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**INNOVATION MANAGEMENT IN BUSINESS STRUCTURES OF**  
**STRATEGIC ALLIANCES**

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**Abstract**

An actively changing environment presents new challenges for existing business structures. Consumer preferences and requirements to the quality of products, their characteristics and features change under the influence of the environment. The main way for manufacturers to respond to these changes is to develop and implement innovations. This explains the need for the establishment or adjustment of the system of innovation management in business organizations. Their participation in strategic alliances, which allows them to exchange experience and innovations, is of great importance for increasing the innovative activity of business structures. In this regard, the purpose of the study was formed, which consists in studying the features of the functioning of the innovation management system in the business structures of strategic alliances. The study analyzed scientific sources on the subject. Based on the obtained results, conclusions were drawn about the importance of cooperation for the innovative development of enterprises. A selection of industries that are most promising for sharing innovations and participating in strategic alliances was formed. On the example of Russian business structures, some aspects of the organization of joint innovation management systems in strategic alliances are considered. The authors formulated the main features of innovation exchange and specific features of the innovation management system of business structures within the framework of a strategic alliance.

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## 1. Introduction

In the modern world, strategic alliances are one of the most effective forms of organizing joint production of individual business structures. This is due to the close cooperation of business structures within the alliance: they not only interact in the production process of a particular product, but also are also ready to support each other in other situations. This form of organization not only ensures stable operations for all members of the strategic alliance, but also allows them to enter global markets. After all, strategic alliances often unite business structures located in different countries. Such stability provides stability to business structures in emerging of any crisis.

From the point of view of the development of strategic alliances' participants, it should be noted that they actively exchange technologies, experience and, in particular, implemented innovations. Often, management aspects in business structures within strategic alliances are also standardized for everyone (Ahmadi et al., 2021). Therefore, the innovation management system will be the same in many ways. All this is necessary to increase the competitiveness of products produced within the framework of the strategic alliance on the world market.

Considering the situation on the example of Russia, we can say that the current strategy of innovative development of the Russian Federation until 2020 sets one of the tasks to increase the innovative activity of business, which requires existing business structures to implement an innovation management system or to make adjustments to it (Strategy of innovative development of the Russian Federation until 2020, 2016). It also notes the importance of Russia's involvement in global innovation flows for the purpose of development, exchange of information and experience. These tasks largely correlate with the objectives of the strategy of scientific and technological development of the Russian Federation, which refers to the importance of including Russian enterprises in global value chains (Decree of the President of the Russian Federation No. 642 of 01.12.2016 On the strategy of scientific and technological development of the Russian Federation, 2016).

Based on this, it can be concluded that the participation of business structures in international strategic alliances significantly contributes to building up the innovative potential of a business unit. This will affect not only the effectiveness of business structures within the country, but also the country's position on the world stage. As mentioned earlier, the exchange of technologies, experience, and innovations is typical for business structures within a single strategic alliance. Therefore, such cooperation can solve urgent problems of both innovative and scientific and technological development of Russian business.

## 2. Problem Statement

The importance of the innovations exchange between individual business structures of the same strategic alliance is largely related to the quality of products. The desire of individual members of the alliance to be developed and to develop the product dictates to all members of the alliance the need for modernization (Aleshkova et al., 2021). At this point, the question arises about the readiness of each individual participant to introduce innovations and the current state of the innovation management system in it. After all, if any individual link in the chain will "fall out" (it will be unprepared for changes), there is no point to talk about the effectiveness of general modernization. The initiator of changes is usually the

parent company of the alliance. Therefore, the main responsibilities for training other business structures will be assigned to her. It will initiate the implementation or adjustment of the innovation management system in the business structures of the alliance.

### **3. Research Questions**

In the course of the study, the authors considered the relevance of participation of business structures in international strategic alliances to increase their own innovation activity. As a result, there is also the question of what role this cooperation plays for the member countries of the alliance in innovative development. In order to demonstrate the organization of innovation management in a strategic alliance, the authors should answer the question about the experience of Russian business structures participation in international strategic alliances. Of particular importance will be the answer to the question of which industries have a great opportunity for such production and innovation cooperation. Therefore, it is important to choose the right example. Based on this, it will be possible to judge the importance of increasing the innovation activity of specific enterprises for the country's economy. Also, it is important to answer the question on the specifics of a really functioning innovation management system in a strategic alliance and the real consequences of its activities.

### **4. Purpose of the Study**

The main purpose of the study is to reflect the specifics of the functioning of the innovation management system within the framework of strategic alliances. This goal is achieved through answers to the questions listed earlier, which allow us to take a more complete look at the subject of research (a specific innovation management system). The importance of studying the interaction of business structures within strategic alliances is often noted, and innovative aspects that are important for the country's economy dictate the most specific directions for research (Gordeeva & Antipina, 2021). That is why the choice falls on the studying of innovation management in these business structures. This issue is particularly often addressed in relation to small and medium-sized enterprises (Al Suwaidi et al., 2021). The question of the importance of management support of innovation implementation is also raised regularly (Barham et al., 2020; Naumova & Tyugin, 2021). Finally, the importance of innovation management for the IT sphere (Hidalgo & Herrera, 2020).

### **5. Research Methods**

In the course of the study, the authors analyzed domestic and foreign sources on issues of innovation management, corporate governance, strategic alliances, as well as the exchange of innovations between individual business structures. To do this, a selection of peer-reviewed scientific publications that publish materials on this topic was formed, after which the most interesting studies were selected. Based on the analyzed data, the authors identified the main features of innovative cooperation in strategic alliances. From the existing strategic alliances with the participation of Russian business structures, the most suitable and promising objects for further research were selected. Information about the innovation management system operating in the selected business structures, its coordination within the framework of the strategic alliance,

and the main results of activities was systematized. Indicators that characterize the contribution of individual business structures to the overall performance of the alliance are calculated. These indicators allowed us to analyze the dependence of innovative cooperation on the contribution of participants.

## 6. Findings

International cooperation has long played an important role for the development of the economy of the interacting countries. Situations in which it is more profitable to purchase technologies than to develop them yourself are common. At the same time, with organized cooperation, you can purchase technologies with a significant discount or for free. This contributes to more rapid development and subsequent implementation of innovations in cooperating business structures. Innovations are an indicator of the development level of both individual business structures and the entire country. The indicator of innovation activity is widely used in assessing the development of a particular country. This is primarily because innovations contribute to the development and expansion of production, reducing costs, and creation of new, unique products. As a result, sales volumes, net profit, tax revenues and GDP (gross domestic product) of the country are growing. This is what confirms the positive impact of the participation of domestic business structures in international strategic alliances.

Based on the analyzed sources, the authors formulated signs of innovation exchange within the framework of strategic alliances:

- cooperation between individual business structures is formalized in one form or another (usually in the form of common ownership);
- the entrepreneurial structures have the total production capacity;
- there is an active exchange of technologies between business structures of the same strategic alliance;
- production development is being financed between the members of the strategic alliance.

Speaking about promising industries for such cooperation and exchange of innovations, the authors identify several areas. First of all, this is industry: mechanical engineering and automotive industry, medical industry. Business structures actively cooperate within the IT sphere and the results of intellectual activity, as well as in the aviation sphere.

Considering the experience of participation of Russian business structures, it should be noted that automotive companies achieved the greatest success in this area. A striking example is AVTOVAZ, which operates within the framework of the Renault-Nissan-Mitsubishi strategic alliance. It is on the example of this enterprise and the strategic alliance that the specifics of the functioning of the innovation management system were analyzed. The main document regulating the functioning of the innovation management system at the enterprise is the passport of innovation development. This document was drawn up taking into account the requirements of the alliance and provides for plans on activities that ensure comprehensive innovative development: product, technological, engineering and innovative development of business processes (Lada, 2019). In most cases, the responsibility for events and their provision is in the parent companies of the alliance, which is also noted in the document.

Analyzing the data of the innovation management system in Renault Group, we can see that the main directions of innovative development (electric cars, autonomous cars, etc.) correlate with the plans of

other members of the alliance. The management of the alliance notes the importance of the synergy effect that occurs when the business structures of the alliance interact for the introduction and development of innovations, as well as testing innovative technologies and services. This approach in the innovation management system allows the alliance to quickly adapt to changes in the external environment, to develop technologies and sell products that are in the best interests meet the needs of customers. The Renault Group innovation management system involves significant investments in the activities of other members of the alliance to support open innovations (Groupe Renault, 2020).

Significant changes have affected the activities of AVTOVAZ after joining the alliance and starting production of cars not only under the Lada brand, but also under the Renault, Datsun and Nissan brands. As can be seen from Table 1, the changes significantly affected the increase in the degree of production localization. At the same time, the company has already learned to independently manufacture such high-tech components as engines and transmissions, which is already a movement towards scientific and technological development. Such dynamics helps to strengthen the company's position and to increase its competitiveness.

**Table 1.** Innovative changes of AVTOVAZ after being included in the strategic alliance

Field of activity	Changes
Designing	Creation of an engineering service: since joining the alliance, JSC AVTOVAZ has been producing new car models based on concepts provided by foreign partners of the alliance. Since 2016, the design base has been strengthened, including the improvement of the engineering service. More than 250 vacancies were opened.
Components production	Prior to joining the alliance, the company has carried out only an assembly of engines, their company manufactured only the body and its main components, the assembly and painting of details were made. After joining the company, a workshop was opened that is engaged in the manufacture and assembly of engines and transmissions, including automatic ones.
Final assembly	Changes at this stage concerned, first of all, production automation. For example, the control panel assembly process was automated. It consists from the automatical selection of sets of parts before sending them for assembly.

Source: authors.

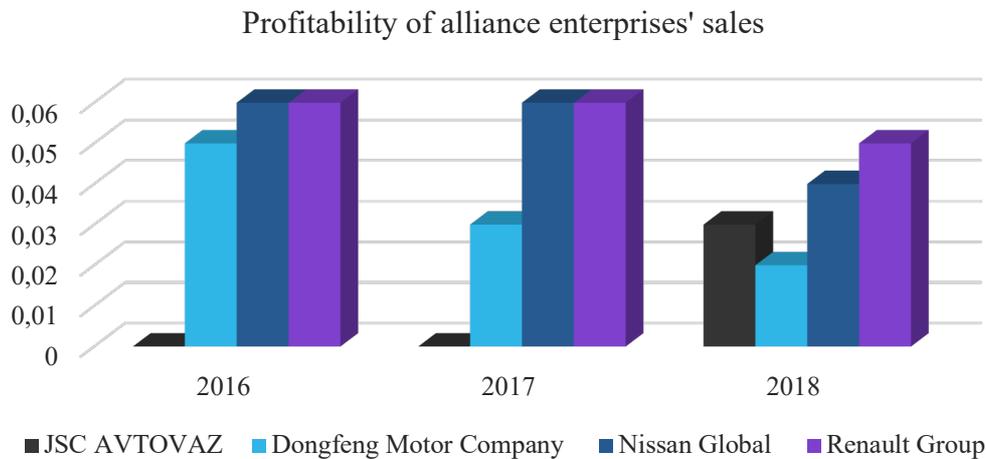
This is not a complete list of changes, reflecting only recent years. Many undefined changes affected not only production processes, but also business processes. For example, the Introduction of a new, more efficient, alliance methodology for finding suppliers, reducing the turnover time of cars, optimizing warehouse logistics, reducing the costs of logistics and storage of cars, and much more. It also important to compare the profitability of sales of automotive companies that are part of the same strategic alliance. Profitability can only be estimated for the period up to 2018, since after the full transition of AVTOVAZ to the ownership of the alliance, It no longer needs to publicly place financial statements (Table 2).

**Table 2.** Return on sales of alliance enterprises

	2016	2017	2018
JSC "AVTOVAZ"	-	-	0.03
Dongfeng Motor Company	0.05	0.03	0.02
Nissan Global	0.06	0.06	0.04
Renault Group	0.06	0.06	0.05

Source: authors.

For clarity, we present the data in graphical form (Figure 1).



**Figure 1.** Graphical representation of the sales profitability of alliance enterprises

Source: authors.

Analyzing the obtained data, it is clear that the profitability of the alliance's companies is approximately at the same level. However, there is a decrease in the indicator for all enterprises except AVTOVAZ. The latter, on the contrary, after several years of lack of profitability, reached a positive value. This is due to the transfer of engine and transmission technologies by the alliance to the AVTOVAZ. There was a redistribution of income within the alliance due to the transfer of innovative technologies from one business structure to another.

## 7. Conclusion

Summing up the results of the study, it should be noted that innovative cooperation of business structures within the framework of strategic alliances and the organization of correlating innovation management systems can significantly increase the innovative activity of the involved business structures. This will have a positive impact on the economic performance of the company and the country. Speaking about the features of the innovation management system of business structures within the framework of the strategic alliance, the authors identified several specific features:

- the innovation development programs of the alliance's business structures correlate with each other and depend on the innovation policy of the parent company;

- the exchange of innovations and technologies takes place strictly within the framework of the innovative development plan;
- adjustment of the innovation management system occurs not only at the level of the product and production processes, but also at the level of business processes;
- funds are being allocated to financing the development of other business structures of the alliance;
- due to the exchange of innovations, the level of income is redistributed between business structures of the same strategic alliance, which once again confirms the relevance of these measures for the economic development of economic entities.

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