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**"Global Challenges and Prospects of the Modern Economic Development"****TRANSFORMATION IN SUPPLY CHAIN MANAGEMENT WITH  
MODERN COMPANIES**

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***Abstract***

The article features theory of supply chain management when applied to the transformation of Russian companies in post-Soviet era. It provides detailed description of the modern theory of organizational structure as well as its regional approach. Procurement is a work of administration and management. The structures have several of the most common types, which are effective in the main probable strategies of the organization. It is important to note that with a divisional structure, segmentation not only does not entail additional costs, but also leads to significant savings. In addition, it is not just because of the different cost of warehouses and labor. Most of structures, including procurement, are divided into global sub-regions and, in some cases, into individual countries. This structure has the features of a matrix, which is reflected not only in the duplicate subordination to several managers, but also in the peculiarities of the terms and methods of work for certain categories. In fact, in modern companies we find a matrix structure, which is subdivided into the following main types: multi-central, international, global and transnational. The authors demonstrate the changes in supply chain management with Russian companies triggered by the economy transition and come with recommendations to improve it further based on the international practices and the local management style.

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## 1. Introduction

The optimization of the company structure becomes an urgent problem in conditions of increasing competition and difficult market environment. First, it concerns procurement and sales: divisions that directly interact with the external environment, and, consequently, have a direct impact on the financial performance of the company and its commercial efficiency. In this work, we will focus on the organization of the procurement system as the sphere closest to the authors.

## 2. Problem Statement

The organizational structure of procurement activities is the object of contemporary management research in the following directions. Pleshchenko substantiates the organization of procurement of the production organization on the nomenclature of goods and the structure of decision-making on the price and amounts of purchases. It is worth considering centralized and decentralized models of procurement decision-making in Russian state-owned corporations and companies with a high share of state participation. Pleshchenko also reviews the procurement organization in iron and steel industry, where the share of procurement in the sales is about 65%, he also justifies the need to connect the procurement with marketing (Pleshchenko, 2016).

The organizational structure in a modern company is reflected in the works of Baligh (2016) the organization of procurement and the structure of procurement activities – in the studies of Monczka, Handfield, Giunipero, and Patterson (2016). Procurement in modern international companies has a tendency to change due to technological improvements and changes in product and capital markets. Argyres and Zenger (2013) examined the dynamics of the organizational structure in large international companies in connection with modern changes in information technology and market position.

With regard to procurement, experts of McKinsey identify the following main management methods: agreement on the strategy with the general one, the supply chains' segmentation, optimization of the ratio between the level of service, costs and risks, the use of lean production methods, as well as an integrated approach to sales and production planning (Wine, Gordusenko, & Ruwadi, 2014). It is obvious that most of them are difficult to combine with the product structure of the organization: in the latter case, the supply chains' segmentation will not bring savings, but will result in additional costs. The unity of strategy and planning system will act in the same way. The very structure of logistics and raw materials markets can vary greatly between regions (often within the same country!). If there is a high level of competition and choice among a large number of suppliers, in other places the same product or service may have a virtual monopoly due to formal restrictions or prohibitive delivery costs from alternative suppliers. The "just in time" system, which has successfully established itself in Japan and a number of other countries, cannot be applied in regions with weak development of transport infrastructure. This does not negate the previously mentioned opportunities to save on the scale of centralized procurement, global tenders for goods and transportation, etc. The introduction of international management experience is quite relevant. This article addresses the challenges of introducing modern procurement organization in a company.

### **3. Research Questions**

The task of management currently is to ensure the coherence of internal and external factors of enterprise development (administration, staff, society). Procurement is closely related to financial management, marketing, legal support, and other sectors of enterprise management.

Procurement is characterized by the need to work with different product groups, from the main product, which is essential for the organization to implement production, to a wide range of providing goods and services. Procurement should provide the company with raw materials, packaging, equipment, advertising, stationery, supplies for canteen. Effective organization of the procurement structure should take into account the categories of purchased goods, which increases the requirement for management in this area.

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

The aim of the study is to improve the organization of procurement in Russian companies, taking into account international experience. This is guided by following objectives: to describe the features of the organizational structures, to review the peculiarities of the Russian management and to formulate the problems of procurement organization and to propose ways of modernization based on international experience. The novelty of the research lies in the consideration of the organization of the procurement process in Russian companies from the point of view of modern international trends.

### **5. Research Methods**

To understand the applicability of these models in Russia, it is necessary to determine the place of Russian management on the scale of opportunities, the conditional poles of which may be defined by Japanese and American styles. Comparative analysis of Russian and major international management styles shows a combination of individual leadership and shared values and assessments. We use the analysis of organizational structures of different companies in the Russian market. This will highlight the features of the organization of procurement in various types of companies.

### **6. Findings**

According to Drucker (2001), the organizational structure must meet the following basic conditions. Firstly, it should ensure high efficiency of the entire company: to promote optimal management decisions and prevent the wrong ones. It can be achieved by maintaining a balance between the various functions in the company and avoiding distortions in favour of a particular link with its narrow interests, which do not always coincide with the requirements of the business. Secondly, the structure should contain a minimum number of management levels. The shortest chain makes it possible to respond more quickly to the challenges of the environment, proposals and problems faced by ordinary employees in the field, which are not always visible from the offices of top managers. On the other hand, it provides fast and accurate implementation of management decisions, allowing avoiding slipping when passing hierarchy. Thirdly, the structure should facilitate the training and verification of the next

generation of top managers. This is achieved through the establishment of profit centres, the efficiency of which can be measured and depends on the decisions taken by their managers.

Drucker (2001) identifies two possible approaches: product and divisional (in his terminology – functional and federal decentralization, respectively). The first involves the creation of profit centres based on product categories. For example, manufacturers of household chemicals can divide their products into cleaning ones and detergents. Profit centres for individual brands are wide spread. On the one hand, this approach helps to concentrate on similar products' promotion, and on the other hand – to make decisions about the comparative potential of product categories. In contrast to this approach, the divisional structure has a marked geographical character, and therefore is most applicable for mono-product companies with deep differences in the specifics of doing business in different countries or even in separate regions within one country. Building and construction and alcohol market present the examples of clear national regulation's markets.

Actually, the grocery and divisional structure cannot exist in their pure type. On the one hand, there is a very limited number of functions that it makes sense to duplicate between product categories. Even if the production is clearly divided, which does not always happen, companies rarely runs the duplication of logistics, legal services, information departments, etc. On the other hand, the unity of brands requires certain unification in the ways of different markets' promotion. Obviously, having signed an advertising support contract with a famous actor or a sportsman, the company will use its image in all regions. The effect of savings on volume is also achieved by agreeing on single deals with global suppliers for all regional divisions.

Procurement requires, in particular, separate accounting of goods and services purchased for a particular product category, although this information remains internal and is not communicated to suppliers. Within the procurement service, there is a clear divisional structure in which procurement is carried out at the regional level with a high role of global procurement managers and global procurement strategies. Nevertheless, it is possible to integrate the procurement management system into the company's product structure. For example, Procter & Gamble Company is based on the division of product categories: beauty, care, health products, household chemicals and family line, including women's and children's hygiene. As Smithson shows, the Corporation has identified service functions that cannot be divided by product principle: the President, the CFO and the financial service in general, the personnel service, the technology service, the legal service and the Secretariat, the procurement service (Smithson, 2018).

The multi-central structure is the closest one to the divisional structure. It implies a high degree of autonomy of regional divisions related solely to financial instruments of control, combined with extremely limited norms and standards, the observance of which requires the unity of the company. This structure is close to the well-known franchise system. It is used when the parent company lacks the resources to enter a particular market, which leads to the sale of the trademark to a local business partner on agreed terms. In international and global structures, on the contrary, product categories follow the global life cycle, and therefore the balance is shifted towards the product strategy. In the international structure, the dependence of regional branch offices is resulted only in obtaining technology, know-how and other knowledge from headquarters, while in the global structure all regional branch offices are relegated to the position of local sales offices. The transnational structure allows for more flexible ratio of

divisional and product approach, in particular by autonomy of divisions within a certain budget, decentralization of decision-making, interdependence of individual divisions at the horizontal level. If the blurring of the hierarchy often hinders the speed of operational decision-making, it is more than compensated by the synergetic effect of the use of local developments in other markets, the possibility of flexible changes in the model of work depending on the situation, which may require in different cases a single global policy or specifics in certain markets. World economic cycles or oil prices affect all regions equally, but political conditions, the living standards' differences and consumption patterns clearly require a regional approach.

Regional differences are expressed not only in the formal structure but also in the management style. The latter depends on the cultural differences. The management style varies greatly. There are two the most advanced modern management styles - American and Japanese. The first of them is mainly based on developed systems that level the starting capabilities of managers to achieve results, but at the same time allow to bring about successful results without regard to the workforce quality. Among other styles, it is important to note the European one. It is characterized by a developed system of employees' training, social responsibility and search for compromise.

Alekseev and other authors distinguish among the features of Russian management "rigid authoritarianism in management, sole decision-making (centralization of power), dualism in the behavior of Russian managers, as well as the predominance of administrative management methods based on power, strict subordination to a superior and sanctions/penalties" (Alekseev et al., 2016). It is obvious that these traits are a legacy of the centralization of Soviet times. The Soviet times' system did not encourage common workers initiative and it was not always justified by economies of scale. The first post-Soviet years were characterized by so called 'legislative vacuum', the lack of proper laws to protect the owners' interests, the high risk of raider attacks, forcing business owners to control many processes themselves. This requires further strengthening of the authority of the judiciary, law enforcement practice, which is beyond the scope of this work. Also the directions of the government influence on the innovative development of the economy and small business is quite noticeable (Baynova, Kozyrev, & Petrov, 2016).

Russian companies are divided into three groups: companies founded by Russian private persons (for example, "Metalloinvest"), companies with a high proportion of public shares (as "Russian Railways"), Russian branches of international companies (Procter & Gamble Company has a branch office for example). These companies have a different history and experience. The organizational structure has prerequisites in the Soviet centralized administrating and social responsibility in public sector. In 1990-2000 years, Russian companies are actively involved in the global economy. Since 2014, the impact of foreign investment has been decreasing. Russian companies in time of creation are presented in Table 01.

**Table 01.** Russian companies in time of creation

<b>The time period</b>	<b>Number of units</b>	<b>Shares of companies from different periods</b>
In soviet period	13388	11,7%
In 1991-2000	16664	14,5%
In 2001-2013	61576	53,7%
2014-2017	23042	20,1%
Total	114670	100%

Source: authors based on Distribution of organizations (legal entities) by the date of commencement of economic activities in the Russian Federation in 2017 (Federal State Statistics Service, 2019).

The majority of Russian companies were founded during the period of active integration into the global economy. However, the share of Soviet enterprises is noticeable. (11,7%) In addition, we can see the growth of creation of enterprises in the period of economic sanctions and import substitution. (20,1%) Thus, there is a request for the introduction of modern supply management in Russian companies, taking into account Russian features.

We would like to dwell on the concept of dualism, which, according to Pogosyan (2014), "is the main feature of the domestic mentality" and it is caused by the difference of behaviors in a stable and unstable state of the control system. We are talking about high readiness for force majeure, which violate the logic of standard procedures and force to go beyond written or unwritten rules and instructions. It is important to note the inherent hierarchy of Russian companies, as well as the division between the level of decision-making and the level of expertise. The latter is caused by strict control on the part of senior managers, who not only formally authorize, but also take a decision, even if it is in the area of responsibility of other specialists. This leads to the need for a personal meeting with the top manager and even the owner to agree on relatively minor issues. (Baynova & Sukharev, 2019)

Alekseev et al. (2016) give a comparative analysis of the Russian and main international management styles. Russian style includes individual decisions, clear separation of duties and powers, narrow employee specialization, employee commitment to the profession, formal relation to subordinates, tough management structure, short hiring a job and a strong leader as an ideal manager as in USA companies. And Russian style has some the same features with the Japan companies: a collective responsibility, slow evaluation and career growth, collective shared values, orientation of leadership per team, control method according to collective indicators, high staff training costs and such career conditions as age, experience and collective achievement. Elements of individual and collective styles create contradictions in Russian management.

An intricate system of decision-making is one of the main signs of inefficiency of corporate governance. The study of the Central Bank of the Russian Federation on the basis of the Code of corporate conduct (Pleshchenko, 2016) also demonstrated non-compliance with the equality of minority shareholders and requirements for payment of reasonable compensation to top management depending on the results of work. In particular, the appointment of independent Directors is rarely used, which is again due to the high risks and the lack of confidence of owners in the legal protection of their interests. As for payments to top managers, the problem is largely related to the dependence of companies on the state and the lobbying capabilities of managers who have their own price and do not always correlate with current

performance. The consequence of the hierarchy is a clear divisional nature of the structure of large Russian companies with a high level of control from the headquarters. For example, in "Russian Railways" the latter not only establishes plans to improve financial efficiency, but also regulates financial, economic activities, personnel policy of subsidiaries (Pogosyan, 2014). However, the trend toward centralization keeps the company until the last from the selection of independent profit centres. There are often examples of absolute centralization, rejecting not only the allocation of subsidiaries, but also the outsourcing of non-core functions. However, this strategy was a typical feature of the Soviet times rather than of post-Soviet Russia.

With a divisional management structure, procurement fits well into the business model. As in other countries, a combination of single corporate procurement for the main procurement nomenclature and local procurement for auxiliary materials is used. The trend toward centralization is visible in the context of the supply chain itself. Thus, procurement professionals often control their product categories from forecasting and planning needs to arrival at the warehouse. Such a system creates additional complexity in the form of organizations mismatched business processes. As a result, it is difficult to unify contractual procedures; there are problems with the replacement of employees, obtaining reliable interim information about the status of orders.

Companies deal with such difficulties in the first place through digital business transformation. Indeed, such technologies are successfully used in the world to obtain real-time information about the state of the supply chain. And it's not just about tracking the status of mail. There is automation of such processes as electronic bidding, billing, debt calculation. To this, you can add mechanization of warehouses using bar-coding, which minimizes logistics risks.

In particular, mining and metallurgical holding 'Metalloinvest', which launched an appropriate program in 2016, has followed this path. The requirements of the automated enterprise management system (ERP) have replaced the traditional end-to-end responsibility of procurement professionals with a step-by-step approach. "Units responsible for the development and implementation of category strategies, operational procurement, contract and claims work, monitoring, basic record documents, ... methodological support service and supply development" were formed (Harvard Business Review Russia, 2018). It is characteristic of this company that it avoided the temptation of centralization during the implementation of changes and retained the divisional structure, within which similar business processes are planned to be implemented at all plants of the holding. "Metalloinvest" refers to the sphere of ferrous metallurgy, for which it is successful to build long-term contractual relations with suppliers of iron ore raw materials.

However, the success of such a way requires maintaining a high level of intercompany communications at a horizontal level, which would ensure the replication of successful techniques from one region to other departments. A company may improve productivity, reduce scrap and reduce the training duration of newcomers in one plant, but wasn't able to apply the same technology to other sites. If the change fails to scale, there will be an internal structure complication, which significantly devalues the results. Revealing examples of the factories, farms and shops of the Soviet era come to mind. These enterprises were built on the basis of advanced world models and often remained alone against the background of the opposing changes in the environment. Now, improving the mechanisms of interaction

between the authorities and citizens is a priority by using supply chain management (Vetrova, Medvedeva, Kabanova, Evstratova, & Senicheva, 2019).

## 7. Conclusion

On the example of the companies mentioned in the article, we can conclude about the organizational structure of supply chain activities. Companies have a divisional structure. Centralized supply chain management is typical for Russian companies. The challenges facing modern business in the organization of the procurement system look ambitious. It is important that the principles of procurement do not contain contradictions with the applied management style. This will ensure the implementation of a modern procurement system with minimal costs. Improving the level of top managers' education, their traditional powers to quickly change the organizational structure should help to implement these modern methods. The first examples of successful changes, as we see, have already appeared, and I do believe that there will be more of them.

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