

UDC 658.7:656.2

DOI: 10.18372/2306-1472.67.10441

Galina Kucheruk¹
Anastasiia Bozhok²

FACTORS OF LOGISTICS AND FORWARDING SERVICE FORMATION AND DEVELOPMENT

State Economic and Technological University of Transport
19, M. Lukashevich Str., Kyiv, 03049, Ukraine
E-mail: ¹ekonomika@mail.ru; ²nastya.bozhok@gmail.com

Abstract

Purpose: Forwarding service is a key part of the system of goods movement and as such it provides realization of numerous services. Providing of new additional and unconventional services to cargo owners by haulers will extend the range of their clients, increase profits from sales, facilitate and accelerate the introduction of new transport technologies, increase stability and strength of relations in the transport market. **Methods:** We formulated requirements to be met by modern forwarding service. Carriage management should be based on logistics concept and its methods; comprehensive resource optimization of haulers and owners of cargo and other supply chain participants (insurance, financial ones, etc.). Optimization of the space-time chain, even involving freight forwarders (transport intermediaries), is a complex scientific and practical task. **Results:** We offer directions for development of forwarding additional and non-conventional service for forwarding system of cargo haulage service, which would also provide an opportunity to reduce transport time and increase service level. **Discussion:** A general scheme of products delivery to consumers contains a significant number of units-particular entities. It is important to analyze not only the position of economic entities in the market, but the features and capabilities of their interaction in major systemic tasks of forwarding service, quality and effective promotion of freight flows.

Keywords: consumer; distribution, consumption; forwarding; logistics service; freight flows; informativeness supply chain; transport; production.

1. Problem statement

Forwarding services markets operate and develop in conjunction with markets of commodity products. From the marketing-and-logistics viewpoint together, they form a market of goods supply and forwarding services systems. Within the market of freight services there is competition between producers (haulers) and accordingly between products delivery systems, which are formed on the basis of infrastructure provision of selected traffic routes [1].

In the supply chain of factory outputs to consumers and their forwarding service there are such basic subjects as cargo owners, carriers, freight forwarding and freight terminal companies, intermediaries and organizations of transport-logistics services. Thus, a general scheme of products delivery to consumers contains a significant number of units - particular entities, each of which solving the overall transport-distribution problem, has its own competitive strategy. In this regard it is important to analyze not only the position of economic entities in the market, but the features

and capabilities of their interaction in major systemic tasks of forwarding service, quality and effective promotion of freight flows [2].

2. Analysis of Recent Research and Publications

The different aspects of development logistic systems are exploring by many national scientists as B. Anikin, V. Dikan, A. Dejneka, R. Larina, B. Omelchenko, I. Smirnov and many others, but further improvement of logistics processes, which ensure the competitiveness of logistical enterprises are require the development of logistics and forwarding service.

3. The objective of the article

Identifying factors of logistics and forwarding service formation and development .

4. Presentation of main material

In developed countries forwarding service is a key part of the system of movement of goods and as such it provides realization of numerous services. World experience shows that presence of wide and

established network of forwarding companies is an integral part of transport systems infrastructure [1].

In this connection modern forwarding service is to meet the following basic requirements:

- services are to be based on a transport expedition contract concluded between the forwarder and shipper to implement a comprehensive service as to organizing shipments from the supplier to the consumer;

- services provided for hauling of goods in the scales of international traffic should comply with the rules of international treaties and agreements made between the countries participating in transportation;

- implementation of forwarding services, execution of transportation and other transport documents should be realized according to existing rules of cargo transportation on the appropriate mode of transport, and as for the carriage of direct combined routes – subject to the rules of cargo transportation by all forms of transport which are included in delivery of goods [3];

- providers should take into account the interests of consumers of freight services, progressive experience of freight supply and cargo traffic services and meet the requirements of an integrated approach, accuracy and timeliness of performance, safety and environmental performance, staff ethics, aesthetics conditions and informativeness [4].

It is necessary to ensure comprehensive approach reflected in the fact that provision of transport expeditions services should make it possible to grant not only forwarding and intermediary transport services but also the main transportation or shipment services performed under a separate contract of carriage, and create favorable conditions to ensure efficient and quality transportation in terms of all entities of transport services market [5].

Strategy of forwarding service should conform both to the general purpose of the hauler and to specific objectives of maintaining stability and reducing to a minimum all types of economic losses. At the same time carriage management should be based on:

- logistics concept and its methods as an effective economic instrument;

- comprehensive resource optimization of haulers and owners of cargo and other supply chain participants (insurance, financial ones, etc.).

Shipment of goods is divided into a series of successive separate stages that are not related, and performed by various haulers, whose interests often do not coincide. Therefore, optimization of the

space-time chain, even involving freight forwarders (transport intermediaries) is a complex scientific and practical task [1].

Forwarding activity in the context of transport-distribution system is considered by experts from the standpoint of two basic approaches – conventional and logistics.

Under the conventional approach forwarding agents are regarded as middlemen or agents of other subjects of the movement of goods. They provide appropriate models in which freight forwarders, acting as an intermediate link in the chain of movement of goods "production-distribution-consumption" have to restrict their functions with cargo coordination methods within the subsystem "shipper – transport" and "transport – consignee". In addition to the conventional scheme of forwarding service forwarders are unable to qualitatively assess all peculiarities of the relationship of trade and transport markets [6].

This is due to the implementation by forwarders of an integrated function under the influence of scientific and technological progress in transport, new transport and logistics technologies, information and computer systems.

In an innovative model of cargo forwarding, combination of interacting entities' functions is based on concentration of their efforts regarding promotion of through freight flow. It is a through flow of cargo to be the main object of control [7].

According to this approach all relationships between shippers and transport freight forwarders, carriers and other transportation companies, consignees and other entities of through-chain goods movement are considered in the frames of transport and logistics system. Here, transport and logistics system implies a complex economic system which consists of interrelated freight flows and the accompanying elements – operations and units. Their boundaries and operational tasks are connected with internal and external purposes of goods movement [8].

Forwarding services provided by shippers on conditions of through supply of goods can be divided into three main groups:

- 1) at an early stage – in the process of transportation:

- choice of method and scheme of supply;

- preparation and labeling of goods in accordance with the standards of the carrier;

- an increase in shipments and the formation of packages and containers;

- storage of consignment in the warehouse;
- loading and delivery of cargo in the cargo terminal;
- consulting and customs clearance;
- registration of transport documents;
- settlement of haulage calculations and informing the consignor;
- other services;
- 2) on the way – during transportation:
 - registration and payment for the shipment overload;
 - control of cargo passing nodal points and traffic coordination of participants;
 - additional preparation of cargo in reload points;
 - maintenance and repair of packaging;
 - quality control and processing of cases regarding goods unsafety;
 - informing the shipper of cargo location;
 - other services ;
- 3) the final stage:
 - registration of commercial regulations and processing of pretentious affairs; – consulting and customs clearance
 - sorting consignment;
 - unloading the consignment and its removal from the cargo terminal;
 - informing the shipper and transport documents processing;
 - unloading, warehousing and storage of shipments;
 - production of additional payments on transportation and their execution;
 - other services [9].

Use of logistics conception concerning formation of forwarding system of cargo haulage service allows, on the one hand, to supplement the classified list of services provided, and on the other hand having a set of similar (specialized) cargo flows to go to the formation, in the frames of regional transportation and distribution network, of system of through-supply production and creation, on the basis of optimization of information flows, of unified network management system of forwarding traffic service.

Development of forwarding service:

1) additional services:

- information on the services provided;
- insurance and control of goods;
- execution of calculations for transportation;
- pricing for shipping;

- management of warehouse operations;
- choice of the optimal route of transportation;
- data communication between all the partners;
- control of inventory in warehouses and on the way;
- 2) non-conventional services:
 - diversification of activities;
 - advertising of new routes;
 - studying of customer needs;
 - computer maintenance of documentation;
 - construction of computer information networks;
 - offers as to the organization of cargo;
 - forwarding chain activity;
 - implementation of customs formalities;
 - analysis of traffic.

Haulers that participate in the chain of goods movement, as well as other partners, should ensure a reduction in transport time, increase of service level [10].

Providing of new additional and unconventional services to cargo owners by haulers, thus to extend the range of their clients, to increase profits from sales, to facilitate and accelerate the introduction of new transport technologies, to increase stability and strength of relations in the transport market.

The structure and specific list of forwarding services should be formed by each hauler individually, considering its strategies, available financial and other resources and opportunities to maximize profits from their commercial activities. In this aspect should be considered all the possible economic feasibilities of providing clients with a specific set of services, appropriate calculations and justification for production capacity, routes, vehicles, freight terminals, etc.

References

- [1] *Telegin, A.I. Transport forwarding.* Novgorod, Publishing house BGATB, 2010, 400 p. (in Russian).
- [2] *Kucheruk, G. Y. Development of transport and logistic complex in Ukraine.* NAU: The problems of system's approach, 2014, Vol. 44. (In Ukrainian).
- [3] *Bozhok, A. 2015. Global trends of development in logistics systems of forwarding service.* Ukrainian railway, 2015, N 7-8 (25-26): 37-39. (In Ukrainian).
- [4] *Brady, M. K. Some new thoughts on conceptualizing perceived service quality: a hierarchical approach / M. K. Brady, J. J. Cronin, // Journal of Marketing, 2001, Vol. 65, No. 3. – P. 34-49.*

[5] *Chiou, S.* The effect of management leadership style on marketing of information, single quality, and final results: a cross-cultural / S. Chiou, T. Chang // – 2009. – Vol. 22, No. 2. – P. 95-107.

[6] *Cook, L. S.* Exploring the linkages between quality system, service quality, and performance excellence: service providers' perspectives [Електронний ресурс] / Cook L.S., R. Verma. – 2002. Available at www.asq.org/

[7] *Davis, P. S.* The Influence of CEO gender on market orientation and performance in service small and medium-sized service businesses / P. S. Davis, E. Babakus, P. D. Englis Pett, T. // Journal of Small Business Management. – 2010. – Vol. 48, № 4. – P. 475-496.

[8] *Dennis, E.B.* Blumenfeld. Analyzing trade of between transportation, inventory and production / E. B. Dennis // Transport. Res. Bvol. (USA). – 2001. – BN 19, № 5. – P. 35-38.

[9] *Gounaris, S. P.* Antecedents to perceived service quality: an exploratory study in the banking industry / S. P. Gounaris, V. Stathakopoulos, A. D. Athanassopoulos // The International Journal of Bank Marketing. – 2003. – Vol. 21, No. 4/5. – P. 168-190.

[10] *Kaynak, H.* The relationship between total quality management practices and their effects on firm performance / H. Kaynak // Journal of Operations Management. – 2003. – Vol. 21, No. 4. P. 405-435.

Received 15 February 2016.

Г.Ю. Кучерук¹, А.Р. Божок². Фактори формування та розвитку логістичного транспортно-експедиційного обслуговування

Державний економіко-технологічний університет транспорту, вул. М. Лукашевича 19, Київ, Україна, 03049

E-mail: ¹economika@mail.ru; ²nastyia.bozhok@gmail.com

Мета: Транспортно-експедиційне обслуговування є ключовою ланкою системи переміщення вантажів і передбачає розвиток численних сервісних послуг. Надання транспортними підприємствами нових додаткових та нетрадиційних послуг вантажовласникам дозволить розширити коло їхніх клієнтів, збільшити прибуток останніх від реалізації продукції, полегшити і прискорити впровадження нових транспортних технологій, підвищити стабільність та міцність зв'язків на ринку транспортних послуг. **Методи:** Сформульовані основні вимоги, яким має відповідати сучасне транспортно-експедиційне обслуговування. Управління транспортним обслуговуванням має базуватися на логістичній концепції та її методах, виходити з комплексної оптимізації ресурсів транспортних компаній та вантажовласників, а також інших учасників системи постачання. Оптимізація такого просторово-часового ланцюга, навіть за участю експедиторів-транспортних посередників, являє собою складне науково-практичне завдання. **Результати:** Запропоновані напрями розвитку додаткових і нетрадиційних послуг у транспортно-експедиційному обслуговуванні вантажопотоків, що надасть можливість забезпечити скорочення часу на транспортування та підвищити рівень сервісу. **Обговорення:** У загальній схемі постачання продукції до споживачів міститься значна кількість ланок – конкретних суб'єктів господарювання, кожний з яких, вирішуючи загальну транспортно-розподільчу задачу, має власну конкурентну стратегію. Тому важливим є аналіз не тільки становища господарюючих суб'єктів на ринку, й функцій і можливостей їх взаємодії у головних системних задачах транспортно-експедиційного обслуговування, якісного та ефективного просування вантажних потоків.

Ключові слова: вантажопотоки; виробництво; інформативність; ланцюги постачання; логістичний сервіс; розподіл; споживання; споживач; перевезення; транспорт.

Г.Ю. Кучерук¹, А.Р. Божок². Факторы формирования и развития логистического транспортно-экспедиционного обслуживания

Государственный экономико-технологический университет транспорта, ул. Н. Лукашевича 19, Киев, Украина, 03049

E-mail: ¹economika@mail.ru; ²nastyia.bozhok@gmail.com

Цель: развитие транспортно-экспедиционного обслуживания является ключевым звеном системы перемещения грузов и предусматривает осуществление в связи с этим развитие многочисленных сервисных услуг. Предоставление транспортными предприятиями новых дополнительных и нетрадиционных услуг грузовладельцам позволит расширить круг их клиентов, увеличить прибыль последних от реализации продукции, облегчить и ускорить внедрение новых транспортных технологий, повысить стабильность на рынке транспортных услуг. **Методы:** сформулированы основные требования, которым должно отвечать современное транспортно-экспедиционное обслуживание. Управление транспортно-экспедиционным обслуживанием должно основываться на логистической концепции и её методах, исходить из комплексной оптимизации ресурсов транспортных компаний и грузовладельцев, а также других участников системы поставок. Оптимизация такой пространственно-временной цепи даже с участием экспедиторов транспортных посредников, представляет собой сложное научно-практическое задание. **Результаты:** Предложены

направления развития дополнительных и нетрадиционных услуг в транспортно-экспедиционном обслуживании грузопотоков, что предоставит возможность обеспечить сокращение времени на транспортировку и повысить уровень сервиса. **Обсуждение:** В общей схеме поставки продукции потребителям содержится значительное количество звеньев – конкретных субъектов хозяйствования, каждый из которых, решая общую транспортно-распределительную задачу, имеет собственную конкурентную стратегию. Поэтому, необходимым является анализ не только состояния хозяйствующих субъектов на рынке, но и функций и возможностей их взаимодействия в главных системных задачах транспортно-экспедиционного обслуживания, качественного и эффективного продвижения грузовых потоков.

Ключевые слова: грузопотоки; информативность; логистический сервис; перевозки, потребитель; потребление; производство; распределение, транспорт, цепи поставок.

Kucheruk Galina (1967). Doctor of Economics. Professor.

Head of Chair “Logistics” of State Economy and Technology University of Transport, Kyiv, Ukraine.

Education: Gorkovskiy Institute of Engineers Water’s Transport, Gorkov, Russia (1989).

Research area: transport’s logistic, quality control, railway transport, supply chain.

E-mail: ekonomika@mail.ru

Bozhok Anastasiia (1986). Candidate of Economics. Associate Professor.

Department “Logistics” of State Economy and Technology University of Transport, Kyiv, Ukraine.

Education: Donetsk Institute of Railway Transport Ukrainian’s State Academy of Railway Transport, Donetsk, Ukraine (2008).

Research area: logistics service, supply chain, costs, economics of railway transport.

E-mail: nastya.bozhok@gmail.com