



УДК 339.138

<https://doi.org/10.31713/ve2202315>

JEL: R40

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QUESTION OF THE FORMATION OF COMPETITIVE ADVANTAGES OF A LOGISTICS OPERATOR IN THE CARGO TRANSPORTATION MARKET

The purpose of the scientific research is to study the peculiarities of the formation of competitive advantages of a logistics operator in the market of road freight transportation. An analytical toolkit for the formation of the logistics profile of the freight road transportation operator is presented, based on the identification of a set of key criteria and service standards concerning basic services and services with high added value. The procedure for determining the integral (weighted) criterion of the efficiency of the level of customer service involves forming a system of conflict-free criteria and service standards, establishing their importance, conducting a comparative analysis of service criteria, and performing their expert evaluation. The influence of the proposed client-oriented approach on the income from the implementation of the logistics operator's services was determined based on the ABC analysis and the results of the customer survey.

Keywords: logistics operator; road freight transportation market; logistics profile; ABC analysis.

The crisis triggered by the full-scale war in Ukraine led to a decline in the number of road freight carriers in 2022, with smaller trucking companies looking to close down their businesses, while stronger players were ready to expand. According to a survey by the Ukrainian marketing agency Dive&Discovery Research [3], more than half (58%) of fleet owners (carriers and forwarders with their own trucks) predict market stagnation but try to maintain optimism and believe that it will still be possible to work in the market. Meanwhile, the demand for freight road transportation from customers is growing due to the reformatting of logistics in wartime conditions, where the main types of transportation remain railway and road transportation.

The works of many domestic and foreign scientists are devoted to various aspects of research on transport logistics, including

P. Arimbekova, V. Gerasimchuk, I. Hrytsuk, M. Izteleuova, E. Krykavskiy, M. Malchuk, M. Oklander, M. Olishevich, O. Popko, O. Pokhilchenko, I. Sokur, L. Sokur, Smith D., and others [1; 2; 4–9]. However, the question of the formation of competitive advantages of domestic logistics operators, particularly truck carriers, based on customer formation, requires more detailed study.

A modern way of presenting information to the target audience regarding the level of quality and speed of service provision is through the formation of the market operator's own logistics profile. In a broad sense, a logistics profile is a sum of features that characterize the capabilities of a logistics operator and serves as a way of positioning logistics services on the market, including freight road transportation services. This, in turn, enables the significant strengthening of competitive advantages, provided that the services fully meet the customer's expectations [4]. In turn, customers of cargo transportation, based on the study of the logistics profile, choose a relevant service operator (road carrier). After receiving the service, they compare the level of quality of the received service with their expectations. If the service received does not meet expectations, customers lose interest in the truck carrier and turn to other operators. On the other hand, if the received service fully meets the customer's expectations, it encourages customers to return to this service operator repeatedly. Additionally, a satisfied customer acts as a promoter, spreading positive information about their customer experience of cooperation with such a market operator to their acquaintances and business partners, which serves as the best advertisement for any car carrier. Conversely, dissatisfaction with the service leads to a loss of market share for the service operator.

That is why the service operator must accurately identify the needs and expectations of its target customers and clearly formulate its logistics profile. Customer service, as a whole, is designed to provide value-added benefits to all links in the logistics chain. To achieve success, it is necessary for the service operator's basic capabilities to meet specific criteria. The primary criteria for the basic level of customer service, especially for truck carriers, are speed, quality, and availability.

Let's consider the formation of a logistics profile using the example of 'GOLD C' LLC—one of the domestic operators of road freight transportation operating both within the country and beyond its borders. Table 1 presents the current and recommended list of criteria and service standards of 'GOLD C' LLC, along with the evaluation of these indicators in percentage value and on a 10-point scale.



Table 1

Current and proposed service standards of «GOLD C» LLC

Indicator		Service standards			
		Acting		Offered	
		%	points	%	points
1	2	3	4	5	6
K ₁	Delivery time	90	9	99	9,9
K ₂	Insurance and cargo support	75	7,5	99	9,9
K ₃	Flexibility and adaptability to the client's expectations (indicates the logistics operator's ability to adapt to changing requirements and market conditions; allows to evaluate the possibility of changing routes, schedules, volumes of transportation, and other parameters)	70	7	99	9,9
K ₄	Absence of loss / damage of cargo on the way (percentage of cargo transportation during which no cargo loss occurred; indicates the level of efficiency and safety in the process of road transportation)	94	9,4	98	9,9
K ₅	Waiting time from the moment of submitting an application for transportation (characterizes how quickly you can get access to a truck after placing an order)	To 10 works days	6	7 works days	9
K ₆	Flexibility of delivery modes (standard delivery by advance order, express delivery; characterizes the possibilities for choosing the optimal delivery mode according to the client's needs)	93	9,3	98	9,8
K ₇	Basic level of service (includes customer surveys or evaluations regarding speed, quality, availability of services)	90	9	100	10
K ₈	Level of service with added value (turnkey cargo delivery, full documentary support, movement control)	95	9,5	100	10
K ₉	Communication, information, feedback (the level of communication and information between the carrier and the customer; indicates the presence of clear and timely communication about the status of the cargo, delays or changes in delivery)	80	8	99	9,9
K ₁₀	Cargo delivery guarantees	85	8,5	99	9,9

Please note that the maximum value accepted during the evaluation was 10 points. A comparative analysis of the current and recommended service standards of 'GOLD C' LLC is presented in Figure 1.

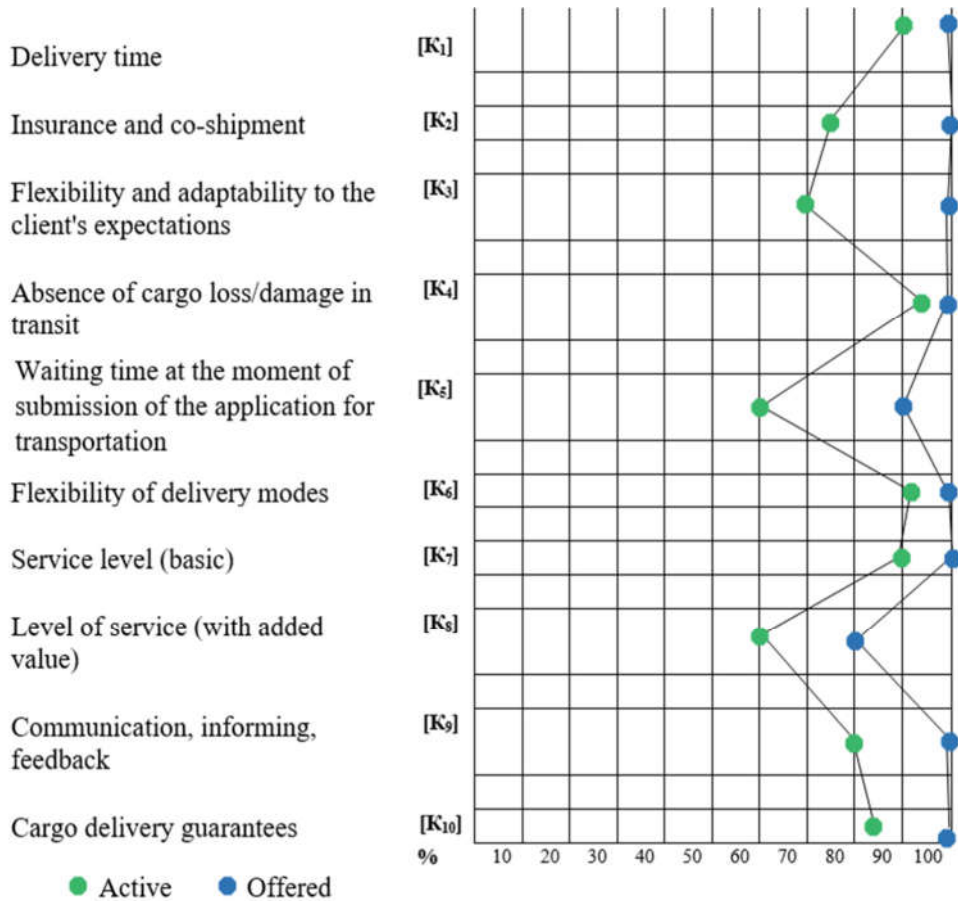


Fig. 1. Comparative analysis of evaluation of current and recommended service standards of "GOLD C" LLC

We will evaluate the importance of each criterion by forming a semi-matrix (Table 2), in which the numbers of those criteria are placed that are considered more important in the opinion of experts when they are compared with others in pairs. It is important to note that a pairwise comparison of criteria is largely a subjective assessment; however, the subsequent assessment process helps restore lost objectivity [2].

Table 2

Semi-matrix for determining the importance of service criteria

C	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈	C ₉	C ₁₀	Number of benefits	Importance, %	Category
C ₁	-	K ₁	K ₁	K ₄	K ₁	K ₁	K ₇	K ₈	K ₁	K ₁₀	5	11,4	5
C ₂	-	-	K ₂	K ₄	K ₅	K ₂	K ₇	K ₈	K ₂	K ₁₀	3	6,8	7
C ₃	-	-	-	K ₄	K ₅	K ₃	K ₇	K ₈	K ₉	K ₁₀	1	2,3	10



Continuation of the table 2

C ₄	-	-	-	-	K ₄	K ₄	K ₄	K ₄	K ₄	K ₁₀	8	18,2	2
C ₅	-	-	-	-	-	K ₆	K ₇	K ₈	K ₉	K ₁₀	2	4,6	8
C ₆	-	-	-	-	-	-	K ₇	K ₈	K ₉	K ₁₀	1	2,3	9
C ₇	-	-	-	-	-	-	-	K ₈	K ₇	K ₁₀	6	13,6	3
C ₈	-	-	-	-	-	-	-	-	K ₈	K ₁₀	6	13,6	4
C ₉	-	-	-	-	-	-	-	-	-	K ₁₀	3	6,8	6
C ₁₀	-	-	-	-	-	-	-	-	-	-	9	20,4	1
Σ	x	x	x	x	x	x	x	x	x	x	44	100	X

Based on the data on expert evaluations according to the above criteria, we calculate the integral (weighted) criterion according to the formula:

$$C \text{ integral} = C_{\text{exp}} \cdot I_{\text{cr}}, \quad (1)$$

where C_{exp} – expert assessment of criteria, points;
 I_{cr} – the importance of the criterion, points.

The calculation of the integral criterion is presented in tabular form (Table 3). At the same time, we will place the criteria in order of decreasing importance.

Table 3

Evaluation of the integral criterion of effectiveness of the current and proposed level of customer service

Criterion	The importance of the criterion, %	Current service standards		Suggested service standards	
		expert	integral	expert	integral
C ₁₀	20,4	8,5	1,73	9,9	2,02
C ₄	18,2	9,4	1,71	9,9	1,8
C ₇	13,6	9	1,22	10	1,36
C ₈	13,6	9,5	1,29	10	1,36
C ₁	11,4	9	1,03	9,9	1,13
C ₉	6,8	8	0,54	9,9	0,67
C ₂	6,8	7,5	0,51	9,9	0,67
C ₅	4,6	6	0,28	9	0,41
C ₆	2,3	9,3	0,21	9,8	0,23
C ₃	2,3	7	0,16	9,9	0,23
Together	100,0	83,2	8,68	98,2	9,88

The results of the calculations prove that, according to the general criterion, the suitability range of 'GOLD S' LLC is as follows: based on the current standards – 8.68 points, and based on the proposed ones – 9.88 points, respectively. Thus, it is advisable for 'GOLD C' LLC to form a logistics profile that encompasses both basic services and services with high added value.

In view of the above, the main strategic goals for 'GOLD C' LLC should focus on: 1) attracting new customers by forming a

comprehensive logistics profile and diligently adhering to the service standards outlined in the profile; 2) maintaining the existing client base through high-quality satisfaction of basic needs in road freight transportation services; 3) Increasing the share of service offerings with high added value.

The establishment of customer service criteria and standards, as well as their diligent adherence, will contribute to the cultivation of a strong business reputation for truck carriers. It will also lead to increased levels of trust and customer loyalty, enabling the capture of a larger market share and, consequently, an expansion in the volume of truck transportation services. Ultimately, this will result in the formation of undeniable competitive advantages overall.

In order to strengthen the competitive advantages of the logistics operator 'GOLD C' LLC, a marketing study of consumer preferences and expectations was conducted through a Google survey. The survey involved 100 clients of 'GOLD C' LLC. According to the survey results, approximately 55% of the respondents are regular customers of truck transportation by 'GOLD C' LLC, while 45% of the respondents are customers who place orders for truck transportation less frequently (Fig. 2).

Regarding the most important criteria for evaluating freight road transportation services for customers: 36% of respondents chose the cost of delivery, 33% opted for the reliability of delivery, 25% emphasized the speed of cargo delivery, and 6% focused on ensuring the proper temperature regime.

The majority of respondents (55%) prefer basic services at prices aligned with the average market level and are not willing to pay additional funds for extra services such as cargo insurance or priority processing of applications and documents. Meanwhile, 20% of respondents are willing to pay extra for these additional services (Fig. 3). Additionally, about 18% of respondents are ready to pay a higher price for truck transportation if it guarantees a faster delivery speed.

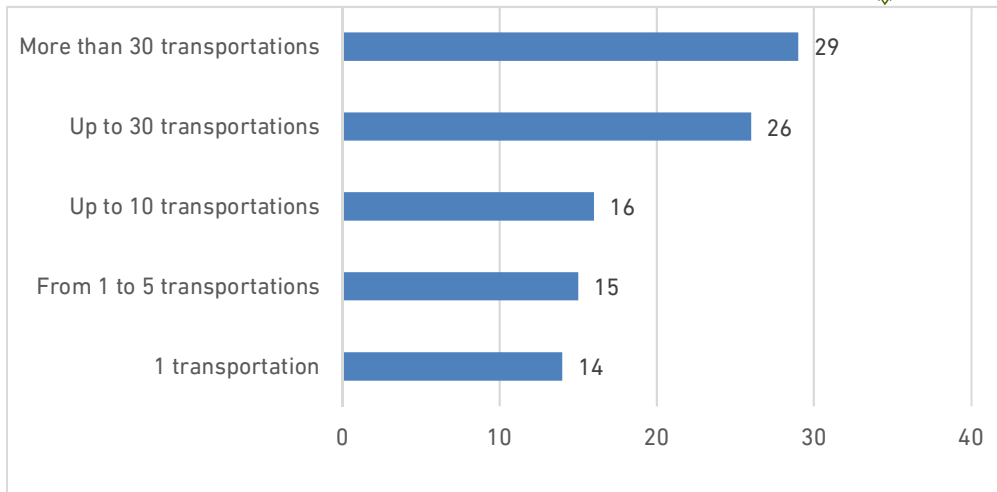


Fig. 2. Number of shipments (orders) of «GOLD C» LLC during 2013–2022

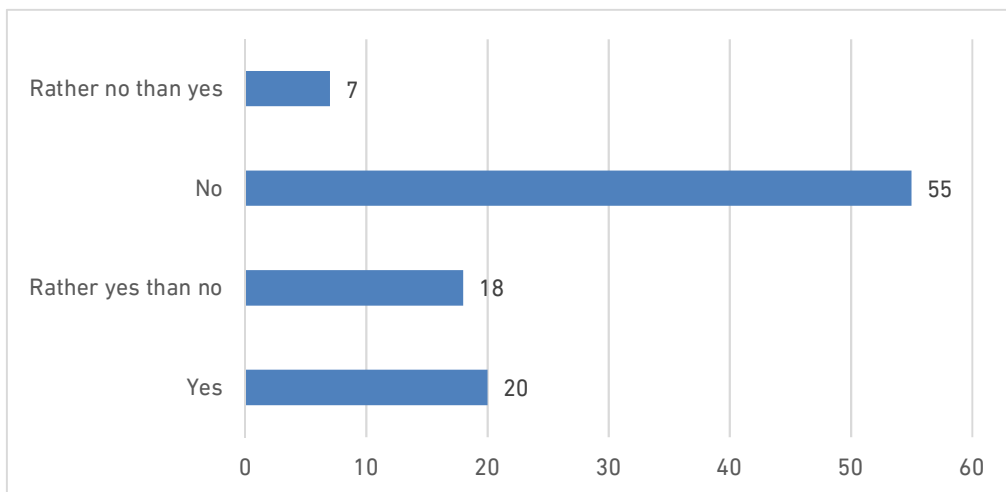


Fig. 3. Willingness of customers to pay additional funds for value-added services

The majority of orders for 'GOLD C' LLC (60%) are made through the 'Lardi-Trans' Internet platform. Additionally, 15% of customers find information about the company's services through organic distribution on the Internet, while another 15% learn about the company's services through 'word of mouth.' Contextual advertising accounts for 10% of customers who come to the company (Fig. 4).

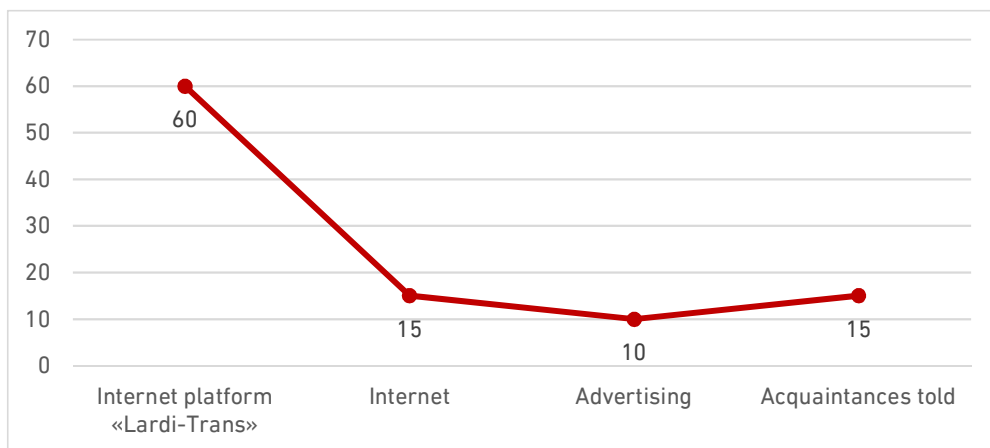


Fig. 4. Traffic analysis of customers of «GOLD C» LLC

In total, 69% of respondents are satisfied with the services of 'GOLD C' LLC, 19% of respondents answered that they are more satisfied than not, and 2% of respondents are not satisfied with the company's services.

To measure the level of customer satisfaction with the services of the truck carrier 'GOLD C' LLC, we will use the NPS index. This index is established by surveying customers and characterizes how likely customers are to recommend the services, in this case, truck transportation, to others on a scale from 0 to 10 points. Specifically, customers who give 1 to 6 points are detractors (not satisfied with the services and may negatively affect the company's reputation by sharing their negative customer experience). Customers who give 7 to 8 points are considered neutral (they are satisfied but less loyal, and their likelihood of recommending services to others may be lower than that of promoters). Finally, customers who give 9 to 10 points are considered promoters (completely satisfied with the level of services and highly likely to recommend truck transportation to others).

The percentage shares of each of the above groups, including detractors, neutrals, and promoters, are 12%, 19%, and 69%, respectively (Fig. 5). Based on this, the NPS index of 'GOLD C' LLC is 57%, which is a good result and indicates that more than half of the customers are willing to repeat applications for receiving services from truck transportation. However, it is advisable for 'GOLD C' LLC to work on increasing this indicator in the short term.

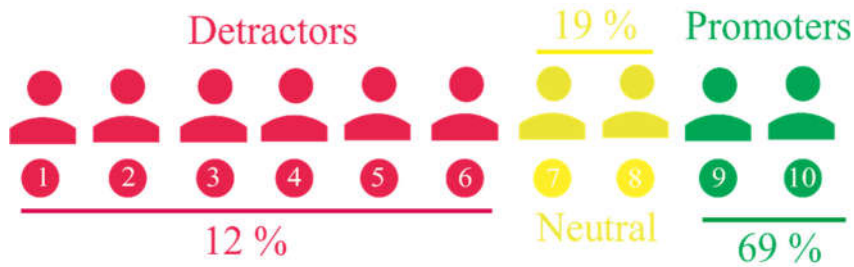


Fig. 5. Index of consumer loyalty of clients of "GOLD C" LLC

According to the results of the ABC analysis of the services of 'GOLD S' LLC (Fig. 6), it was established that 45% of the logistics operator's services are dedicated to international truck transportation. Of this 45%: 10% are value-added services (group A), 35% are basic services (group B), 55% are domestic freight transportation services to customers at the basic level (group C).

At the same time, the category of value-added services (A) from the provision of international transportation contributes approximately 40% of the total sales revenue, while the category of basic services from the provision of international transportation (B) contributes around 32% of the sales revenue. Additionally, the category of basic services from the provision of domestic transportation (C) accounts for approximately 28% of the sales revenue (Table 4).

Table 4

ABC-analysis of freight road transportation

Group	Share in the total cost	Cumulative value	Share in the total amount	Cumulative value
A	40	40	10	10
B	32	72	35	45
C	28	100	55	100

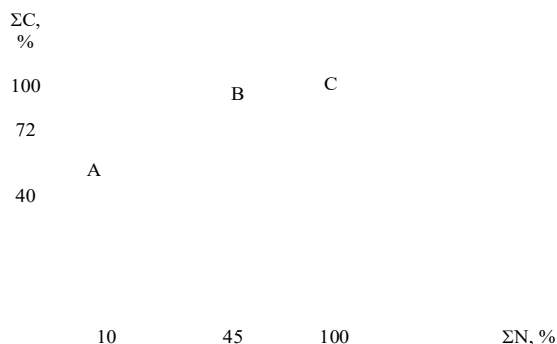


Fig. 6. Graphical interpretation of the results of the ABC analysis of cargo road transport services of «GOLD C» LLC

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According to the preliminary forecast, the formation of a logistics profile and ensuring that the services meet the customer's expectations will lead to an increase in the volume of orders by 12.5% (from 1,250 orders per year to 1,400 orders per year). Additionally, diversification of the services by separating group A and increasing its share from 10% to 20% will result in a rise in the share of revenues from providing international freight road transport services to VIP customers (services with added value) to UAH 25.152 million per year (excluding advertising costs). The total income from providing both basic services and services with high added value will amount to UAH 102.422 million, which is 1.6 times higher than the income from the implementation of services in the reporting year (Table 5).

Table 5

The impact of a client-oriented approach on revenues from the implementation of services "GOLD C" LLC

Indicator	Fact	Prediction		
		Basic services	Value-added services	Together
Order	1250	1120	280	1400
Average check, UAH.	52000	69 000	90 000	-
Sales volume, UAH.	65 000 000	77 280 000	25 200 000	102 480 000
Advertising costs	9600	9600	48 000	57 600
Revenue minus advertising costs	64 990 400	77 280 400	25 152 000	102 422 400

Conclusions. The analytical tools presented in the article for the formation of the logistics profile of the operator of the freight road transport market are based on the identification of a set of key non-conflict criteria and service standards in terms of basic services and services with high added value, which will allow in the practical plane to strengthen competitive advantages and take a more favorable position relative to the main competitors on the market. The outlined approaches can be aimed not only at attracting new customers by forming a logistics profile and clearly adhering to the service standards stated in the profile, but also at maintaining the existing customer base at the expense of high-quality satisfaction of basic needs in freight road transportation services and increasing the share of service offers with high added value cost.



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ДО ПИТАННЯ ФОРМУВАННЯ КОНКУРЕНТНИХ ПЕРЕВАГ ЛОГІСТИЧНОГО ОПЕРАТОРА НА РИНКУ ВАНТАЖНИХ АВТОМОБІЛЬНИХ ПЕРЕВЕЗЕНЬ

Метою наукового дослідження є вивчення особливостей

формування конкурентних переваг логістичного оператора на ринку вантажних автомобільних перевезень. Представлено аналітичний інструментарій формування логістичного профілю оператора ринку вантажних автомобільних перевезень, який ґрунтується на ідентифікації набору ключових критеріїв і стандартів обслуговування в розрізі базових послуг і послуг з високою доданою вартістю. Загалом логістичний профіль – це сума ознак, які характеризують можливості логістичного оператора і є способом позиціонування логістичних послуг на ринку, у т.ч. послуг з вантажних автомобільних перевезень, що, своєю чергою, дозволяє суттєво посилити конкурентні переваги за умови повної відповідності послуг очікуванням замовника. Описано процедуру визначення інтегрального (зваженого) критерію ефективності рівня обслуговування замовників шляхом формування системи безконфліктних критеріїв і стандартів обслуговування, встановлення їх важливості, здійснення порівняльного аналізу критеріїв послуг і проведення їх експертної оцінки. Визначено вплив пропонованого клієнтоорієнтованого підходу на доходи від реалізації послуг логістичного оператора на основі ABC-аналізу та результатів опитування замовників.

Представлений у статті аналітичний інструментарій формування логістичного профілю оператора ринку вантажних автомобільних перевезень, дозволить у практичній площині посилити конкурентні переваги та зайняти більш вигідну позицію відносно основних конкурентів на ринку. Окреслені підходи можуть бути спрямовані не лише на залучення нових клієнтів шляхом формування логістичного профілю і чіткого дотримання заявлених у профілі стандартів обслуговування, а й на утримання існуючої клієнтської бази за рахунок якісного задоволення базових потреб в послугах вантажних автомобільних перевезень та збільшення частки пропозицій послуг з високою доданою вартістю.

Ключові слова: логістичний оператор; ринок вантажних автомобільних перевезень; логістичний профіль; ABC-аналіз.

Отримано: 22 травня 2023 року
Прорецензовано: 27 травня 2023 року
Прийнято до друку: 23 червня 2023 року