



THE DETERMINANTS OF LOGISTICS COOPERATION IN THE SUPPLY CHAIN - SELECTED RESULTS OF THE OPINION POLL WITHIN LOGISTICS SERVICE PROVIDERS AND THEIR CUSTOMERS

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ABSTRACT. Introduction: The paper is focused on some selected aspects of the cooperation between logistics service providers and their customers and considers the results of comparative analysis of importance assessment of the variables determining: the scope and nature of that cooperation, quality of providers' sales offer as well as changes in their customer service policy.

Methods: To analyze the underlying problem direct research was conducted, i.e. a survey based on a questionnaire among 50 logistics service providers and 50 shippers. The sample was determined on special purpose. In the statistical analysis chi-square independence test, U Mann-Whitney's test as well as Cramer's V and Spearman's rho correlation ratios were used.

Results: There were observed significant statistical differences between analyzed groups in the way the cooperation is perceived. The most vital discrepancies are related to customers' satisfaction degree and the assessment of the influence the providers' prices and competencies have on the cooperation. For the customers, declaring higher degree of the satisfaction from the cooperation, service quality was the most important factor. However, for the service providers, price factor was the most important one. Moreover, some differences in the answers related to changes in the service were observed, mainly with reference to: logistics capacity, out-of-loss shipments and communication.

Conclusions: The group of customers revealed to be little demanding about logistics service. They tended to order mainly routine services, not demanding special skills from the service providers. This is the most probable reason why customers/providers preferred cooperation with greater number of entities. The customers, unlike service providers, also didn't have the need to develop more advanced forms of cooperation. Moreover, the observed differences related to the importance hierarchy of the cooperation determinants as well as service standards, should be considered by the logistics service providers when continuing their cooperation with customers.

Key words: logistics service providers, customers, cooperation, logistics service, satisfaction.

INTRODUCTION

This paper presents the results of research on selected aspects of a cooperation between the logistics service providers and entities ordering logistics services. According to the authors, publications on this issue in Poland are few and far between. However, this issue seems to be important for at least two reasons.

Firstly, in the world literature an increased interest in logistics outsourcing has been underlined for many years [Rollins et al. 2011, Mangan, et al. 2008, Lai 2004]. Secondly, the research results show that a cooperation with the service provider based on partnership relations has a positive impact on the business activities conducted in the supply chain [Jayaram et al. 2010]. For example, according to Thakkar et al. [2005], this cooperation,

despite being more complex, contributes to an increased flexibility of the supply chain.

LOGISTICS COOPERATION IN THE SUPPLY CHAIN - THEORETICAL APPROACH

The term "cooperation" is generally understood as a particular type of activity that businesses decide to pursue together in a particular place and time. It is emphasized that the essence of cooperation lays in the achievement of a common goal or in the provision of mutual support to one another, if the goals are not interrelated [Smith 2012]. A similar importance of this concept is presented by Ciesielski and Długosz [2010], who define cooperation as a "combination of mutual benefits achieved by a joint effort." The research shows that businesses decide to cooperate to strengthen their competitive position or to continue their development [Nowicka 2011]. In addition, willingness on part of the businesses to share resources is considered to be a particularly important aspect of cooperation [Krzyżanowska 2013].

In terms of a cooperation in the area of logistics, the activities undertaken in this respect are of paramount importance in the supply chain management. Richey et al. [2012] are of the opinion that it is difficult to effectively manage the supply chain without an effective cooperation. In this case, an efficient meeting of the demand of the final purchaser becomes the priority. However Harrison and van Hoek [2010] note that the majority of entities are unable to fulfill this task without the assistance of other businesses, which in practice results in an increased, interest in logistics services. In other words, physical flows in the supply chain become more frequently the domain of specialized businesses, known as logistics service providers or "third participants". Such an understanding of cooperation means an activity undertaken on different levels of the supply chain, starting from the supply source and ending on the shop shelf. It should also be noted that the logistics service provider does not enter into relationships with the main participants in the supply chain only, but also

develops relationships with SME businesses. The research conducted by Zowada [2015] suggests that one should appreciate the logistics cooperation with customers of this sector because it constitutes an important source of revenue for the logistics sector.

The service providers offer their customers a wide range of cooperation forms. The service can be carried out both on the basis of a contract governing the obligations of both parties, or be of a more casual nature. In the first case, one talks about contract logistics, which is considered to be the most profitable form of cooperation. In practice, this type of service is provided by 3PL, which offer a wide range of tailored solutions. Under the contract logistics, one can provide services in the field of transport, forwarding and storage, which are the foundation of any logistics offer [Świtąła 2013], as well as such value-added services as: co-packing, co-manufacturing and processing of returns, which are examples of "made to measure" services [Hanus, Kempny et al. 2010]. Apart from the reductions of costs, the basic benefits of 3PL services include streamlining of the operations, achieved to a great extent by reducing the stock levels in the customer's warehouses and by shortening the delivery cycle [Rajesh et al. 2011].

The literature provides with many examples of the key role of service providers in the supply chain [Fabb-Costes et al. 2008, Fulconis et al. 2006]. There can be also noticed a trend towards a further intensification of their activities, and notes that this group is increasingly more responsible for the integration of the supply chain [Jayaram, Tan 2010]. In this regard, a special role is attributed to the 4PL, which are described as the supply chain coordinators [Selviaridis et al. 2007] or integrators [Hanus 2012]. The research indicates that 4PL have the most extensive scope of services covering the entire supply chain. In addition, these service providers have the strongest position in the logistics market [Świtąła 2013].

Taking into account the above-mentioned tendency of the customers to purchase logistics services, attention should be also pay to the various forms of logistics cooperation. In this

regard, one finds of interest the typology presented by Hsiao et al. [2010] which distinguishes 4 levels of logistics cooperation (the first two levels concerning the operational activity, and the remaining two ones - strategic management). In the opinion of the authors, the relationships between the service provider and the customer are generally unstable on the first level. This is the least binding form of cooperation in which one provides standard services, usually relating to the carriage and storage of cargo. In the second case, the cooperation is based on a short-term contract and covers a wider range of services. Apart from the basic services, one also offers services tailored to the needs of customers, including value-added ones. The next level of cooperation exists in the case of services tailored closely to the needs of the customer (i.e. service customization) and means a further strengthening of the ties existing between the parties to the relationship. According to the authors in this form of co-operation the service provider, apart from offering physical activity-based services, also performs managerial functions associated with logistics planning and controlling. According to the authors, full outsourcing is the highest, 4th level of cooperation. In this type of relationship, the service provider is distinguished by capacities and competences in the field of supply chain management. Among other competences, it integrates 3PL logistics services and determines the location of new nodes in the network. The authors' research also suggests that this form of cooperation is the most beneficial to the customers.

RESEARCH MATERIAL AND METHODS

The research was conducted in the Silesian voivodeship at the turn of 2013 and 2014 on a sample of 100 entities representing two communities, i.e. logistics service providers and their customers. The sample was chosen deliberately. In both cases, a decision was made to have the same number of respondents and to eliminate representatives of micro-enterprises from the measurement. The respondents were directly interviewed by pollsters of Research and Knowledge Transfer

Centre UE in Katowice. The research questionnaire consisted mainly of scaled closed questions (ordinal and nominal scales). The responses of the managers covered the last two years of logistics cooperation.

The IBM SPSS software version 20.1 was used to prepare the results. In the statistical description the chi-square independence test, the Mann-Whitney U test, as well as the Cramer V and Spearman's rho correlation coefficients were used. It was assumed that the result was statistically significant for $p < 0.05$.

Half of the customers group (I) consisted of manufacturing enterprises and half of trading enterprises. The sample was dominated by companies with foreign capital. The national origin of the capital was declared by 34% of the respondents. Almost 90% of the respondents were employed in the SME sector. The interviews were mostly conducted with middle and senior managers, usually with company owners and directors as well as with workers employed as heads of production, logistics and sales departments. In terms of the geographic scope, companies operating on the national or regional market constituted the largest subgroup. Over 30% of the respondents indicated that they conducted international activity. The FMCG (sale of food, clothing, household chemicals, etc.) was the main area of activity of the trading companies, whereas the manufacturing companies mentioned construction, food production, machinery and equipment manufacturing as well as furniture production, as their core business.

The group of service providers (II) was mostly made up of small and medium-sized enterprises. Large entities were represented by 12 representatives of the logistics sector (24%). Companies participating in the survey were mainly represented by middle and senior managers responsible for logistics and sales service. The operational staff accounted for 10% of the studied sample. The studied population was dominated by companies pursuing their business activity on the international level (58%). 20% of the respondents were entities operating on the all-Polish market. Every tenth company turned out to be a global logistics service provider.

Companies with Polish capital were the most numerous group of respondents (64%), 14 participants declared to be founded on foreign capital and 4 respondents - mixed one.

In the studied period representatives of the logistics sector offered their customers a complex and diverse range of services. The respondents had at average more than 6 products in their offer ($\bar{x}=6.50$, $\sigma = 3.37$). Most businesses offered 8 services ($D = 8$) and every fifth company had more than 10 products in their offer. The portfolio of the service providers was dominated by transport (86%), shipping (60%) and storage (56%) services. Customer service based on contract logistics (3PL) was declared by 28% of the respondents, while provision of contract logistics and supply chain management services (4PL) was declared by 42% of the respondents. In the remaining cases, the logistics service related on the provision of simple services without a permanent contract (2PL).

ANALYSIS AND DISCUSSION OF THE RESEARCH RESULTS

The nature and extent of cooperation between the research participants

Under the cooperation the customers were ordering on the most frequent basis national transport services (70% of the respondents). Answers provided by the respondents also showed a wide use of shipping services (56%) and services relying on the carriage of cargo within the international traffic (46%). A relatively large percentage of companies also ordered postal and courier services (40%). Less interest was observed in storage services (24%), reverse logistics (20%) and customs services (18%). Even fewer customers used logistics consultancy services (12%) or outsourced delivery service based on the cross-docking (12%) or JiT (10%) system. Value-added services such as in-house (6%), co-manufacturing (4%), and co-packing (2%) turned out to be the least popular.

The conducted research showed that the average number of purchased services amounted to 3.64, with the dominant equaling to 3. The high standard deviation ($\sigma = 2.50$) indicates significant discrepancies in the declarations made by the respondents. And so: 38% of the respondents outsourced 1-2 services, 10% - 4 services, and 28% - at least 5 services. In 4 cases, the number of purchased services amounted to 8, and in 1 - 13. For obvious reasons, the number of ordered services was positively correlated with the amount of monthly expenses. Generally speaking, the wider range of services was outsourced, the higher level of expenditure was declared by the customers (Spearman rho coefficient = 0.531, $p < 0.01$). In most cases the monthly expenses for logistics services amounted up to PLN 10 thousand. (38%). 12% of the respondents declared to be spending up to PLN 20 thousand. The same number indicated an amount of up to PLN 30 thousand. A higher budget for logistics services was recorded by 18% of the surveyed companies, out of which 6% declared expenses for external services in the amount of PLN 50 thousand and in 12% - up to PLN 200 thousand. It should also be noted that every fifth examined company failed to provide their answer.

Respondents from the group (I) were also asked to specify the number of service providers whom they ordered logistics services. Most respondents cooperated with at least 6 service providers (50%). 12% of the entities maintained contacts with only one service provider. More than a quarter of the respondents maintained relationships with 2-3 service providers, while 16% of the respondents cooperated with 4-5 service providers. The research indicates a long period of cooperation, usually lasting a few years. Over 60% of the respondents indicated that the cooperation period was 4 years and longer, 8% said that the cooperation had been lasting for three years, and 14% marked the two-year period.

The statistical analysis revealed the existence of a strong positive correlation between the number of service providers and the amount of the monthly budget of the

customers for logistics services. The research results show that with an increased number of maintained relationships, the expenditure on logistics services grew, too (Spearman rho coefficient = 0.355, $p < 0.05$). An even stronger dependence was observed in the case of the length of the cooperation. The longer the period of cooperation declared by the customers, the more service suppliers the customers were bound with (Spearman rho coefficient = 0.386, $p < 0.01$). However, no relationship between the number of service providers and the quantity of the ordered / requested services could be found.

Responses of the customers indicate the existence of various forms of cooperation in the field of logistics. The most common form was cooperation without a permanent contract. This was the choice of 68% of the surveyed companies, although it should be emphasized that in the analyzed period, the majority of the surveyed companies had a reliable service provider whom they entrusted their cargo. The remaining companies, in each case prior to the order, evaluated the offers available in the market and on this basis decided on the selection of the service provider. 30% of the entities ordered services on the basis of an agreement. The cooperation on the basis of a contract logistics was pursued with division into full or partial outsourcing (20% and 10% respectively). According to sole answer, it was the contractor (cargo supplier/recipient) who selected the service provider responsible for logistics services.

Figure 1 shows an overall level of satisfaction with the course of the existing cooperation in both groups. In group (I), the average score on a 5-grade scale was 4.38, and in group (II) - 3.94. Although in both cases the level of satisfaction remained at a relatively high level, the purchasers of services were more satisfied with the cooperation. 90% of the customers positively assessed their relationships with the service providers, out of which 50% assessed it very positively. For comparison, a positive opinion on the cooperation with the customers was expressed by 74% of the service providers, out of which only 22% assessed it in very positive terms. Interestingly, one in four service providers

gave a neutral answer ("neither satisfied nor dissatisfied"). This means that a large part of the representatives of the group (II) were not able to clearly assess their relationships with their customers. Results of the Mann-Whitney U test show that a difference in the assessment between these two groups is highly statistically significant ($U = 839.00$, $p = 0.002^{**}$).

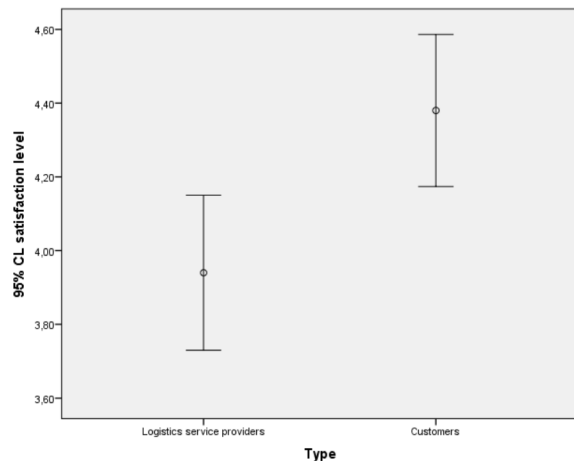


Fig. 1. The level of satisfaction with the course of the existing cooperation in both groups
Rys. 1. Ogólny poziom zadowolenia z przebiegu dotychczasowej współpracy - rozkład ocen usługodawców i klientów

Customers participating in the research were also asked to determine whether the above declared way of cooperation was appropriate for them. The research showed that the respondents preferred positive answers: "rather yes" (30%) and "definitely yes" (40%). A declared form of cooperation did not significantly affect the opinion of the respondents. Moreover, 90% of the surveyed companies confirmed their willingness to continue the above cooperation as well as the fact that the company responsible for handling their cargo met their individual logistics needs. Most likely, just for this reason, in group (I) one recorded higher levels of satisfaction, compared to group (II). What's more, the customers were willing to get involved in a long-term cooperation with service providers, but often only in the casual form - without a clear willingness to strengthen the ties in the near future.

Assessment of the significance of determinants affecting the logistics cooperation

The research shows that a decision to undertake logistics cooperation is determined by a set of different factors. The results presented in Table 1 also indicate the existence of several discrepancies in the assessment of the importance of these factors from the perspective of both groups. In both cases, the average scores on a 5-grade scale frequently oscillated between the values of 4 and 5, which mean that when assessing the importance of individual determinants, the surveyed entities usually attributed to them a significant part in their decision to order the services of a company specializing in this field. According to the customers, the quality of the provided services is a determinant which has the greatest impact on the decision to start cooperation

with a logistics service provider and on the course of this cooperation (4.82). It should be noted that in this case, the most opinions focused on the highest score (5). The results also show the best coherence, as evidenced by the smallest standard deviation ($\sigma = 0.44$). One should also emphasize the importance of the human factor. According to the customers, competences of the employees of the service provider are the second most important criterion for logistics cooperation (4.54). Also in this case, the answers given by the respondents are characterized by a greater coherence than in other matters. The most surprising opinion was recorded with respect to the price of the service, the importance of which, taking into account the average score, is at the same level as the reputation of the service provider (4.44) and only slightly higher than the company's experience in the provision of logistics services (4.40).

Table 1. Comparative analysis of the assessment of the significance of selected determinants affecting the logistics cooperation

Tabela 1. Analiza porównawcza oceny znaczenia wybranych determinant kształtujących współpracę logistyczną

No	Description	Customers (I)		Service providers (II)		Statistical description	
		\bar{x}	σ	\bar{x}	σ	U	P
1.	Service quality	4,82	0,44	4,56	0,76	1075,00	0,095
2.	Service price	4,44	0,78	4,84	0,42	910,00	0,003**
3.	Competences of the employees	4,54	0,54	4,10	0,86	907,50	0,010*
4.	Experience	4,40	0,78	4,50	0,76	1134,50	0,365
5.	Reputation	4,44	0,81	4,50	0,76	1184,00	0,600
6.	Comprehensiveness of the provided services	4,26	0,77	4,36	0,83	1139,50	0,404
7.	Market coverage	4,16	0,88	4,18	1,19	1129,50	0,368
8.	Service individualization	4,00	1,03	4,12	0,87	1202,00	0,726
9.	Intralogistics solutions, including IT and automated product identification	3,52	1,01	3,38	1,12	1166,00	0,546

According to the service providers, the service price had the greatest impact on the customers' decision to start / continue cooperation (4.84). The respondents were in this case the most unanimous in their assessments ($\sigma = 0.42$). The service quality ranked second (4.56), followed ex aequo by the company's experience (4.50) and reputation in the market (4.50). Respondents in both groups agreed that from among the factors taken into account, the intralogistics solutions had the least impact on the cooperation. Most

respondents were convinced of the average importance of this factor (in both groups the dominant was 3).

When analyzing the data in Table 1, the greatest differences in responses between group (I) and (II) were observed in the case of two criteria, i.e. the price (0.40) and the competence of employees (0.44). The customers within the sample attributed more importance to the professional competences, and less importance to the price, compared to

the service providers. Analysis of the Mann-Whitney U test showed that in the first case the difference between group (I) and (II) had been statistically significant ($p < 0.05$), and in the second case - highly statistically significant ($p < 0.01$). A noticeable difference was also observed in the case of the quality of the provided services (0.26). It is clear that the customers assess it better than the service providers, although the differences in the declarations are not statistically significant ($p = 0.095$). On the other hand, the greatest unanimity of the responses was recorded as regards the importance of the coverage (0.02) and the reputation of the service provider (0.06).

Changes in logistics services in the opinion of the surveyed entities

Declarations of the logistics sector show that in the past two years there have been changes beneficial to the customers on the domestic market. One has seen an improvement both in the quality of the logistics aspects and in the interpersonal service. It is worth noting that a large number of the service providers declared to implement changes in the area of modern technologies. The research shows that in the last two years the surveyed companies have been investing on the most frequent basis in new forms of communication with customers, mainly in the development of e-services and mobile services. 36% of the respondents declared to provide their customers with new Internet applications, and 23% - with mobile ones. At the same time, 37% of the respondents confirmed that they had adjusted their customers' websites and e-tools for the mobile devices.

When it comes to the customers, the participants were asked to indicate how in their opinion the logistics services had changed over the last two years. From among all entities the average score on a 5-grade scale was 3.60 - which is well above the average. The dominant amounted to 4, which means that the tested sample was dominated by a positive assessment ("the service has improved"). The customers indicated the changes in the service providers' activities, which had contributed most to the improvement of the logistics

cooperation. In the surveyed group, the emergence of new services and changes in the manner of their provision was indicated most frequently.

Further answers of the respondents correlate with the above assessment. Both the customers and the service providers declared that in the past two years the quality of the provided services had improved (Table 2). In group (II), to the improvement of the logistics potential (94%), meaning the ability to handle more orders, and to the timely delivery (92%) were indicated most frequently. According to the service providers, their efficiency in providing their customers with information about the handled load had increased too (88%). On the other hand, the customers most often perceived improvement in quality with regard to the typical operational aspects, namely: delivery timeliness (76%), speed (74%) and flexibility (70%). In both groups, improvement in the quality of the after-sales service was the least popular answer.

The research results presented in Table 2 show that representatives of group (I) declared more rarely positive changes in the service, compared to representatives of group (II). This is especially visible with regard to the damage-free deliveries and capacity. In both analyzed cases, the difference in the responses exceeds 30%. A highly significant correlation ($p < 0.01$) was also recorded in the case of the information flow. Improvement in the information flow was confirmed by nearly 90% of the service providers, but only 66% of the customers. A statistically significant relationship ($p < 0.05$) also occurs in the case of the timeliness and completeness of the deliveries (in the group of service providers, the response rate was respectively 92% and 76%, and in the group of the customers - 76% and 54% respectively) and error-free documentation (positive changes were confirmed by 86% of the service providers and 60% of the customers). A relationship close to a statistical significance was observed in the case of personal service. Information on this subject indicate that the logistics service providers preferred more often positive answers, compared to the customers.

Table 2. Changes in the provision of logistics services - comparative analysis
 Tabela 2. Zmiany w świadczeniu usług logistycznych - analiza porównawcza

No	Improvement in the quality of the logistics services within the scope of:		Service providers (II)	Customers (I)	Statistical description		
					Chi-2	P	V Cramer
1.	Timeliness of deliveries	N	46	38	4,76	4,76	0,027*
		%	92,0	76,0			
2.	Speed of deliveries	N	42	37	1,50	1,50	0,163
		%	84,0	74,0			
3.	Completeness of deliveries	N	38	27	5,32	5,32	0,018*
		%	76,0	54,0			
4.	Damage-free deliveries	N	43	26	13,51	13,51	0,000**
		%	86,0	52,0			
5.	Error-free documentation	N	43,0	30,0	8,85	8,85	0,012*
		%	86,0	60,0			
6.	Information flow	N	44	33	6,83	6,83	0,008**
		%	88,0	66,0			
7.	Logistics potential (service capacity)	N	47	30	16,32	16,32	0,000**
		%	94,0	60,0			
8.	Flexibility of deliveries	N	40	35	1,33	1,33	0,178
		%	80,0	70,0			
9.	Post-sale services/complaints	N	30	27		0,37	0,343
		%	60,0	54,0			
10.	Personal service	N	41	33		3,33	0,055~
		%	82,0	66,0			

CONCLUSIONS

The obtained research results do not allow to draw explicate conclusions. On the one hand, in general, it can be concluded that the competences achieved by the service providers make them an attractive partner in the logistics cooperation. This conclusion is confirmed by the results of studies which indicate a high level of satisfaction with the existing cooperation and an improved quality of the provided services declared by both groups. On the other hand, customers participating in the research proved to be little demanding in terms of the logistics services. In the analyzed period they ordered in most cases routine services, the provision of which does not require special skills from the service providers. Most likely, for this very reason this group maintained relationships with more entities. Also the customers did not feel the need to develop more advanced levels of cooperation, which was important for the representatives of the other group. It is worth noting that a similar

conclusion was drawn from studies carried out in 2011. The research shows that only 10% of the logistics market customers declared they had signed a contract for logistics services [Świtata 2011]. The reluctance on part of the customers to establish a long-lasting cooperation with the service providers was also confirmed by study conducted by Niestrój [2014], which showed that only 37% of the respondents, mainly representatives of large logistics service providers, had 10 or more contract customers, the other major groups focused on 3-5 entities (24%) or did not perform any contract-based services at all (23%).

The main aim of the research was to assess the importance of selected determinants affecting the course of logistics cooperation. The research shows that a decision to start / continue cooperation is influenced by many quantitative and qualitative factors. In both cases, respondents most frequently attributed to them a significant influence on decisions regarding cooperation. Additional analysis

revealed the existence of clear differences between the surveyed groups in the positioning of selected service factors in the order of importance. This applies in particular to the service price and the competences of the personnel. In this case, the importance of the human factor in the group of customers should be noticed. It can be assumed that underestimation of the human factor by the service providers can constitute an obstacle in the transition to higher levels of logistics cooperation. There were also observed differences in the responses relating to changes in the service, especially in relation to the service capacity, damage-free deliveries and exchange of information. The research shows that despite declaring their satisfaction with the current service, not all customers felt that the changes implemented by the service providers had resulted in the improvement of the service. Thus, it can be tentatively concluded that innovations introduced by the service providers have not always been aimed at standardizing the offer and serving the mass customer.

Limitations and directions for future research

The presented research results are not free from limitations and do not exhaust the undertaken subject. It is worth noting that the tests were carried out on relatively small group of companies and therefore the results should be cautiously interpreted. The customer group was represented only selected economic activities and sectors. First, the customer group did not include representatives of service companies who due to the specific nature of their activity, could provide some interesting conclusions about the nature and scope of logistics cooperation with the service providers. The research did not include representatives of sectors important to the logistics service providers, i.e. automotive and pharmaceutical sectors, either. Particularly, it would be advisable to expand the research by the opinions of representatives of the automotive sector, because they are customers who generate a significant demand for logistics services. It is also worth noting that both samples were dominated by the SME businesses. For this reason, it would also be

advisable to increase the share of large enterprises in the following studies.

The conducted research may serve as a source of guidance for managers from the logistics sector as regards the provision of personalized logistics services to their customers in the near future. Having the research results in mind, the service providers should plan innovations in their offers more carefully, preceding them with a thorough study of the expectations of their customers. Research results indicating the possibility of further improvement in the customer service process should be considered important to the development of the logistics cooperation. In this respect, one should take steps to improve the quality of the after-sales service, which has not received much attention in the recent years.

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DETERMINANTY WSPÓŁPRACY LOGISTYCZNEJ W ŁAŃCUCHU DOSTAW - WYBRANE WYNIKI BADANIA OPINII USŁUGODAWCÓW LOGISTYCZNYCH I ICH KLIENTÓW

STRESZCZENIE. Wstęp: Artykuł koncentruje się na wybranych aspektach współpracy usługodawców logistycznych z klientami, ze szczególnym uwzględnieniem wyników analizy porównawczej oceny znaczenia determinant odpowiedzialnych za jej zakres i charakter, a także jakości świadczonych usług oraz zmian w polityce obsługi klienta.

Metody: Podjęty problem badawczy zrealizowano na podstawie badań bezpośrednich, które przeprowadzono z zastosowaniem metody wywiadu kwestionariuszowego wśród 50 usługodawców logistycznych oraz 50 przedsiębiorstw zlecających obsługę logistyczną. Próbę badawczą dobrano w sposób celowy. W analizie statystycznej wykorzystano test niezależności chi-kwadrat, test U Manna-Whitneya oraz współczynniki korelacji V Cramera i rho-Spearmana.

Wyniki: Odnotowano istotne statystycznie różnice w sposobie postrzegania współpracy pomiędzy badanymi grupami. Główne rozbieżności dotyczyły poziomu zadowolenia klientów oraz oceny wpływu cen świadczonych im usług i kompetencji obsługujących ich pracowników na przebieg współpracy. Dla klientów, deklarujących większą satysfakcję z tytułu współpracy z usługodawcami, najważniejsza była jakość usług. Z kolei usługodawcy największą wagę przypisywali głównie cenie. Odnotowano także różnice w odpowiedziach dotyczących zmian w obsłudze, zwłaszcza w odniesieniu do: potencjału logistycznego, bezszkodowości dostaw oraz wymiany informacji.

Wnioski: Grupa usługobiorców okazała się mało wymagająca pod względem obsługi logistycznej. Klienci zlecali głównie usługi rutynowe, których świadczenie nie wymagało od usługodawców szczególnych umiejętności. Najprawdopodobniej właśnie dlatego, dostawcy/odbiorcy ładunków utrzymywali relacje z większą liczbą podmiotów. Nie odczuwali oni także potrzeby budowania bardziej zaawansowanych poziomów współpracy, na czym zależało przedstawicielom drugiej grupy. Odnotowane w badaniu różnice, zarówno te dotyczące hierarchii ważności poszczególnych determinant, jak i te odnoszące się do standardów obsługi, powinny zostać uwzględnione przez usługodawców podczas ich dalszej współpracy z klientami.

Słowa kluczowe: usługodawcy logistyczni, klienci, współpraca, obsługa logistyczna, satysfakcja

DETERMINANTEN DER LOGISTISCHEN ZUSAMMENARBEIT IN DER LIEFERKETTE - AUSGEWÄHLTE UNTERSUCHUNGSERGEBNISSE DER BEFRAGUNG VON LOGISTISCHEN DIENSTLEISTUNGSANBIETERN UND IHREN KUNDEN

ZUSAMMENFASSUNG. Einführung: Der Artikel konzentriert sich auf die ausgewählten Aspekte der Zusammenarbeit der logistischen Dienstleistungsanbieter mit ihren Kunden, mit besonderer Rücksicht auf die Ergebnisse der Vergleichsanalyse von Bedeutungsbewertung der Determinanten, die sowohl für ihren Umfang und Charakter als auch für die Dienstleistungsqualität und Veränderungen in der Kundendienstpolitik verantwortlich sind.

Methoden: Das besprochene Forschungsproblem wurde anhand der direkten Untersuchungen durchgeführt, die mit der Anwendung der Fragebogenmethode unter 50 logistischen Dienstleistungsanbietern und 50 Unternehmen erstellt wurden. Die Untersuchungsprobe wurde zielgerecht angepasst. In der statistischen Auswertung wurden unterschiedliche Verfahren wie: der Chi-Quadrat-Unabhängigkeitstest und der U Mann-Whitney-Test, sowie die V-Cramer und die Rho-Spearman Korrelation angewendet.

Ergebnisse: Es wurden relevante statistische Unterschiede in der Beurteilung der Zusammenarbeit zwischen den untersuchten Gruppen festgestellt. Die Hauptabweichungen betrafen das Niveau der Zufriedenheit der Kunden sowie die Bewertung des Einflusses der Preise von geleisteten Dienstleistungen und die Kompetenz der sie bedienenden Mitarbeiter auf den Verlauf der Zusammenarbeit. Für die Kunden, die größere Zufriedenheit wegen der Zusammenarbeit mit den Dienstleistungsanbietern aufweisen, war die Qualität der Dienstleistungen von Bedeutung. Hingegen haben die Dienstleistungsanbieter den größten Wert auf den Preis gelegt. Es wurden auch die Unterschiede in den Antworten, die die Veränderung der Dienstleistung betreffen, festgestellt, vor allem in Bezug auf logistisches Potenzial, schadenfreie Lieferungen und Informationsaustausch.

Fazit: Die Gruppe der Dienstleistungsempfänger erwies sich als wenig anspruchsvoll hinsichtlich der logistischen Kundenbedienung. Die Kunden beauftragten vor allem routinemäßige Leistungen, deren Ausführung keine Sonderkenntnisse von Dienstleistungsanbietern erfordert haben. Höchstwahrscheinlich gerade deswegen hielten die Anbieter/Empfänger der Ladungen Beziehungen zu der größten Zahl der Subjekte. Sie haben auch keine Notwendigkeit empfunden, neue fortgeschrittene Stufen der Zusammenarbeit aufzubauen, worauf die Vertreter der zweiten Gruppe großen Wert gelegt haben. Die in der Untersuchung gezeigten Unterschiede, sowohl diese, die die Wichtigkeit der Hierarchie von einzelnen Determinanten betreffen, als auch diese, die den Servicestandard betreffen, sollen daher von den Dienstleistungsanbietern während der weiteren Zusammenarbeit mit Kunden berücksichtigt werden.

Codewörter: logistische Dienstleistungsanbieter, Kunden, Zusammenarbeit, logistische Kundenbedienung, Zufriedenheit.

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