LOGISTICS OF THE CONFECTIONERY INDUSTRY

Vinnytsia National Technical University

Анотація

Розглянуто теоретичні аспекти постачання, виробництва та збуту кондитерських виробів **Ключові слова:** логістика, постачання, виробництво, збут, кондитерські вироби.

Abstract

The theoretical aspects of the supply, production and sale of confectionery are considered **Key words:** logistics, supply, production, sales, confectionery.

Introduction

Understanding logistics systems is one of the basic concepts of modern logistics. Only in the middle of the 20th century did logistics begin to pay attention to the creation of supply schemes. This period can be called the heyday of production. But by the middle of the 20th century, it was necessary to find ways to create a competitive advantage over other businesses. In the logistics organizational chain, the cost of a product at a certain stage is lower than the cost of the same product without access. This observation shows that logistics, if applied in the economy, will lead to clear economic benefits. Because of this, logistics began to be used to manage material routes. Logistics activities of enterprises include not only the transportation of goods from suppliers to consumers (from enterprises to warehouses), but also the procurement and distribution of material resources. Thus, logistics activity is a system of actions and decisions related to the formation of optimal proportions of material, financial, information and transport flows along the continuum chain from external sources to the final consumer of finished products.

The confectionery industry is one of the most promising branches of the food industry of Ukraine. In 2021 the industry has a capacity of 1.5 million tons, and confectionery enterprises of Ukraine consume about 600,000 tons of sugar annually. The national confectionery industry is represented by enterprises included in the system of the Ministry of State Administration of Ukraine. For example, the CJSC "Ukrkondyter" system includes 28 factories, food enterprises, shops and public catering enterprises. The total capacity of 28 confectionery factories of the CJSC "Ukrkondyter" system corresponds to 3/4 of the output of the confectionery industry of Ukraine.

The confectionery market is conditionally divided into three main segments: sugar, flour and chocolate products. The most important segment is sugar confectionery (caramel, dragees, candies). The segment of flour products (biscuits, waffles, muffins, crackers) accounts for 38.6% of the total volume of products, but the segment of chocolate products accounts for 5.7%. The development of new recipes by manufacturers and the improvement of technical equipment led to the development of almost all product groups in the confectionery industry.

The largest manufacturers of confectionery products in Ukraine are the following companies: "Roshen", JSC "AVK", LKF "Svitoch", CJSC "Kraft Foods Ukraine", CJSC "VO "Kyiv-Konti". According to experts, the capacity of the domestic confectionery market is about 1 million tons per year.

Research Results

Research for 2020 shows that consumers like chocolate, chocolate with various toppings and waffles the most. Confectionery with sugar is the least popular among the population. On average, one Ukrainian consumes about 4 kg of chocolate per year, and milk chocolate has the greatest demand (milk chocolate is preferred by 43% of consumers). A notable trend is the active movement of imported chocolate products from the Ukrainian market. Thus, the share of foreign brands is 5%. The majority of consumers belong to the age group from 18 to 55 years (85%), among them 67% are women and 33% are men.[4]

We can conditionally highlight three products that are most widely used in the confectionery industry. Among them are flour, sugar and eggs.

The main suppliers of flour are Vinnytsia and Dnipropetrovsk, Kyiv and Zaporizhzhia regions. It is one of

those products that are mostly supplied to confectionery enterprises. Flour is used in almost all sweets except gluten-free, but they make up a small part of production.

Vinnytsia, Volyn, Lviv, Kirovohrad, Rivne, Poltava, Ternopil, Khmelnytskyi and Cherkasy regions are among the main suppliers of sugar. Sugar is the main component of all confectionery products, except for those based on fructose, a natural sugar substitute.

About ten egg producers operate on the Ukrainian market, but the largest share belongs to two players. The first is "Avangard", which is part of Oleg Bakhmatyuk's agricultural holding "Ukrlandfarming" and is represented by the "Kvochka" brand. The second is "Yasensvit", a company of the "Ovostar Union" group, which sells its products under the trademark of the same name [2].

The total volume of production of enterprises in 2021 amounted to more than 1 million tons of products every year, which allows to fully meet the needs of the domestic market and to export a large amount of products abroad. The range of products covers almost all groups of confectionery products [3].

Many materials and raw materials are used in the confectionery industry. First of all, the most important of them are flour, eggs, sugar, vanilla sugar, yeast and others.

The average duration of the technological process depends on the products being manufactured. I have analyzed the most popular products in the confectionery industry: cakes - from 3 to 24 hours, candies - from 2 to 4 hours, bakery products - about 3-4 hours.

Each company chooses the delivery interval independently, but usually they take place every 2-3 days. It all depends on the product being delivered. If it is flour, sugar or eggs, then the deliveries can be once a week, but if it is fresh fruit or other perishable products, then the deliveries take place more often.

We note that export activity is based on the following factors:

- presence of the enterprise's export potential, which is characterized by the quantitative, qualitative and structural state of the subject's available resources (production, financial, labor, etc.), necessary for their relationship and coordination;
- ability to mobilize reserves in specific terms to achieve the set goal;
- ability to export and increase and improve all components of their connecting links.

Despite fierce competition, the confectionery market remains one of the most sought-after and popular among business objects. The European Union's exemption from duty on sweets also stimulated the growth of the industry. Long-term cooperation of foreign partners with the leaders of the confectionery market of Ukraine allows to export goods to foreign markets duty-free. The largest exporters of Ukrainian sweets are Belarus and Lithuania, Poland, Moldova, Kazakhstan, Azerbaijan, Turkmenistan, as well as the countries of America and Asia. This is evidenced by the rate of growth of specialists, 120% in the former CIS countries and 60% in the EU countries. [1]

Unfortunately, 2022 was a difficult year for Ukraine and for the whole world, it brought war, destruction, economic collapse and other crisis phenomena to the country, challenging all industries.

But a crisis is a new opportunity. And part of confectionery manufacturers find and implement successful solutions for business development and increase in sales volumes. In particular, enterprises switch to the production of dry cookies, snacks, nutritional bars for the needs of both the population and the army. Part of the production is transferred as humanitarian aid and to the front.

Taking into account the decrease in the purchasing power of the population, confectionery manufacturers are increasing the number of products in the middle and low price categories.

As a strategy to support the confectionery business, the most effective will be the modernization of production, aimed at reducing raw material and energy costs, introducing new recipes, reducing logistics costs both when supplying raw materials and when shipping finished products to sales points [5].

Conclusions

Having studied the confectionery industry, we can conclude that logistics is an integral part of it. Ukrainian companies that produce sweets tend to concentrate their investment activities mainly in two directions. To do this, you need to make a certain number of changes.

First of all, this is the modernization of the equipment of each enterprise. Secondly, improving the qualifications of all employees in order to improve the quality of manufactured products, which will increase the number of satisfied consumers. And finally – access to new sales markets. This will increase the profits of companies and reveal the possibility of financial growth of each enterprise.

Summarizing all of the above, it is possible to predict further growth of interest in domestic confectionery products both in Ukraine and abroad. The trend for Ukrainian products will continue for the next few years.

And although, according to forecasts of the National Bank of Ukraine, more than 5 million people will not

return to Ukraine from EU countries in the next 2 years, a decrease in the consumption of confectionery products is not predicted.

REFERENCES

1. Аналіз та прогноз ринків збуту кондитерських виробів. URL: <u>https://cdn.hneu.edu.ua/rozvitok19/thesis02-26.html</u> (дата звернення: 28.05.2023).

2.
Постачальники
яєць
в
Україні.
URL:

https://www.epravda.com.ua/publications/2022/10/14/692613/#:~:text=%D0%9F%D0%B5%D1%80%D1%88%D0%B8%D0%B9%
20%E2%80%93%20%22%D0%90%D0%B2%D0%B0%D0%BD%D0%B3%D0%B0%D1%80%D0%B4%22%2C%20%D1%8F%
D0%BA%D0%B8%D0%B9,%D1%80%D0%B5%D0%B0%D0%BB%D1%96%D0%B7%D1%83%D1%94%20%D0%BF%D1%8
00%B6%D0%B4%20%20%20%20%D0%BF%D1%8E%20%D0%BF%D1%85%D0%BF%D1%85%D0%BF%D1%85%D0%BF%D1%85%D0%BF%D1%96%D0%BF%D1%85%D0%BF%D1%85%D0%BF%D1%85%D0%BF%D1%85%20%D0%BF%D1%85%20%D0%BF%D1%85%D0%B6%D0%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0%B6%D0

3. Тенденції кондитерської промисловості України. URL: <u>http://www.economy.nayka.com.ua/?op=1&z=3460</u> (дата звернення 28.05.2023).

4. Україна. Кондитерська промисловість. URL: <u>http://ukrexport.gov.ua/ukr/prom/ukr/161.html</u> (дата звернення: 28.05.2023). 5. Pro-Consulting. Ринок кондитерської продукції: тренди та успішні рішення. Тези з виступу Pro- Consulting на конференції «Кондитерський бізнес 2022». URL: <u>https://pro-consulting.ua/ua/pressroom/rynok-konditerskoj-produkcii-trendy-i-uspeshnye-resheniya-tezisy-s-vystupleniya-pro- consulting-na-konferencii-konditerskij-biznes-2022</u> (дата звернення: 28.05.2023).

Данилюк Ярослав Ігорович – студент групи Л-216, факультет менеджменту та інформаційної безпеки, Вінницький національний технічний університет, Вінниця, e-mail: <u>yaroslav2004dan@gmail.com</u>

Науковий керівник: Слободянюк Алла Анатоліївна – старший викладач кафедри іноземних мов, Вінницький національний технічний університет, м.Вінниця, e-mail: <u>a.allavin@gmail.com</u>

Daniliuk Yaroslav Igorovych – student, Faculty of Management and Information Security, Vinnytsia National Technical University, Vinnytsia, e-mail: <u>varoslav2004dan@gmail.com</u>

Scientific Supervisor: Slobodianiuk Alla Anatoliivna – Senior Lecturer of the Foreign Languages Department, Vinnytsia National Technical University, Vinnytsia, e-mail: <u>a.allavin@gmail.com</u>