



## THE ISSUE OF LOGISTICS SERVICES IN THE INTERNATIONAL SCIENTIFIC LITERATURE

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### Abstract

The logistics services market is constantly evolving and changing. Logistics companies try to design new services to meet the expectations of their customers. The issue of logistics services has also become the subject of many scientific publications.

The main aim of this article is to analyse of research into the issue of logistics services as well as to identify the major research areas connected with this field. A literature systematic review method was used. In the paper presents the result of analysis of English-language articles published in the Ebsco, Elsevier, Emerald, Scopus and Web of Science databases in 2000-2018. The research methodology was conducted according to the following seven stages: (1) determining the purpose of the study, (2) selecting and selection of basic literature, (3) selection of publications, (4) preparation of the publication database, (5) content analysis and (6) report preparation. The result of the conducted research was the identification of four major research areas that provided basis for discussions on logistics services in the years 2000-2018. These are: (1) selection of logistics service providers (LSPs), (2) evaluation of the logistics service quality (LSQ), (3) analysis of the impact of logistics service quality on customer's satisfaction, (4) indication of innovations in the area of logistics services.

**Keywords:** Logistics services, logistics service definition, systematic review of literature

### 1. INTRODUCTION

In recent years literature sources in the field of management have devoted considerable attention towards the issue of logistics services. This is associated with e.g. changes in the approach adopted by enterprises with regard to supply and distribution management. Enterprises - conscious of the fact that logistics excellence has a significant impact on revenue and profitability [1] - have noticed the need for specialisation on professional customer care. Therefore, the number of logistics services providers (LSPs) offering specialised logistics services all across the world has increased in recent years. In the sector of logistics services there function logistics operators that offer complex supply services, including e.g.: transport, storage, stock management and return policy.

This paper focuses on the analysis of research into the issue of logistics services as well as the identification of major research areas connected with this subject matter. The article was written on the basis of, among other things, a systematic literature review that involved the identification of basic literature sources, selection of publications as well as content analysis.

### 2. LOGISTICS SERVICE DEFINITION

The subject literature offers no universal definition of a logistics service which has evolved together with the development of the logistics services sector. Already until the late eighties there functioned a traditional transport sector divided into transport as well as forwarding and mail branches. In the ninety's operators began to create the so-called logistics services packages, where they offered storage services, stock management and additional services, them being packaging or labelling. At the end of the nineties there developed a concept of managing and optimising supply chains as well as supply networks based on close-knit cooperation of logistics operators with manufacturing and trading enterprises, which involved transforming logistics services into customised logistics solutions [2].



A logistics service is defined as organising commodity transport and storage together with formal and legal service provision by a given company [3]. The scope of logistics services connoted within the definition can be wider and may include forwarding services, other related services as well as those supporting the process of transporting goods among specific foci of the supply chain [4] or service provision within packaging, customer care and order handling [5]. Moreover, logistics services may comprise two categories: resource-driven - physical services within transport and storage, as well as skill-based - involving planning and organising [4]. Hence, a logistics service denotes physical activities e.g. transport, storage, as well as non-physical activities e.g. supply chain design, selection of contractors, freightage negotiations and ICT enabled tracking and tracing [6]. The latter approach was also reflected in a different definition of a logistics service, where it is interpreted as a service involved in the processes related to planning, implementing and controlling the flow of materials / goods, services, information and funds between the initial and ultimate points in order to meet customer requirements in an effective and efficient manner [7].

### 3. SYSTEMATIC LITERATURE REVIEW - MAJOR RESEARCH AREAS ASSOCIATED WITH THE ISSUE OF LOGISTICS SERVICES

The aim of this article is to identify theoretical and empirical achievements in the field of logistics services in global literature. The author of the publication applied a method of systematic literature review. The procedure of systematic literature review entailed the following stages [8]: determining the aim of the research, identification and selection of basic literature, selection of publications, developing the publication database, content analysis and report drafting. The author resigned from a bibliometric analysis due to limitations with regard to the article's volume.

The first stage of the research involved a selection of databases in order to search for scientific articles. Five databases were chosen: Ebsco, Elsevier, Emerald, Scopus and Web of Science. The author subsequently identified catalogues of articles on the basis of the expression service and logistics service in the title, abstract and keywords. The next stage involved the identification of articles including logistics service only in the keywords and only in the title. In order to determine the ultimate set of full-text publications being the subject of further review, the author verified abstracts, titles and keywords as well as deleted duplicating items. The literature under study involved the years 2000-2018. **Table 1** illustrates the course of creating the literature database.

**Table 1** The course of creating the literature database [own study]

Search criteria	EBSCO	Elsevier	Emerald	Scopus	Web of Science
"Service" in the title, abstract and keywords	1 197 132	127 643	27535	1 386 971	no data
"Logistics service" in the title, abstract and keywords	1036	274	196	4 298	no data
"Logistics service" in the keywords	no data	no data	55	1371	no data
"Logistics service" in the title	381	90	no data	918	643
Publications in the field of management and business	no data	no data	no data	408	275
Full-text publications reviewed from the years 2000-2016	91	14	20	11	16
After verification of abstracts, titles and keywords	69	12	17	10	13
After deleting duplicate publications	73				

In the **Table 1**, in some cases, “no data” was entered, because in the analysed databases there was not always possible to determine the number of publications due to the adopted criteria.

The group of 73 articles selected in such a manner was used for identifying research problems associated with logistics services. Upon the content analysis of selected publications, the author identified 4 major research areas that provided basis for discussions on logistics services in the years 2000-2018. These are:

- (1) selection of logistics service providers (LSPs),
- (2) evaluation of the logistics service quality (LSQ),
- (3) analysis of the impact of logistics service quality on customer’s satisfaction,
- (4) indication of innovations in the area of logistics services.

One of the main research subjects associated with logistics services is the selection of logistics service providers (LSPs). Literature offers considerations for various assessment criteria towards LSPs, their classification entailing diverse research methods. The publication [9], using the AHP method, devises a classification system of selection criteria in view of the requirements of the external environment and an evaluation by the experts from the logistics field. It involves four categories of criteria, where the most significant ones include: costs, information technology capability, accurate delivery time and strategic partnerships. The AHP method was applied to evaluate selection process of 3PL service providers in the pharmaceutical industry [10]. According to the author, among the 12 criteria classified into 4 groups - cost, quality, reputation and service level, experience is the most important criterion in the pharmaceutical industry. A method of evaluating logistics services providers is also presented in the paper [11]. The authors established an evaluation index system for the reverse logistics service provider selection. They also proposed a new multiple attributes decision-making method, GI-TOPSIS, based on combinational weight determination. The evaluation index system is based on value recovery rate, processing speed, environmental effects and recessive cost. A TOPSIS technique was also used in the selection and ranking of the 3PL service provider [12].

Literature also undertakes the issue of evaluating logistics service quality (LSQ), which has become the principal criterion for evaluating the competencies of LSPs. The reasonable and effective LSQ evaluation can help enterprises to improve the logistics service level and enhance their market competitiveness [13]. Furthermore, the quality supervision and coordination is an important approach that can ensure an effective operation of the logistics service supply chain and obtain more customers [14]. The conducted literature study leads to the observation that there exists no complete and scientific theoretical system or a single universal method, tool or set of criteria for evaluating LSQ. This is related to the fact that scientists aim to discover many differentiated aspects of service quality [15]. Hence, researchers apply various models and methods of measuring service quality [16]. The quality of services is often evaluated with the use of the SERVQUAL method. The study focused on such areas as: materiality, reliability, promptness, competency and empathy [17]; tangibles, reliability, responsiveness, assurance, empathy [18]. In another research logistics service quality was analysed by using confirmatory factor analysis, ANOVA and linear regression. The authors focused on two dimensions: relational LSQ and operational LSQ [19]. Still, a different approach to the evaluation of services quality is proposed in the paper [20]. The research entailed the following LSQ dimensions: word-of-mouth, repurchase intentions, order condition, timeliness, order accuracy, product availability, discrepancy handling, information quality, contact quality and procedural quality. Researcher Li Q. proposed a method for quantitative evaluation of e-commerce logistics service quality based on extenics theory. His logistics service evaluation index system takes into consideration 5 evaluation criteria: transparency, completeness, staff reliability, timeliness and economy [21]. A logistics service quality index was also proposed by Jang P. *et.al.* [22]. On the basis of literature review, researchers determined 6 dimensions of LSQ: timeliness, accuracy, availability, reliability, visibility and valuability. Another group of scientists identified nine potentially important components of LSQ: personnel contact quality, order release quantities, information quality, ordering procedures, order accuracy, order condition, order quality, order discrepancy handling and timeliness [1].

The most numerous group of publications is comprised of research works aimed at analysing relations between the quality of rendered logistics services and customer loyalty and satisfaction. A high level of customer service allows not only for being distinguished among other competitors, but also increasing customer satisfaction, which involves gaining their loyalty. Research on the impact of the quality of logistics services on the level of customer satisfaction was conducted both from the perspective of individual as well as institutional customers [23, 24]. Frequently, its objective was to distinguish elements contributing to satisfaction. For a high level of customer satisfaction, the following elements are the most important: the speed in order delivery, adaptability to customer requirements [25], costs [26], convenience of placing orders, timely and flexible deliveries [27], corporate reputation [28], prices and quality of service [29]. Moreover, logistics accountability, financial accountability, marketing accountability [30] as well as transparency and ethical behaviour [31] have positive effect on the buyer's trust. Nowadays, the problem of trust is commonplace because its decrease can be observed in all areas of human life, including among the participants of supply chains [32]. Literature also undertakes the issue of customising logistics services. The conducted research indicates that customised logistics services (CLS) affect the level of customer satisfaction [33]. Furthermore, the improvement of customisation degree can contribute to enhancing customer satisfaction and further increase in customer demand [34].

Current literature investigations also focus on innovation in the area of logistics services which - as Bajec P. claims - is no longer a luxury for logistics services providers or their customers, but rather a necessity [35]. Among other aspects, they concern such technological innovations as: information and communication technology (ICT) [36, 37] and Intelligent Transport System (ITS) [38]. Theoretical considerations and the presented results of empirical studies concentrate on innovative strategies of supply chain management. Works in this scope concerned, among other things, supply chain disruptions of third-party logistics service management [39], performance [40] and cost management [41]. The roles of LSPs as supply chain integrators [42, 43] were also discussed.

Apart from the described major research trends, as identified in literature, much concern is also devoted to issues associated with e.g. productivity and effectiveness of LSPs, LSP management as well as improving and designing logistics services. Among the analysed articles the database also included such papers that focused on the aspect of environmental protection in the context of LSPs activity.

#### **4. CONCLUSION**

In the light of the above considerations it can be stated that the issue of logistics services constitutes a current and vast research trend in global literature. The conducted systematic literature review leads to the observation that the most analysed research areas involved issues associated with the selection of LSPs, QLS, customer satisfaction from the level of services quality as well as innovations in logistics services. The author concludes that most publications present the results of quantitative research. In recent years these articles have growingly applied a method of structural equation modelling [20, 26]. However, not much concern is devoted to theoretical aspects. No common definitions of a logistics service or logistics services quality have been devised either. According to the author, the current state of the art with regard to the subject under study requires more precision and transparency.

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