

Supply Chain Management and Logistics Outsourcing: Conceptual Framework

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Abstract

The objective of this article is to present a review of the literature relating to the phenomenon of outsourcing as part of the supply chain management approach. We shed light on the different definitions of outsourcing, as well as on the explanatory theories of the phenomenon of outsourcing. It will also be necessary to dwell on the concept of "supply chain", which makes it possible to understand the link between the phenomenon of outsourcing and the emergence of logistics service providers "LSP"

Keywords: logistics outsourcing, supply chain, transaction cost theory (TCT), resource based view (RBV), logistics service providers (LSP).

Introduction

International competition, continuous innovation and increased cost pressure are forcing companies to look for new ways to increase their profitability and competitiveness. This strong constraint generated a growing trend in the United States, then in Europe: Using outsourcing as a strategic lever not only to reduce costs but also to create value by refocusing company resources on activities core business.

As part of the supply chain management (SCM) approach, outsourcing is particularly important for the organization of logistics. It makes it possible to delegate operational activities that consume resources that the company will be able to reallocate to strategic objectives (marketing, research and development, international growth, etc.) It sometimes facilitates the development of new distribution models or the new technologies implementation.

The objective of this article is to present the literature review to explain the phenomenon of outsourcing as part of the supply chain management approach.

More specifically, in the first part we shed light on the different definitions of outsourcing, as well as its advantages and disadvantages.

We will specify in the second part, the explanatory theories of the phenomenon of outsourcing, we will, first of all, relying on the theory of transaction costs (TTC). Then, we will discuss the resource based view (RBV) approach, particularly as a complement to the TTC to analyze issues related to outsourcing.

Finally, in the third part, it will be necessary to dwell on the notion of the "supply chain". The latter is known as a network of organizations involved, upstream and downstream, in processes and activities that create value in the form of products and services for end-users (Christopher, 1992). This concept thus makes it possible to grasp the link between the phenomenon of outsourcing and the emergence of PSL.

1- Outsourcing: Definitions and main visions

The phenomenon of outsourcing, is an operation that consists of entrusting a specialized external service provider with the responsibility of managing a set of tasks (listed in a function, a domain, etc.) that were previously performed internally. Despite the current abundance of articles

addressing this theme, the lack of consensus around a definition of outsourcing is an established fact, explicitly or implicitly (Barthélemy 2004).

1-1 Definition of outsourcing

The growing research on the topic of outsourcing offers us many definitions of this organizational change. The term outsourcing is of English origin, "outsourcing", and knows different definitions according to the sources. According to Quélin (1997), there are nuances

between externalization and outsourcing. externalization frequently refers to the use of a provider outside the company. outsourcing has many points in common with externalization but its use is often reserved for information systems outsourced by a company. Outsourcing resorts to service contracts, or even to the market for the most standard services. In this work, we will not take into account the differences between externalization and outsourcing. As a result, we decide to adopt the term outsourcing. The **ASLOG**¹ glossary defines outsourcing as "a process of looking for external expertise that has become insufficient internally to take over all or some of the activities previously performed by the company itself" (Wattky, 2006). As for the **APICS**² glossary, in a highly logistics-centric version, it refers to outsourcing as "the process by which logistics providers provide goods or services that were previously done in-house".

In the same perspective, **AFNOR**³ gives the following definition of outsourcing: "Outsourcing is a service defined as the result of the integration of a set of basic services, aimed at entrusting to a specialized service provider all or part of a function of the "customer" company within the framework of a multi-year, flat-rate contract with a defined level of service and duration. "(Médan, 2008).

Barthélemy (2001), defined outsourcing as the fact of entrusting an activity to an external provider after having done it internally, according to the same author the phenomenon of outsourcing is not new. Indeed, the problem of the arbitrage between internal resources and external resources has always arisen and companies have gradually outsourced insensitive activities such as general services.

¹ French Association for Logistics, created in 1972. Association law of 1901, whose vocation is to promote the logistics.

² Apics dictionary 8th Editions

³ French Association for Standardization

Outsourcing brings out an important notion: The core business. While the outsourcing of functions outside the core business (overheads, payroll, accounting) is widely practiced for many years, that of activities of the value chain (logistics, purchasing, IT and telecom ..), close to the heart of the business³, is a more recent phenomenon and in clear progression (Thierry Sauvage et al, 2009).

Indeed, outsourcing has several original features:

- It often involves the transfer of personnel and equipment to the provider;
- It often involves the establishment of a long-lasting and close relationship between the outsourcing company and its service provider.
- It has a significant organizational dimension. It is not a simple assignment because the provider is supposed to completely substitute for internal services. In addition, its mission is often to reorganize the activities that are transferred to it.

These different definitions present the advantage of distinguishing outsourcing from other managerial and organizational practices. Thus, three essential characteristics emerge to qualify outsourcing (Médan, 2008):

- On the one hand, outsourcing permanently modifies the firm's boundaries;
- On the other hand, and correlatively, outsourcing is most of the time a strategic aspect, calling into question the structural configuration of resources in order to increase its capacity to generate value;
- Finally, an outsourcing operation is inseparable from the desire to safeguard the core business of the company; this covers activities considered -strategic" as opposed to activities classified as "peripheral", with little or no value creation.

subcontracting thus differs from outsourcing practices, in the sense that it involves a partnership with a service provider, whereas outsourcing is an operation by which one company entrusts another to the task of performing for it, and according to pre-established specifications, a part of the acts of production or services for which it has ultimate responsibility (AFNOR, 1986).

Outsourcing often leads to a reduction in the size of the company. This then results in frequent confusion with downsizing.

Downsizing is a generic method of increasing the efficiency, productivity and competitiveness of an organization by reducing its size. This phenomenon is particularly common. It consists in getting rid permanently of personnel or equipment that were part of the company (by the dismissals and the transfer). On the other hand, an outsourced activity remains necessary for the proper functioning of the company. A relationship must be established with the provider who takes over the internal services. If outsourcing does not rhyme with downsizing, both techniques are often used at the same time.

1-2 Outsourcing: Advantages and disadvantages

In the search for cost optimization, more responsiveness and flexibility, companies must ask themselves a number of questions about outsourcing one or more activities of their organization. They must determine which activities are part of their core business and the conditions for effective outsourcing. Companies must also define the limits of this system being aware of what they lose in knowing by opting for outsourcing (Wattky, 2006).

➤ **Benefits to be expected from outsourcing**

The expected benefits of outsourcing operations are quite numerous. Based on the Ernst & Young Outsourcing Barometer (2005), cost is by far the most cited business benefit. As a result of this idea of saving money by doing things, companies appreciate determining fixed charges for services or functions that could involve significant expense, unmanageable expenditure variability and uncertainties (substantial investments and renewals in IT hardware) in terms of investments in support functions.

Secondly, flexibility and simplicity are an almost logical consequence of the outsourcing process, as long as it takes place in good conditions. By taking over employees, the burden of managing the staff is now on the service provider, with the necessary resource adjustments being made by the latter and no longer by the client company. The definition of the conditions for the transfer of personnel is of almost strategic importance.

➤ **Risks taken by outsourcing**

The outsourcing of an activity also has its limits because if it is not controlled, it can have serious consequences for the company in financial, technical, human, social and control terms.

✓ **Risks related to controlling profitability**

Although outsourcing generates a very significant reduction in "visible" costs, it still causes increased costs - "hidden costs" - which are often underestimated by companies. These costs are inherent in the need to set up a monitoring and control system for outsourced activities (coordination of teams, periodic updating of contracts, definition of specifications, monitoring of the provider's activities). In addition, it is not always easy for the client to control the elements of billing, which ultimately limits the expected gains.

✓ **Risk related to the waiver of contracts**

Another problem of outsourcing is the renegotiation of the contract at maturity. The change of partner can be extremely costly for the company and, at the end of the contract, the service provider may be tempted to make the most of its influence ... In addition, the outsourced activities are not always carried out with the level of quality required, especially if they involve low-skilled tasks.

✓ Risk of loss of key skills

Finally, one last limit to outsourcing concerns the relative risk that companies have to let go of certain skills, until the provider becomes so powerful that it represents a threat in return, in case the client wishes to reintegrate these skills or repositioning them. One of the perverse consequences of the outsourcing of skills concerns the management of the service provider and, indirectly, outsourced skills: given the evolution - or even the change - in some sectors, particularly logistics, as well as skills, one can assume that management methods must take these developments into account, which becomes very difficult for a company that has lost key skills.

To understand this decision-making process, the research is based primarily on two theoretical trends that are the theory of transaction costs (TCT) and the theory of resources (RBV). For these two reasons, the determinants of outsourcing are associated with a redefinition of the company's boundaries. Firms keep in-house functions that are defined as those that give them a competitive advantage in terms of performance, cost, or technological proficiency.

2- The explanatory theories of the phenomenon of outsourcing

There is no real theory of outsourcing. On the other hand, two major theoretical tools make it possible to approach this question: The theory of transaction costs and the theory of the resource (Barthélemy, 2004).

The Transaction Cost Theory (TCT) has focused on vertical integration, and is moving away from two important themes that are the core business and triggers of outsourcing. The "Resource Based View" makes it possible to fill these gaps (Barthélemy, 2001).

2-1 Transaction Cost Theory: Inputs and Limits

Transaction cost theory (TCT) can be thought of as an economic theory of institutional arrangements based on transaction as a unit of analysis. The proposed framework is part of the neo-institutional economics school which aims to study all "institutions of capitalism" (Williamson, 1985).

It appears as an analysis that takes into account not only the economic variables of firm and market theories, but also the characteristics of the behavior of institutions derived from the theories of organizations. It aims to explain the arbitrage that an economic agent makes between a strategy of integration of a function and the use of the market to take over this function (outsourcing). This arbitrage corresponds to a choice of form of contract, that is to say to the choice of internal or external transactions. It is carried out with a view to minimizing the cost of transactions according to the characteristics of the transactions.

The great strength of transaction cost theory is that it simultaneously addresses the two questions that lie at the heart of the problem of outsourcing (Barthélemy, 2001):

- On the one hand, it makes it possible to decide whether outsourcing is desirable. By simple analogy to "standard" reasoning (which deals more specifically with the question of vertical integration),

transaction cost theory prescribes vertical disintegration when (1) the transactions relate to unspecific assets; (2 and 3) the uncertainty is low and the performance of the provider is easy to evaluate; (4) the frequency of trade is low

- On the other hand, it helps to determine the optimal governance structure. Indeed, the theory of transaction costs shows that there is a form of governance adapted to each type of outsourcing. Beyond a certain level of specificity, outsourcing is not desirable. Below this ,outsourcing is possible, even if the risks and the cost of the monitoring structure are sometimes high. Ditto for the uncertainty and ambiguity of the performance. The frequency plays a role a little apart. All else being equal, a high frequency makes it possible to resort to a form of governance such as hierarchy or relational contract.

The figure below summarizes the contribution of transaction cost theory to management and outsourcing decision issues.

Figure1: Theory of transaction costs, decision and management of an outsourcing operation

		specificity of assets		
		low	strong	
uncertainty and measurement issues	Low	neoclassical contract		
	strong	classic contract	relationship contract	internalization
		occasional	recurring	
		frequency		

Source: According to Williamson (1985), adapted from Barthélemy

Four great cases must be distinguished. The first is internalization, the other three are outsourcing:

- First case: Internalization. Hierarchical governance structures provide economies of scale equivalent to those of service providers because the assets are specific to each user. They are preferred to outsourcing because it is based on complex contractual arrangements (and therefore expensive in terms of transaction costs).

- Second case: outsourcing with conventional contract. When non-specific assets are committed, the use of the market allows for economies of scale (and therefore production costs). Transaction costs are minimal because vendor monitoring is not required. Standard or standard contracts are then sufficient to mitigate the opportunism of suppliers.
- Third case: outsourcing with neoclassical contract. Hierarchical governance structures do not provide economies of scale for occasional transactions. Hence a market advantage in terms of economies of scale. Neoclassical contracts minimize transaction costs when all foreseeable contingencies are specified and the impact of unanticipated contingencies is minimized by the use of third party arbitration. The contract is also systematically used as a reference in the management of the transaction.
- Fourth case: Relational contracts. The market allows economies of scale (and hence production costs) for the "standard" part of the transaction. Relational contracts, in which the mutual obligations of both parties are clearly specified, minimize transaction costs because both parties have an interest in maintaining the relationship - the client avoids breaks in service and the supplier benefits from a uninterrupted income stream.

The theory of transaction costs is therefore focused on the only aspect of cost reduction (transaction and production). However, as the empirical studies show (Barthélemy, 2001),

outsourcing can also be interpreted as the realization of a performance differential between internal services and the best provider in the market.

The focal point is no longer the reduction of transaction or production costs but the increase in performance, sometimes despite the risks involved.

Outsourcing can therefore be interpreted as the awareness of a performance differential between internal services and the best provider of the market ("performance gap"). The objective of outsourcing is then to increase performance, even if this leads to an increase in transaction costs, or even production costs.

2-2 The resource approach as a complement to the TCT for the analysis of outsourcing

Faced with the limitations of the TCT, different paradigms emerged from the 1980s. Among them, a new approach called Resource-Based-View (RBV) is now dominant to explain the performance of the firm, (J. Barney , 1991). This approach focuses on the relationship between the firm's internal characteristics and its performance (Penrose, 1959, Wernerfelt, 1984) around two hypotheses:

- Firms can be heterogeneous in terms of the resources and capabilities on which they base their strategies.
- These resources and capabilities may not be quite mobile across firms, due to the diversity of stakeholders in the industry (Spanos and Lioukas, 2001).

This current of thought has the particularity of shifting the attention towards the analysis of the firm, its resources, its knowledge and know-how, its routines as well as its ability to learn. Indeed, this approach, the "Resource-Based-View" appears to complete the "industrial" analysis (Wernerfelt, 1984) with the deep conviction that the profitability of firms also emanates from intrinsic resources and not only from the sector.

The company is then a portfolio of resources and no longer a portfolio of strategic business areas (Arrègle and Quélin, 2001). Resources are apprehended as the roots of the company, which serve as a support for the products, and thus for the areas of strategic activity (Hamel and Prahalad, 1994). The competitive distinction comes directly from a difference in the use of the company's resources (Arrègle, 1996). Thus, differences in performance between firms can be explained by differences in their competitive positioning, which are themselves explained by differences in resources. Each competitor has a heterogeneous set of resources, which generates a difference in competitive position, and therefore performance (Arègle, 1996).

Outsourcing can also be interpreted as the realization of a performance differential between internal services and the best provider in the market. The objective of outsourcing is then to obtain access to the resources of the provider deemed better. The focal point is no longer the reduction of transaction costs but the increase in performance, in a context of difficulty in accumulating resources and in spite of the risks incurred.

In-house development of value-creating (specific) resources is both complex and expensive. Hence the lack of in-house expertise pushes some companies to use outsourcing as a way to access existing resources. The outsourcing contract may also require that the transferred resources be improved by the provider (Barthelemy 2001).

Resource-based theory helps to understand the inter-organizational relationship that exists in outsourcing, since it explains the cooperation agreements by the non-availability of a resource on the market or the impossibility of developing it in-house. which leads the organization to turn to a partner (Gosse, Sargis and Sprimont, 2001).

3- Logistics outsourcing and growth of logistics providers

For twenty years, logistics has undergone a strong development and profound changes. Supply chain management is becoming a strategic approach for companies (Colin, 2005) and requires more and more resources. In order not to disperse their assets and make better use of their investments, companies are gradually outsourcing all or part of their supply chain. The refocusing of manufacturers on their core business has led to the outsourcing of the logistics function, thus contributing to the creation of a logistics service market.

Logistics has gone beyond this simple instrumental dimension and has acquired, under the leadership of Supply Chain Management (SCM), a strategic dimension based on the implementation of increasingly sophisticated information and communication systems (software packages for information systems, EDI,

RFID, etc.). It takes place in the supply chain defined as a set of three or more entities (companies or individuals) crossed by upstream and downstream flows of products, services, information and financial, from a supplier to a customer. The supply chain integrates an inter-organizational approach to the coordination of product and information flows and, from a strategic point of view, it refers to the problem of the design of the logistics network based on the choice of location of the units. logistics.

In fact, the resources and the logistical skills of an organization differ according to the nature of the resources it possesses (value, rarity, non-imitability, non-substitutability, etc.) and according to the importance of the resources it devotes to its logistical activities. If these resources prove insufficient, through the use of outsourcing, the logistics provider can provide new skills and additional resources.

In short, from a RBV theory perspective, logistics outsourcing is, in essence, a strategic decision to bridge the gap between the skills and the logistics currently available to the organization and those of which it requires.

Given this observation, the literature reviews on the theoretical underpinnings of outsourcing have led to the identification of two approaches that are generally used to deal with this phenomenon: the Transaction Cost Theory (TCT) and the theory of the resource (RBV). Transaction cost theory is the dominant paradigm. The main conclusion of this work is that outsourcing is justified when the level of "contractual risks" is low. Contrary to the theory of transaction costs, and in line with our research problem RBV is based on a simple idea: Differences in performance between companies in the same industry can be explained by differences in resources and skills. The goal of management is to identify, protect, exploit and create resources and skills to generate a sustainable competitive advantage. While the number of empirical studies using the resource theory approach is still limited, it is growing rapidly.

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