* : Monografya], Sumy State University Publish House, 192 p.
11. Drachuk, J. Z., Trushkina, N. V. (2013), "Directions of Marketing Provision of Industrial Manufacturing Modernization" ["Naprijamy marketyngovogo zabezpechennja modernizaciji promysloвого vyrobnyctva"], *Regional Business-Economy and Management*, No. 2 (38), P. 35–42, available at : http://nbuv.gov.ua/UJRN/Rbetu_2013_2_8.
12. Kushneruk, A. S. (2012), "Theoretical Issues of Governmental Policy of Industrial Development on Marketing Basis", ["Teoretychni zasady derzhavnoji polityky promysloвого rozvytku na zasadaх"], *Actual Problems of Economics*, No. 9 (135), P. 86–93, available at : http://nbuv.gov.ua/UJRN/ape_2012_9_11.
13. Vinichenko, I. I. (2013), "Singularities of Marketing Management of Enterprises' Innovative Activity" ["Osoblyvosti marketyngovogo upravlinnja innovacijnoju aktyvnistju pidpryjemstv"], *Effective Economics*, No. 2, available at : http://nbuv.gov.ua/UJRN/efek_2013_2_3.
14. Ukrajinec, A. I. (2012), "Analyze of Innovative Marketing Implementation Abilities" ["Analiz mozhlyvostej vprovadzhennja innovacijnogo marketyngu na mashynobudivnyx pidpryjemstvax Lvivshchiny"], *Bulletin of National University "Lvivska Politehnika"*, No. 749 : Logistics, P. 299–304, available at : <http://ena.lp.edu.ua:8080/hande/ntb/25833>.
15. Elwin, T. *Reengineering Marketing*, available at : <https://tobyelwin.com/reengineering-marketing/>
16. Abdikeev, N. M., Kiseljov, A. D. (2010), *Corporation's Knowledge Management and Business Reengineering* [*Upravlenie znanijami korporacii i reinzhiniring biznesa*], ed. by N. M. Abdikeev, Moscow, "Infra", 382 p.
17. Myronenko, K., Kovalenko, A., Stanislavnik, E. (2014), "Key Aspects of ERP-systems Implementation at Innovative-active Industrial Enterprises" ["Kljuchevye aspekty vnedrenija ERP-system na innovacionno-aktivnyx promyshlennyx predpriyatijax"], *Scientific Bulletin of Odessa National Economic University*, No. 6, P. 83–94, available at : http://nbuv.gov.ua/UJRN/Nv_2014_6_10.
18. Bekker, J., Vilkov, L., Taratukhin, V. (2007), *Processes Management*, Moscow, "Eksmo", 384 p.

19. Gardiner, S. C., Hanna, J. B., La, Tour M. S. (2002), "ERP and the Reengineering of Industrial Marketing Processes. A Prescriptive Overview for the New-Age Marketing Manager", *Industrial Marketing Management*, Vol. 31, No. 4, P. 357–365. DOI: [https://doi.org/10.1016/S0019-8501\(01\)00167-5](https://doi.org/10.1016/S0019-8501(01)00167-5).
20. Attaran, M. (2004), "Exploring the Relationship between Information Technology and Business Process Reengineering. *Information & Management*. Vol. 41, No. 5, P. 585–596. DOI: [https://doi.org/10.1016/S0378-7206\(03\)00098-3](https://doi.org/10.1016/S0378-7206(03)00098-3).
21. Micu, A., Capatina, A., Micu, A. E. (2012), "Marketing Process Reengineering within a Romanian Software Company Focused on the Implementation of a Freelancing Strategy", *iBusiness*, Vol.4, No. 4, P. 341–349. DOI: <https://doi.org/10.4236/ib.2012.44043>.
22. Morokhova, V. O., Borzakovska, L. V. "Complex Interaction of Marketing and Innovative Activities of Industrial Enterprise" ["Kompleksna vzajemodija marketyngovoji ta innovacijnoji dijalnosti promyslovogo pidpryjemstva"], *Management of Innovative Process in Ukraine*, available at : http://ena.lp.edu.ua/bitstream/ntb/14834/1/109_179-180_120506_maket_ena_ntb.pdf.
23. Iljashenko, N. S. (2010), "Implementation of Innovative Marketing Conception within Industria Enterprises Activity" ["Vprovadzhennja koncepcii innovacijnogo marketyngu v dijalnistj promyslovjx pidpryjemstv"], *Marketing and Management of Innovations*, No. 1, P. 28–33.
24. Gaponenko, A. L. (2006), *Economics, Based on Knowledge [Ekonomika, osnovannaja na znanijax]*, Moscow, "RAGS", 352 p.
25. Gilbert Forti "Reengineering Marketing Strategies", Lahti University of Applied Sciences : Degree Programme in International Business, available at : https://www.theseus.fi/bitstream/handle/10024/51425/Forti_Gilbert.pdf?sequence=4&isAllowed=y.

Received 17.08.2018

Відомості про авторів / Сведения об авторах / About the Authors

Кобизський Денис Сергійович – Сумський державний університет, аспірант кафедри економіки, підприємництва та бізнес-адміністрування, АТ "Сумський завод "Насосенергомаш", начальник відділу маркетингу, м. Суми, Україна, e-mail: Kobyzskyi_DS@nempump.com; ORCID ID: <https://orcid.org/0000-0003-1842-7128>.

Кобизский Денис Сергеевич – Сумской государственной университет, аспирант кафедры экономики, предпринимательства и бизнес-администрирования, АО "Сумский завод "Насосенергомаш", начальник отдела маркетинга, г. Сумы, Украина.

Kobyzskyi Denys – Sumy State University, Postgraduate Student at the Department of Economics, Entrepreneurship and Business Administration, JSC "NASOENERGOMASH Sumy", Marketing Department Chief, Sumy, Ukraine.

ОРГАНІЗАЦІЙНО-ЕКОНОМІЧНИЙ ПОТЕНЦІАЛ РЕІНЖІНІРИНГУ БІЗНЕС-ПРОЦЕСІВ В МАРКЕТИНГОВІЙ ДІЯЛЬНОСТІ ПРОМИСЛОВОГО ПІДПРИЄМСТВА ДЛЯ ЗАБЕЗПЕЧЕННЯ ЙОГО ЕФЕКТИВНОЇ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ

Предметом дослідження статті є принципи організації інноваційної діяльності вітчизняних промислових підприємств та функціональні зв'язки маркетингу та інноваційної діяльності в період здійснення реінжинірингу бізнес-процесів. **Мета** роботи – розкрити організаційно-економічний потенціал залучення реінжинірингу бізнес-процесів у маркетинговій діяльності промислових підприємств для забезпечення ефективного інноваційного маркетингу зокрема, та ефективної інноваційної діяльності в цілому. В статті вирішуються наступні **завдання**: дослідження статистичних показників інноваційної діяльності вітчизняних промислових підприємств та відповідних джерел фінансування; аналіз існуючих досліджень по темі інноваційного маркетингу, маркетингу інновацій, інноваційної складової реінжинірингу та реінжинірингу бізнес-процесів у маркетинговій діяльності; розвиток методичного підходу впровадження інноваційного маркетингу. Використовуються такі **методи**: порівняльний аналіз, системний підхід, статистичний аналіз. Отримано наступні **результати**: українські промислові підприємства відчувають різкий дефіцит залучення інновацій. Підприємства власноруч мають навчитися нагодувати ефективну інноваційну роботу з використанням наявного ресурсного потенціалу. Чітко визначений орієнтир для промисловості – інновації. При чому, інновації – не тільки технологій та кінцевого продукту, а й управлінські інновації. Зазначена розстановка сил безальтернативно вимагає залучення інноваційних трансформаційних заходів радикального характеру, до яких належить реінжиніринг бізнес-процесів. В період різних змін як у внутрішньому, так і зовнішньому бізнес-середовищі, на переконання автора, саме маркетинг має стати відповідальним за адаптацію підприємств до нових принципів роботи. Так сформовано розширений перелік точок контакту маркетингової діяльності та інноваційної, розкрито інноваційну функцію маркетингу промислових підприємств, вдосконалено теоретико-методичний підхід до інноваційного маркетингу промислових підприємств при проведенні реінжинірингу бізнес-процесів. **Висновки**: реінжиніринг бізнес-процесів у маркетинговій діяльності промислових підприємств містить у собі вагомий організаційно-економічний потенціал, що може бути використаний для забезпечення ефективного інноваційного маркетингу зокрема, та ефективної інноваційної діяльності в цілому.

Ключові слова: реінжиніринг бізнес-процесів; маркетингова діяльність; інноваційний маркетинг; організація бізнес-процесів; промислові підприємства.

ОРГАНИЗАЦИОННО-ЭКОНОМИЧЕСКИЙ ПОТЕНЦИАЛ РЕИНЖИНИРИНГА БИЗНЕС-ПРОЦЕССОВ В МАРКЕТИНГОВОЙ ДЕЯТЕЛЬНОСТИ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ ДЛЯ ОБЕСПЕЧЕНИЯ ЕГО ЭФФЕКТИВНОЙ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ

Предметом исследования статьи являются принципы организации инновационной деятельности отечественных промышленных предприятий и функциональные связи маркетинга и инновационной деятельности в период осуществления

реинжиниринга бизнес-процессов. **Цель** работы – раскрыть организационно-экономический потенциал привлечения реинжиниринга бизнес-процессов в маркетинговой деятельности промышленных предприятий для обеспечения эффективного инновационного маркетинга в частности, и эффективной инновационной деятельности в целом. В статье решаются следующие **задачи**: исследования статистических показателей инновационной деятельности отечественных промышленных предприятий и соответствующих источников финансирования; анализ существующих исследований по теме инновационного маркетинга, маркетинга инноваций, инновационной составляющей реинжиниринга и реинжиниринга бизнес-процессов в маркетинговой деятельности. Используются следующие **методы**: сравнительный анализ, системный подход, статистический анализ. Получены следующие **результаты**: украинские промышленные предприятия испытывают острый дефицит привлечения инноваций. Предприятия должны самостоятельно научиться обеспечивать эффективную инновационную работу с использованием имеющегося ресурсного потенциала. Четко определенный ориентир для промышленности – инновации. Причем, инновации – не только технологий и конечного продукта, но и управленческие инновации. Указанная расстановка сил безальтернативно требует привлечения инновационных трансформационных мер радикального характера, к которым относится реинжиниринг бизнес-процессов. В период резких изменений, как во внутренней, так и во внешней бизнес-среде, по убеждению автора, именно маркетинг должен стать ответственным за адаптацию предприятия к новым принципам работы. Так сформирован расширенный список точек контакта маркетинговой деятельности и инновационной, раскрыта инновационную функцию маркетинга промышленных предприятий, усовершенствовано теоретико-методический подход к инновационному маркетингу промышленных предприятий при проведении реинжиниринга бизнес-процессов. **Выводы**: реинжиниринг бизнес-процессов в маркетинговой деятельности промышленных предприятий содержит в себе весомый организационно-экономический потенциал, который может быть использован для обеспечения эффективного инновационного маркетинга в частности, и эффективной инновационной деятельности в целом.

Ключевые слова: реинжиниринг бизнес-процессов; маркетинговая деятельность; инновационный маркетинг; организация бизнес-процессов; промышленные предприятия.
