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KATARZYNA SUKIENNIK

Czestochowa University of Technology, Poland

TOMASZ SZCZEPANIK

Czestochowa University of Technology, Poland

ROBERT SAŁEK

Czestochowa University of Technology, Poland

WIOLETTA SKIBIŃSKA

Czestochowa University of Technology, Poland

MANAGEMENT TRANSPORT AT USING INNOVATIVE FORWARDING TOOLS.

Abstract:

In the article was presented managing transport in the forwarding enterprise using modern tools. The transport process requires joining many crucial elements Which in the direct way influence the quality of services provided and the position of the company on the competitive market. Customers more and more often before making a decision on choice of the transit company draw on own experience. At present the product should be delivered in the shortest time the most possible, at lowest costs and keeping the appropriate Return quality of provided services. Forwarding tools used for managing transport are in our times well-known in many companies. The process finding the Competent transit company and delivering the parcel in the set time is time-consuming and requires having Suitable experience and Qualifications. Tools used in this process should be modernized what lets the Possibility of the company Increase. The main aim is to show the latest tools forwarding and ways to use them to improve the quality of transport services.

Keywords:

Management, transport, freight forwarding, forwarding tools, innovations

JEL Classification: M21

Introduction

Today, the turnover of goods is a very important element in the development of both companies and national and international markets. Transport plays a major role since it allows the delivery of goods at the right time, at a reasonable price, and maintaining the high quality of services. The process which takes into account the transport of goods occurs by forwarding, which affects its speed. Properly planned and executed transportation enables companies doing business according to current standards. Using forwarding tools available on the market can increase the company competitiveness. Modern programs which facilitate the work of shippers are unable to replace their knowledge and experience when planning the transport process. The choice of a shipping company is therefore a very important element of the company activity on the market.

Transport as part of the forwarding process

Transport is one of the most important factors determining the development of the country economy. The effectiveness of implementing the transportation process depends on good knowledge of the transport market. In the literature, transport is presented as an activity involving a pecuniary provision of services resulting in the movement of people and / or cargo from the point of origin to the point of receipt as well as the provision of directly related support services.(Rydzkowski, Wojewódzka – Król, 2007) Transport allows the delivery of goods from different places, which undoubtedly improves the quality of life. Transport accompanies every economic and social activity.(Mindur, 2008) The establishment of transport operations should be well planned in order to reduce costs and achieve an appropriate level of service quality. (Rydzkowski, Wojewódzka –Król, 2007) Each company generates high transport costs and therefore transportation should be streamlined to minimize costs. The structure of the logistics costs in manufacturing companies can be summarized as follows: (Fechner, Szyszka, 2006)

- costs of contracted transport approx. 8.3%
- costs of own-account transport approx. 30.8%
- operating costs of warehouses about 8.0%
- cost of inventories approx. 13.4%
- costs of purchase approx. 18.3%
- costs of sales approx. 18.9%
- administration costs approx. 7.1%

Transport costs depend on many factors, e.g. the weight of transported goods, the product volume, the technology used to provide the transport service, the distance, the hazards associated with the transport of goods, the susceptibility of goods and the

value of goods. (Ciesielski, 2005) The data allow observing the difference between the use of own-account transport (30%) and contracted transport (8.3%), which is more profitable for many businesses. Keeping vehicles generates costs whereas hiring a transport company makes it possible to predict transport costs.(Neider, 2008) Therefore, many companies sign forwarding contracts so that they do not have to deal with the organization of transport of products. The functioning of transport on the global market is related to, among others, the need to develop new solutions, overcoming barriers, resulting from the diversity of transport infrastructure in the EU countries.(Harrison, Remko van Hoek, 2010) All activities related to the organization of transport and movement of goods are associated with the activities of freight forwarders. In the literature, forwarding is defined as an organized movement of freight using appropriately chosen means and mode of transport, resulting in shipment of consignments from the sender to the recipient. (Szczepaniak, 2002) Delivery of freight is an activity that requires high qualifications and knowledge of the market. The forwarding process begins with signing the forwarding agreement, or the forwarding order, and ends with the last shipping activity and billing forwarding services. (Mindur, 2007) The forwarding agreement determines the cooperation with the client, sender, recipient and shipper. It is prepared individually for each order. That is why the experience in this matter is very important. When designing and shipper's implementing the transport process, the main tasks of the shipper are: (Neider, 2006)

- providing customers with advice and consultation regarding the transport conditions before the conclusion of a commercial contract and during its implementation;
- providing advice on how to prepare the goods for shipment and how to fill in the documents;
- concluding beneficial contracts of shipment, handling or storage;
- coordination and synchronization of these agreements;
- supervision over the transport process and passing on this information to the client;
- performing additional tasks, such as declarations for placing goods under a customs procedure, reporting an attempt of collecting commodities, repackaging and labelling the shipment or presenting the goods for inspection , the scope of which results from the contract:
- providing shippers with the means of transport to load the goods;
- the inclusion of a small parcel shipment in a collective shipment;
- regulating charges for the transport cost and other activities and services ordered to be executed by the forwarder in connection with the movement of cargo;
- making claims against transport service providers on behalf of customers

Each company needs improvements aimed at its better functioning. (Puto, Brendzel-Skowera, 2012) During transport and forwarding such improvements may be IT tools that allow for better control and supervision of the goods being transported.

Market of forwarding services in Poland

Forwarding has been developing in an increasing number of countries in recent years, which affects the level of forwarding services both domestically and internationally. The literature distinguishes the following groups of entities involved in the forwarding process (Figure 1):

Customers — Market participants — Logistics experts

Carriers / Operators

Figure 1: Forwarding market participants

Source: H. Bronk, The impact of globalization on the transformation of forwarding services [in] Globalization – a challenge for the environment of shippers. II Congress of Freight Forwarders, Gdansk, Sopot 2001, p. 15

All groups of the market participants of the market have their own priorities which they pursue. Shippers care about the best fulfilment of the obligations and thereby gaining prestige on the forwarding market. Customers care about the cost and time of goods delivery, logistics experts consider the technical aspects, and carriers deal with transport. Meeting the requirements of all participants is not easy therefore appropriate transport management is very important.

The TSL (transport, forwarding and logistics) market in Poland is growing year by year, and revenues reach millions of PLN. The best known TSL companies are presented in the annual rating (Table 1).

Table 1. Rating of TSL companies according to the revenues from TSL activity

Ranking	Company name	Revenues from	Revenues from	The main
		TSL in 2014 (in	TSL in 2015 (in	source of
		thousand zł)	thousand zł))	income from
				TSL
1	Grupa Raben	2 019 164	2 144 406	logistyka
2	Schenker Sp. z o.o.	1 426 239	1 478 340	logistyka
3	DPD Polska sp. z o.o.	836 204	1 163 591	usługi kurierskie
4	LOTOS Kolej Sp. z o. o.	600 669	669 438	transport
5	ROHLIG SUUS	573 000	601 059	logistyka
	Logistics S.A.			

Source: Own study based on Dziennik Gazeta Prawna, 2016 nr 122 (4269), pp.5

The data show an increase in the TSL revenue in 2014 and 2015 of all five highestrated companies. This clearly shows that the TSL service industry in Poland is growing. In the rating there are a lot of companies whose main source of income from the TSL is forwarding (Table 2)

Table 2. Rating of TSL companies according to the value of revenues from TSL activity, whose main source of TSL revenue comes from forwarding

Ranking	Company name	Revenues from TSL in 2014 (in thousand zł)	Revenues from TSL in 2015 (in thousand zł)
6	PEKAES	575 622	555 489
9	Jas-Fbg S.A.	445 351	462 822
10	Panalpina Polska Sp. z	392 652	373 946
	0.0.		

Source: Own study based on Dziennik Gazeta Prawna, 2016 nr 122 (4269), pp.5

In the rating, the companies with shipping revenue are successively in the 6th, 9th and 10th places, so it is clearly visible how high their position is. Forwarding is a profitable branch on the Polish market.

In the modern economy, there is a tendency to specialize in one field; however, strong competition results in companies extending the scope of activity. Still, only large companies can afford to expand their business. Small and medium-size ones search for a niche market. Most often they cooperate with large companies as service subcontractors.

Innovative tools to facilitate forwarding according to Polish companies

The basic tool used in enterprises is a computer program which allows making lists and analyses. A basic computer program allows generating documents and organizing work in the company. In Poland, the system for positioning through the GPS signal was developed in 2000. It is called AutoGuard. The GPS system, which includes the GPS recorder, the GPRS modem – a driver's pendant, the data reader and the software package, such as XTrack Analyzer. The forwarder's work with the installed GPS system comes down to the following facilities:

- the forwarder knows the whereabouts of every car equipped with GPS,
- the number of errors is reduced,
- the driver is informed about the route, road conditions, etc. through the on-board computer,
- the forwarder has more control over the course of the transport processes, e.g. by connecting alarm sensors that switch on automatically in case of stealing or burgling the vehicle.

- the possibility of remote control by the shipper with the devices connected to the system installed in the car, for example this way you can remotely shut off the fuel supply to the engine, which will immobilize the vehicle,
- the customer can through an application on the internet check where the consignment currently is,
- improved quality and contact with the customer.

The product called AutoGuard S-2 is used for protection, navigating and managing means of transport. By using this system, the company generates savings in the operation of vehicles, improves the fleet utilization by optimizing routes and efficiency of working time. The system controls the transport of cargo and the work of drivers. Another important program for entrepreneurs is INTERSPEED, which allows for comprehensive management of the company. This system provides service from the time the offer is submitted, through the moment of invoicing, payment and recovery action, cost control to data exchange with external systems, including GPS solutions, electronic maps and any financial and accounting programs. INTERSPEED consists of the following modules: (interlan-poznan.pl)

- transport orders and shipping,
- fleet management and cost control,
- transport planning,
- invoicing and payments,
- workshop
- tacho analysis and accounting working time of the driver,
- e-speed,
- logistics warehouse.

Each module is helpful in running a company and significantly facilitates the organization of work. Aiming to meet customer expectations is now recognised as the most important goal of a company. (Baskiewicz, 2013) Another important tool is TimoCom TRUCK & CARGO. It is a tool used for customer acquisition and searching free cargo. The freight and vehicle exchange helps freight forwarders to better organize transport so as to make the best use of available resources. In Poland there are four main online freight exchanges. These are TimoCom, Teleroute, Longintrans and Cargotruck, which are characterized by having thousands of tenders in order to facilitate the work of shippers. Another increasingly popular approach is the Electronic Data Flow (EDI - Electronic Data Interchange). This system consists in direct communication between computers, aimed at automating the flow of documents related to business activities both inside and outside the organization, with the help of standards to enable reading these documents by machines. The effects of

implemented enterprise information systems of logistics and forwarding, individual effects:

- cost reduction,
- profit increase
- sources of new opportunities,
- technical support of logistics operations,
- support of planning and logistics operations control,
- optimizing material management,
- timely execution of shipments,
- high turnover of goods,
- optimal inventory.
- -supporting transport and sales of goods, assisting in the processes of employment and payment.

All systems facilitate forwarding activity are constantly upgraded and adapted to the latest international standards. With the knowledge of innovative systems can properly perform forwarding services.

Summary

Freight-forwarding activity in Poland is developing, which may be observed on the basis of the provided analyses. Choosing the right company that will organize and properly plan the transport process is currently the most important element of the company activity. The delivery of goods in a timely manner, taking into account the quality of services and the right price allows for the development of many enterprises. The use of modern forwarding enables facilitating transport as well as properly controlling it and reporting. These statements may be used in the future to detect anomalies and improve services. Many large companies order transport and shipping which helps them work. One, however, needs to keep in mind that in Poland there are many smaller entities which themselves seek jobs through the use of available forwarding systems. It is important that there should be a constant growth on the TSL market which enables all interested market participants to obtain satisfactory revenues.

References

RYDZKOWSKI W., WOJEWÓDZKA –KRÓL K. (2007) (red.), Transport, Wyd. Naukowe PWN, Warszawa 2007, pp.1

- MINDUR L. (2008) (red.), Technologie transportowe XXI wieku, Wyd. Państwowy Instytut Badawczy, Warszawa- Radom 2008, pp.13
- RYDZKOWSKI W., WOJEWÓDZKA –KRÓL K. (2007) (red.), Transport, Wyd. Naukowe PWN, Warszawa 2007, pp.2
- FECHNER I., SZYSZKA G. (2006) (red.), Logistyka w Polsce, Biblioteka Logistyka, Poznań 2006, pp.186
- CIESIELSKI M. (2005) (red.), Rynek usług logistycznych, Difin, Warszawa 2005, pp.89
- NEIDER J.(2008), Transport międzynarodowy, Wyd. PWE, Warszawa 2008, pp. 28
- HARRISON A., REMKO van HOEK(2010), Zarządzanie logistyką ,PWE, Warszawa 2010, pp.154
- SZCZEPANIAK T.(2002), Transport i spedycja w handlu zagranicznym, PWE, Warszawa 2002, pp.281
- MINDUR L.(2007), Technologie transportowe XXI wieku, Radom 2007, pp. 527
- NEIDER J.(2006), Transport w handlu międzynarodowym, WUG, Gdańsk 2006, pp. 176
- PUTO A., BRENDZEL-SKOWERA K.(2012), Zmiana jako warunek i przesłanka rozwoju przedsiębiorstwa, [w:] H. KOŚCIELNIAK, B. SKOWRON-GRABOWSKA, Uwarunkowania przedsiębiorczości i rozwoju organizacji, WWZPCz, Częstochowa 2012, pp. 113

www.interlan-poznan.pl

BASKIEWICZ N.(2013), BSC as an Effectiveness Management Tool in a Small Process – Enterprise, [in:] Współczesne determinanty funkcjonowania małych i średnich przedsiębiorstw (red.) Seroka-Stolka O., WWZPCz, Częstochowa 2013, pp. 255