

## **Эффективность использования и характер построения логистической цепочки поставки продукции**

*Анисимов Антон Юрьевич*

*Санкт-Петербургский политехнический университет Петра Великого  
студент*

*Бойко Ирина Александровна*

*Санкт-Петербургский политехнический университет Петра Великого  
студент*

*Захаренко Алина Викторовна*

*Санкт-Петербургский политехнический университет Петра Великого  
студент*

### **Аннотация**

Преобразования, происходящие на макро- и микроэкономическом уровне, как отдельной страны, так и мировой системы, оказывают непосредственное влияние на трансформацию существующих принципов проектирования логистических цепей поставок международного сообщения. В статье рассматривается структура бизнес-процессов в рамках мероприятий, направленных на оптимизацию концепции логистических потоков, направленную на повышение эффективности компании

**Ключевые слова:** модель поставки, материалопроводящие потоки, бизнес-процессы, логистические потоки, цепочка поставки

### **Efficiency and nature of the construction of the supply chain of products**

*Anisimov Anton Yur'evich*

*Peter the Great St.Petersburg Polytechnic University  
Student*

*Boyko Irina Aleksandrovna*

*Peter the Great St.Petersburg Polytechnic University  
Student*

*Zakharenko Alina Viktorovna*

*Peter the Great St.Petersburg Polytechnic University  
Student*

### **Abstract**

The transformations taking place at the macro - and microeconomic level, both in an individual country and in the global system, have a direct impact on the

transformation of the existing principles of designing logistics supply chains for international communication. The article deals with the structure of business processes in the framework of measures aimed at optimizing the concept of logistics flows aimed at improving the efficiency of the company

**Keywords:** delivery model, material flows, business processes, logistics flows, supply chain

To date, the problem of creating an effective supply chain of products to the business structure is the most urgent, which is caused by the aggravation of the situation with the import of goods and the creation of import substitution policy. For clarity, the authors analyzed the existing supply chain and proposed their own delivery model, developed taking into account all the necessary requirements. The retail chain "Prisma" was chosen as the object of research. The subject of the study is the supply chain of nuts in the stores of the trade network.

The development of the author's model of the logistics chain was started with the identification of possible Russian suppliers of nuts, due to the maintenance of import substitution policy and the presence of direct supplies in Russia. The following products were selected as groups of nut products:

1. Roasted walnut, halves;
2. Salted roasted peanuts, halves;
3. Fried hazelnut;
4. Almonds fried.

Among the possible suppliers of these products and the prices for which they offer to sell their products considered by the authors, the most optimal and rational option was the company "Crimean nut" (Republic of Crimea). This company is the Crimean producer of production from nuts, production and packing of production for realization in the HoReCa segment and distribution networks positioning itself as the company growing and making high-quality, natural, environmentally friendly products. Below are the prices at which the selected supplier company offers for the previously mentioned products:

1. Roasted walnut, halves - 480 rubles / kg;
2. Salted roasted peanuts, halves - 200 rubles / kg;
3. Fried hazelnut - 450 rubles / kg;
4. Roasted almonds - 400 rubles / kg.

This company specializes exclusively in the production of nuts, in comparison with other suppliers, sells products in the HoReCa segment, which indicates a sufficiently high quality of products. The price is fully justified by the quality, besides for customers there is a system of loyalty and flexible discounts. The company is promising in this segment of the market, actively cooperates with various retail chains.

The next step in the development of the author's logistics supply chain was to identify the needs of one point of sale of nuts in St. Petersburg within the chain of stores "Prisma" per year. This value is approximately equal to 30 tons, according to the results of the negotiations held with the Manager of the stores "RGBA". According to the demand for these types of nuts, it was found that the

largest share in sales is peanuts (40 %), then walnuts (25%), almonds (20%) and hazelnuts (15%). Accordingly, the number of these indicators per year per store will be equal to:

1. Roasted walnut, halves - 7.5 tons;
2. Salted roasted peanuts, halves - 12 tons;
3. Fried hazelnut - 4,5 tons;
4. Almonds fried - 6 tons.

The contract on delivery of nuts from the Crimea by the Crimean nut company was made on the basis of need for the provided production from all network of the shops located in the territory of St. Petersburg. Based on the fact that 15 stores get the need to supply these products for each of the types of nuts per year to all stores:

1. Roasted walnut, halves - 112.5 tons;
2. Salted roasted peanuts, halves - 180 tons;
3. Fried hazelnut - 67.5 tons;
4. Almonds fried - 90 tons.

Based on the prices declared by the supplier company, the calculated need for the supply of these products and VAT, an amount equal to 195 142 500 rubles was received.

The following supplier of PEK (St. Petersburg) every two months party on 5 tons makes delivery. In the negotiations it was established that the goods will be delivered to the road that will be approximately 645 768 rubles a year, given the favorable fence of the cargo and its insurance. Thus we get that the total amount for all stage of delivery of nuts is 195 788 268 rubles per year.

Prisma retail chain is a Finnish Hyper-and supermarket chain within the s-Group holding, which indicates the predominance in the assortment matrix of stores of certain groups of goods supplied directly from Finland, as well as from Estonia - the largest partner and supplier of private labels of the company. Based on this, the design of the author's model of the logistics chain takes into account the data on the volume of supply of nuts from the above suppliers. During the analysis of the foreign market of nuts, was determined the amount of the total supply of 165 000 000 rubles, determined on the basis of average prices of selected types of nuts:

1. Roasted walnut, halves - 490 rubles / kg;
2. Salted roasted peanuts, halves - 220 rubles / kg;
3. Fried hazelnut - 465 rubles / kg;
4. Roasted almonds - 430 rubles / kg.

The company «Prisma», which can significantly reduce costs, carries out the delivery of the products. Based 2834 RUB/tonne. With the frequency of delivery once every two months, the cost of 6 shipments amounted to 570 000 rubles per year. As a result, taking into account the customs duty and VAT, the Total amount of supply of nuts (almonds, walnuts, hazelnuts and peanuts from Finland to Prisma stores located in St. Petersburg is 570,000 rubles per year.

Comparison of the total cost of the supply of nuts of domestic and foreign suppliers proposed above shows that the most profitable for the trade network

"Prisma" is cooperation with the company "Crimean nut", as the choice of the supplier provides savings of 4 782 000 rubles per year.

Summing up, it should be noted that the developed model of the logistics supply chain will reduce the costs of the customer, which will lead to a more effective development strategy of the company due to cost savings. A number of significant advantages, including savings of up to 5 000 000 rubles per year, the supply of products of proven quality (tested HoReCa), as well as the establishment of economic relations with the domestic manufacturer, will have a positive impact on the efficiency of the trading network, will provide active support for import substitution policy, as well as stimulate the establishment and development of international partnerships.

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