

APPROACHES FOR SEGMENTATION OF THE CARGO FREIGHT MARKET

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Abstract

In order to be competitive, cargo freight enterprises should always strive to fully satisfy consumer demands and react adequately and in a timely fashion to market changes. This stipulates the use of marketing approaches for market segmentation in accordance with its specificity and the type of transport. The present article substantiates the necessity for segmenting the cargo freight market and indicates specific approaches for that. They should include: analysis and grouping of customers according to their differences and demands about their criteria for the quality of transport services, which stipulates the use of a certain type of rolling stock, the creation of optimal freight conditions, payment conditions, requirements regarding the time and deadline of delivery, the provision of additional services, as well as guaranteed retention of the cargo's utility value.

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JEL Codes: *R40, R41, R49*

1. Introduction and Setting Up the Problem

Transport market segmentation is an essential element of the marketing concept, which allows transport enterprises to choose those target segments on the transport market that are the most convenient and effective for them, and guarantee optimized expenses at the cost of the purpose of their actions in the development and use of equipment, technology and marketing efforts. Cargo freighters should constantly strive to provide high-quality transport services, under acceptable conditions for consignors and at good prices. Market segmentation gives opportunities for reducing the escalation of competitive

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struggles and guaranteed advantages in the quality of transport services, compared to other types of transport or competitive enterprises. For example, the most effective transport market segments for railways are fuel freights, raw material freights and other medium-distance and long-distance massive load freights, especially for cargo owners who have their own railway offices. For motor vehicle transport, short-distance and, on separate occasions, medium-distance freights are more advisable. Long-distance passenger freights are more effective for air transport, etc. Transport market segmentation also stipulates a deeper grouping of customers with identical demands toward transport services: cargo and passenger, including by cargo types, by means of transportation, by qualitative delivery parameters, mixed freights; passenger – long-distance and short-distance, express and company trains and motor transport lines. The segmentation principle also determines the monopolistic and competitive market segments of certain types of transport (Parvanov, Tzvetkova, 2017).

Transport market segmentation approaches could vary and a universally accepted pan for all types of transport, such as criteria, stages and methods does not exist. Their composition always varies, depending on the type of transport, the specificity of the transport market, freight type and conditions, and the qualifications and perspective of the experts who will handle this activity. However, some of the most frequently used criteria include: regional demography, aspects of the population's demography, consumers' lifestyle, economic and technological indicators.

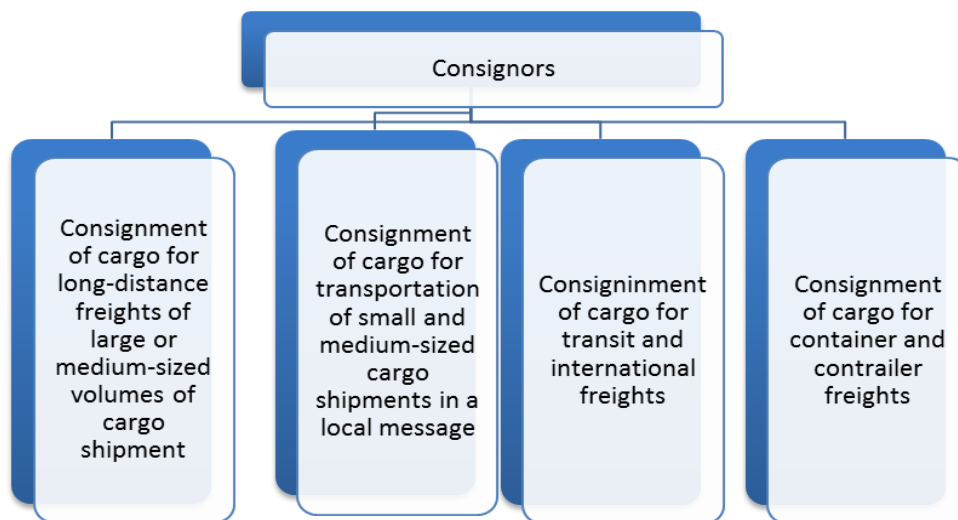
The practical execution of the segmentation of company customers is not an easy task due to the fact that the most important customer groups, according to marketing specialists, are differentiated on the basis of studying the structure of transported cargo and the peculiarities of enterprise activities, determined as a result of marketing studies of the transport enterprise's region of attraction. On one hand, the selection of segmentation criteria depends on the region's economic and geographical peculiarities and the development of transport infrastructure, and the peculiarities of the management, the specificity of transport services and the transport enterprise's capabilities on the other (Tzvetkova, 2014).

2. Approaches for Segmenting the Cargo Freight Market

There should be two stages of the segmentation of the cargo freight market:

The first stage of the segmentation involves the differentiation of all cargo owners by cargo volume and freight distance and according to transit and international freights in a separate sub-group. From the perspective of receiving a high profit from the freight, the biggest point of interest for the transport firm is the relative share of consignors in the total cargo turnover for the planning period. Therefore, it is advisable that marketing specialists differentiate the following segments during the first stage:

Figure 1. Consignor segmentation on the transport market



There are principle differences in the approaches for working with the four given groups of segments:

a) The individual approach is more appropriate for the segment of large and medium-sized consignors with large relative shares. As a rule, they work with market specialists and shipping agents. This approach is based on the long-term mutual cooperation between transport firms and such enterprises. After

that, depending on the practical situation, it is advisable to carry out the second version of the segmentation, where large and medium-sized consignors are divided into smaller sub-groups. The segmentation criterion is primarily the cargo's designation in accordance with the merchandise nomenclature (coal, liquids, iron ore and ferrous metals, manure, chemicals, containers, cement, wood, paper, industrial raw materials, etc.) that transport firms have adopted. When a more complete report of the demands of cargo owners is required, and to save up on the necessary marketing actions, it is acceptable to divide consignors into even smaller segments by one or several of the following factors:

- regularity of freights;
- special requirements with regard to the rolling stock;
- term of delivery;
- conditions of payment or customer reliability;
- contract peculiarities;
- requirements for cargo preservation, etc.

The methods for collecting data and conducting analytical work in the segment of large consignors include: polling, personal communication between market specialists assigned to the given enterprise or their group with the management of the consigning enterprise; analysis of the economic condition, the consignor's business and financial issues, the situation in the sector they work in, investment naturalization, integration of new technology in transport enterprises; studying the geography of sales; monitoring the consignor's production prices in its places of realization and calculating the transport components in the price;

b) For the segment of consignors of small and medium-sized shipments, primarily in a local message on behalf of the firm, the work is conducted by market specialists from regional agencies, transportation hubs, and by employees from transport-shipping organizations.

The given market segment could be divided into:

- type of rolling stock;
- conditions of payment;
- delivery deadlines;
- "door-to-door" service;
- cargo preservation;

- payment for additional services, etc.

When studying these segments, in addition to analyzing the allocation of cargo by type and designation, the elasticity of the demand for freights by price and by a number of quality indicators, such as speed and observation of delivery deadlines, simplicity and efficiency in document preparation, etc. should be analyzed as well. Furthermore, the coefficient of elasticity should be calculated for each individual group of consignors;

c) The analysis of the segment for transit and international freights comes down to clarifying their allocation by volumes, types, points of consignment, points and countries of destination, degree of regularity, consignor demands in terms of delivery deadlines, retention of the cargo's utility value and other indicators of quality. A more detailed segmentation is not mandatory here, excluding international freights, where the conditions of delivery require various approaches to the time and conditions of cargo delivery. That way, a currently new topical work trend, which Bulgarian transport enterprises can now take part in as well, is taking responsibility for organizing the delivery of cargo shipments not just "door-to-door" but by solving all problems regarding formation, customs inspection, receiving transport permit, tracking the cargo's route, including transfer and delivery with all types of transport. For transit cargo, especially in the field of international freights, this work trend is too perspective (Parvanov, Tzvetkova, 2007).

The second stage of transport market segmentation is done in accordance with the conditions for the quality of freights and transport service.

For this purpose, it is advisable to divide all transported cargo into four groups and segments:

- cargo for even, regular delivery under universal freight conditions (primarily raw materials and fuels);
- cargo with guaranteed delivery within a certain deadline (primarily component products, machines and equipment);
- cargo which requires speedy delivery (quickly deteriorating goods, deficit, scarce production);
- cargo which requires special (individual) freight conditions (off-gauge, toxic, explosive or other cargo).

Such grouping of cargo takes place after an in-depth development of marketing actions for improving the quality of transport services for customers. Marketing actions should stipulate a differentiated approach to tariff policies, the means of forming demand and stimulating the quality of customer service by reporting the peculiarities of cargo freights for each segment. It is possible to develop special marketing programs for each segment – for example, along the group of speedy cargo delivery (building high-speed trains, developing refrigerated transport, etc.). The overall approach to market segmentation should not be formal. Its depth and breadth depend on the goals and capabilities for studying and developing the market. As it is known, groupings by types of consumers, types of production and types of competitors are classic criteria or signs of market segmentation (Tzvetkova, 2009). Geographic, technological, behavioral and other indicators are differentiated. At the same time, due to economic reasons, it is not advisable to create an excessive amount of segments to avoid unnecessary growth in expenses for the creation and realization of complex marketing for each of the numerous segments. What is advisable is the development of a flexible and differentiated ad products and means of demand stimulation only with regard to the most important small group of segments on the transport market.

In order to fully utilize the transport firm's capabilities and to create strategic, organizational, economic and technical measures, it is necessary to study the working conditions of the competitive types of transport in the transport firm's region of attraction and reveal the bases of the competition, i.e. those consignor segments which cause other freighters and other types of transport to compete heavily with the transport enterprise. In order to solve the presented problem, the use of the famous SWOT-analysis (strengths, weaknesses, capabilities and risks) is recommended; it should be conducted until a marketing strategy for each individual consignor segments is chosen (Parvanov, Tzvetkova, 2007, p. 72).

For each segment, several (3-5) crucial requirements toward the quality and peculiarities of freights, which are key factors for their successful servicing, have been differentiated on the basis of the studies conducted for them.

The most important requirements for the transport enterprise include:

- speed of delivery;
- retention of the cargo's utility value;

- “door-to-door” delivery;
- easy cargo processing;
- tariff discounts.

These requirements could be selected as key factors for the quality of the provided service.

Based on expert assessments or factual data, the degree of availability of each key factor in transport enterprises should be compared to that of their primary competitors within the given segment.

The general assessment in SWOT-analyses is calculated as a sum of the conducted assessments of the key factors of their relative weight in parts of the unit. As a rule, the relative weight of the factors is determined on the basis of consignor polls.

For example, according to experts, the total weighted score of transport enterprises could be estimated on a 10-scale system, as follows (see Table 1):

Table 1

Key factors	Weight	Railway	Motor transport
Speed of delivery for a distance of 200 km	0,20	7	6
Retention of the cargo's utility value	0,30	6	7
“Door-to-door” delivery	0,20	7	10
Easy cargo processing	0,20	6	8
Tariff discounts	0, 10	7	6
Total	1,00		
Weighted score	-	6,5	7,5

- **Railway transport:**

$$7 \cdot 0,20 + 6 \cdot 0,30 + 7 \cdot 0,2 + 6 \cdot 0,20 + 7 \cdot 10 = 6,5$$

- **Automobile transport:**

$$6 \cdot 0,20 + 7 \cdot 0,30 + 10 \cdot 0,20 + 8 \cdot 0,20 + 6 \cdot 0,10 = 7,5$$

That way, the SWOT-analysis of strengths, weaknesses, capabilities and flaws shows that, in relation to most key indicators and the weighted score of the firm, motor transport enterprises in the given segment fall short. In order to

gain specific advantages, they need to adopt measures for guaranteeing better cargo preservation, give more attention to “door-to-door” deliveries and simplify the order of forming and approving cargo for consignment. The economic assessment of the effectiveness of these measures requires the use of methodical recommendations for determining the effectiveness of innovational projects, i.e. purchasing special rolling stock, high-speed locomotives, road reinforcement, motor transport acquisition, etc. (Parvanov, Tzvetkova, 2007)

Transport market segmentation stipulates the differentiation of international and domestic cargo freights, as well as intermodal and multimodal freights in a direct mixed message.

Transport market segmentation takes place in the process of conditioning materials for the marketing study. However, the main segmentation criteria should be formulated prior to developing the research poll. In segmentation, the cargo freight volume, the cargo turnover, the earnings, the costs, the profits and the profitability of each segment are determined. The prime cost of freights, which depends on the size of the transport section, is differentiated in order to determine the highest possible discount value. It is also advisable to determine the segment’s geographical scale.

The segmentation of the cargo freight market stipulates paying attention to the grouping of cargo by the tariff classes of the flexible tariff policy. This circumstance should be taken into account when developing marketing actions for stimulating freight demand.

The segmentation of the transport market ends with the selection of the most effective target segments that the transport firm will service.

The target segments which emerge as a result of the segmentation of the transport market should:

- Be uniform - they need to have a clear and identical set of needs for transport services and react in a similar fashion to the marketing influence of transport companies;
- Be significantly large in volume, in order to justify additional losses for the realization of marketing strategies in accordance with the requirements of the given group of cargo owners;
- Be accessible for effective marketing;
- Have a quantitative dimension;
- Be available on the market for extended periods of time.

If the selected market segments ultimately fail to satisfy the uniformity criteria for reactions and the other requirements, the segmentation process should be continued by including new criteria in the analysis. Therefore, the segmentation of the cargo freight market is interactive in nature (Parvanov, Tzvetkova, 2007, p. 72).

As a rule, the main segments for transport companies are branches of material production: coal mining, oil processing, metallurgical industry, chemical industry, forest industry and woodworking, mechanical engineering and the agricultural complex. It is also vital to determine the relative weight of freight volumes and the earnings of each transport market segment.

3. Deductions and Conclusions

The segmentation of cargo consignors makes it possible to study their main requirements and problems in more detail and, on the basis of the individual approach, fully satisfy existing customer needs so that transport enterprises can retain them in the future. At the same time, transport enterprises economize on expenses, supplying customer groups with identical, acceptable for them set and quality of services. It is evident that each type of transport has customers who traditionally make use of its services. Another part of cargo consignors is defined as the so-called “field of competition” for several types of transport or a number of enterprises from the same type of transport. Therefore, it is essential that the management of transport enterprises determine the consignor segments it intends to work with. That way, automobile transport enterprises could specialize in transporting cargo in containers, in local cargo freights within the city, the district, etc. Furthermore, depending on their size, automobile enterprises aim toward demanding one or several target segments. Unlike commercial enterprises, railway companies and some automobile firms cannot choose to service only the most lucrative customers, turning down a number of other segments on the transport market. This requires the availability of certain transport resource reserves, which involves a significant part of conditionally-permanent railway transport expenses and the necessity for the largest possible growth of freight volumes in order to increase profits from the main activity. Additionally, in some remote regions railway transport is the only accessible type of message, and even in cases of low profitability of the railway line, customers cannot be denied service. Therefore, transport companies should always maintain a certain excess of the level of available transport resources

over the demand for transport service. However, even without taking into account the impossibility for a selective approach toward customers, it is advisable to segment the consignor market in order to improve their quality of service, attract new customers and conserve resources when servicing them.

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