

SCIENTIFIC AND METHODOLOGICAL APPROACH TO THE FORMATION OF MARKETING-LOGISTICS SUPPORT OF ENTERPRISES IN PRODUCTION AND TRADE CHAINS

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Abstract. The purpose of the article is to develop a scientific and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains. It is established that the starting point in the development of scientific and methodological approach is the content, direction and purpose of such support. Modern views on the essence of marketing-logistics support of enterprises were considered. It is argued that the starting point in the development of scientific and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains is the perception of such support as the creation and implementation of conditions that ensure effective interaction of marketing and logistics to create and provide value to consumers. production and trade chains, based on the actions of organizational structures of the enterprise, providing marketing and logistics, to promote the efficient operation of the enterprise on the basis of ensuring the development of the business core. The expediency and methodical approach to the assessment of marketing and logistics of enterprises using the method of analysis of hierarchies is proved. The evaluation algorithm is based on a double marketing and logistics mix 5PR, which allows you to determine both the level of security and the rating of enterprises. Based on the manifestation of belonging to the pushing or extracting systems, a scientific and methodological approach to the identification and streamlining of enterprise processes in production and trade chains is proposed. It is recommended to assess the growth based on financial condition, as a reflection of the creation and provision of value to consumers. It is proposed to choose strategies for directing actions of organizational structures systems that provide marketing-logistics support to enterprises in production and trade chains, based on the developed matrix “SCE & SCR / level of demand certainty”, which promotes effective interaction of marketing and logistics. As a result, an environment for identifying effective ways of marketing-logistics support of enterprises in creating conditions to improve the efficiency of their activities based on the development of the business core.

Keywords: marketing, logistics, support, enterprises, production and trade chains, indicators, evaluation

JEL Classification: M30, M31, M39

Formulas: 0; **fig.:** 2; **tabl.:** 1; **bibl.:** 15

Introduction. The perception as a factor in improving the enterprises efficiency of their marketing-logistics in production and trade chains makes it relevant to research, development and evaluation of elements of the latter. The starting point is the perception of such support as the creation and implementation of conditions that ensure effective interaction of marketing-logistics that can create and provide valuable commodities to consumers in production and trade chains based on the actions of organizational structures providing marketing-logistics support in enterprises effective work.

Literature review. Studies of the process of marketing-logistics support business support among domestic scientists are found in the works of S. Kovalchuk, E. Krykavsky, N. Chukhray, Z. Andrushkevich, O. Ogorodnik, N. Trishkina and others, but no scientific and methodological approach to the formation of such a

process.

Aims. The purpose of the article is to establish a scientific and methodological approach to the formation of marketing-logistics support in production and trade chains.

Methods. The author used the methods of logical comparison, systematization and generalization, which made it possible to achieve the goal of the study.

Results. The basis for the development of a scientific and methodological approach to the formation of marketing-logistics support in production and trade chains is content, focus, and purpose.

The term "marketing-logistics support" is used by researchers and specialists in different contexts to describe marketing and logistics activities, but does not have a definite, consistent meaning that is perceived equally by all. This can be seen from the generalization of the definitions available in the economic literature of the category "marketing and logistics support of the enterprise", which contains table. 1.

Table 1. Definition of the category "marketing-logistics support of the enterprise" in scientific research

Direction	Definition	Author
Creation and implementation of conditions for effective interaction of marketing and logistics to ensure the effective operation of the enterprise	...as the marketing-logistics support of the enterprise, we will understand the creation and implementation of conditions that ensure the effective interaction of marketing and logistics with certain organizational structures to ensure the effective operation of the enterprise	Kovalchuk (2012)
An attribute of an integral management tool	...marketing-logistics support - is an integrated management tool that helps to achieve strategic, tactical or operational goals of the business organization through effective (in terms of reducing overall costs and meeting the requirements of end users to the quality of products and services) management of material and service flows, and also accompanying flows of information and funds	Ogorodnik (2016)

Source: developed by authours

As the marketing-logistics support of the enterprise as a whole to create and implement conditions that ensure effective interaction of marketing and logistics to ensure the effective operation of the enterprise with a goal, namely: to create and provide value to consumers, and how to achieve: organizational structures are taken as the basis of scientific and methodological approach to the formation of such support for enterprises in production and trade chains.

The creation and provision of value to consumers occurs in the processes occurring in the production and trade chains.

In order to ensure the effective operation of the enterprise, marketing-logistics support should be focused on promoting actions that meet the needs of sustainable development of enterprises and be characterized by a certain focus on achieving the goal of enterprises. While it is impossible to take into account all the variety of

theories, concepts, methods, ways and directions that underlie the sustainable development of enterprises, the marketing and logistics of enterprises in production and trade chains is to focus on raising the core of the business - the so-called business core. This justification is based on the concept of sustainable development management of the company, which is based on the idea that the basis of sustainable development of the enterprise is to ensure the integrity and maximum efficiency of the core business (Zuk, 2007).

Thus, marketing-logistics support of enterprises in production and trade chains is the creation and implementation of conditions that guarantee effective interaction of marketing and logistics complexes to create and provide value to consumers in production and trade chains based on the actions of organizational structures of enterprises, what implementing marketing-logistics support, to promote the efficient operation of the enterprise on the basis of ensuring the development of the business core.

As follows, the scientific and methodological approach to the formation of marketing and logistics support of enterprises in production and trade chains is aimed at: streamlining the processes of enterprises in production and trade chains in creating and providing value to consumers; clarification of action strategies of organizational structures that provide marketing and logistics of enterprises; improvement of marketing and logistics support of enterprises for their effective activity on the basis of ensuring the development of the business core.

The principled schematic diagram of the scientific and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains is shown in Fig. 1.

Therefore, there is a primary need to solve the first two tasks of the theoretical and methodological approach to marketing-logistics support of enterprises in production and trade chains, as: 1) streamlining processes in production and trade chains of enterprises in creating and providing value to consumers and 2) definition and refinement strategies of organizational structures that provide marketing and logistics of enterprises.

The solution requires basing the theoretical and methodological approach to marketing-logistics support of enterprises in the production and trade chains on the main elements, which are: the state of processes in the production and trade chains of enterprises; circumstances of marketing activities; atmosphere of logistics activities.

However, first of all, within the economic activity before each enterprise there is a task of estimating the level of its marketing-logistics support in production and trade chains to increase the efficiency of functioning in the management system.

Existing methods of such assessment can be found in the economic literature, but they are rather limited and are summarized as follows:

1) determining the level of enterprises marketing-logistics based on the planning state of enterprises marketing and logistics activities and judgments on the relationship of such support with the presence (absence) of relevant marketing and logistics departments (or both) (Andrushkevich, 2011). Taking into consideration recommendations that support certain creating type of organizational structure of

marketing and logistics departments to perform marketing and logistics functions with the greatest economic effect, it should be indicated on incomplete assessment of enterprises marketing-logistics, carried out by this method;

2) study of criteria and indicators for assessing the marketing-logistics of the production and trade chain and the formation of indicators a system for assessing the effectiveness of marketing and logistics activities (Trishkina, 2017). However, the assessment of the production and trade chain of enterprises (and not enterprises in production and trade chains) is carried out here, so it is not possible to formulate criteria for assessing the enterprises marketing-logistics support.

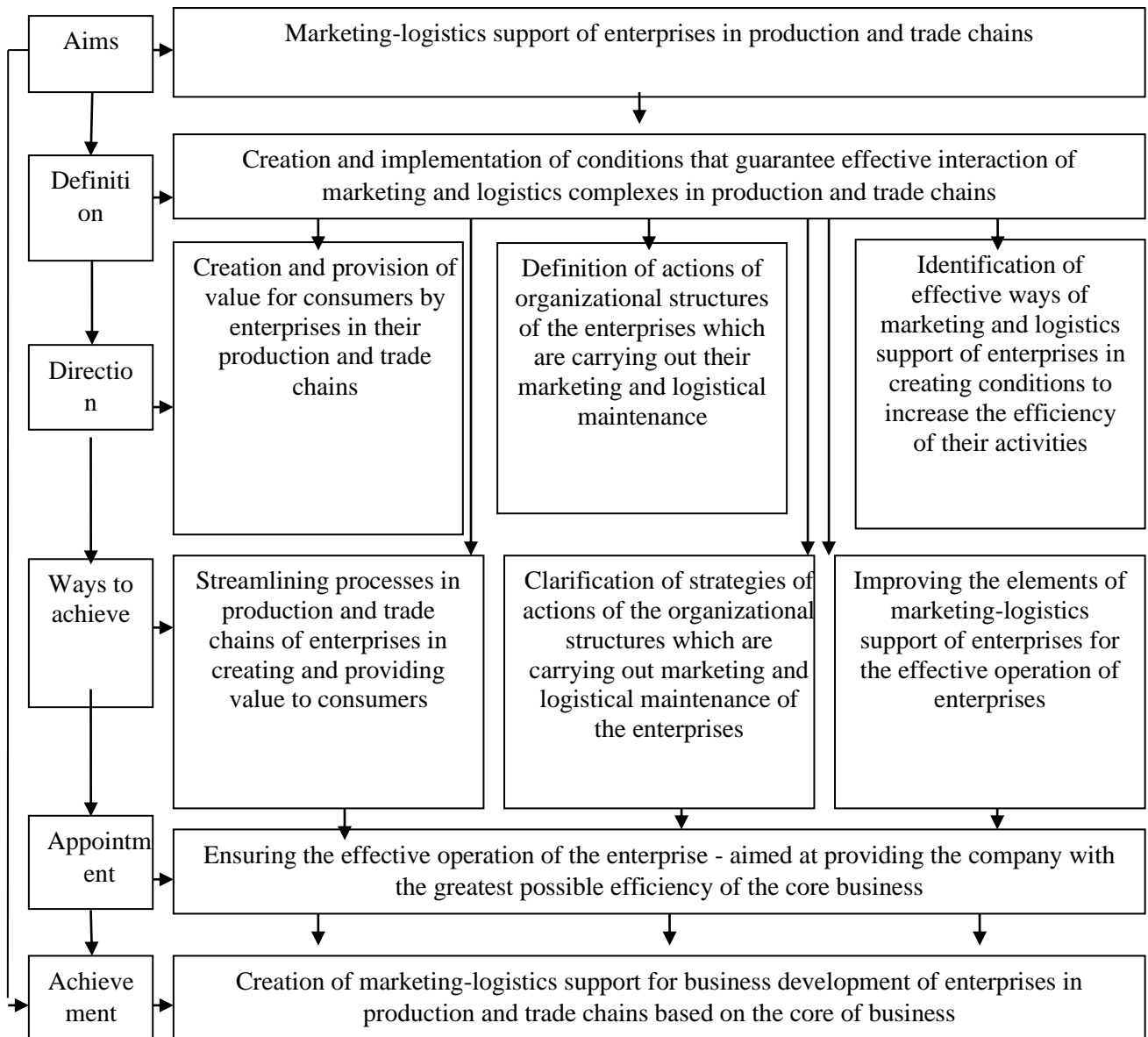


Figure 1. Principled schematic diagram of the theoretical and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains

Source: developed by author

The complexity of enterprises marketing-logistics support of in production and trade chains as an object of evaluation requires a method that will eliminate these contradictions, lack of data in its definitions and remove the likelihood experts' errors in assessments.

From these positions, it is advisable to use the method of analysis of hierarchies (also known as ANP - Analytical Hierarchy Process) as means of multidimensional evaluation.

According to the algorithm of the AHP method, detailed in works of T. Saati (Saaty, 2008) and his followers (Konoplyannikova, 2020), its stages are developed and adapted to the content and criteria for assessing enterprises marketing-logistics in compliance with all requirements for application of the specified method.

To assess the level of enterprise marketing-logistics we formed the base that is grounded on the marketing mix 4P and logistics mix 7R double marketing and logistics mix (double mix) 5PR, which has the appropriate advantages for considering the state of enterprises marketing-logistics, noted in (Semenov, 2016). Besides, the criteria of marketing and logistics of the enterprise we have defined in the composition: required quality commodity of required quantity for a certain consumer; commodity price at minimum costs; promoting of required quality commodity at required time; commodity promotion with minimum costs at required time; commodity promotion in required place for required consumer.

To assess the enterprise marketing-logistics for each criterion it is allocated the appropriate sub-criteria:

- to the criterion "Goods of the required quality in the required quantity to a certain consumer": the corresponding quantity of goods; required product quality; defined consumer of goods;
- to the criterion "Price of goods at minimum cost": the level of prices for goods and services; price incentives; value for money;
- to the criterion "Promotion of goods of the required quality at the right time": advertising activity; promotion strategy; defined period of delivery time;
- to the criterion "Promotion of goods with minimal costs at the right time": sales area; sales forms; forms of payment;
- to the criterion "Promotion of the goods to the necessary consumer in the necessary place": commitment to the buyer; guaranteed availability of the product in the distribution channels; sales promotion.

According to the method of AHP on the basis of the formed algorithm of an estimation of marketing and logistical maintenance of the enterprises it was possible to carry out both an estimation of its level, and to define a rating of the investigated enterprises on such sign.

The philosophy of close integration with suppliers and consumers in the achievement of additional market successes and benefits dominates in the enterprises marketing-logistics in production and trade chains.

Proposed criteria for identifying enterprise processes in production and trade chains (based on the formation of enterprises marketing-logistics in these chains as the essence of the study), is considered as the choice of such basic indicators that are

common to both marketing and logistics activities, as well as to enterprise processes in the production and trade chains.

Under such conditions, the processes of enterprises in production and trade chains are proposed to identify on the basis of allocation in both logistics and marketing activities, two basic principles of material flow management, as:

- pushing, which is the basis of the “Push-system”;
- pulling, on which the “Pull-system” rests.

First of all, it is necessary to underline the relevant indicators as criteria for identifying of enterprises processes in the production and trade chains. For the formation of such assessment, it is important to keep in mind the following features of enterprises processes in production and trade chains:

- general enterprises processes represent a closed cycle of the capital expanded cycle of the corresponding enterprise;

- enterprises processes embody material and cash flows, that simultaneously implement the processes of commercial, operational, financial, marketing, logistics and other activities;

- enterprises use all the resources that are logically and consistently implemented functions of labor objects transformation in accordance with the laws of their transformations through labor itself and means of labor into finished products for certain consumers.

The following characteristics are also important for assessment formation:

1) the basis for the identification and comparison of the enterprises processes in the production and trade chains should be objective information about the consequences of production, economic and financial activities of enterprises;

2) the sources of such information should be indicators of the relevant generally accepted forms of enterprises reports;

3) assessment of the enterprises processes in production and trade chains should take into account the most important indicators of property and financial conditions of these enterprises, the efficiency of their production, economic and market activities.

Based on the above justification, it is proposed to carry out such an assessment using indicators that characterize enterprise financial condition. For criteria that identify the enterprises processes in the production and trade chains such groups of indicators are selected:

- liquidity and solvency - the enterprises ability for fast conversion assets into cash and their ability to meet to creditors obligations over a period of time. These criteria are particularly important for the “Pull-system”, in which key questions are the relationship with suppliers regarding solvency in settlements with them, showing the enterprise ability to meet current obligations;

- profitability - efficiency of activities in relation to the enterprises processes in the production and trade chains; the factor that affects the efficiency of both the pulling and pushing systems, but is of less importance because it reflects the retrospective;

- business activity - characterizes the efficiency of invested funds used in the

enterprises processes in the production and trade chains and determines the enterprise assets that can increase the activities efficiency; a criterion that is more characteristic of the “Push-system”, as fuzzy tracking of demand requires the obligatory stocks and reserves of insurance;

- financial stability - the ability to carry out economic activities in the enterprises processes in production and trade chains in conditions of entrepreneurial risk and changing business environment in order to strengthen competitive advantages, taking into account interests of state and society; factor that matters both of the systems;

- property potential - characterizes the enterprises composition and capital structure, the state of fixed assets, the type of their reproduction and efficiency; it influences on both (Push- and Pull-systems) alternatives.

Since the study of enterprise performance is conducted at the current time, the solution of the problem occurs under conditions of certainty. Thus, a model of linear programming of decision-making under conditions of certainty is built (Saaty, 2008), (Ilyin, 2015), (Sergeev, 2006).

Since the objective function tends to the maximum, therefore, the system with the highest coefficient will be optimal.

Thus, the enterprise processes formation in production and trade chains according to the system in which the combined weighting factor is higher, and is optimal for the enterprise with the available indicators.

Research and direction of organizational structures actions system that provide enterprises marketing-logistics in production and trade chains, considered to be of great importance in researches of the optimal relationship (“power balance”) between marketing and logistics. And it is in the processes conditions in production and trade chains that are characterized as internal supply chains and logistics chains, we propose to use terms that are widely applied in management of these chains, namely (Egorov, 2012), (Sergeev, 2006):

- Supply Chain Responsiveness (SCR) - a characteristic of the supply chain that reflects the ability to respond quickly to environment changes;

- Supply Chain Efficiency (SCE) - certification, which reproduces the level of total costs in the supply chain from product development to consumer delivery and after-sales service.

The characteristics of the above categories reflect the diversity of marketing and logistics activities (Egorov, 2012), namely:

- marketing tends to “reactivity” in determining the material flows composition in production and trade chains and the distribution of such flows,

- logistics tends to be “efficient” in the material flows management in production and trade chains and customer service.

Thus, the “balance of power” between marketing and logistics activities in the study and direction of the system of organizational structures that provide marketing and logistics to enterprises in production and trade chains, is revealed in the reactivity ratio and efficiency of business strategy.

To determine the strategic compliance area in coordinates of the two above analyzed cases, scientists propose to build a graph in which the predicted areas of

change in SCE / SCR parameters depending on the third parameter, namely: “estimated uncertainty of demand” (Sergeev,2006), (Puzanova, 2012). At the same time, the relationship between the parameters of “SCE / SCR” and the degree of demand certainty opens the possibility of choosing and using different supply chain strategies (Puzanova, 2012); the latter, in our opinion, it is advisable to use in organizational structures that provide enterprises marketing-logistics in production and trade chains.

Adapting the development of organizational structures strategies that provide of enterprises marketing-logistics in production and trade chains, we propose a combination of supply chain strategy model (Puzanova, 2012) and the schedule of its strategic area identification (Sergeev,2006), (Puzanova, 2012) in the proposed matrix, that can be named “SCE&SCR/level of demand certainty” (Kovalchuk, Semenov, 2020) (Fig. 2).

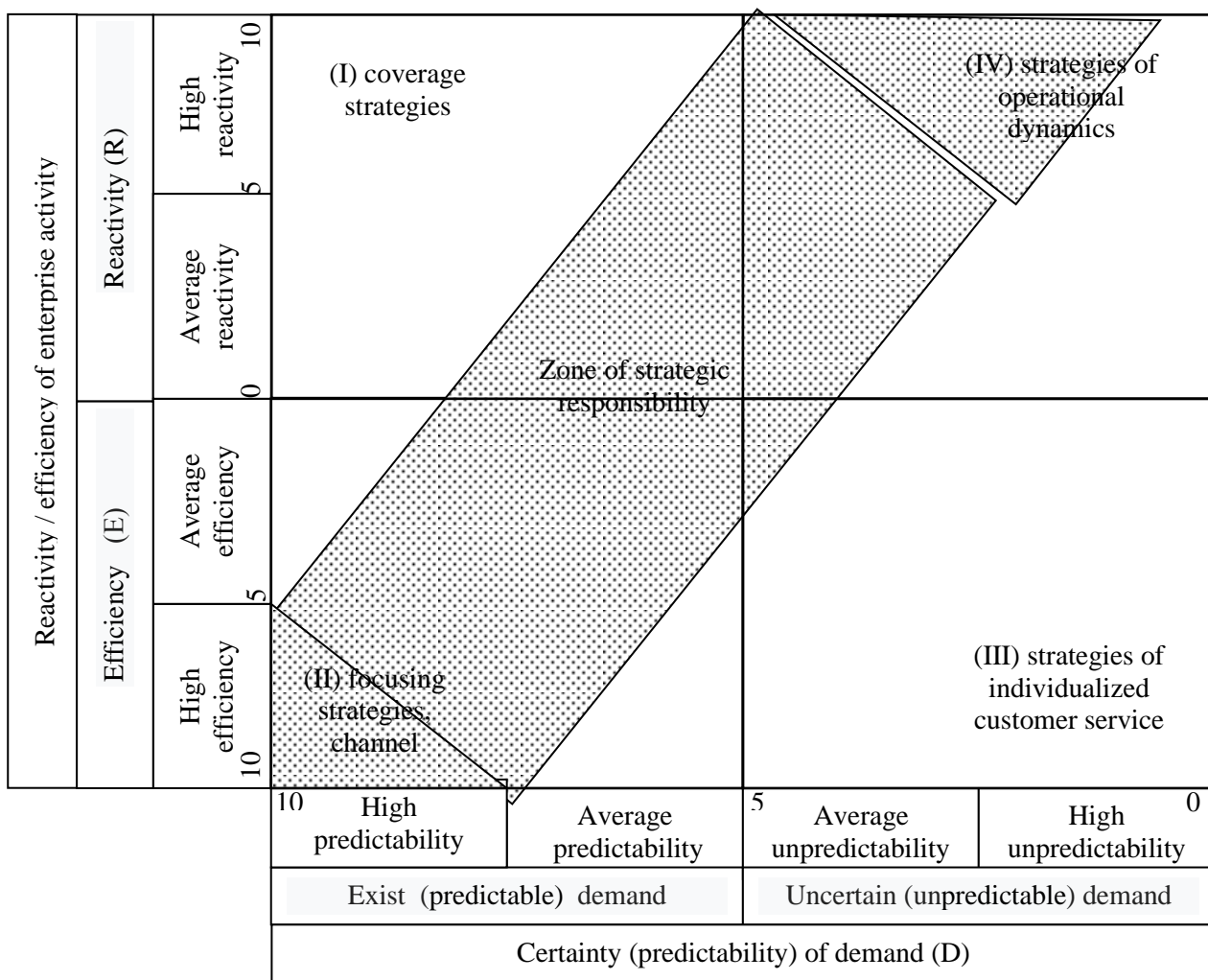


Figure 2. The basic structure of the matrix "SCE & SCR / level of certainty of demand", proposed for the positioning of enterprises in the direction of the system of actions of their organizational structures that provide marketing and logistics support in production and trade chains

Source: developed by author

The possibility of organizational structures to choose the appropriate reactive and effective business strategies for the matrix (adequate to the enterprises positioning in the matrix) is coincided financially attractive for the use of the matrix "SCE&SCR/level of demand certainty", which are: coverage strategies (I); channel (II) focusing strategies; strategies of individualized customer service (III), strategies of operational dynamics (IV) and their application to improve the enterprises marketing-logistics in production and trade chains.

Discussion. The results show that the activities of enterprises in a market environment should be based on their appropriate marketing and logistics in production and trade chains: the latter contributes to the formation of opportunities to expand markets and enter new ones, increase the interest of current consumers and attract potential, ensure competitiveness.

Using scientific and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains leads to the improvement of the latter for the effective operation of enterprises based on ensuring the development of the business core.

Conclusions. The developed theoretical and methodological approach to the formation of marketing-logistics support of enterprises in production and trade chains includes substantiation of the sequence and assessment of marketing-logistics support of enterprises in production and trade chains; establishing a method of identification and assessment of the development of enterprise processes in production and trade chains; developing an approach to directing the system of actions of organizational structures that provide marketing-logistics support to enterprises, to improve it. The choice of assessment of marketing-logistics support of enterprises in production and trade chains on the basis of the developed double marketing and logistics mix (double mix) 5PR using the ANR method was explained and argued. It is proved that the basis for the identification and comparison of enterprise processes in production and trade chains is objective information about the consequences of production, economic and financial activities of enterprises, which allows to assess these processes. The advantage of the proposed matrix "SCE & SCR / level of certainty of demand" is the ability to assess both the level of efficiency (ie, the state of logistics) and reactivity (ie, the state of marketing activities) of units involved in marketing-logistics support of enterprises in production and trade chains.

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