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INNOVATIVE ACTIVITY OF CORPORATE-INTEGRATED STRUCTURES IN THE SYSTEM OF ACTIVATION OF ORGANIZATIONAL RESOURCES OF MARKETING MANAGEMENT

Abstract. Nowdays the formation of integrated corporate structures in Ukraine can become one of the tools to counter foreign competitors, the creation of large export-oriented structures that can make investments in enterprises of related industries in order to guarantee their supply of raw materials, sales of products, filling the domestic market with domestic products; consolidation of financial resources of enterprises, stabilization, social condition in the regions of economic presence of companies in view of the creation of new jobs, increase of the tax base through loading of existing and deployment of new productions of their capitalization.

The study of integration processes, their nature, and economic significance made it possible to generalize theoretical definitions of the very essence of integration and its types, to emphasize that in the conditions of modern economic development, one of the forms of integration development is the creation of integrated corporate structures. Integrated corporate structures are an effective form of consolidation of investment resources, knowledge-intensive technologies and production capital, that is, they are the most optimal organizational form of implementing the innovation process.

Considering the purpose of this article is the study of the current problems of the innovative development of corporate-integrated structures in the system of activation of the

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organizational resource of marketing management and the determination of ways to solve them. To achieve the goal, the methods of analysis and synthesis, induction and deduction, comparison, classification, system approach, statistical analysis, structural and logical generalization were used

The article studies and summarizes the global experience of corporate management. The Polish practice of successful operation of integrated corporate structures is considered. A statistical analysis of the activities of joint-stock companies in Ukraine was performed. The problematic state of the innovative development of corporate structures of Ukraine is considered and ways to eliminate it are determined. Peculiarities, factors, organizational forms, models, types of scientific, technical and innovative activities of corporate structures in Ukraine were studied. The organizational design of the company is proposed, which is aimed at attracting organizational resources. The priority areas of innovative development of corporate-integrated structures in Ukraine have been determined.

Keywords: corporate integration, corporate integration processes, corporate management, integrated corporate structures, innovative development, innovative activity, marketing management, organizational resource, world experience, Polish practice.

Introduction. Under the conditions of a constant shortage of state financial resources, which are directed to the support and provision of scientific, technological and innovative activities, the transfer of the center of gravity to the internal capabilities of large corporate structures is a promising way to raise and grow innovative activity in all areas of economic activity. Today, the main problem that hinders the creation of conditions for innovative management is the weakness of the state's policy to support the reproduction of industrial capital. The sector of small and medium-sized enterprises is not able to reach a position comparable to TNCs of highly developed countries, and does not serve as a basis for creating effective economic structures.

The national interests of Ukraine require the solution of the strategic problems of the country's development through the formulation of tasks related to the fierce competitive struggle that is already actively taking place in the domestic and foreign markets, which is manifested in the competition of individual enterprises and companies, in the economic and technological competition of Ukraine with other countries, choosing their place in the global economy. It is from these positions that company management methods should be formed, including adequate economic and legal norms, rules, and regulators.

However, the role of organizational resources of the state remains important, including the development of a system of state programs; stimulation and support of favourable and stable conditions for the development of the most effective forms of large-scale production and its integration with financial capital; effective management of state property; regulation of the development of financial markets and their infrastructure; antimonopoly regulation and stimulation of competition, control over the activities of natural monopolies. That is, the main purpose of using the organizational resource of the state for the sustainable development of the economy of Ukraine is the formation of favourable conditions for the successful operation of large corporate structures – the main leaders of industrial and scientific and technological policy (Fedulova, 2007).

Given this, in modern business conditions, the capabilities of corporations can become one of the main factors in ensuring the competitiveness of the Ukrainian economy.

Analysis of recent research and publications. In the modern world economy, the process of integration takes place in various forms in space and

time, which is intensified and accelerated under the influence of globalization processes, and causes the formation of various types of business structures. The problems of substantiating the theoretical and methodological foundations of the evaluation and substantiation of corporate integration processes were considered in foreign works (Shidpour et al., 2023; Hariyani et al., 2023; Andersen & Bering, 2023; Velte, 2023; Lie, 2023; Ceesay, 2023) and Ukrainian economist scientists (Kyzym et al., 2007; Hutsaliuk, 2017a, 2017b, 2017c; Lutsyshyna, 2019; Shatska, 2019; Iaremenko et al., 2021; Vlasenko et al., 2022).

The analysis shows that recently scientists (Abdekhoda & Dehnad, 2023; Bajolle et al., 2023; Banihashemi et al., 2023) thoroughly research the mechanisms of managing the development of business integrated structures and pay considerable attention to the essence and features of the organizational resource.

Despite the wide range of scientific research on the chosen topic, the multifacetedness and debatable nature of certain issues require further development. And especially the solution to this problem is actualized at the current stage of globalization transformations in the conditions of smart specialization and modernization of the national economy, the formation of a new paradigm of corporate management.

The purpose of this article is to study the current problems of innovative development of corporate-integrated structures in the system of activation of the organizational resource of marketing management and to determine ways to solve them. To achieve the goal, the methods of analysis and synthesis, induction and deduction, comparison, classification, system approach, statistical analysis, structural and logical generalization were used.

Formulation of the main material. In recent decades, integrated business structures have become increasingly important in the development of the world economy. The most common forms of business integration are concerns, financial and industrial groups, and strategic alliances. Integrated business structures are recognized as a means of implementing joint activities, mutually beneficial cooperation, improving the division of labour and cooperation through the formation of production and organizational structures adapted to specific conditions (Kosata, 2015).

On the basis of a comparative analysis of the features of corporate governance in the world, characteristic features have been determined on the example of some countries (Rodionova, 2017). Thus, Great Britain, the United States, Canada, and Australia have the following characteristics: the participants are: shareholders, directors, managers, government agencies, stock exchanges; the share ownership form is associated with the absence of significant investors dominating over others in corporations; dispersion and blurring of the share capital of corporations, which facilitates the flow of shares from one owner to another; finding the majority of shares in the ownership of institutional investors – pension and mutual funds; rather limited influence of shareholders on the activities of the corporation (lack of right in determining the level of dividends, superficial role in hiring or firing managers); the presence of an additional link in the structure of corporations – the board of directors (consisting of insiders and outsiders), which is elected by shareholders and acts as their representative, defends their interests in the corporation; strict disclosure requirements.

Germany, Austria, Switzerland, Belgium, and France are characterized by such signs of corporate governance as: presence of highly concentrated share capital; the presence of a bicameral Council consisting of the Management Board - the Executive Council (company managers, insiders) and the Supervisory Board (representatives of shareholders, employees and company employees). Chambers are completely separate, simultaneous membership in the Management Board and the Supervisory Board is excluded; only independent directors can be members of the Supervisory Board; the executive council (board) of the corporation is a collegial body, as a rule, all members of which have equal rights; the close connection of banks with industry, which is manifested in the cross-industry integration of industrial concerns with financial institutions into horizontal industrial and financial associations; the participation of banks not only in the financing of investment projects, but also in the management of the corporation through the election of representatives delegated by them to the Board of Directors; clear distribution of control and executive functions in the management of the corporation; inclusion of representatives of workers and employees in the Supervisory Board; establishment of the number of the Supervisory Board by law, which cannot be changed by shareholders; the legalization of restrictions on the voting rights of shareholders, that is, the possibility of limiting the number of votes a shareholder has at a meeting by the charter of the corporation, and this number may not coincide with the number of shares he owns; more relaxed disclosure requirements.

As the analysis shows, Poland is an example of the best practice of a structural and well-grounded and formed approach to the corporate management of the economy. Immediately after gaining independence, Poland began European integration. This made it possible to sign the European Agreement in 1991. An important step at this stage was the adaptation of Polish legislation to EU legislation. In this regard, it was necessary to modernize the agricultural sector. In the field of small and medium-sized businesses, implement institutional support in order to increase the competitiveness of Polish businesses on the territory of the European Union. Such actions led to the fact that in 2011 more than 3.6 million entrepreneurs were registered in the country that is, almost every 10 Poles had their own business.

A key stage in Poland's transformation was large-scale privatization. About 45 % of the country's industry was owned by the private sector within two years. The next step to success was the removal of restrictions on the share of equity capital for foreigners. Tax incentives for foreign investors were established. The new law removed all restrictions on the export of profits and the size of investments. The reforms gave results. And already in 2004, Poland became a full member of the EU. In 2013, Poland laid down a national strategic vector, as the Strategy for the Development of Poland 2030 was adopted.

According to the data of the Polish Economic Institute (Ambroziak et al., 2023), the amount of direct foreign investment to Poland in 2021 increased by 82 % and amounted to 24.8 billion dollars. Thus, the country took 14th place in the world and 3rd place in the EU after Germany and Sweden in terms of inflow of foreign direct investments. Previously, the record volume of investments in Poland was recorded in 2007, which amounted to 19.9 billion dollars. According to the results of 2021, the total value of foreign investments in Poland amounted to 269 billion dollars. Previously, Poland was not among the largest European

investors, led by Germany (1,417 projects worth 43.8 billion dollars), Great Britain (1,125 projects worth 37.4 billion) and France (725 projects worth 28.9 billion dollars). Currently, foreign investors invest the most funds in the sphere of production -42 %, financial services -22.7 %, as well as motor transport and communication -12.1 % (Błędowska et al., 2023).

Currently, such private companies as Dino Polska (company value 6.2 billion dollars), InPost (4.03 billion dollars), Cyfrowy Polsat (3.65 billion), LPP (3.3 billion), Synthos (2.66 billion), Polpharma (2.33 billion), Grupa Maspex (2.01 billion), CD Projekt (1.85 billion), Techland (1.66 billion), Polenergia (1.52 billion USD), etc.

The Dino Polska company is a Polish chain of medium-sized supermarkets located in the most convenient places for customers. Over the past few years, the network has shown dynamic growth. Thus, the Compound Annual Growth Rate (CAGR) in 2017-2021 was 49.9 %, and over the past four years, revenues have tripled. The number of stores will also grow rapidly: if at the end of 2010 the company had 111 supermarkets, then by the end of 2021 there will be 1,815 of them.

In 2016, things did not go well for InPost. This is due to the fact that at that time the postal business of InPost was losing to the national post office for almost two decades. Everything was changed by the investment of the Boston Company Advent International, which helped to pay off all the company's debts and contributed to the development of a new direction for the company – the installation of post offices. Currently, there are about 18,500 post machines in Poland. InPost became a public company in January 2021 on the Amsterdam Stock Exchange, where it was valued at \$ 9.7 billion at the time. InPost is trying to expand abroad: its post offices are in Great Britain, Italy and France. The latter company entered the market with the help of the purchase of Mondial Relay for 565 million euros.

The largest Polish chemical concern Synthos supplies rubber to all major tire manufacturers in the world. In addition to scaling up the rubber business, Synthos is gaining access to new technologies that allow it to produce a new generation of low-resistance tires used in, among other things, electric vehicles. This will allow the company to enter a new market with higher profitability.

Polenergia, the leading Polish producer of renewable energy, is taking advantage of the trend towards greener energy sources. Today, the company's income depends on wind energy. This company is one of the few that is gaining momentum on the stock exchange, despite the general trend of falling shares. Polenergia shares grew by 27 % over the year. At the same time, the company established cooperation with global structures in the market of renewable energy. Thanks to cooperation with the Norwegian company Equinor, her company has become the largest player in the renewable energy market in the Baltic Sea, which is currently the most promising field for the development of renewable energy in Poland.

If we consider Ukraine, it is worth noting that today the joint-stock sector of the national economy consists of public and private joint-stock companies (JSC). As of January 1, 2020, 13748 JSCs were registered in Ukraine, of which 1280 were public (9.3 %) and 5370 (39.1 %) were private. The dynamics of the formation of the quantitative composition of joint-stock companies in Ukraine during 2015-2020 characterizes an almost stable trend of this process, which

from the point of view of economic theory does not contribute to the disclosure of the potential of corporate entrepreneurship and its impact on the innovative development of the country. However, according to the State Statistics Service of Ukraine, the total number of joint-stock companies decreased by 11.7 % due to a decrease in the number of public JSCs by 69.1 % of public JSCs. And the number of private joint-stock companies, on the contrary, increased in 2020 compared to 2015 by 54 % (Table 1).

Table 1
Number of joint stock companies in Ukraine

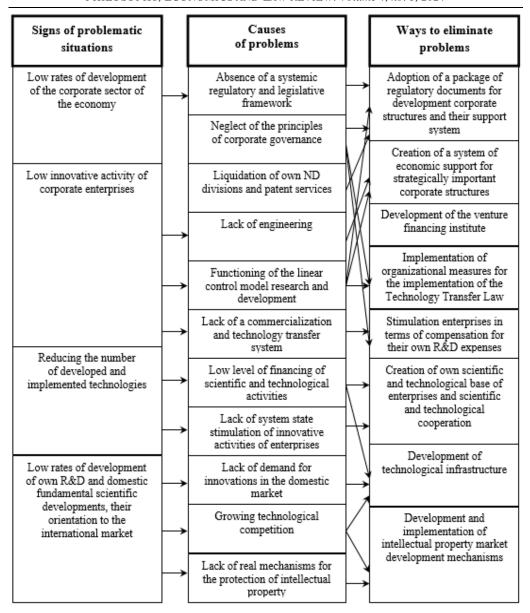
Years	the total number	Including	
		public JSC	private JSC
01.01.2016	15571	4149	3486
01.01.2017	15206	3122	4348
01.01.2018	14710	2186	5076
01.01.2019	14310	1727	5304
01.01.2020	13902	1418	5352
01.01.2021	13748	1280	5370

Source: State Statistics Service of Ukraine (2021). The number of legal entities by organizational and legal forms of business.

In the corporate sector of the economy during the specified period, one more trend remains noticeable – the implementation of periodic processes of property redistribution through the reorganization of joint-stock companies. In particular, their specific weight for the period from 2010 to 2022 decreased from 52.1 to 40 %, which is a consequence of bankruptcies and consolidation of enterprises. Transformation processes of enterprises into other corporate structures are taking place passively in Ukraine. However, most of the leading Ukrainian industrial companies have already clearly recognized the fact that they do not have and will not have the resources to restore the entire existing technological park. The costs of repairing old equipment are often close to the costs of purchasing a new one. Our analysis made it possible to see a picture of the problematic state of innovative development of corporate structures in Ukraine, caused by insufficient use of organizational resources, and to propose ways to eliminate it (Fig. 1). The alternative in this situation is cooperation, concentration of resources on serious technological modernization.

As mentioned earlier, the formation of a new technological system takes place through the formation of clusters of technologically connected industries, which are formed along the directions of the spread of its key factor. Large companies and business groups play a leading role in the coordination of innovation processes in clusters of technologically connected industries. They are system integrators of the innovation process that takes place in various links of the innovation system. Large knowledge-intensive companies can take on large-scale financial and technological risks when developing new technologies.

Such companies control sales channels, are the owners of formats and standards, which becomes an important competitive advantage in high-tech markets. In addition, they create and develop technological platforms. The underdevelopment of such companies is the main strategic weakness of the russian innovation system.



 $\textbf{Fig. 1}- \textbf{The problematic state of innovative development of corporate structures} \\ \text{of Ukraine and ways to eliminate it} \\$

Source: developed by authors

However, today one of the weak points of the innovative system of Ukraine is the low capacity of corporate research and development, despite some encouraging developments of the last two or three years. Attempts to shift quasimarket research from public organizations to private firms, to stimulate the creation of technology firms, to encourage private investment in research and development, and to attract foreign investment in research and development have generally failed.

In addition, although empirical data is scarce, it can be assumed that Ukrainian business (private firms, as well as state-controlled manufacturing and service enterprises) is mainly involved in the developing part of research and development and has a stronger tendency than its Western counterparts to import research and development already in the form of manufactured equipment. This

has important implications for domestic manufacturers of such equipment, who find it difficult to develop and finance a survival strategy through technological modernization, thus supporting an ambitious research and development program. Ukrainian companies were too large, had debts and liabilities and were not very attractive to foreign investors. Short of liquidation, their only prospect would be to transform into small new businesses that would attempt to match the chosen themes of their research and technology portfolio with market opportunities. Of course, this process causes the loss of a fairly significant part of such a portfolio in the absence of privatization of results with high market potential, which is often beyond the capabilities of small new firms.

Retrospective allows us to pay attention to experience: under conditions when a technological shift occurs, new markets emerge, the usual conditions of the game change or new business models are developed, previously stable economic entities suddenly become vulnerable (the latest global economic crisis is proof of this). One of the main problems of such a state is that the organization of management with discretion requires a completely different set of competencies for the creation and management of innovations. Searching in unusual places, building relationships with unknown partners, placing resources in high-risk projects, researching new opportunities for business development – these can be means of innovation management in the conditions of technological changes, when the dynamics of economic process transitions into a new quality of development.

The researches we have conducted at actual operating enterprises have shown that in all cases there are organizational innovations: the creation of marketing services, the implementation of a complex of organizational measures, including the separation of production into subsidiaries, the creation of a trade network. However, each enterprise necessarily has its own organizational nuances, and where the initiator of the innovation is clearly the director (who can also be a pronounced autocrat), the process of making a decision to implement innovations is formal. Such enterprises have a Board of Directors headed by the same director. Therefore, the decision to carry out an innovation, although it is discussed at the council, is made, in fact, individually. Members of the Council (Directors or Technical Council) are assigned the role of implementing the idea. Judging by the reports, the Technical Council includes the first managers of the enterprise, leading specialists who must organize the work on comprehensive consideration of the proposed initiative and make a decision. At the same time, the technical and economic justification of the project, which has a different form (business plan, production development plan, program of organizational and technical measures, etc.) must be drawn up. At the same time, at the "Equator" enterprise, such a plan is drawn up by the director, the deputy for production and the chief engineer, and the operating document at the enterprise is the orders of the Directorate of the enterprise.

In principle, the mechanism for making a decision on innovations does not differ from the above-described scheme in the case when the author of the idea of innovation becomes the head of the middle management. In our research, he is the head of the department in auxiliary production at JSC "Ekvator". In this case, a link is added to the above-mentioned scheme – access to the Board of Directors. It follows from the report that initially the author of the idea informs the management of the enterprise about it at a conference call. Then the result of

the discussion is formalized in the form of a written application submitted in the name of one of the deputy general directors. He, in turn, submits this proposal to the Board of Directors, which decides its fate. In the case of a positive decision, the relevant services are given the task of comprehensively working out the innovation, specific deadlines for the implementation of measures are determined. If the innovation relates to the creation of new products, then the development is introduced into production first in the form of experimental batches. This option of making a decision on carrying out an innovation is ineffective, because the extension of the chain of access to the owner, which decides the fate of the project, takes time. The initiative for jobs is almost completely ignored, the planning department does not have time to deal with the calculation of the economic efficiency of such proposals. Therefore, workers or engineers have to calculate everything independently, the calculations are considered secondary and are rarely implemented in production. In addition, there are no financial incentives to put forward and substantiate such proposals. Effective implementation of new technology is possible only with the initiative "from above", starting from the level of the head of the workshop.

In the case when the initiator of the innovation is the customer, the mechanism of decision-making on the innovation coincides with a similar case at state-owned enterprises. That is, initial agreements are reached between the managers of two enterprises during their personal meeting. Then, the company's specialists and services are included in the innovation development process, according to the profile of the innovation. In this case, the business plan is not developed, because the customer assumes all costs for the preparation of new production, provides technical documentation.

Thus, the analysis of the reports showed that all joint-stock companies are characterized by a wide range of innovations. The reasons for innovation are: competition and expansion of the sales market for its products, including entering the foreign market, inefficient work of individual factories. The degree of democratic decision-making depends on the power (authoritarianism) of the owner, which can be both external (a third-party organization) and internal (the CEO).

In order to identify organizational management structures (OSU) that have the highest level of innovative receptivity, it is necessary to investigate the following types of them: linear, functional, linear-functional, staff, methodical, line-staff, divisional, matrix, "network", temporary working groups (flexible). The results of the study showed that a high level of innovative receptivity is typical for the last four types. At the same time, there is no single type of OSU that is optimal for all enterprises. Therefore, the choice of the type of OSU depends on the goals, strategy of the company, its scale and resource provision, namely:

- Divisional type of OSU should be chosen in those cases when we are talking about a large industrial enterprise, where innovative projects are difficult to implement due to rigid bureaucratic management methods, which lead to loss of flexibility and mobility of the entire enterprise as a whole. Therefore, the creation of independent divisions aimed at the implementation of innovations will be an effective solution in such conditions;
- Matrix type of OSU is intended for enterprises in which the process of implementing several innovation projects is simultaneously taking place, while the ascending organization must have the ability to quickly form groups of

specialists from all profiles of each innovation project, and it is also necessary that the basis is an informal management style;

- Temporary working groups give a great effect at the initial stages of an innovation project, because their composition includes a few highly qualified specialists. Test samples, which can be used to judge the prospects of an innovative project, are created in a short time. However, such formations only truly justify their existence when they include specialists of a high level of competence, and the entire organization as a whole has a high degree of receptiveness to creative ideas;
- Network approach should be used in those cases when the project requires the interaction of many organizations (research centres from different areas of the innovation project, several enterprises) (Liashenko et al., 2021; Khaustova & Trushkina, 2022).

The features of a science-intensive innovative enterprise (a long production cycle, the need to involve specialized design bureaus (DB), a large number of cooperative relationships, a narrow range of consumers, etc.) require the coordinated and effective work of many performers, the great scientific potential of designers. Such an organization of production can be implemented within the framework of a research and production complex, in the structure of which there is an innovator – DB, which ensures the production of an innovative component, and a financial donor, which, in turn, is an investor in new developments, projects of new products (Chernov, 2007). Currently, in Ukraine, it is expedient to work out organizational and production approaches to the formation of the structures of the future scientific and industrial complex.

As observations show, five stages of innovative development that Ukrainian enterprises go through can be conventionally identified.

At the first, various internal organizational and management innovations are carried out: relations between divisions are structured, planning and budgeting are implemented, personnel are updated, management information processing is computerized, and ERP systems are implemented.

Then second stage of market innovations begins: building sales and distribution networks, logistics chains, marketing policy, sometimes vertically integrated companies are created, packaging and product design changes.

The third stage is modernizing innovations: equipment is modernized, new product ranges are created (without significant changes in technology), quality and knowledge management systems are introduced, new product development departments are created.

The fourth stage is associated with the implementation of a serious technological recovery, when ready-made technological lines (mostly from well-known foreign manufacturers, which have sometimes already been used) and technologies are purchased, research units are created, the task of which is to develop original products based on these technologies; new unoccupied market niches are searched for, automated design systems are implemented.

And only at the fifth stage, when enterprises begin to realize that with the help of known solutions it is impossible to achieve a cardinal advantage in the competition, they move to their own technological innovations: they develop original technologies, create corporate research and venture funds, enter into an alliance with specialized scientific teams, buy small innovative enterprises, diversify into high-tech, rapidly developing market segments, and pursue an

active patent-licensing policy.

The analysis of the organizational structures of machine-building corporations engaged in research and development showed that the most widespread is the organizational structure of management, which consists of a horizontal project group and a vertical hierarchy of functional divisions. The implementation of project management in line-functional organizations affects the hierarchy of authority, responsibility, organizational procedure, the order of resource allocation, and the establishment of relative priorities in the organization. Production goals are focused on cross-functional requirements and mutual agreement of solutions. The implementation of project management leads to a change in the nature of the interaction of units, creates real organizational problems for both project and functional units. In turn, for the effective management of a research unit, a matrix structure will be appropriate – an organizational formation that is created temporarily – for the period of development and implementation of an innovation, includes specialists of various profiles, administratively subordinate to the heads of the corresponding permanent units, but temporarily sent to work in a temporary structure for carrying out work according to a certain specification.

The mechanism for making a decision on carrying out an innovation depends on the form of ownership of the enterprise and on who is the initiator of the innovation (owners of the enterprise or third-party organizations). If the initiative comes from a third-party organization, then it actually determines all initial measures regarding the organization of the innovation: provides information about the type of innovation, calculates technical documentation, fulfils financial obligations. At the same time, this process is the most formal for state-owned enterprises, because the tasks can be directive in nature, which implies the obligation to implement the decision and the methods of its implementation. In this case, discussions and calculations on projects are often not held at the enterprise.

The existing long-term shortage of financial resources, the dispersion of which among small entities and the lack of a limited number of priorities for their direction does not give the opportunity to concentrate them on the implementation of large-scale projects, requires a return to the practice of concentration of production in Ukraine. From these positions, the implementation of the concept of industrial policy, as well as the process of integration, cannot be carried out by taking into account formal documents. In practice, modern mechanisms of organizational transformations should be more actively implemented in the activities of every strategically important corporate enterprise on the basis of merger and acquisition processes, synergism of integration actions, and the relationship between organizational and control functions.

The analysis of the functioning of the leading corporations of developed countries shows that they have created such an innovative structure and management culture, in which the directions of technological development are integrated into general strategic plans, and the growth policy is directly related to the constant development of promising products and penetration into new areas of activity. The search for effective organizational forms of innovation management goes in two directions:

1) Selection and separation of units dealing with innovations and long-

term problems of enterprise development;

2) Creation of a mechanism for integration and coordination of the activities of subdivisions during the development and implementation of innovations.

Most companies monitor the emergence of new scientific knowledge even at the first stage of R&D – the stage of conducting fundamental research with the aim of gaining leadership in the scientific and technological race. Therefore, the share of intellectual capital in the total capitalization index of an average modern high-tech corporation reaches 85 %. As a result of the implementation of innovative development strategies and registration of rights to the technologies created at the same time, companies form their portfolio of patents, which allows them to maximally secure the rights to use inventions in this field and block the research and development of competitors.

After that, based on the results of research and development, as well as experimental studies, international standards are formed and licensing rules are established, within the framework of which all products entering this market segment must be developed and produced. At the same time, the rights of other competitors to enter product markets are extremely limited. As a result, a powerful expansion of science-intensive products to selected sectors of regional markets is carried out, besides, pressure is exerted not only on other developers of science-intensive products, but also on manufacturers, which creates additional conditions for the monopolization of production and sale of products. In fact, the transformation of a limited monopoly into a natural monopoly is carried out.

In most cases, corporations, performing R&D, create not only objects of industrial property, but also other competitive advantages. So, for example, the introduction of intangible assets into one's activities and effective management of the latter allows not only to protect the business, but also to increase the value of the company, increase the size of assets, and also provide additional income through the sale of licenses.

Most industrial enterprises of Ukraine engaged in R&D are limited to development. At the same time, some industrial enterprises conduct applied research, and some also conduct fundamental research: CJSC "NKMZ", JSC "Motor Sich", "Sumy NVO named after Frunze", OJSC "Turboatom", OJSC "Nord", OJSC "Azovmash". However, the majority of innovative and active domestic enterprises have concentrated their scientific and technical potential mainly on the improvement of existing products, which, in our opinion, is due to the lack of fundamental and applied research. In conditions of limited financial resources, enterprises need indirect stimulation of innovative activity by the state, which is possible when the moratorium on the effect of tax benefits for innovatively active enterprises, provided for in the legislation, is lifted.

In Ukraine as a whole, according to the results of the analysis, the following trends and regularities were found in the direction of ensuring the use of the organizational resource of corporations in the implementation of R&D:

- 1) Vast majority of enterprises pay insufficient attention to R&D, due to the lack of an effective mechanism for implementing the strategy of innovative development;
- 2) Most of the applied research and development is carried out by the branch sector of science, while the factory sector accounted for only 16.0 % of

the total development;

- 3) Share of R&D expenditures by the factory sector, in the total volume of national expenditures, is very low 8.6 % in 2016; the tendency of stagnation of the factory sector in terms of the number of research organizations continues, in contrast to other sectors, where a certain stability is observed; the number of R&D performers in the factory sector continues to decrease, in 2016 it was only 23.4 % of the 1991 level;
- 4) There is a small number of enterprises in Ukraine, that perform the entire cycle of R&D, and in general, the factory sector in 2016-2022 accounted for about 5 % of the total number of organizations that performed R&D on their own in the 4th sectors of science.

From a theoretical point of view, the effectiveness of the R&D stage is influenced by the following factors: conducting R&D in directions that correspond to the effective development of an industrial enterprise in the perspective of a market economy; concentration of qualified personnel at the R&D stage of the enterprise; study of the innovation market, both sectoral and global; acquisition of licenses or ready-made technologies for the production of products that meet the requirements of the efficiency of the industrial enterprise; creation of a powerful material and technical base, the degree of equipment of which will ensure the most productive conduct of the R&D stage; involving, if necessary, third-party organizations for R&D; provision of sufficient funding for the complex of works at the R&D stage; systematic assessment and selection of projects in the early stages of R&D (Pidorycheva & Trushkina, 2021).

At the same time, our research shows that the low effectiveness of using organizational resources both in Ukrainian industry in general and in the corporate sector in particular is explained by a whole set of factors. Thus, the unstable economic situation makes it difficult to reliably assess the demand for innovative products, even in the short term. Often, the need for such products may disappear even before they appear on the market. In combination with insufficient experience in marketing research, this factor serves as a serious obstacle to the promotion of new products to consumers in the domestic market, and the low level of competitiveness of innovative products and services makes it difficult to promote them to foreign markets.

The low level of demand by the domestic economy for innovations and new technologies is due to the following circumstances:

- 1) Lack of fair competition between enterprises on domestic markets, many of which are monopolized and controlled by criminal structures;
- 2) Sharp drop and subsequent slow growth of demand for goods and services in the domestic market;
- 3) Low level of competitiveness of domestic goods and services, which, in turn, leads to a low level of utilization of production capacities and a lack of working capital for ordering R&D and new technologies;
- 4) Imperfection of tax legislation and the need for most enterprises to pay for R&D and new technologies from profit, etc.

This condition stabilizes and preserves the low technological level of industry, since investment flows are mainly directed to raw materials industries. This is confirmed by the critical condition of the modern production base of Ukrainian industry. So, in Ukraine, the process of restoring production has actually stopped. Only 11.2 % of industrial enterprises develop and master

innovations (for comparison: 60-80 % is considered the norm in developed economies).

Against the background of the degradation of the technological structure, the volume of scientific research and development, which previously fuelled high technologies, has sharply decreased. R&D expenditures decreased by 5 times and approached the level of countries with low scientific and technical potential. In particular, in 2022, R&D spending in Ukraine amounted to 0.86 % of GDP, while in countries with developed economies, the generally accepted figure characterizing the share of science spending in GDP ranges from 2-3 %. A fact that shows the low level of spending on science is the indicator of spending on R&D per capita. In Ukraine, this figure was 20 dollars in 2022, while in the USA it was 964 dollars, in Japan it was 838.4 dollars, in Sweden it was 1149 dollars, in France it was 598 dollars, and in Germany it was 654.3 dollars. The constant underfunding of science has turned it into an expendable sphere, which practically excludes the possibility of using science as the main factor of economic growth, since analytical estimates show that economic return comes when the critical level of science intensity of GDP is reached, which is at least 1.5-2 %.

Among the factors of a production nature that hinder R&D, the low innovation potential of enterprises, lack of information about new technologies, almost complete lack of information about sales markets, and insufficient opportunities for cooperation with other enterprises and organizations can be noted. All these negative circumstances are a consequence of the rupture of previously formed industrial, economic and informational ties. Lack of information from both developers and potential investors is also a negative factor in the actual implementation of R&D.

The innovation market includes demand determined by enterprises capable of introducing promising technologies into production and investing in high-risk projects, and supply for scientific and technological developments, which is formed by scientific research institutes and separate teams of inventors engaged in the development of new technologies. A prerequisite for the effective functioning of such a market is free access to information from both buyers and sellers, and a high level of intellectual property protection. If property rights are not sufficiently protected, any incentives for private investment will be ineffective. Therefore, the presence of effective laws and mechanisms for the protection of innovations can be seen as a condition for the effective implementation of scientific and technological developments. The simplest and most widespread is the application of certification and the use of patent protection.

So, the factors affecting the scientific and technological potential and the effectiveness of R&D are closely correlated. Unlike industrialized countries, in Ukraine, conducting R&D is not considered by the majority of corporate structures as a necessary condition for successful functioning in market conditions. Statistics show that the most favourable for the implementation of innovations are large industrial corporations with the number of employees from 10 to 25 thousand people, and the largest specific weight in the implementation of innovative products is occupied by enterprises with the number of employees from 100 to 200.

However, it should be noted that the processes of market transformation

of the economy of Ukraine led to the development of both methodological developments and the corresponding legislative and normative-instructive framework for the functioning of economic entities, taking into account national characteristics. This directly concerns both the state and non-state sectors, as well as the corporate sector, which is an important element of the entire national economy and includes business entities from both of its components.

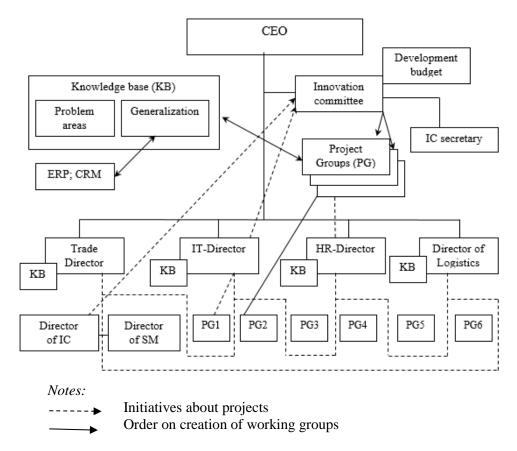
The reasons for the slow pace of dissemination of best practices regarding the use of the organizational resource of corporations are the imperfection of the existing system of stimulating innovative activity and the introduction by enterprises of insignificant innovations that do not require large costs and are not calculated for the long-term development of enterprises, but can significantly affect the organization of production and be the basis for the formation of innovative culture through the mechanism of innovative receptivity of employees.

The organization of R&D in corporate structures as a component of the management process is carried out on the basis of the principle of catch-up mastering of innovations. At the same time, the intensity of the mastering process and the level of development are important characteristics, not the speed or duration of the introduction of innovations.

At most enterprises, the R&D process is divided into two separate stages: 1) R&D stage and 2) DCR stage. Although these stages have many common factors, not all enterprises have the opportunity to attract investments in the GDR. On the contrary, research and development work (on various scales) is engaged in by almost all enterprises, regardless of their financial status and organizational form of management.

Under such conditions, in the institutional plan, the creation of appropriate organizational forms within the corporate structure is worthy of attention:

- 1) Specialized scientific and scientific consulting firms (contract work on R&D development with industrial companies, scientific and engineering expertise for customers);
- 2) Intensification of innovative processes, when the field of R&D turns into a functional link of a single scientific-production-marketing process oriented to market demands;
- 3) Formation of internal ventures as a form of integration of research and development with production;
- 4) Implementation teams, which include employees of production divisions, who solve tasks to reduce the time of mastering a new product into production while minimizing costs;
- 5) Package of means of organizational and managerial acceleration of research and development: scientific funds that stimulate the development and implementation of fundamental research projects by external specialists; dependent non-profit institutions of industry importance, created by corporations and state departments on a share basis; scientific and technical institutions of an auxiliary nature (R&D service centres), which organize the interaction of specialists from universities, industrial companies and state institutions; research associations (partnerships) of large industrial companies and leading government departments. From these positions, the organizational design of the company, aimed at attracting organizational resources, can be following (Fig. 2).



 $\begin{tabular}{ll} Fig.~2-Organizational~design~of~the~company,~which~is~aimed~at~attracting~organizational~resources \end{tabular}$

Source: developed by authors

Conclusions. As a result of the study, it was established that an important factor in the stabilization and growth of the competitiveness of the national economy is the improvement of the policy of state stimulation of the innovative activities of corporations. State policy in the corporate sector should be aimed at supporting, establishing and operating integrated corporate structures, which would ensure the saturation of the domestic as well as the world commodity market, promote the integration of production and intellectual capital, expand the scope of participation in the international division of labor and transform them into full-fledged transnational companies

Summarizing the results of the analysis reminded me of a well-known statement: if you purchase the most modern equipment, hire the best specialists, and then you can equally fail the business if the most important thing – effective management – is missing. An outstanding example of this is the case of the General Motors plant in Hamtramck (Michigan), which has been included in many management textbooks. Neither the robotic complexes, nor the automated systems, nor the best engineers and programmers involved in the work could ensure the output of even a third of the planned capacity of the new enterprise in the scheduled time. As a result, the plant, which until now has already been called the enterprise of the future, simply demonstrated phenomenal inefficiency. The reason for this is the lack of changes in the organizational

structure and labor incentive system at this enterprise.

Consequently, investments in machinery and equipment may prove to be less effective or completely ineffective without additional investments in improving the management structure and human capital. Even the "new economy" provides production with completely different information opportunities, but it is not a panacea and an automatic guarantor of efficiency and competitiveness.

Prospects for further research in this area are the development of recommendations for improving the policy of state stimulation of the activities of corporations.

Conflict of Interest and other Ethics Statements. The authors declare no conflict of interest

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Вікторія ГОНЧАР, Олександр ЯКУШЕВ, Наталія ТРУШКІНА ІННОВАЦІЙНА ДІЯЛЬНІСТЬ КОРПОРАТИВНО-ІНТЕГРОВАНИХ СТРУКТУР У СИСТЕМІ АКТИВІЗАЦІЇ ОРГАНІЗАЦІЙНИХ РЕСУРСІВ УПРАВЛІННЯ МАРКЕТИНГОМ

Анотація. На сьогодні одним із інструментів протидії іноземним конкурентам може стати формування в Україні інтегрованих корпоративних структур, створення великих експорто-орієнтованих структур, здатних здійснювати інвестиції в підприємства суміжних галузей з метою гарантованого постачання сировини, збуту продукції, наповнення внутрішнього ринку вітчизняною продукцією, консолідації фінансових ресурсів підприємств, стабілізації соціального стану в регіонах економічної присутності компаній з огляду на створення нових робочих місць, збільшення податкової бази за рахунок завантаження існуючих та розгортання нових виробництв та їх капіталізації.

Дослідження інтеграційних процесів, їх природи та економічного значення дозволило узагальнити теоретичні визначення самої сутності інтеграції та її видів, підкреслити, що в умовах сучасного економічного розвитку однією з форм інтеграційного розвитку ϵ створення інтегрованих корпоративних структурі. Інтегровані корпоративні структури ϵ ефективною формою консолідації інвестиційних ресурсів, наукомістких технологій і виробничого капіталу, тобто ϵ найбільш оптимальною організаційною формою реалізації інноваційного процесу.

Зважаючи на те, що метою даної статті є дослідження актуальних проблем

інноваційного розвитку корпоративно-інтегрованих структур у системі активізації організаційного ресурсу маркетингового менеджменту та визначення шляхів їх вирішення. Для досягнення мети використано методи аналізу та синтезу, індукції та дедукції, порівняння, класифікації, системного підходу, статистичного аналізу, структурно-логічного узагальнення.

У статті досліджено та узагальнено світовий досвід корпоративного управління. Розглянуто польську практику успішного функціонування інтегрованих корпоративних структур. Проведено статистичний аналіз діяльності акціонерних товариств України. Розглянуто проблемний стан інноваційного розвитку корпоративних структур України та визначено шляхи його усунення. Досліджено особливості, фактори, організаційні форми, моделі, види науково-технічної та інноваційної діяльності корпоративних структур в Україні. Запропоновано організаційний дизайн компанії, який спрямований на залучення організаційних ресурсів. Визначено пріоритетні напрями інноваційного розвитку корпоративно-інтегрованих структур в Україні.

Ключові слова: корпоративна інтеграція, корпоративні інтеграційні процеси, корпоративне управління, інтегровані корпоративні структури, інноваційний розвиток, інноваційна діяльність, маркетинговий менеджмент, організаційний ресурс, світовий досвід, польська практика.

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103

ORGANIZATION OF PROJECT MANAGEMENT OF RAILWAY TRANSPORT INFRASTRUCTURE MODERNIZATION IN THE CONTEXT OF DIGITALIZATION

Abstract. The organization of project management of the modernization of railway transport infrastructure in conditions of digitalization is an important aspect of the development of the transport industry, which requires a deep analysis and understanding of modern trends. The article is devoted to the study of approaches to projects in the modernization of railway transport infrastructure aimed at the implementation of digital innovative technologies. The authors consider railway transport as a key element of urban mobility, which is experiencing a

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