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The features of negotiations within reverse logistics cooperation

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Abstract: The subject of consideration in the paper are negotiations between companies cooperating within reverse logistics. The objective of the paper is to present a concept for describing the specificity of such negotiations, influencing the ability of cooperating parties to create and recover value within reverse logistics. As introductory part of the article the methodology used for preparation of article is presented. Then, reverse logistics as the activity influencing value creation and value restoration is characterized. In next part of the work main units cooperating and negotiations is also presented. Within the subsequent parts of the article in order to present the features of negotiations within reverse logistics cooperation the original methodological framework is applied, comprising the key aspects of negotiation's definition, distinguished on the basis of different approaches presented in literature, e.g. as a process, methods of conflict management and reaching agreement, mutual dependence of the parties and processes of: decision making, communication, mutual exchange and value creation. The summary synthetizes the major features of the considered negotiations presented by the authors of the paper is a novelty and has an original character, i.e. it is based on their own thoughts on the specificity of the negotiations under consideration. No such concept has been presented in the literature on the subject so far.

1 Introduction

Integrating the cooperation of enterprises in supply chain is distinguished among the key factors enabling the achievement of competitive advantage and increasing performance effectiveness. In the supply chain, suppliers (of raw materials, materials, semi-finished products, parts), manufacturers, wholesalers, retailers, as well as providers of specialized logistics services cooperate with each other to deliver products to recipients.

In terms of the development of the concept of Green Supply Chain and Sustainable development, the companies operating in the field of reverse logistics are also of great importance. Reverse logistics is treated as important area of value creation and value restoration [1]. It is concentrated around three main directions of activity: recycling, reuse, remanufacturing [2]. Values achieved by the reverse logistics can be of tangible or intangible character [3-5].

Types of operations included in reverse logistics may be carried out by suppliers of specialized logistics services collecting waste and secondary raw materials, units disassembling used and damaged products, companies processing secondary raw materials, as well as companies dealing with final waste disposal. The issue of cooperation with service providers is treated as one of most important problems when managing reverse logistics [1]. Activities carried out by specialized service providers may be implemented separately but may also be part of comprehensive logistics service for the supply chain. Characteristics of waste, recyclable materials, its impact on the environment result with numerous regulations of national law as well as international agreements and conventions regulating cooperation with service providers [6].

Due to the diversity of enterprises participating in reverse logistics, wide range of issues to be agreed there are differences in the expected effects of cooperation, as well as the need to ensure continuity and security of cooperation. It is important to properly prepare and conduct negotiations, especially in bilateral relationships. These negotiations are conducted in special conditions, in which the expectations and individual attitudes to cooperation depend on the links with other partners. Negotiating and updating the terms of cooperation in such conditions requires a specific approach [7].

Considering the above statements, the objective of the paper is to present specific features of negotiations between cooperating parties influencing further ability to create and recover the value in reverse logistics. It is also important to indicate the significance of various types of activities for the processes of value creation, as well as value restoration. The significance of individual types of operations affects the roles of the participants carrying out these activities in the negotiation processes.



2 Methodology

The concept of product/service value used in this article refers first of all to generic core designed to fulfil basic customer needs, surrounded by additional attributes or supplementary services [8]. The approach refers also to understanding how the relationship between exchange parties contributes to understanding value. There is also another way to consider value, presented in literature. It relates to trade-off between benefits and tangible monetary sacrifices, as well as intangible costs, that customer make to buy the product [9]. This aspect of the value considerations is not addressed in the article.

As the main approach for the preparation of this article desk research is used. The application of such a concept is supported by the analysis of studies presented in literature in which generalizations and detailed experience are presented, concerning value in reverse logistics and the impact of cooperation with logistics service providers on the processes of value creation and recovery. In order to develop the characteristics of negotiations within reverse logistics cooperation, a number of detailed methodological tools were applied. First of all, the method of analysis and its various types were used, mainly cause-and-effect, structural and comparative analysis. In addition, research tools such as expert method, morphological analysis, scenarios, SWOT analysis, benchmarking, case study, documentation analysis, modelling, synthesis and classification methods were used.

Published studies, taken into consideration can be divided into several groups. The first of these contains basic studies on the genesis and essence of reverse logistics [1,10]. The second group consists of review papers on the essence of reverse logistics activity, its contemporary development trends, as well as structures of cooperation in reverse logistics channel [7,11-16]. The studies included in this group take also into account the assumptions of activity in the field of reverse logistics, principles of shaping the relationship between participants cooperating in reverse logistics, as well as conditions of cooperation with specialized service providers, operating in such areas as: transport, storage, processing of recyclable materials and waste disposal [7,14,15,17]. Considered group of studies includes also the issues of legal regulations regarding the handling of various types of waste and recyclable materials, in particular the conditions for handling hazardous goods [6,13,16]. The third group of studies are those that concern the identification of activities that affect the recovery of values in reverse logistics [15,18]. The last group of studies used in the preparation of this article are those in which the issues of negotiating the terms of cooperation, conditions for the occurrence of conflicts, preparation of contracts, assumptions for limiting conflicts in organizations and between cooperating units were considered. The authors' methodological framework was applied [19], comprising the key dimensions of negotiation's, including the concepts by other authors, e.g. [20-24].

It should be also emphasized, that the preparation of the content is also supported by authors' individual experience in the area of designing reverse logistics management systems, negotiating and preparing the terms of cooperation with service providers specializing in handling used products, products with expired date of use, recyclable materials, as well as waste. Therefore, the characteristics of negotiations carried out in reverse logistics presented in the next part of the article in terms of key dimensions of this type of negotiations is based on the authors' own suggestions as to the interpretation of these dimensions.

3 Results and discussion

3.1 Reverse logistics as the activity of value recovery

According to one of the early comprehensive descriptions of reverse logistics such concept is defined as a process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal [1]. The main activities distinguished in the area of reverse logistics include product repair, recycling, refurbishing, upgrade, disassembly of a defective or used product to recover parts for reuse, as well as disposal of products with expired date of use and also disposal of waste [7]. The implementation of these activities requires taking into account transport, selection, storage as well as packaging. More specifically, the characteristics of the tasks related to the flow of goods in reverse logistics include [6,12]:

- collection of goods to be returned to supplier it concerns identification of incorrectly delivered, redundant, defective goods, as well as the identification of materials, damaged parts and separation of the number of units to be returned, this process may also apply to goods from recipients,
- collection and sorting of expired used, as well as damaged products, waste and recyclable materials, it relates to the qualification of mentioned types of goods for further actions (use of product components in remanufacturing process, recycling, repair of product),
- recovery of parts suitable for remanufacturing by disassembly of products that turned out to be defective and were not sold as a result of quality control after the end of production or due to defects disclosed in the distribution channel,
- recovery of parts from end-of-life products for use in remanufacturing, which requires disassembling of these products, inspection and sorting as well as qualifying suitability for reuse,
- repair of damaged product,
- delivery of waste for disposal,
- recycling of materials for further use in manufacturing process.



The implementation of the above-mentioned activities becomes possible primarily through the provision of transport. Similarly to forward logistics activities related to transport are emphasized among the main activities that significantly affect the effectiveness of value creation in reverse logistics, [10]. Taking into account four main aspects of economic utility, which influence the value of product for recipient (the usefulness of the form, place, time and possession), it should be indicated, that the aforementioned activities related to securing, preparation and processing relate to the utility of the product form, as well as possession in the area of reverse logistics. Transport is about the utility of time and place to use this product. It influences also possession of product.

Types of activities presented so far, influence processes of value creation and value restoration in reverse logistics, as it is reflected in Figure 1. The diversified impact of individual types of activities on these processes reflects also the different bargaining power of units specializing in particular tasks in negotiation with the client.

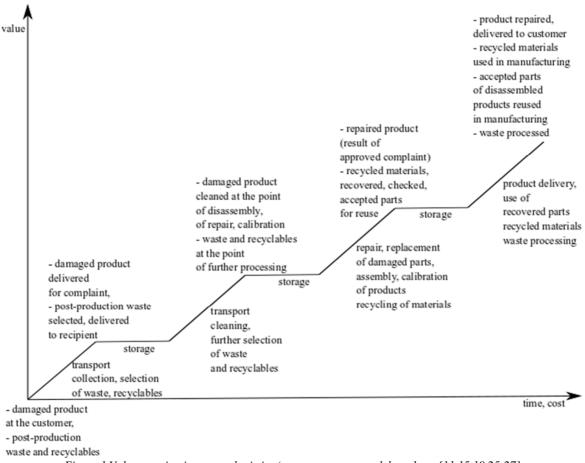


Figure 1 Value creation in reverse logistics (source: own research based on: [11,15,18,25-27]

Considering the information in Figure 1 it should be added, that the places where the increase in value is marked do not reflect the differences in the size of the increase. In addition, presented diagram does not take into account returns of full value goods. In such a case, value creation scheme is simplified. It covers only the return from the point of sale to the supplier, who, after receiving this product, prepares it again for sale and passes it to the distribution chain. The place where a recycled material or a reusable part from disassembled product, accepted for further use is waiting to be used in the manufacturing process means entering the value chain of product manufacturing and delivering it to the customer. It should be also emphasized, that the value created in reverse logistics is not just about preparing recycled material for reuse in manufacturing process, reusable parts, repairing the product and restoring its functionality to the customer. These are activities related to recovery value associated with the product for the customer. Along with such activities, there are other activities related to the creation of new value, playing also important role. An example is the production of energy in the process of waste disposal by a company, often for own use.



3.2 Types of companies involved in reverse logistics cooperation

Taking into consideration previously mentioned types of activities in the area of reverse logistics, relationships between reverse logistics and the flow of goods in manufacturing process, as well as the ways of specialization of service providers following types of participants can be distinguished:

- product suppliers,
- recipients (using the delivered goods in the further production or distribution process),
- end users of products,
- units disassembling worn, damaged, spoiled products,
- units recycling materials for reuse,
- units participating in waste disposal,
- specialized service providers authorized to collect and transfer waste and recyclable materials to the places of their further use.

In practice, there may be enterprises combining the above-mentioned specializations, in accordance with legal restrictions related to the handling of waste and recyclable materials.

Product suppliers, by establishing cooperation with further manufacturers or sellers of finished products negotiate with their recipients the rules of handing over to the supplier of unused products, products with expired useby dates, end-of-life products, products being the subject of a complaint, and packaging for re-use. If the supplier of products is also authorized to collect materials for recycling and waste for disposal, the rules for collecting these goods may also be negotiated.

Suppliers may also negotiate with users of finished products the rules for collecting used products or complaints about broken products, treating it, for example, as an additional element of the offer as part of the sale of a new product. Also handing over of the generated waste and materials for recycling (e.g. used packaging, parts replaced during repair) to the supplier may also be the subject of negotiation. Reverse logistics negotiations can also include the rules of transfer of waste to final waste disposal companies. It relates to cooperation with product manufacturers, distributors, units disassembling products as well as companies recycling materials.

Taking into consideration the process of transferring waste and recyclable materials, specialized logistics service providers authorized to collect, segregate and transport waste and recyclable materials may also participate in negotiation with companies mentioned earlier.

Negotiations on the terms of collection of waste and secondary raw materials with such companies can be conducted by producers and distributors of products, companies dealing with disassembly of used and broken products, companies processing recyclable materials into materials and companies dealing with final waste disposal.

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3.3 The dimensions of negotiations within reverse logistics

3.3.1 Process of negotiation

Due to their complexity and volatility, the negotiation processes in general, and those considered here in particular, are not easily structured. They can be disordered, and unpredictable. Some activities are carried out intuitively, spontaneously, and even instinctively. Other ones are formalized by procedures. Quite large amount of data facilitates the implementation of these processes, especially the identification and analysis of the negotiating situation.

The scope of negotiations in reverse logistics can vary greatly depending on the specific characteristics of the goods to be exchanged. Sometimes the negotiations cover the terms of the transaction considering typical, standard elements, and in other cases they concern very specific products and their parameters. In addition, in the negotiation processes under consideration, there are restrictions on the freedom of specialist actions due to numerous legal regulations regarding the way of handling individual types of goods (waste, secondary raw materials, expired products) - security for the duration of transport and storage, requirements of means of transport and storage area, storage process, neutralization of threats to the environment, documentation. Thus, the negotiation processes under consideration may be not only complex, but also very specific.

An important issue is the selection of the right negotiation partners. Whenever possible, they should be undertaken with those entities with whom positive relationships can be forged and maintained. In addition, service providers that have special licenses to handle certain types of goods, such as liquid goods that need to be transported in special tanks, often must be selected. When collecting waste and secondary raw materials from customers, you also need to consider their preferences, limitations in the ability to prepare for the transfer of waste secondary raw materials, out-of-date products to suppliers, etc. As a result, some partners may have greater bargaining power.

There is an increasing need to negotiate with multiple partners at the same time. Undertaking multiparty negotiations is, however, difficult due to the limited possibilities of analysing their context, selecting strategies, arranging meetings, and conducting them. Thus, in reverse logistics, we deal with both bilateral and multilateral negotiations, i.e., with the participation of the aforementioned partners, cooperating in reverse logistics. In addition, negotiations must take into account the conditions resulting from legal provisions, but also the individual conditions of units that specialize in recycling or waste management, etc. As a result, seemingly bilateral negotiations may be conducted under the influence of



conditions imposed by third parties participating in the processing, etc.

Conducting considered negotiations requires high flexibility of operation and efficient, direct and multidirectional coordination of activities carried out in networks of numerous interactions.

3.3.2 Managing conflicts

It is a competitive dimension of negotiations within reverse logistics as their participants strive to achieve their own goals and obtain the best possible results. They have divergent intentions and different views on the issues under consideration. The contradictions also concern the values, principles, expectations, perceptions, etc., which creates the emotional context of the negotiations, significantly influencing the substantive issues.

On the one hand due to the large amount of data with virtually unlimited availability and a wide exchange of information, the number of potential conflicts between the parties to the considered negotiations may be large, as a result of many different interactions between them. There are very violent and sharp disputes over fundamental, mainly material, issues. There may also be unnecessary data conflicts, very often occurring in practice and sometimes difficult to recognize, but here they do not result from their lack (as is usually the case) but from their excess and mutual lack of understanding, which also causes unnecessary disputes. As a result, the parties to negotiations are then not able to properly identify and assess the causes, effects and the course of such conflicts, as well as the negotiating situation.

The available data may be unreliable, erroneous, selective, incorrectly compiled, etc., or differently interpreted by negotiators. Unnecessary data conflicts can cause other serious misunderstandings, mostly about values and relationships, and even stimulate real conflicts of interest. Therefore, it becomes necessary to provide a reliable and comprehensive explanation of the situation by confronting the possessed information and organizing it based on commonly agreed standards for its presentation and evaluation. This may allow for a relatively quick and cheap solution of the discussed conflicts, which will prevent their escalation.

On the other hand, the increasing speed of action, the multiplicity and virtualization of relations, and sometimes the anonymity of the partners to negotiations mean that possible conflicts are mostly short-lived, unnoticeable, they cannot fully reveal themselves, let alone develop. Moreover, due to possible anonymity of partners or incomplete knowledge about them, it is much more difficult to use competitive negotiation techniques, use the effect of surprise or asymmetry of information, strengthen bargaining power, threaten and promise, bluff, etc., because the parties are "well-informed". It is much easier to explain the nature of short-term conflicts, their causes and effects. They are and must be dealt with on an ongoing basis, when and where they appear, directly through their website. You can make better use of their positive functions, especially stimulating changes that improve performance.

3.3.3 Reaching agreement

This dimension concerns their intended result, beneficial to all their participants, i.e., meeting their needs. They also have common goals, so they are interested in the results of negotiations, which constitute important values for them (tangible and intangible). The cooperation of the parties is therefore necessary to achieve the desired level of effectiveness. This, in turn, requires concluding a number of contracts (implicit and explicit), specifying the terms of the agreement between them. It is therefore the cooperative dimension of negotiations.

Nowadays, under the so-called revolution 4.0, the possibilities of identifying new, potential negotiating partners are large, provided that there is access to data on their reliability, credibility, etc. The choice of partners, usually made from among many alternatives, is hypothetically easier, because a relatively good recognition of the negotiation environment increases the probability of interacting with relevant partners, establishing and maintaining positive and beneficial relationships based on mutual trust, which reduces the risk for the course and the effects of negotiations. To achieve this, a reliable analysis of the partners' credibility is required.

In addition, in the current reality, sometimes limited, short-term or even virtual contracts are established, which on the one hand frees us from permanent obligations, but on the other hand increases the risk of losses due to the partners failing to meet contractual arrangements or concluding incomplete contracts. It should be noted, however, that with broad, virtually unlimited access to data, signals about disloyal or unreliable partners are easily available in the negotiating environment. In general, negotiators are more inclined to establish and consolidate positive relationships and to use cooperative-oriented negotiating techniques.

It is therefore advisable to rely on proven partners, especially those trusts. Therefore, the scope of cooperation with them should be expanded.

The virtualization of contacts causes that their implementation is usually faster, and it is often necessary to consider many different issues and many different goals, both common and contradictory.

3.3.4 Mutual dependence

There is an interaction of the dimensions of cooperation (collaboration) and competition (rivalry), i.e., the coexistence of contradictory and convergent goals of the participants in the considered negotiations. It expresses the efforts of the parties to achieve a favourable result, conditioned by the necessity to resolve the conflict between them. Neither party can achieve its goals on its own, and at the same time each of them can achieve their goals by others. If the partners saw alternative and more effective



ways of achieving their goals, they would not negotiate. Thus, such a relationship expresses a close relationship between the two previously discussed dimensions.

In today's business the parties are rarely "doomed to each other", much more often negotiating by choice than by force. On the one hand, a large amount of information available expands the group of potential partners for cooperation, but on the other hand, it makes it difficult to search for and select the right partners and analyse them in the context of negotiations, and competition intensifies, and conflicts may arise. There is much more interaction between the parties to the negotiation. Mutual relations are varied, usually stronger, symmetrical or asymmetrical, although sometimes short-lived or momentary, creating complex networks of connections.

It is easier to build and maintain lasting positive relationships, especially partnerships. You are more likely than usual to establish and maintain positive and beneficial relationships with negotiators based on mutual trust. The aim is to shape and maintain them in order to ensure effective cooperation, beneficial to all, but it is not always possible and/or necessary. Signals about disloyal or unreliable partners are easily available in the negotiating environment. Moreover, generally "well-informed" negotiating parties are more likely to establish and maintain positive relationships, and to use cooperativeoriented negotiation techniques. Cooperation and competition coexist in the form of a coopetition strategy. On the other hand, establishing and developing partnerships is usually time-consuming and generally costly, and sometimes unprofitable or risky. Anonymous functioning in a negotiating environment may turn out to be more beneficial and even safer.

3.3.5 Decision-making process

It is the most important interpretation of negotiations as it expresses direct finding solutions to the negotiated issues by the parties involved. In the preparatory phase, this process is carried out by them independently of each other, i.e. each of them analyses the negotiating situation from the point of view of their goals and interests. On this basis, they determine initial solutions to negotiated problems based on their own criteria for selecting solutions. Then they iteratively make the necessary arrangements of possible alternatives, determining the scope of negotiations, i.e. a set of acceptable solutions to negotiated problems, based on the analysis of the community and divergence of interests. By adopting common selection criteria and rules, they find a solution acceptable to everyone.

In negotiations within reverse logistics, all typical activities within the process of interactive decision-making by negotiators, i.e. identifying problems, collecting and analysing information, generating alternative solutions, selecting criteria for their evaluation, making choices and the necessary implementation works, are facilitated due to both the wide access to data and strong relations of the parties, as well as difficult and complex due to the specificity of the negotiation process itself and the redundancy of information.

Therefore, the information needs of negotiators as decision makers are, in principle, satisfied to the required degree, so their choices should be accurate, adequate to the problems, made on time, adequately detailed, etc. That substantially increases the quality of decisions. Moreover, it significantly reduces the uncertainty of their performance and the effects of negotiations. In this case, the difficulty may be the excessive amount of data, requiring their careful analysis and selection.

The disadvantages of the decision-making process in the considered negotiations include the need to act quickly, forcing the parties to decide, the presence of an excess of information and the need for careful selection, expanding analyses, and making choices too quick and hasty. As a result, decision-making processes can be more timeconsuming, although burdened with lower risk.

Taking this into account, the most significant positive effects of the decision-making process in negotiations within reverse logistics are better and faster decisions, more settlements in real time, data availability for innovation and lower costs.

3.3.6 Communication process

This dimension concerns the mutual exchange of information, "penetrating" all activities of the parties in the negotiation process, from the initial presentation of positions, through: shaping relations, formulating, and exchanging offers, persuading, asking questions and answering, listening, clarifying doubts, etc., to final arrangements and drafting the contract.

On the one hand, as a result of the impact of revolution 4.0, and big data in particular, the exchange of information in the considered negotiations is significantly enriched. The parties to the negotiations have practically unlimited access to all necessary data in real time, although, for obvious reasons, not all information necessary for action is public, presented to everyone on the forum. High availability of information and transparency of communication allow negotiators to properly determine how to better achieve goals. It increases the efficiency of analytical and diagnostic activities. It significantly enriches the tools for conducting negotiations, i.e., increases the number and quality of offers and the accuracy of arguments, improves the effectiveness of questions, facilitates clarification of doubts and the effective selection of negotiation techniques. In addition, virtual negotiations create greater opportunities for the negotiating team to communicate during the negotiations, allowing for establishing a common ground.

On the other hand, negotiators are not favoured by a kind of artificiality of communication during online meetings, a kind of "narrow field of view", and especially by limiting non-verbal communication. It is much more difficult to interpret and analyse the meaning of non-verbal messages of other negotiation participants and their



emotional behaviour. It is easier to hide some inconvenient facts due to the lack of necessity to disclose some data, which may be a condition for cooperation with negotiation partners. There are fewer opportunities to care for data protection and security, and limited awareness of potential threats in this area.

In general, a wide exchange of information and efficient communication allow to better meet the information needs of the participants to negotiations within reverse logistics. They improve the throughput of omnidirectional communication channels. They increase the usefulness of information in terms of its detailed parameters, i.e., reliability, authenticity, proper form, appropriate detail, etc.

3.3.7 Mutual exchange

It must take place on terms jointly agreed by the parties, through mutual agreements and concessions. It is favoured by the differences in the hierarchy of negotiators' goals, i.e., it seeks to obtain significant resources and values, giving back less important but important for other parties in return. It concerns not only tangible resources, as well as intangible ones, i.e., ideas, ideas, concepts of solutions.

On the one hand, the positive aspect the negotiations processes under consideration is mainly expressed by supporting the determination of the scope and conditions of a possible exchange due to the wide range of interactions and cooperation between the negotiating parties and the appropriate scope of communication between them. It is much easier to obtain and transmit full and reliable information about the needs of the parties and to gather the necessary data on mutual requirements and expectations already in the initial phase of the negotiations, as they are widely available. In other words, it is not difficult to define and confront the preferences of the participants in negotiations, as their expectations are not undisclosed or unclear.

Potential exchange offers are precise and well-thoughtout, oriented not only towards material values. There are favourable conditions for the creativity of the parties in the search for opportunities to exchange immeasurable assets. It is easier for negotiators to create wider possibilities of meeting their needs mutually. They rarely show a tendency to formulate non-equivalent exchange proposals only for the purpose of achieving quick and immediate benefits, especially tangible ones. Negotiations based on interests dominate, not simple haggling. There are many options for selecting potential exchange partners and their offers. It is easier to obtain and communicate complete and reliable information about the needs of the parties and to limit focus on immediate needs at the expense of long-term effects.

On the other hand, the significant acceleration and increase in the complexity of the considered negotiation processes may cause them to appear too quick and simpler exchange proposals with a higher "weight", entailing greater risk. Undoubtedly, greater precision is required when formulating exchange offers. In addition, there may be opportunities to surprise other negotiating participants when they are not prepared to accept certain proposals.

3.3.8 Creating values

The interdependence of the parties and the process of mutual exchange in the negotiations allow the parties to the negotiations to achieve mutual benefits by creating additional value, which would not be possible without negotiation. These common values are a synergistic effect of the cooperation of the parties. Creating them is also possible when one party has something to offer that is not worth much for itself but is of great value to other participants in the negotiation - and vice versa. By exchanging these values, each side loses little, but gains a lot. Within reverse logistics usually we face the process of values recovery, creating a new one. It should be emphasized, that this is another aspect of value creation in cooperation in reverse logistics, next to the previously presented issue of recovering value related to the use of parts from damaged products, use of recyclable materials, waste, etc.

Therefore, negotiations within reverse logistics are characterized by the ease of their parties agreeing on common values that are to be the subject and effect of cooperation. Orientation not only on the immediate effects of negotiations, the strength and durability of relationships, their positive nature, mutual trust of the parties, wide exchange of information about the values themselves and the possibility of achieving them make their co-creation much easier. At most, the prospect of quick and measurable benefits as an effect of the temporary cooperation of the parties may induce them to try to obtain these benefits.

There may, of course, be the danger of unjustified appropriation of resources, and as a result, reliable partners must be relied upon in the search for common values. In addition, cases of such unethical activities are exposed online and widely stigmatized. Differences in the assessment of the values represented by their participants, i.e., different priorities, create the potential for reaching agreement through the exchange of values that are beneficial to them. On an ad hoc basis, these values may be of little importance to the parties to the negotiations but bring them benefits deferred in time. Moreover, potential conflicts of values can and should be resolved by explaining their causes and by convincing each other about the positive impact of different values on the negotiation processes.

4 Conclusions

To sum up, the following features of negotiations within reverse logistics can be indicated:

substantial acceleration of the conduct of these processes, especially pre-negotiation analysis (specifying, for example, bargaining power of parties resulting from the importance of each party in the process of creating or restoring value in reverse logistic, obtaining recommendations),



- significant increase of the scope of such analysis in a wider negotiating environment (e.g. taking into account the influence of other entities cooperating with negotiating parties),
- searching for trusted negotiation partners, shaping and maintaining positive relationships with them,
- adopting a broader perspective when looking for possible alternative solutions (e.g. considering other potential service providers of the same type, avoiding excessive dependence on the entity with which one is negotiating),
- increased flexibility of performance, especially when searching for options for solutions,
- seeking for new strategies and negotiation techniques aimed at finding a balance between cooperation and competition,
- enriching the tools of multiparty negotiation, more and more dominant in contemporary socio-economic life,
- full acceptance of the multicultural nature of the negotiating environment and its creative use,
- particular attention is related to compliance with limitations resulting from law on environmental protection, treatment of special types of goods, dangerous goods waste and recyclable materials as well as with requirements of permits for transport, storage, securing, etc. resulting from these regulations,
- paying much more attention to information security,
- using modern systems of supporting negotiations via the Internet.

These are not all the suggestions that are useful in negotiating with service providers in the area of reverse logistics. Those presented are treated as most important.

The main advantages of the suggested concept of negotiations are as follows:

- it is conducive to effective cooperation between companies,
- moreover supports the management of relations among them,
- what is more, it influences the effective shaping and maintenance of partnership relations between them,
- stimulates the search for effective solutions to problems arising in cooperation,
- facilitates the resolution of potential and real conflicts within cooperation,
- helps to reach compromises and consensuses while resolving these conflicts,
- supports the search for creative solutions to improve cooperation,
- leads to the conclusion of effective contracts between partners,
- in the end, it increases the efficiency of cooperating parties, as well as entire supply chain's performance.

On the other hand, the following disadvantages of the suggested concept may be pointed out:

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- its use can sometimes be too laborious,
- it may leave aside the scope of considerations of secondary but important conflict goals for individual parties to the negotiations,
- sometimes it leads to the conclusion of the socalled sick compromises that do not satisfy any of the participants,
- companies having strong bargaining power may dominate over other co-operators.

The suggested concept of the description of negotiations within reverse logistics cooperation presented in the paper is a preliminary approach to the issues under consideration, since they are relatively new, not fully recognized in theory and research, as well as in economic practice. Therefore, the authors will strive to enrich and broaden his concept, mainly by searching for more precise characteristics of the considered features of the negotiations under consideration. It is also planned to conduct comparative empirical research in order to verify the usefulness of this concept.

In addition, it is planned to expand the context of considerations, i.e. to create a broader concept of the conditions of negotiations within reverse logistics cooperation in the current economic reality by proposing the principles of their conduct, and thus creating a specific normative model of such negotiations. The second, promising direction of research will be considering the more general issue of managing relationships with partners, and not only the negotiations with them.

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Review process

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