

THE QUALITY CONTROL OF THE OUTSOURCING OF LOGISTICS PROCESSES IN THE CZECH ENTERPRISES IS UNDERESTIMATED

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Abstract

Usual levels of logistics services provided, and their characteristic features are defined in the paper. The main goal of this paper is to describe the current state of application of logistics services outsourcing in the Czech Republic, find specifics about their quality control and recommend suggestions for improvement. This paper aims to describe the basic parameters of modern logistics services outsourcing, as a result of original research. The quantitative research was carried out in the enterprises of different types and sizes in the Czech Republic with the application of questionnaire survey. The issues of primary research concerned the type of services requested and the way of managing supplier-customer relationship within the provision of outsourced logistics services. The interpretation of the research results is described in the paper. The paper sets out the characteristic features of the current state of management of logistics services' outsourcing in the Czech Republic. The most important research finding shows significant underestimating of outsourced logistics services quality control and influencing by the enterprises that outsource their logistics services. This awareness and knowledge of connected risk makes possible to strengthen supplier-customer relationships and quality in the provision of outsourced logistics services.

Keywords: Outsourcing, logistics services, quality, supplier-customer relationship

1. INTRODUCTION

Subject of the paper is the outsourcing of logistics processes as one of the methods for Value Chain Management realization. Further the outsourcing concept is defined as the tailor-made transfer of support processes to another organization to achieve the company's strategic goals.

The motivation of the paper is to monitor the situation of outsourcing and its quality management in Czech enterprises. Outsourcing in logistics processes currently represents a wide range of potential services and the ways of their implementation.

The main goal of the paper and connected research is to show preferences of enterprises regarding outsourcing of logistics processes. The research questions were formulated like that:

- 1) How many logistics companies are operating in Czech Republic and what is the trend?
- 2) What are the most popular areas of outsourced logistics services?
- 3) What are the most preferred criteria that enterprises use to measure the quality of logistics services?
- 4) What tools use companies for the ensuring and improvement of the outsourced logistics services high performance?

The methodology applied in the paper is based on questionnaire research performed in enterprises in Moravian-Silesian and Olomouc region. The paper discussion contains short recommendations for the business practice.

1.1. Definition of logistics services

The offer of logistics services is constantly expanding. Authors describe 5 basic types of logistic services' providers [1]. Specialized logistics services providers are called third party logistics providers (further referred to only as 3PLs). This and other levels of logistics services are presented in **Figure 1** [1].

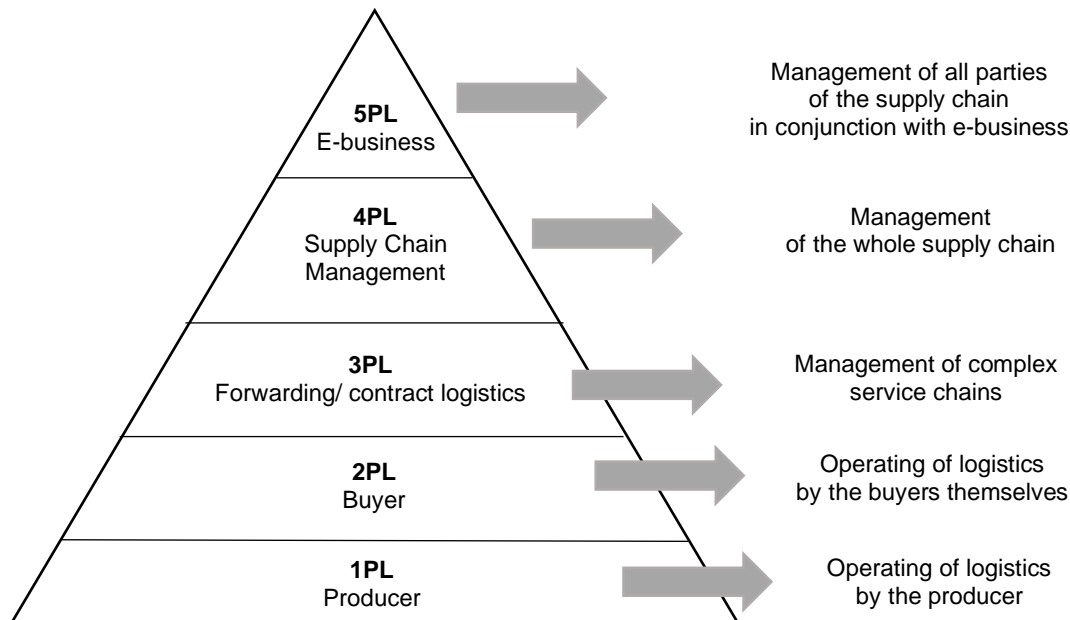


Figure 1 The levels of logistics services' providers and type of offered services.

Authors divide the provision of logistic outsourcing services to single-sourcing and multi-sourcing services. The first area considers service outsourcing in a supply chain with one client and one service provider. The second area considers several competing service providers [2].

1.2. Literature review

In Porter value chain concept [3], input and output logistics are part of core business activities. The nature of supplier-customer relationships is changing within the concept of GVC (Global Value Chain) [4]. Logistics processes are increasingly being replaced by outsourcing [5], that is related with:

- development of importance of the facility management [6],
- development of supplier-customer relationship towards long-term narrower relationship [7],
- application of lean management concept [8],

To effectively increase the service level, outsourcing has become a major trend in the service industry [2]. The scope of outsourcing is constantly growing. Bottane et Rizzi (2006) suggest the Technique for Order Preference by Similarity to Ideal Solution and the fuzzy set theory for the selection of the most appropriate 3PL service provider [9]. Wallenburg (2009) makes clearer that logistics service providers (LSP) may utilize their proactive improvement to create customer loyalty and focus on either cost or performance improvements [10]. Hsiao et al (2010) findings show the complex relationships between levels of outsourcing, performance and supply chain characteristics [11]. Selviaridis and Spring (2010) offer insights about the dynamics of business service exchanges [12]. Peng (2012) states that the good choice of service suppliers is the key to success in logistics outsourcing and provides the evaluation and selection of logistics outsourcing service suppliers carried out based on Analytic Hierarchy Process [13].

1.3. Logistics services provision in Czech Republic

The number of logistics services' providers in the Czech Republic is fluctuating. Below, in the **Figure 2**, is the development of the number of logistics services providers, enterprises that in the years 2005-2019 were listed in their business activities as transport and storage according to the classification CZ NACE 49-53 [14]. We can see local maximum in 2008 to 2010 with number around 42 000 logistic companies. As a result of bank crisis and investment bubble in that period we can see fall tilt the 2015 and number 38 000 logistics companies. After that there is visible new vital revival in new conditions and actualized business models.

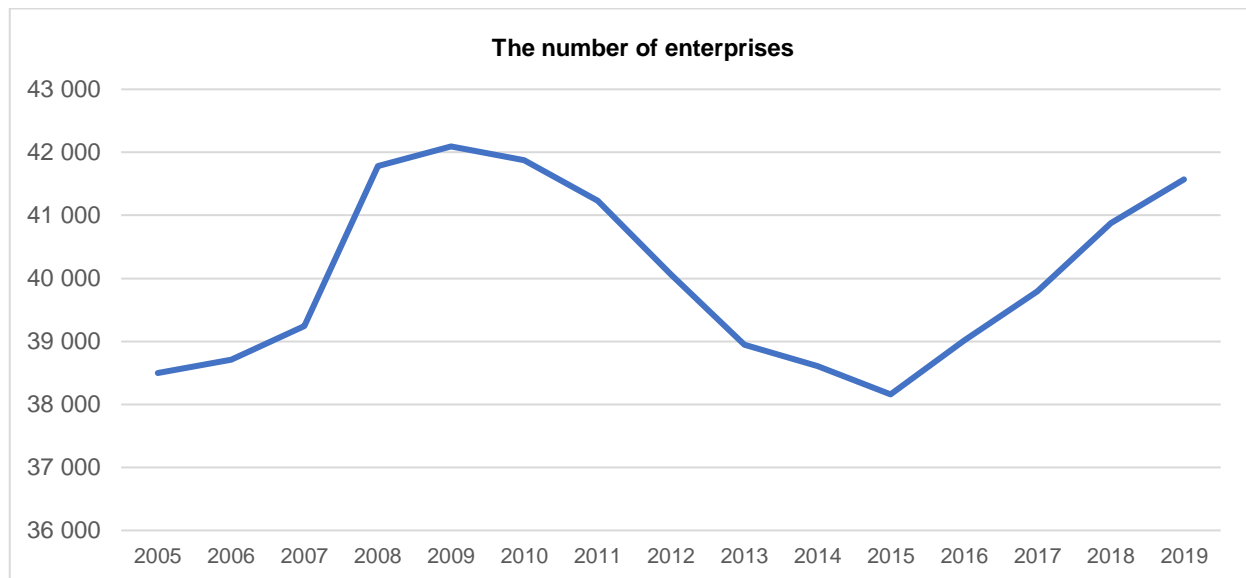


Figure 2 The number of logistics services' providers in the Czech Republic in the years 2005-2019. X axe is year, Y axe the number of enterprises.

Along with the rapid development of economic globalization, the further complicating of geopolitical situation and the intense development of information technology, the competition between enterprises is becoming increasingly escalated. The logistics outsourcing has become the development trend of enterprise logistics operations. The good choice of service suppliers is the key to success in logistics outsourcing. Logistics outsourcing can bring great benefits for the enterprise. But in the current market more difficulties exist in the choice of enterprise logistics outsourcing services' suppliers and may even cause failure of logistics outsourcing. The main reason is the lack of effective method, how to choose the logistics outsourcing suppliers suitable for the enterprise development [13].

2. METHODOLOGY

The quantitative primary research has been realized using questionnaire survey in the year 2019. The number of enterprises reached by the survey was 123. The enterprises were situated in regions of Moravia-Silesia and Olomouc.

The business subjects were described by following attributes:

- Business sector of respondents (production, services, trading).
- Size of respondents' company (micro, small, medium-sized, large).

Main questions of questionnaire were:

- Do you outsource any logistic processes?
 - If yes, with help of what criteria do you measure the quality of logistic services?

- In what area of logistics do you realize outsourcing?
- Which tool is used in your company for the support of high performance?
- Which tool is used in your company for the redress of low performance?

The results of the survey research are presented in the text below.

3. RESULTS

The enterprises, participated on survey are described by the size and the branch of business as follows. The respondents answered that their main business sector is:

- services (46 %),
- production (29 %) and
- trade (25 %).

The size of respondent companies is:

- micro (58 %),
- small (19 %),
- medium (13 %),
- large (10 %).

The main part of the survey aimed at finding out how companies use outsourcing of the logistics services. The results of this part of survey are shown in the next figures and the following text. On the question “Do you outsource any logistic process?” 57 % respondents answered NO and 43 % YES. The answers on the question “If yes, with help of what criteria do you measure the quality of logistics services?” are shown in the **Figure 3**. We can see that most customers, that outsource their logistics, appreciate timeliness (timekeeping) of delivery, absence of errors and flexibility and adaptability of providers’ business as an important quality parameter.

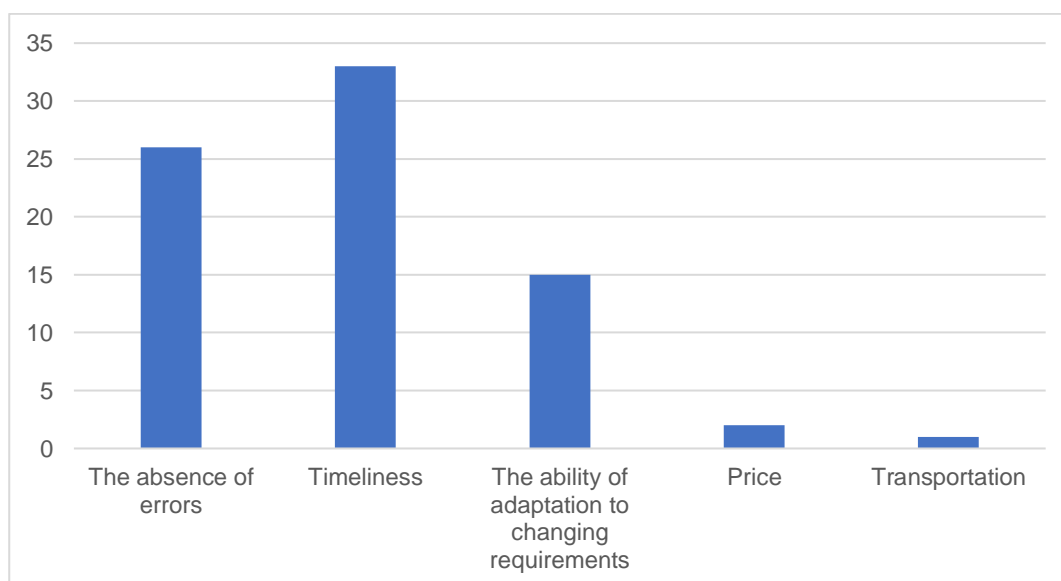


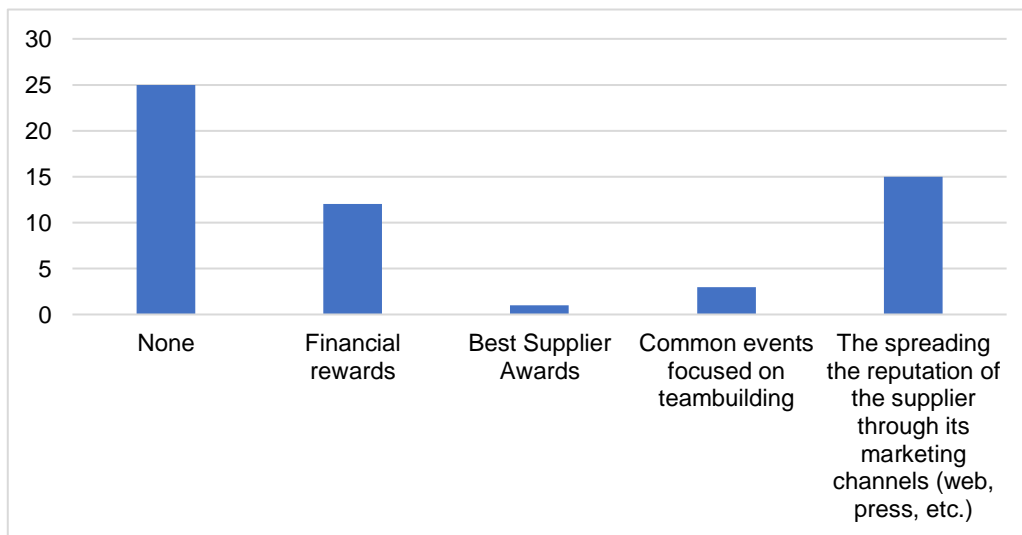
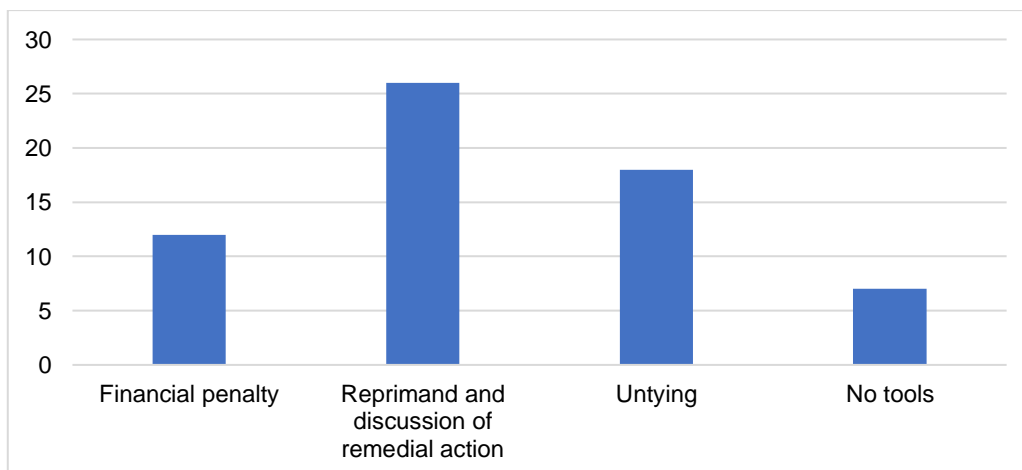
Figure 3 Preferred criteria/ KPI that enterprises use to measure the quality of logistics services

The results of the question about area of logistic services’ outsourcing are presented in the **Table 1**. Most popular areas of logistic outsourcing are transportation and forwarding followed by stock management, packing and completion of packages.

Table 1 Most popular areas of logistic services' outsourcing

Area of logistics outsourcing	Number of answers
transportation, forwarding	36
stock management, packing, completion	14
supplier-customer relationships	6
supply management	6
planning	6
customs services	5
accounting	5
none	2

The answers on the question “Which tool is used in your company for the support of high performance?” are shown in the **Figure 4**. Respondents indicated that most of them do not use any tools to support high quality of outsourced logistics services. Some companies support their logistics suppliers by improving their PR reputation or they use financial benefits for them.


Figure 4 Overview of the tools used in companies for the ensuring of the high performance

Figure 5 Overview of the tools used in companies for the improvement of their low performance

The respondents' answers on the question "Which tool is used in your company for the redress of low performance?" are shown in the **Figure 5**. Most applied tool is reprimand and discussion about remedial actions followed by untying of business contracts. Alternatives are possible financial penalties for low quality of provided services. Unlike in the case of prevention, which is underestimated, only circa 7 percent of respondents do not solve real quality problem issues.

4. DISCUSSION

The main results of the questionnaire survey can be described and characterized as:

- Number of logistic companies in CR fluctuates from 38 000 to 42 000 in period 2005 to 2019.
- Most enterprises (57 %) do not outsource any logistics processes.
- The biggest group of companies (36 %) outsource transport and forwarding services.
- Most appreciated quality parameter is punctuality and accuracy of services.
- One quarter (25 %) of enterprises do not use any tools to ensure good performance (prevent failure) of outsourced logistics services.
- Among the activities that help to remedy failed quality performance, prevails negotiation of actions or possible untying the business contract.

Upper findings answer the research questions, and the research results can be understood and interpreted as significant underestimating of outsourced logistics services quality control and influencing. The requirements for logistics service providers based on other authors can be defined in the following points [15]:

- Long-term cooperation.
- Accurate definition of output requirements of logistics services (in contract).
- Flexibility and complexity of provided services.

Market development potential for the provision of logistics services is following [16]:

- The recognition of a greater role of logistics in the company within the concept of transition to process management.
- The reinforcement the segment of providing services at higher levels (3PL-5PL).
- Wider use of good modern performance tools to ensure long-term cooperation.

The potential of the logistics services market development in the Czech Republic is based on the ability of flexibility and long-term cooperation in the supplier-customer relationship. Most important recommendation resulting from the research results is to pay more attention to control of quality of outsourced logistic services. Except of good quality od contract, there sounds to influence logistics services provider PR. This recommendation based upon research findings can benefit many enterprises which outsource their logistics processes. They may implement more diligent controlling processes as well as profound risk analysis.

4. CONCLUSION

Logistics services' provision in the Czech Republic and characteristics of logistics services outsourcing are described in the paper. The main results of the paper are based and justified by the summary of realized original questionnaire survey in the Moravian Silesian and Olomouc region. Some nonexcepted findings were discovered and recommendations with practical implication were formulated. The higher levels of logistics services including outsourcing can be declared as the important continuous trend in this area of management.

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