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Pitel Nina Yakymivna,

Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Uman National University of Horticulture (Uman, Ukraine);

Alioshkina Liudmyla Petrivna,

Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Management, Uman National University of Horticulture (Uman, Ukraine)

ABC ANALYSIS AS A TOOL OF OPTIMIZATION OF MARKETING MANAGEMENT OF EXPORT-LED ENTERPRISES

The article proves the relevance of using ABC analysis in business practice of export-led enterprises to optimize receipts from foreign trade activity. Benefits and limitations of ABC analysis are determined and systematized. Author's model of the process of marketing management of export-led enterprises is proposed. It includes the development and implementation of corporate marketing business strategy based on the integration of strategies of commodity lines allocated by the results of ABC analysis.

Keywords: ABC analysis, management system, marketing management, foreign trade activities, export-led enterprise.

General problem statement. Modern processes of globalization and internationalization of the world economy put new challenges and threats before national companies that promote their products and services on the world market. In fact, it is necessary to look for new tools and methods to enhance competitiveness both on domestic and foreign markets for the successful competing in the international labor division. Export-led enterprises need an effective system of marketing management aimed at the development of promising strategic development plans and improving the efficiency of foreign trade activities. Such plans should be potentially profitable and able to form a basis for the firm international competitiveness of the enterprise. This can be achieved by optimizing marketing policy (commodity, price, marketing and communication) and management system that combines all the techniques and tools of planning, organization, motivation, coordination, monitoring and more.

Management system of export-led enterprises in modern conditions requires the development of theoretical and practical recommendations on mechanisms to improve the efficiency of foreign trade activities, namely: optimization of marketing policy, cost minimization of resources and elimination of unproductive losses, optimization of range of items, stability of logistic management and others. One of the optimization tools of the management system of foreign trade activities is an ABC methodical approach. It belongs to the management mechanisms of product range of the enterprise.

Analysis of studies and publications. In the scientific literature the question of techniques and methodology of ABC-analysis is covered extensively by scientists. In particular, fundamental studies belong to experts-analysts, including R. Bodriakov [1], P. Grek [2], A. Fisher [10]; expediency of application and methodology of ABC analysis are described by O. Kreschenko [8], D. Yezepov [4], Y. Ivakhiv, I. Spilnyk [6] and others. Issues of strategic management in the system of marketing management are as well studied by many scientists, including A. Hryniov [3], I. Komarnytsky, G. Tsar [7], I. Novak [9] and others.

Unsolved aspects of the problem. However, most scientists describe the methodology and algorithm of ABC analysis. Thus, the issues on application of this analysis remain poorly understood in the practice of the Ukrainian export-led enterprises to develop corporate

marketing business strategy and, on this basis, optimizing revenues from foreign trade activities. This problem has led to the formulation of the research objectives, namely: substantiation of expediency of using ABC analysis in the practical work of national enterprises to optimize the costs and benefits of foreign trade activities as well as development of proposals on the formation of the process of marketing management of the export-led enterprise based on the integration of marketing strategies of commodity lines allocated by the results of ABC analysis.

Presentation of the material. Under the conditions of globalization volumes of international trade in goods and services determine the intensity of foreign economic relations of the country. Data on the movement of goods across the border describe the dynamics of proportions and volume of foreign trade. Fluctuations in the global world market in recent years require finding favorable business opportunities of the Ukrainian enterprises in the increasingly competitive international market [11, p. 21].

The basic functional form of foreign economic activity of national enterprises is international trade that is exports and imports of goods and services. For the past five years, exports of goods decreased from 68 billion US dollars in 2011 to 38 billion in 2015, while imports decreased from 83 to 38 billion US dollars, based on the State Statistics Service of Ukraine [5] (Fig. 1).

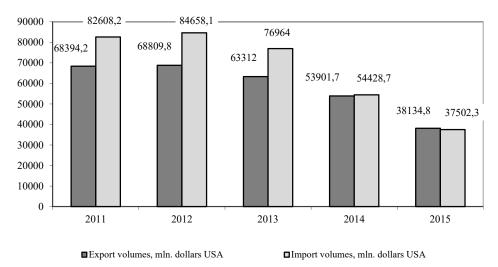


Figure 1 – Volumes of foreign trade of Ukraine (given according to data [5]), data for 2014-2015 are shown excluding the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol city and the zone of the antiterrorist operation

For 2011-2015 exports of goods by the Ukrainian enterprises decreased at 1,8 times (or by 30,3 billion US dollars) and import decreased at 2.2 times (by 45,1 billion US dollars). Reasons for this are global challenges, political instability and economic crisis in the country. So, we can say that in recent years in Ukraine unfavorable trends remain in foreign trade which makes need to develop and implement an effective foreign trade policy, including on the basis of the introduction of effective methods, tools and mechanisms of management of foreign economic activities.

In a global competitive environment for domestic companies operating in international

markets, the key to improving the efficiency may be relatively new concept of business development, formed on the basis of category management. This concept, unlike traditional management system based on specialization by functions, includes the development of the management strategy by commodity categories that are considered as separate business units. This approach requires special attention, clear and correct management of commodity flows to ensure uninterrupted process of selling products for maximum satisfaction of customers [8, p. 253]. For each business unit (commodity category) it is advisable to develop a specific strategy of management and for that it is necessary to distribute the entire commercial variety of goods into homogeneous clusters or groups of products. Managerial apparatus should have sufficient knowledge and specific tools to solve this problem. It is possible to use a methodical approach of ABC analysis. This is one of the mechanisms for management of commercial variety of goods that is the most often mentioned in scientific publications by relevant themes [8, p. 253-254].

In the business practice of the Ukrainian export-led enterprises the application of ABC analysis will identify groups of products that improve the efficiency of export deliveries. It means they provide the greatest revenue and profit and contribute to the optimization of the range of commodity groups with little earning power ratio. With the help of ABC analysis all services of enterprise management can organize, structure, reproduce and provide more accurately efficient and comprehensive information in terms of commodity groups (customers, regions, countries, etc.). This will objectively assess the efficiency of business processes in the enterprise and identify reserves to minimize the costs of different types of resources (especially for unprofitable activities). That is, ABC analysis identifies priority and basic commodity groups which the main focus of the executive staff should be directed to in the development of promising development strategy of foreign trade activities.

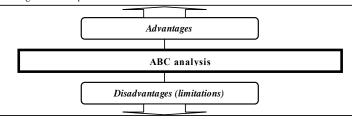
In the scientific literature, a significant number of scientists studying the material flows recommend to use the method of ABC analysis to optimize management of commodity stocks of the enterprise. Quite fundamental studies belong to experts-analysts, including A. Fisher [10], R. Bodriakov [1], P. Grek [2] and others.

ABC analysis method is used for the classification and distribution of a collection of objects into clusters to study economic phenomena. In scientific studies this tool is used to analyze and systematize the totality of goods on the principle of Pareto into three groups. They are called by first letters of the Latin alphabet ABC and results are graphically displayed by the Lorenz curve. This method aims to highlight the most productive and economically viable activities. For the management system of the enterprise ABC analysis is an information base of the management that allows make informed decisions based on the most accurate accounting and control of expenses and income.

ABC analysis has significant advantages that justify the use of this tool to improve efficiency of the management system of enterprises. However, there are several limitations that must be taken into account for the formation of product strategy and business processes (Fig. 2).

It is advisable to group objects by several indicators at once to minimize the negative impact of deficiencies of ABC analysis, for example, to determine groups A, B and C by reference to several variables, namely by income and by the frequency of purchases. When managing volumes of export supplies it is possible to use a combination of two indicators – products that bring the most revenue and are often sold. Systematization of data should be carried out by trademarks or consumer properties (positions compared with each other should be in each group) for taking into account qualitative characteristics. Under such conditions the clustering will have a practical sense because groups are allocated to be managed.

- > easy to use, without extensive training in various situations, for studying various phenomena and processes;
- > visibility and clarity, ability to retrace results and correct them; interpretation of calculations does not cause problems:
- > universality, that is to analyze various indicators, due to which the priority can be traced (the difference of the contribution to the overall result);
- > automation through computer availability of accounting and calculations;
- > possibility of obtaining objective information for allocating overhead costs and identifying the most costeffective activities;
- identification and analysis of costs, formalization of business processes;
- > rationalization of pricing and budgeting;
- > analysis of the value-adding chain and optimization of resources method allows rationalize costs of resources by concentrating on the most important elements and, conversely, minimizing costs for less preferred components:
- > optimization of management based on objective and reasonable formation of product strategy and reengineering of business processes



- ➤ ABC analysis is only a tool in hands of the analyst, therefore it requires a thorough economic analysis, rather than mechanical application;
- > it is a one-dimensional method that reflects only one side of the phenomenon and is optimal for analysis by one indicator:
- > it is advisable to use multidimensional ABC analysis, that is clustering immediately by several indicators, to deepen the analysis of a complex multidimensional object;
- data separation occurs regardless of quality characteristics. Therefore, to optimize analysis and obtain real results it is necessary to group products (by trademarks, consumer properties, etc.);
- > three groups A, B and C do not always allow organize data efficiently, so additional groups are added to the analysis not provided by the classic version;
- quality, reliability, timeliness of data market conditions may change for the period of data processing and systematization;
- ➤ analyzed data, indicators, criteria should reflect the studied process or phenomenon comprehensively, in detail and optimally;
- > the process of preparing the working tools is complicated and time-consuming, that is time, financial and human resources are required to develop a methodological basis of ABC analysis and systematization of data; increasing the intensity of labor strengthening the requirements for enterprise personnal, his qualifications:
- increasing the intensity of labor, strengthening the requirements for enterprise personnel, his qualifications;

 ABC analysis requires strategic and constructive management thinking

Figure 2 – Advantages and limitations of ABC analysis (developed by authors on the basis of [4; 6; 12; 13])

In the analysis it is possible to allocate the fourth group not provided by the classic version, besides main A, B, C groups. It can be when there are some items among goods that are not sold at all or their sale is unprofitable (such products are more harmful to group C and added to group D). Other case is when it is necessary to include 40-50% of the range of items into group A, so it is advisable to separate group A+ from it, in which the best positions will be organized.

A particular problem of the analysis is relevance and reliability of data because during the year seasonality, uneven fluctuations in sales structure and deficit of commodity items in certain periods are observed. Therefore, it is not always justified to have results and conclusions in the future with the assumption that studied structure and sales patterns sales will be without change.

So, ABC analysis has significant advantages that are simplicity, accessibility

implementation and universality. Disadvantages are clustering by one indicator is not always correct and the use of multidimensional analysis increases the number of elements in group A. Also, this type of the analysis does not recognize the nature and quality characteristics of data because it is the work of the analyst.

The marketing strategy is a priority in the system of export strategies of the company [3, p. 94-95]. Therefore, the process of marketing management must include the following stages: statement of the mission and strategic objectives; analysis of the situation in which there is a subject of entrepreneurship; choice of strategic priorities; specification of marketing purposes; development of the corporate marketing strategy of the enterprise as a whole; development of marketing strategies for specific commodity groups defined by results of ABC analysis and functional strategies; their integration into the corporate export-led strategy; specification of strategic objectives, programs and decisions and their implementation; implementation of the corporate export-led strategy; strategic control.

By the results of ABC analysis the choice of marketing management tools for each group of export-led goods should include commodity and price policy contributing to positioning in the market, communicative policy providing product image and distributive policy determining the effectiveness in implementation of products in the foreign market.

We are impressed with the logical order of ABC analysis algorithm proposed by A. Fisher [10] and improved method of A. Kreschenko [8] which considers the method of ABC-analysis as a separate part of the sequence of actions of the methodological foundation of ABC approach. We use certain steps of the proposed algorithm and the system model of control logic of commodity categories by the ABC approach in our study. However, we note that our task was to justify the model of marketing management for the development of export-led development strategy of foreign economic activity, taking into account results of ABC analysis (Fig. 3).

The results of ABC analysis should be seamlessly integrated with the system of marketing management to optimize the profitability of export supplies. In fact, marketing management - is a systematic, target-oriented mechanism of interaction of tools of marketing and management for enterprise adaptation to changes in the marketing environment in order to maximize customer satisfaction and goals of the organization with effective allocation of limited resources [7, p. 113].

In this case all the marketing tools, including market research, choice of the most appropriate sales channels, effective commodity and price policy, advertising, maintenance, etc. must be efficiently implemented in all areas of management: production, financial and human resourcing, innovations, accounting, export policy etc.

Conclusions. Marketing management process should be developed on the basis of ABC analysis for optimizing revenues from foreign trade supplies of export-led enterprises. It should include the following stages: formulation of the mission and strategic objectives, analysis of internal and external environment, ABC analysis, development of corporate marketing business strategy on the basis of the integration of strategies of commodity groups, implementation of the corporate strategy based on the specification of tools of marketing management for each group of export-led goods and strategic control. The results of ABC analysis should be seamlessly integrated with the system of marketing management of the enterprise.

The proposed approach for improving efficiency of marketing management will contribute to rationalization of pricing and budgeting, formalization of business processes and provide optimization of management on the basis of objective formation of product strategy and business processes.

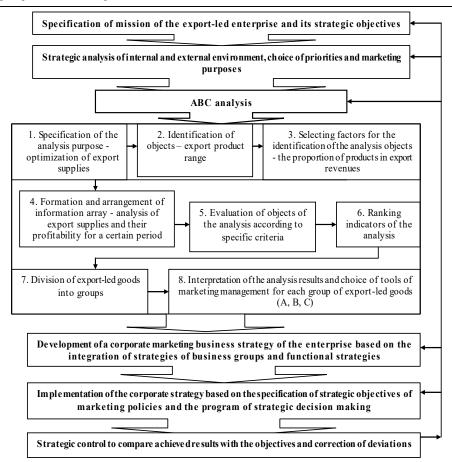


Figure 3 – Model of the process of marketing management of the export-led enterprise based on ABC analysis (authors' development)

Further studies should be aimed at substantiation of scientific and methodological approaches to the development of a corporate marketing business strategy based on the specification of tools of marketing management for each group of export-led goods allocated according to the results of ABC analysis.

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- **Н.Я. Пітель**, канд. екон. наук, доцент, доцент кафедри менеджменту, Уманський національний університет садівництва (м. Умань, Україна);
- *Л.П. Альошкіна*, канд. екон. наук, доцент, доцент кафедри менеджменту, Уманський національний університет садівництва (м. Умань, Україна)

АВС-аналіз як інструмент оптимізації маркетингового менеджменту експортоорієнтованих підприємств

У статті доведено актуальність використання ABC-аналізу у практиці роботи експортоорієнтованих підприємств з метою оптимізації доходів від зовнішньоторговельної діяльності. Виявлено і систематизовано переваги й обмеження ABC-аналізу. Запропоновано авторську модель процесу маркетингового менеджменту експортоорієнтованого підприємства, яка передбачає розроблення і реалізацію корпоративної маркетингової бізнес-стратегії на основі інтегрування стратегій товарних груп, виділених за результатами ABC-аналізу.

Ключові слова: ABC-аналіз, система менеджменту, маркетинговий менеджмент, зовнішньоторговельна діяльність, експортоорієнтоване підприємство.

- **Н.А. Питель,** канд. экон. наук, доцент, доцент кафедры менеджмента Уманский национальный университет садоводства (г. Умань, Украина);
- *Л.П. Алешкина*, канд. экон. наук, доцент, доцент кафедры менеджмента, Уманский национальный университет садоводства (г. Умань, Украина)

АВС-анализ как инструмент оптимизации маркетингового менеджмента экспортоориентированных предприятий

В статье доказана актуальность использования ABC-анализа в практике работы экспортоориентированных предприятий с целью оптимизации доходов от внешнеторговой деятельности. Выявлены и систематизированы преимущества и ограничения ABC-анализа. Предложена авторская модель процесса маркетингового менеджмента экспортоориентированного предприятия, которая предусматривает разработку и реализацию корпоративной маркетинговой бизнес-стратегии на основе интегрирования стратегий товарных групп, выделенных по результатам ABC-анализа.

Ключевые слова: АВС-анализ, система менеджмента, маркетинговый менеджмент, внешнеторговая деятельность, экспортоориентированное предприятие.

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