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Invest Approach to the Transportation Services Cost Formation

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Abstract

Challenging on the market makes the search for new ways of struggle with competitors. Article examined approach to setting transportation services cost based on investing indicators. Ability to establish rational price based on investment performances will help to improve enterprise management and planning for a long term. The transport company invest model allows calculating the transportation services decrease for customers based on net present value. The model parameter variation shows the project decisions efficiency on transportation services cost example. The results give opportunity to regulate transportation services cost according to project's invest indicators.

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Keywords: transportation services, cost formation, NPV

1. Introduction

The global crisis made a huge impact in major sectors of the national economies, but most of all the trade (Shah, 2010). During the last 5 years a great number of businesses at national level went bankrupt and closed (Stournaras, 2010). The economic crisis in Greece has created a serious crisis in demand (Folinas and Aidonis, 2012). All this must be effect on the transport performances. Transport as part of the service sector has to work to satisfy clients' needs and at the same time making their own profits. Development of market relations in Ukraine from one side and global crises from the other led to changes situation where large transportation companies (TC) with their services

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were unclaimed. Transportation volumes have dropped and those companies had to sell their own rolling stock to private owners, because of their non-use. Many small carriers entering in to the market, with lower transportation service cost (TSC) and higher operational efficiency which directed to clients redistribution.

According to the European market analysis (Christopher, 2005; Power *et al.*, 2007) many companies decided to outsource them instead of own. High competitive on transport market forcing search new ways of management. Functioning in such conditions can be used additional advantages. One of these advantages can be product or service cost discounts or premiums, comparing with competitors. Ability to establish rational price based on investment indicators will help to improve company management and get new clients.

Task of multi-criterion optimization in motor transportation service, which will provide effective functioning of TC and ensure of fulfill all contractual obligations to its clients, lower than any competitor, become more and more interesting from practical and theoretical view (Galkin, 2015).

The purposed approach on the one hand to gain new clients and retain loyal ones, on the other hand, to reduce their own costs for transportation services. This can be achieved through the rational use of vehicles with the transport service of several material flows. Vehicle redistribution technology among of several material flows was made in previous works (Galkin, 2013).

2. Materials and methods analysis

TSC formation is hot topic for many years. The TSC size depends of many factors: distance transportation; bulk cargo; bulk density of cargo; carrying capacity of the vehicle; total distance; using the vehicle; type of vehicle; an area in which the transportation, as well as other factors, detailed analysis showed Fig. 1. There are different approaches to the TSC formation (Fig. 1): by cost, by added value, by market approach and logistics approach. None of known approaches do not considering NPV as core for TSC formation.

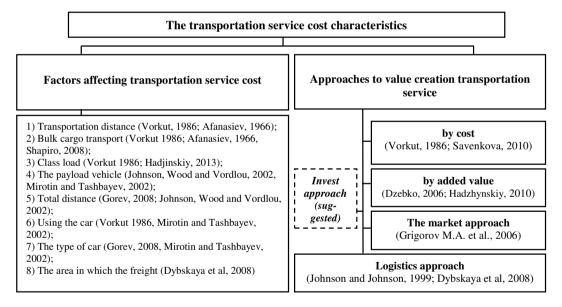


Fig. 1. The transportation service cost characteristics.

Modern TSC formation methods based on: fixed and variable costs, operating profit. TSC can be reduced due to the fixed costs in a certain period in order to attract more clients (Gregory *et al.*, 2006). Using existing discounts methods for short and middle time periods not consider cost of money that invested before – vehicles' purchase, for example. In on period there is be profit, but in whole project term – not. TSC has to consider investment indicators and oriented on investing project profits.

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