Purchasing of logistical services: a new view of LSPs' proactive strategies

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Abstract

Purpose – The purpose of this viewpoint is to analyze the emergence of a modified equilibrium in the relationship between buyers ("shippers") and suppliers ("providers") of logistical services. In the 1990s, the logistical service providers (LSPs) had relatively little power and were often asked to perform basic operations. The situation has evolved as a result of proactive strategies implemented by some forward-thinking LSPs. In this viewpoint, the emphasis is on the strategies developed by shippers which the authors labeled the "ramp effect".

Design/methodology/approach – The authors discuss the impact of the ramp effect on LSPs' innovation processes. This viewpoint is based on the authors' experience in the field, on a literature review focused on the logistics industry and on the purchasing strategies applied to logistical services.

Findings – The authors show that the buyers of logistical services have lost some of their power because of two main factors: LSPs' embeddedness in the shipper's supply chain and the transformation of LSPs into orchestrators (labeled fourth-party logistics). This viewpoint discusses the relational disequilibrium between shippers and LSPs rather than the cooperative relationships between them.

Originality/value – The ramp effect as a source of innovation and proactive strategies for LSPs has never been covered in the management literature. This viewpoint provides both academics and practitioners with a different perspective of the relational disequilibrium between buyers and sellers of logistical services.

Keywords Innovation, Supply chain, Purchasing, Logistics service provider (LSP), Kraljic matrix, Relational disequilibrium

Paper type Viewpoint

1. Introduction

Relationships between shippers (manufacturers or large retailers) and their logistical service providers (LSPs) are often characterized by tensions, power and even conflicts,

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for instance, in the distribution of productivity gains. Using a Delphi investigation, Makukha and Gray (2004) underline that to maintain their freedom of choice, shippers tend to avoid close relationships with LSPs, whereas LSPs want to become real strategic partners. Supporting this line of thinking, Hammervoll and Bø (2010) mention that a lack of trust emerges between shippers and LSPs, due in part to the shippers' bargaining power and to the lack of transparency in the transactions. Although it would be normal to expect that the two "partners" have enough in common to develop a win–win situation for logistics, reality appears to be different. By maintaining its LSP in a precarious position, the shipper is often able to make the LSP bear most of the additional costs resulting from an increasingly volatile environment. Actually, to what extent does the LSP really have a choice, unless the shipper relies more and more on LSPs to provide some of the complex logistical services?

However, it would be inaccurate to pretend that all LSPs are at the powerful shippers' mercy, as vassals are with powerful lords, to use Donada and Nogatchewsky's (2006) words. For a shipper to make it easy to substitute one LSP for another, the logistical services have to be relatively standard and easily substitutable. This is clearly not the case for sophisticated logistical services, for instance, when an LSP commits important resources and has a high level of coordination know-how. In such situations, the relationship is usually stronger because the client absolutely needs the LSP to maintain the proper functioning of the supply chain. Actually, it appears that some dynamic and innovative LSPs have succeeded by offering "high" value-added services, resulting in clients being more dependent than ever before. Quite often, it is the initial power disequilibrium between both parties that has prompted technological and organizational innovations by LSPs, which in turn have resulted in a modified equilibrium. The strategy which is used by shippers which we label the "ramp effect" can be appropriate in most purchasing situations, even when the buyer is less powerful than the service provider; however, it does not imply that it will always generate major benefits.

Although there is ample literature on power disequilibrium, it is surprising that it is much more limited when it comes to LSPs and the organizations buying logistical services. The main purpose of our viewpoint is to illustrate these dynamics by using a representative situation between a shipper and an LSP, following the shipper's decision to outsource some of its logistics activities. Our reasoning is built on a sequential process, which goes as follows. Originally, the organization buying the logistical services clearly had the upper hand over the LSP, as it was defining precisely how the logistical activities would be realized in terms of supply chain organization, frequency of deliveries, transportation operations, handling and storage. Over time, the buyer acquired more services from the LSP for two reasons:

(1) to focus more on its core competencies; and

(2) to take advantage of high value-added services for which LSPs had progressively developed their expertise.

These developments involved perceived and actual power struggles, which progressively lead to what we label the ramp effect. To escape from an increasing dependency on its LSP, the buyer tries to convince the supplier that the services offered are a commodity; consequently, the LSP might feel that the emphasis will have to be on price rather than on distinct services. And such an approach by shippers increases the

continuous efforts made by some LSPs to develop technical and managerial innovations. From this standpoint, the relational disequilibrium between a buyer and a provider of logistical services can be seen as a source of innovation generating proactive strategies by LSPs.

This viewpoint is structured as follows. In Section 2, we explain how the outsourcing decisions made by many shippers have resulted in more pressure on LSPs to remain "doers", without any meaningful decision-making capability; clearly, in that case, shippers want to maintain the acquisition of logistical services in the "non-critical" category to switch easily from one LSP to another, without incurring high switching costs. In Section 3, we show how some LSPs have been able to move out of this trap by adding services and by developing their ability to better coordinate supply chains. The case of fourth-party logistics (4PL), capable of monitoring the entire supply chain without investing significantly in physical assets, illustrates very well the strategic response to the ramp effect that the most dynamic LSPs have come up with. Finally, in Section 4, we make our concluding remarks.

2. The shipper aims for an unbalanced relationship with its logistical service provider

LSPs appeared mostly in the 1990s, following the outsourcing of various types of logistical activities by many shippers, who considered these services to be "non-critical". This reality is now widely acknowledged in the literature (Fulconis *et al.*, 2011). However, it is much less discussed that shippers have systematically tried to maintain LSPs in a dependent position by taking advantage of the disequilibrium in the relationship. In fact, many factors then favored the shippers:

- easy access to other LSPs;
- difference in size, where powerful shippers were mostly dealing with regional transportation companies;
- low trust level in the relationship;
- uncertainty for the LSP about the future of the relationship; and
- non-specific assets used by the shipper.

As these factors are similar to those mentioned by Chen and Chen (2002) in their analysis of asymmetric alliances, we are using these factors in the discussion in Section 2.2 about the relationship between shippers and LSPs. However, in Section 2.1, we will take advantage of the ample literature on power asymmetry to describe briefly some of the associated theories which are useful in understanding better the more specific situation that we are dealing with in this viewpoint: the evolution in the relative power between LSPs and shippers, as well as the ramp effect, which is discussed in Section 2.3.

2.1 Power asymmetry: a theoretical foundation

One of the conventional definitions of "power" comes from Weber (1922/1978), who associates power with the ability to control others, events or resources and make happen what one wants to happen despite obstacles, resistance or opposition. The power relationship is asymmetrical, as each party attempts to meet its own goals, although being conscious of a more global "common interest". According to Weber (1922/1978), in a relationship, the actors' objective is to increase their own power,

while reducing that of others. The social exchange theory has pushed this reasoning further not only by showing that power is also the ability to get someone to do something that they would not do otherwise (Dahl, 1961; Blau, 1964), but also that such actions have resulted in resistance behaviors, using "reciprocal power" from those subjected to power (Emerson, 1962). As mentioned by Yuchtman and Seashore (1967), the competition for rare resources generates bargaining situations, with each party aiming at increasing its organizational effectiveness by properly using its power of influence and resistance.

At the conceptual level, power has progressively become an attribute that some have and others do not; therefore, dichotomies such as "strong" versus "weak" or "dominant" versus "dominated" have emerged. However, it appears more judicious to consider that power is distributed unevenly between the actors, and that the ability to impose one's will over the other party's will is the result of a constant power struggle and proactive strategies. In the context of supply chains, Nyaga *et al.* (2013) indicate that the dominating party tries to improve its operational performance by adopting one of the two behaviors:

(1) a *cooperative behavior* based on joint planning and goal setting, as well as on the development of cross-functional processes; and

(2) an *adaptive behavior* based on investments made to improve the transactional effectiveness of supply chain exchanges, for instance, through the customization of logistical processes.

However, it is clear that the depth of collaboration will be reduced if the actors do not hold balanced power positions (Kähkönen, 2014).

In power relationships, Boulding (1989) distinguishes three mechanisms: the stick, the carrot and the hug. The stick and the carrot are familiar metaphors in organizational theory. The stick corresponds to some type of power using force or treats, while the carrot is associated with an actor influencing another actor's behavior through enticements, often of a financial nature. Clearly, it is the "hug" concept which is more innovative; it opens the door for reinforcing a weaker actor's power through different means. In an organizational context, it can be associated with the formalization of proactive strategies providing more leverage. The power then used by the weaker party makes it possible to better resist the dominant actor and, therefore, to face more easily the relational disequilibrium. The dominant actor, highly committed to the desired outcome, then has to invest more resources to offset the opponent's resistance (Lawler and Bacharach, 1979).

Since the 1970s, theories on marketing channels have explored these power and countervailing (resistance) issues. A channel member's power corresponds to their ability:

- to control the decision variables and activities of another member (El-Ansary and Stern, 1972; Etgar, 1976);
- to affect the decision-making and/or behavior of another member (Wilkinson, 1973; Hunt and Nevin, 1974); and
- more generally, to affect the other channel member's outcomes from the relationship (Anderson and Narus, 1984).

Depending on the extent to which its freedom is limited, the dominated channel member will try to develop resistance strategies such as through coalitions with other channel members and development of highly specific non-substitutable services and unmatched operational excellence.

Based on transaction cost theory, Heide and John (1988) show that the dominated channel member's efforts to involve the dominating one in the relationship through the shared construction of specific assets and continuous bonding efforts indeed allow the dominated member to progressively bring more balance in the relationship. It is then possible to transform a power imbalance situation into a mutual dependence situation between the channel members (Hillman *et al.*, 2009); this scenario constitutes a major avenue for research to better understand marketing channel dynamics in general and, more specifically, the relationships between shippers and LSPs. Historically, LSPs have been dominated by shippers, who had a high level of logistical expertise; however, becoming conscious of that source of dominance, LSPs have then tried to escape from it.

2.2 The ongoing search for more power in the relationship

As indicated by Cézanne and Saglietto (2015, p. 31), an LSP is "[…] the prime contractor of a delivery logistics project, which it will achieve in due time". These authors also add:

> At the same time, ordering firms have recognized that their success no longer depends solely on themselves but on a network of partners capable of supplying them with new skills and technologies.

The LSP is an organization capable of managing, on its clients' behalf, support activities for making products available to consumers. These activities include transportation and handling and storage of materials and products along the supply chain. For instance, many large retailers, having understood that it is more efficient to let LSPs handle the logistical operations, including operations such as co-packing and the preparation of promotions, have now outsourced these operations. In such a context, it is clear that the shipper, who has handed over some of its logistical operations to an LSP while keeping design activities in-house, attempts to maintain an easy way out of the relationship. Otherwise, the LSP might take advantage of the situation through opportunistic behaviors, taking advantage of limited experience of LSP users to behave with self-interest "with guile" (Dreyer, 1998).

Clearly, the ordering firm takes bigger risks when the purchase of logistical services is considered "strategic". If the LSP becomes aware of that situation, it could then use its leverage to negotiate better terms in the outsourcing contract. Based on the social exchange theory, and more specifically on Yuchtman and Seashore's (1967) position, the LSP understands that its organizational effectiveness can be improved based on its power. Therefore, the shipper would be wise to maintain a disequilibrium by leaving the purchase of logistical services in the "non-critical" purchases category, and by acting accordingly. This is why shippers tend to fight the other party's resistance (Lawler and Bacharach, 1979), by using a commoditization strategy for the logistical services acquired and ensuring that there will be competition among LSPs. This reasoning is in line with the well-known Kraljic (1983) matrix, used very often in practice, but also discussed extensively in the academic literature that the author suggests different strategies based on the type of purchases (Figure 1). As mentioned in articles such as those by Gelderman and Semeijn (2006), Caniëls and Gelderman (2007), Padhi *et al.*

(2012), and Bäckstrand *et al.* (2015), Kraljic's (1983) matrix is flexible, for instance, by being useful when other axes are used.

Because each purchase can be positioned in the matrix, where should logistical services fall? It depends on the relative importance of that type of purchase; in many industries, the purchase of logistical services reaches 10 per cent of sales. Therefore, it is preferable to segregate the various types of logistical services so that they do not fall within only one quadrant of the matrix; otherwise, they would likely be acquired by using the same strategy. For the same reason, LSPs should try to make some components of their service unique, particularly for those components that are sophisticated and/or for which buyers would find it difficult to make a reasonable choice. There is not much research on the acquisition of logistical services. Andersson and Norrman (2002) mention that it is important for purchasers to segregate the different types of logistical services acquired to optimize the commercial interface with the LSPs. As for Sink and Langley (1997), they mention that if the shipper's core competence does not lie in the warehousing/distribution area, then outsourcing these activities cannot solve all its problems. Indeed, managing the relationship with the LSP underpins various logistical challenges associated with the products or the markets. Therefore, a shipper must clearly identify the various logistical services required and the impact they might have on the strategy and delivery used by LSPs.

This reasoning is applicable for national markets, but likely more so for international markets. In the operations management view, logistical services delivery is indeed influenced by cultural characteristics (Pagell *et al.*, 2005); for instance, in some countries, a five-day delivery is considered satisfactory, while it is totally unacceptable in other countries. Mentzer *et al.* (2004) argue that for logistical services, the various components of quality can be used to segment markets based on the relationship between service quality and customer satisfaction. In fact, proper market segmentation facilitates an appropriate allocation of resources to the various shippers; therefore, an LSP can reduce costs, increase revenues and differentiate its services effectively in a highly competitive marketplace.

Kraljic's (1983) matrix is of great interest, as it makes it possible to foresee how a shipper might act. The intended commoditization of logistical services where a captive LSP is at the shipper's mercy reduces the risk perceived by the shipper. To reduce the purchasing risk, a shipper uses two sources of information: "experience" based on past

Source: Adapted from Kraljic (1983)

Figure 1.
Kraljic's (1983) matrix: analysis of the purchasing portfolio

services and "credence", which is more difficult to evaluate, as it is based on perceptions (Bienstock, 2002). However, the LSP is unlikely to remain passive, particularly when the services offered are (or appear to be) the same as the ones of other LSPs. Therefore, to offset service commoditization by shippers, an LSP could try to identify the strategic moves required on the appropriate markets, and then develop new valued-added logistical services. In fact, by expanding its control over the shipper's supply chain, the LSP reduces the structural disequilibrium in the relationship; however, a shipper might then perceive an additional supply risk caused by the LSP's behavior and, consequently, insource part of its previously outsourced logistical activities. It is under this light that we can better study the interactive game between sellers and buyers of logistical services.

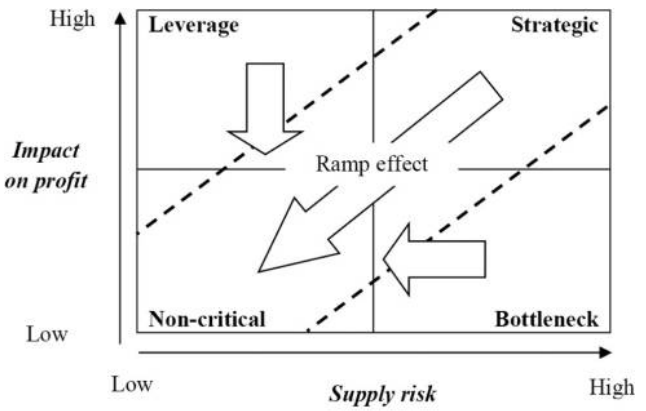
2.3 Identification of the ramp effect

Based on the reasoning behind Kraljic's (1983) matrix, it is logical that shippers attempt to make logistical services "normal" and "non-critical" purchases. However, if the services provided fall within one of the three other quadrants, the shippers might try to convince LSPs that:

- the impact of the desired logistical service on profits is small, and that it is the added value of the product itself through R&D and image that is important to the ultimate customer; and/or
- the supply risk is relatively low, considering the increasing number of LSPs, but also their more sophisticated service scope.

In fact, although the relationship is not always unfavorable to the LSP, the shipper will often try to make it look as if it was. As illustrated in Figure 2, LSPs are then faced with what we call the ramp effect (as represented by the three arrows), which reduces the actual and/or perceived value of their service offer.

At the operational level, the ramp effect results from the shipper standardizing and unbundling the different steps of the logistical process so that it makes it possible to outsource some carefully selected steps to an LSP. For example, a large retailer could



Source: Adapted from Kraljic (1983)

Figure 2.
Ramp effect: commoditization of the logistical services offered

segregate store replenishment into three steps: finished inventory, order preparation and transportation. In such a situation, the retailer retains a supply chain organization and can use different LSPs for each of the three steps; this approach forces LSPs to pursue even more their efficiency drive so that they are not easily replaced by a more efficient LSP. The slippery slope of the ramp effect toward the lower-inferior quadrant has been a reality for many decades, but has been acknowledged in the literature only since the beginning of the 2000s: for instance, when the buyers of logistical services considered warehousing activities to be "strategic" (Bowersox *et al.*, 2002), the logistical step rapidly became a "commodity" and, therefore, a non-critical item that many LSPs of various sizes now offer in Europe. However, although the ramp effect can be used in various circumstances, the additional power obtained by LSPs through the additional – and more sophisticated – services they now provide, makes it more challenging for shippers to use the ramp effect strategy cunningly and successfully.

In purchasing language, the ramp effect corresponds in fact to what van Weele (2014) calls a strategy of purchasing risk minimization; however, no in-depth research has been done on that topic in the field of logistics. So, although it does exist in practice and represents a valid strategy to acquire logistical services, academics have not yet formalized the approach in the field of logistics. One of the reasons for this situation might be the emphasis that they have put on cooperative relationships between shippers and LSPs to develop mutually beneficial gains. However, the ramp effect considers that the relationships between shippers and LSPs should allow the purchaser of logistical services to "[…] exploit, leverage, and develop logistical resources and competencies through inter-firm relationships" (Halldorsson *et al.*, 2007, p. 286). The basic question then arises for the shipper: "How do I use LSPs in order to create value, while being able to end the relationship without incurring major costs?".

From this viewpoint, relationships between buyers and sellers of logistical services clearly involve power, but it is often how that power is used that makes some organizations more successful than others. For example, LSPs can increase both the complexity and the variety of the logistical services they offer. Such an approach fights the ramp effect by demonstrating to the shippers that the supply risk and the impact on profits are high, as logistical services offered by various providers are heterogeneous. If this is the case (or perceived to be the case), the shipper will have to consider the services from a different perspective… unless the shipper sees exactly which game the LSP is playing and acts accordingly. In this situation, the shipper might decide not to outsource some of the logistical services, particularly if they are essential or even considered to be "core" to the shipper's service offer. Each party's perception of its relative power could very well influence prices and which logistical services will be offered (or purchased). For example, a shipper might not perform a thorough supplier search for other LSPs providing similar services at a lower price. However, a shipper who keeps strategic logistical services in-house is not really threatened when some of the activities are performed by an LSP. In fact, the accumulation of supply capabilities helps a buying organization to better structure its purchasing strategy, which in turn increases the buyer's power *vis-à-vis* its suppliers (Lintukangas *et al.*, 2013).

In fact, by looking more closely at the history of the logistics industry, one realizes that the ramp effect helps better understand supply chain evolution over the past 20 years. For example, in the mid-1990s, in France, only a handful of LSPs could perform activities as sophisticated as order preparation and promotional kit preparation;

nowadays, tens of LSPs can do it, many of which are medium-sized family-run businesses (Fulconis *et al.*, 2011). So, shippers can choose among many suppliers, while the supply risk and the impact on profits are both very low. In addition, because there are only minor specific investments made by the shipper, the switching costs to another supplier are also low. Therefore, to offset the commoditization of their services and the negative impact of the ramp effect, LSPs have to develop proactive strategies. Actually, the relational (power) unbalance between shippers and LSPs has resulted in major breakthroughs in logistical services; although some breakthroughs are not well-known, their impact on supply chains is nonetheless important.

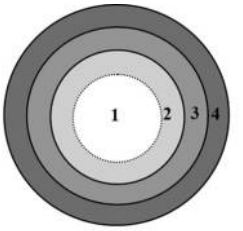
3. How can a logistical service provider move toward a better position?

According to Lorino (1997), an equilibrium normally results from actions followed by counterattacks and of a continuous adaptation to external disruptions. Thus, a new equilibrium is the consequence of changes modifying the relative position of the parties within an organized system, in this case, a supply chain. When the situation is clearly to a shipper's advantage, can the LSP move toward a better position? The answer to this question is of utmost importance for LSPs and also meaningful for researchers interested in the dynamics of inter-organizational relationships. Recent changes in the logistics world indicate that by using the proper strategies, dynamic and innovative LSPs have been able to change their relative position from the disequilibrium they were in, into a more favorable – or, at least, a less unfavorable – one. In Section 3.1, we discuss how LSPs usually respond to the ramp effect by developing further the relationship with the shipper, often by suggesting activities which are highly customized and difficult to duplicate. Section 3.2 shows this trend with the example of 4PLs, who have a unique "plug and play" expertise, and whose presence in supply chains has become more prevalent since the end of the 2000s.

3.1 Embeddedness of a logistical service provider within the shipper's supply chain

At the beginning of the 1990s, some LSPs were considered "pioneers" because they were offering a logistical service deemed "complex"; they had warehouses of a few thousand square meters, where products were stored for a couple of weeks or a few months (Cooper *et al.*, 1991). This situation has evolved. Within about 15 years, LSPs moved from "improved carriers" to "contributors of turnkey logistical solutions"; however, this revolution has not been fully acknowledged. There are many authors who have attempted to better understand this situation by analyzing the activity scope taken over by LSPs; they have often done so by looking at the outsourcing contracts signed by LSPs with their customers (Roques and Michrafy, 2003; Fulconis *et al.*, 2011; Cabigiosu *et al.*, 2012; Folinas, 2013). Figure 3 illustrates the evolution of the logistics industry, initially focused on its core competencies, trucking and warehousing (Circles 1 and 2), but then expanding to offer additional services (Circle 3) and, subsequently, new global packages (Circle 4).

Historically, many shippers specialized in cargo and air freight; naturally, they were offering complementary services such as warehousing, rail transportation and distribution. Performing only these activities had placed many LSPs in a dependent position: the shippers clearly had the upper hand. As the logistical services were operational in nature, the shippers did not consider them "critical". However, at the same time, LSPs were facing a major challenge to determine how to rationalize supply chains



Notes: LSP providing: 1. only transportation services and which is a transportation company; 2. transportation and warehousing: storage, inventory management, order handling, etc; 3. transportation, warehousing and additional services to customers: after-sales service, invoicing, etc; 4. a full package: transportation, warehousing, additional services to clients, including high-value services (site set-up, co-manufacturing, co-packing, engineering, information technology, etc.) making it possible to sell modular customized solutions

Sources: The authors based on Fulconis *et al*. (2011); Michon (2014)

Figure 3.
Categories of LSPs based on their portfolio of logistical services

so that their clients could benefit from economies of scale, while LSPs had to survive by making enough business and, particularly, profits. Since the early 2000s, to move out of this vulnerable position, some have developed more value-added activities, part of what is called *logistics management*, which is based on the integration of logistics and flow monitoring through "logistics control towers" (Roveillo *et al.*, 2012).

Many publications discuss the evolution of logistics outsourcing and increasingly powerful European and American LSPs focusing on a wider scope of logistical services, success criteria in LSP development and the implications of a global economy on supply chains (Lemoine and Dagnæs, 2003; Carbone and Stone, 2005; Rodrigue, 2012; Michon, 2014). Clearly, there are facilitating factors, including the lowering of tariffs; therefore, production systems are encompassing the whole world. Also, major improvements in IT have made trade and traceability easier, while enabling LSPs to offer more complex logistical services because of a combination of organizational learning and technology (Bensassi, 2008; Busse and Wallenburg, 2011; Su *et al.*, 2014).

However, we believe that the main reason for the extended portfolio of services now offered by some LSPs is the shippers' efforts to push their purchases of logistical services down, toward the "non-critical" quadrant (Figure 2) – what we have called the ramp effect. Through additional value-added services, the most powerful LSPs have been able to move out of that quadrant and greatly improve their operational performance (Multaharju and Hallikas, 2015). To show how the ramp effect works, we refer to Fulconis *et al.* (2011), who identified three steps in the relationship between shippers and their LSPs:

- In Step 1, the shipper purchases a logistical service such as trucking, warehousing and order processing; in this case, the LSP simply performs the required tasks, without any control in the customer's supply chain design.
- In Step 2, the shipper acquires full logistical services such as total physical and informational flows between plants and stores. In such cases, the LSP is the expert

suggesting original and even customized technical solutions to optimize the logistical operations it is responsible for.

- In Step 3, the shipper sets up a network, becoming a system designer using "logistical bricks" (various partners); here, the LSP collaborates with the shipper to develop the appropriate processes, and then uses specific tangible and intangible assets (equipment and knowledge, respectively).

Although it would be inaccurate to generalize these three steps to all industries, this description is nevertheless quite applicable to industries such as food processing, automotive, retailing and micro-computing. Dell Computers is a good example of a company which has progressively "dematerialized" its products by leaning upon solid LSPs for procuring the required parts. In Dell's case, a customized computer is delivered at the customer's door within days (Kumar and Craig, 2007). So, how can shippers learn from this example? A shipper must focus on its core competencies that add value to the ultimate customers. Actually, shippers have made it possible for LSPs to better balance the relationship through the development of more durable relational competencies, based on complex logistical services totally embedded within the shipper's supply chain, for instance, in the case of service customization and modularity (Cabigiosu *et al.*, 2015). If a shipper decides to change the LSP for another one, the supply chain would experience major problems, if not stop functioning altogether.

Clearly, there is a distinction between the ramp effect strategy and the main reasons why some shippers have become more dependent on selected LSPs. More specifically, some of the reasons for giving more logistical work to LSPs are as follows:

- shippers have begun practicing lean inventory management/JIT (just-in-time) principles that require extreme logistical coordination, and LSPs are better at performing logistical operations;
- supply chains have lengthened and simultaneously become more complex, therefore heightening the need for logistical expertise, which LSPs can provide;
- shippers want to focus on their core competency, which is not logistics; and
- shippers do not want the cost of logistical assets (vehicles, etc.) on their books, which makes outsourcing more attractive.

Once the outsourcing is done – for any of the reasons aforementioned, or for any other reason, as a matter of fact – how should shippers regain some of the power they have lost because of outsourcing? One of the means used is for shippers to make efforts in demonstrating to LSPs that there are alternative options, which lead to a strategy-labeled ramp effect (or commoditization of the service).

However, this is clearly a vicious circle for shippers; it looks as if shippers, despite their efforts to commoditize logistical services, have created conditions making it easier for LSPs to improve their own position, particularly when they already have developed their technological and organizational capabilities. So, by trying to make the purchase slip toward the "non-critical" category, shippers induced efforts by LSPs to extend the scope and complexity of the services offered. This is coherent with the theories on marketing channels, which emphasize the importance of resistance strategies by the dominated member of the channel, and whose objective is to move toward a more balanced equilibrium, often associated with a mutual dependence (Hillman *et al.*, 2009).

From dependent "doers" of simple logistical activities for shippers controlling supply chain design, dynamic LSPs have become "orchestrators", to use Zacharia *et al.*'s (2011) words. The new equilibrium is now based on an LSP's capability to initiate a complex system of inter-connected and totally modular logistical operations, nearly in real time, and based on their customers' evolving needs. The 4PL model illustrates this development very well; it is not surprising that extensive literature now exists on this topic (Saglietto, 2013; Ding and Zheng, 2014; Abidi *et al.*, 2015; Cézanne and Saglietto, 2015).

3.2 Orchestration as a new equilibrium: the fourth-party logistics

A 4PL designs and sells customized logistical solutions by assembling *ad hoc* resources from shippers, warehouse holders, industrial sub-contractors, etc. The key idea is that it is possible – and sometimes even desirable – for an LSP to develop a complex service, but without owning most of the expensive assets. It is mostly the LSP's relational expertise that brings the legitimacy perceived by the shipper; in fact, this approach corresponds to the orchestration of the partners' resources because of a recognized know-how as the appropriate way to assemble logistical bricks (routing, warehousing, order processing, etc.). In 2015, there are about 20 4PLs in Europe; they come from various countries, and they were all originally 3PLs; the most familiar names are: ABX Logistics, Deutsche Post, FM Logistic, Geodis, Kuehne + Nagel, Norbert Dentressangle, Schenker, STEF-TFE and UPS Logistics. There are other companies focusing mostly on consulting and/or computerized solutions such as ERP: Catalyst International, CXP, Delta Ressources Logistique, PEA Consulting and Self Informatique.

van Hoek (2004) mentions the key differences between traditional LSPs (3PLs) and 4PLs. First, information management is critical in a 4PL's service offer, as a 4PL must orchestrate the flows through traceability and real-time monitoring; however, other dimensions are also important: less dependence on shippers, less frequent contacts with shippers, multiple contacts with supply chain members, etc. The same author also suggests a four-step evolutionary model of logistics; it is clear that inter-organizational interface management becomes a critical competency, for instance, between the 4PL, the manufacturer and the large retailer. An LSP has set a new equilibrium if its expertise in coordinating the flows is indispensable to manage the logistical bricks properly, with the right partners, to the final customer's satisfaction. Using the analysis of Heide and John (1988), which emphasize bonding efforts in marketing channels, 4PLs can be successful in their efforts to reestablish the balance of power with the shippers. In fact, the 4PL has developed the expertise to properly manage the interfaces among the supply chain's logistical bricks (and their suppliers) required by the shipper to develop a sustainable competitive advantage on its markets.

Managing interfaces implies favoring structured knowledge, for instance, through interacting standards (Fabbe-Costes *et al.*, 2006). Such an approach makes coordination less costly and mostly independent of each partner's individual technical and organizational characteristics. Therefore, the interfaces are standardized, and this makes it much easier to replace a logistical brick by another one, for example, a warehouse by another warehouse. The coordination of the inter-organizational interfaces thus becomes independent from each logistical brick and its corresponding supplier. However, simultaneously, the 4PL must learn from the monitoring of each supply chain for which it is responsible, thus allowing knowledge transfer and avoiding

the trap to consider each supply chain as unique. Clearly, this corresponds to tacit knowledge: how much has a 4PL learned from all the supply chain adjustments that it has been involved in?

A 4PL's expertise is based on its capacity to assemble and disassemble supply chains, so as to be tuned in to changes in the environment, and be able to face an increasingly volatile demand from customers. In other words, a 4PL should be capable of quickly building short-lived logistical systems. For example, in a situation where a large retailer wants to carry a three-day special offer on exotic products, no stock-outs are allowed, as they would correspond to lost sales, unlike in the case of regular consumer products. In such a context, the shipper is making a strategic purchase (high risk, high impact on profits), a situation which makes it possible for the 4PL to go up the ramp (Figure 2) and transfer some of the risks to its own sub-contractors (Selviaridis and Norrman, 2014). So, if a 4PL knows what the large retailer it has already dealt with wants, it would be in a highly favorable position to use tacit knowledge (this trucking company costs less for that destination; this warehouse keeper is better at storing that product type, etc.) to make effective and efficient decisions. Successful 4PLs have learned to manage intangibles and to innovate, mostly through better flow monitoring.

The contemporary evolution of logistics in Europe shows two main directions:

(1) the expanding scope of the services offered by LSPs, who have moved from being operators of sub-contracted activities by shippers to becoming builders of complex supply chains; and

(2) the ability of LSPs – mostly of the 4 PLs – to coordinate the logistical flows better because of their competence in managing interfaces.

Often, positive financial results might not last, unless more technological and organizational innovations are developed. However, an LSP can focus on a balanced relationship where, after convincing the shipper, the parties become partners, sharing gains and information. Then, a shipper is more likely to look for a value-added creative logistical solution that supports its own development and reinforces its competitiveness. This illustrates one of the major contributions by the marketing channel theories, which emphasize the importance of power and countervailing power relationships, and the mutual dependence among channel members.

4. Conclusion

This viewpoint explored the dynamics of inter-organizational relationships between shippers and LSPs; from a relational disequilibrium at the time some logistical services were outsourced, the relationships have become more balanced over time. Although many articles deal with power disequilibrium, and also despite the fact that more and more articles on logistics have been published since the early 2000s, most researchers have so far adopted a "win–win" view of cooperative supply chains (Ballou, 2007; Christopher, 2010). In this viewpoint, we have approached this relationship differently by discussing how an unbalanced relationship in the shippers' favor was progressively offset by LSPs using technological and organizational innovations; in addition, we have shown how shippers have used the ramp effect to reduce the actual and the perceived power developed by LSPs. The evolution of the logistics industry in Europe, with the presence of LSPs capable of developing additional expertise in high value-added services, really corresponds to a perspective of actions followed by reactions: shippers'

efforts to commoditize LSP's services and to make the change of suppliers easier; and then the most innovative LSPs' reaction to introduce difficult-to-duplicate logistical services.

The objective of our viewpoint was clearly not to generalize to all industries and organizations the approach that we have labeled the ramp effect. For instance, it is easy to distinguish very different situations in the logistics industry, depending on the products or the complexity of service delivery. A specific situation might make it easy or difficult for a buyer to attempt strategies in line with the ramp effect; the same is true about the LSP's ability to offset the buyer's strategy. By expanding the reasoning to relationships between customers and suppliers, there can be even more subtleties in the strategies used. Therefore, it is impossible to say that the strategies associated with the ramp effect are the same in all industries. Our intent was to suggest a different way to better understand the inter-organizational dynamics between buyers and suppliers. Used as a diagnostic tool, the ramp effect allows the buying company to determine how to increase its power over the supplier, while the supplier will assess how to better counterattack. From this viewpoint, the concept of the ramp effect can be seen as a heuristic approach aimed at determining a *temporary hypothesis* to improve knowledge by trial and error (Abbott, 2004).

It is impossible to consider all the costs and benefits associated with a given purchasing strategy of various logistical services. For instance, a logistical service impacts more (or less) the buying organization's ability to offer low prices or high quality; thus, one must jointly consider issues about logistics and marketing (Svensson, 2002). Also, how can a shipper say "no, thanks" to a 4PL's offer when a shipper's priority is clearly not flow monitoring? Maybe it would be useful to remember the opinion expressed by the former president of SAS, Jan Carlzon, who insisted that in strategic decisions, it was as important to know when to say "no", than simply to be tempted to go ahead. In other words, a manager should assess where the acquisition of a given type of logistical service fits with the goods and/or services provided to the ultimate customer. Excellent managers know it and act accordingly, although the ultimate consequences of their decisions might be known only later, sometimes a little too late to balance the relationship with an LSP.

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