

Logistic Outsourcing: From the Contracts Complexity to the Logistic Services Performance

Jabir Arif

Equipe de recherche Modélisation et Optimisation des Systèmes Industriels et Logistique
Ecole Nationale des Sciences Appliquées (ENSA)
Université Abdelmalek Essaâdi
Tetouan, Morocco
arif.jabir@gmail.com

Imane IBN EL FAROUK

Laboratoire d'Etudes et de Recherches en Sciences Economiques et de Management
UNIVERSITE CHOUAIB DOUKALLI
ENCG
EL JADIDA, MOROCCO
Imane-ibn-el-farouk@outlook.com

Fouad Jawab

Laboratoire de Management International, Techniques de Décision et Logistique
Université Sidi Mohamed Ben Abdellah
Fez, Morocco
jawabf@gmail.com

Abstract

At a worldwide level, the outsourcing has become crucial Nowadays. In logistics, we mostly found outsourcing that demands flexible contractual devices that deal with the continuous relationship between the customer-provider. Whereas, most of the outsourcing logistics researches ignore the relationship between outsourcing logistics and the contractual agreements that govern the performance taking into account that those contracts are structured to improve the performance of the companies. The objective of this paper is to question about the objective of the contract to succeed the outsourcing logistics relationship and to synthesize the contractual devices that mostly promote the success and the continuous progress. We will be using afterwards, the transaction cost theory, the resources theory and agency theory, in terms of the contractual complexity, so as we can demonstrate that this relationship is moderated by specific nature of the assets used to perform the outsourced activity within the uncertainties surrounding, the strategic aspect and the performance expectation.

Keywords

Outsourcing, logistics, contractual devices, outsourcing logistics, performance, contract.

1. Introduction

From the beginning of 1990s, the world practices of outsourcing increase, accusing an annual growth of some 10 % (Sohail and Sohal, 2003). Therefore, companies adopt the strategy of "collaboration" to minimize the costs and maximize the services quality and succeed consequently to improve their business performance (Min and al., 2005, Holweg and al., 2005; Lambert and al., 2004). Among the various forms of strategic collaboration, we distinguish the logistics outsourcing (Cho and al. 2007).

The reason for this first wave of outsourcing was purely economic (Kedia and Lahiri, 2007), based on cost criteria. Other factors are then build from this phenomenon, including lack of internally capacity references to achieve the benefits of the outsourcing.

It is in this context that the phenomenon of logistics outsourcing is then developed and multiplied (Jabir and Jawab, 2015). This reengineering process seems to affect almost everyone involved, from industrial to distributors through Logistic Service Providers (LSP). The point is to reduce costs in a context where the logistical issues become more complex (Bellingkrodt and Wallenburg, 2103). However, under the constraint of the economic environment and looking to be more competitive, companies are developing collaborative relationships increasingly close.

However, the logistics outsourcing bases itself on a contract, generally long-term form (Ishizaka and Blakiston, 2012). With regard to a classic subcontract, the logistics outsourcing contract distinguishes itself essentially by the existence of clauses concerning the staff and assets transfer, implemented ways, productivity and performance (Selviaridis and Norrman, 2014).

On the other hand, we note that the influence of the contractual complexity on the relationship of logistics outsourcing is often neglected, which in turn, influences the performance of the logistic services (Seu and Jose, on 2009). Thus, the contractual complexity can be a key moderator of the fundamental relationship between the logistics outsourcing and the performance (Sumo and al., 2016).

2. Problem

Getting into a logistics outsourcing process is an important strategic act that its implementation is done in a hurry, especially since it often excludes any possibility of going back (Jabir and Jawab, 2013). This comes to proceed upstream to a comprehensive study. Thus, criteria of human economic characters, organizational, technical, etc ... can be used in the decision to resort or not to logistics outsourcing.

Thus, due to increasing of logistics outsourcing, logistic services appears to be a pertinent field of analysis for the study of inter-organizational relationships (Zeynep and Higgins, 2007). On the other hand, companies have realized that they need to cooperate with the LSP, so they can focus on their core activities (Wallenburg, 2009). However, despite the advantages and benefits of logistics outsourcing, many relationships that are not renewed at the end of their contract or does not exist in the period initially planned (Jabir and Jawab, 2015).

This is in the heart of this fact is located our goal. The problem of the paper is interested in the contractual relationship undertaken in the field of the logistic outsourcing, which is not a new dimension in the management, but it is a new and growing subject in the context of Supply Chain Management (Lavastre, Gunasekaran and Spalanzani, 2012). In this context, although attractive, outsourcing, total or partial, of logistic activities engenders risks and costs for which the managers try to master by the establishment of formal and consensual contractual relationship (Leung and al., 2013). The emitted hypothesis is that the efficiency of the logistics outsourcing relationship rests on the construction of a formal environment of the contractual relationship.

To establish the legitimacy of this hypothesis, we propose a plan in four sections. A first section examines the particularities of the logistics outsourcing context. A second section proposes a report of the recent contributions of the contractual approach usable to report the dynamics of the logistics outsourcing relationship. The third section analyzes the contractual devices to be set up so as to favor the efficiency of the logistics outsourcing contract. Finally, the last section of the paper is about another dimension of the logistics outsourcing is the one of the contractual complexity and its influence on the performance of the logistic services.

3. Logistics outsourcing context

Today, the logistic outsourcing is developing in an industrial environment marked by a strong commercial uncertainty (Wang and al., 2011). Companies have a strong tendency to specialize by refocusing on their core business. In this context, the logistic outsourcing turns out to be a way to improve the closeness with the customers thanks to the density

of networks set up by the LSP (Lieb, 2000). To be capable of answering quickly the changes and the demands of the market, organization tries to maintain a physical contact with their customers (Wallenburg and al., 2010a). Consequently, companies are not any more directly in competition between them, but rather through the diverse logistic networks to whom they belong (Jawab and al., 2004).

Today, LSP participate actively in the life of the company. They contribute to the value creation and are real levers of improvement, that is why the organization of the control of this actors dresses multiple stakes (Wallenburg, 2009).

Indeed, the study led by the cabinet Ernst et Young in 2011 demonstrates the strong growth of the number of the providers within the organization. The increase perceives itself both at the level of the number of providers and at the level of the activities which there are confided. The organization is then confronted with problems relative to the management of its various outsourcings.

4. Theoretical foundations

The most interesting main contractual models (Savage, 2004) to analyze the relation of outsourcing specifically logistic are the Transaction Costs Theory (TCT), the Resource-Based Theory and the Agency Theory.

The Transaction Costs Theory: organizations have to optimize their organizational choices according to the costs generated by the contractualization with the provider, compared with the bureaucratic costs of the vertical integration (Coerderoy and Quélin, 1998);

The Resource Based Theory: organizations are not self-sufficient as regards their resources, and the strategy of the core business leads them to favor their specific investments and to resort to the complementarity of the providers offer (Barney, 1991);

The Agency Theory: the organization delegates to the providers a responsibility of means and results; creating a potential dependence towards those who supply them; this introduces the uncertainty into their decision system (Quélin, 2002).

The contractual approach constitutes a relatively strong asset, restful on a set of appropriately identified basic postulates: the autonomy, the opportunism of the partners and the uncertainty (Hesterly and al., 1990). These concepts regulate the performance of the relationship, but their consideration in the design of contracts by the actors is imperfect, considering the principle of limited rationality (Savage, 2004). The nature of the interactions between these concepts is not clearly established by the literature which tends to examine rather their rivalries than their complementarities.

The main interest of the contractual models is finally to suggest that it exists, for given contexts, receipts of logistic outsourcing. The objective is to identify the organization which allows to minimize the costs connected to the production and to the exploitation of the contract (Argyres and Mayer, 2007).

5. Contractual devices: An existence diversity ...

For the logistics outsourcing, the efficiency of a contractual device lies in its capacity to be channelled, by the extracted information (supervision, control) or communicated, the opportunist tendencies and the costs which they infer (Frankel and al., 1996). The presence of opportunism in the relationship of outsourcing leads generally the implementation of a contractual device by one of the partners. The objective pursues three missions: a mission of efficiency, effectiveness and economy (Bouquin, 2005).

5.1. Contract

The first device provided to the actors is the contract. It is at the heart of the TCT, and frames expectations and conditions of the exchange relationship. As such, the contract constitutes one of the control way of the inter-organizational structures (Parkhe, 1993). It aims at reducing the uncertainty as for the behavior of the partners, at minimizing the functioning costs and fixing, in a legal way, the relationship structure. These relationships are part of long-term stability and require a minimum number of mutual trust and an agreement between agents (Jawab and Bouami, 2003).

From him, Quélin (2003) asserts that the contract plays a central role in the outsourcing, because it defines and codifies the obligations of the provider and the company customer. Given the place which occupies the contract, the outsourcing processing as an organizational shape requires a fine understanding of the contractualization mechanisms, marrying at the same time transaction costs, problems of delegation and supervision, and investment in specific assets.

Once the contract is concluded, it will afterward allow to check the opportunism. Thus it cannot manage the opportunism ex-ante. The contract acts on the execution phase, its impact is targeted at the objectives to achieve.

A fittingly drafted contract allows to reduce the opportunism of the LSP, by preventing all the actions which it will have to realize under penalty of financial counterparties, and to assure the LSP can have a regular remuneration (Cao and Lumineau, 2015). Nevertheless, the contract can appear as being congealed and expensive, engendering numerous costs ex-ante such as the selecting of the provider or the negotiation. Eventually, it does not adapt itself to all the unforeseen situations and to the modifications of the environment because the latter is "static", congealed at a moment "t" of the relationship (Hypko, Tilebein and Gleich, 2010a). That is why the managers developed other mechanisms as audit.

5.2. Audit

Audit is defined as "the activity which applies in any independence of the coherent procedures and the examination standards to estimate the adequacy and the functioning of all or part of the operations led in an organization in reference to standards" (Boissinot, 2008).

The audit can modify the appearance of opportunist behavior during the contract execution phase. The control fear and the repression urge the actors to act in the desired way by the contract. The audit limit lies in its "non-reactive" character. The audit result appears once the realized mission, a consequent lapse of time can take place between the appearance and the revelation of an opportunist behavior. For that purpose, the audit can be classified as a control system, and reduces the opportunism during the contract execution. But it cannot manage only by itself all the behavior forms. It does not substitute itself but complementing and reinforcing the traditional mechanisms such as the trust, the contract and the socialization processes (Boulay and Isaac, 2007).

5.3. Organizational form

The organizational form presents certain characteristics for the provider control. If Williamson (1994) favors the hierarchy to the market to protect itself of the opportunism, it is because he considers the actors are more active in their opportunism on the market. The control by the hierarchical power pulls a reduction of the appearance of this behavior. Without going to the hierarchy, organizational mechanisms allow to check the provider through financial mechanisms (Conso and Hémici, 2006).

The contract not allowing to encircle the opportunism, a third organizational shape appeared, allowing to fight against the opportunism: the hybrid form (network, collaboration, etc.). In the networks case, one of the elements on which their implementation rests is the replacement of the contractual relationship by trust relationships, based on skill of each, managed towards a common objective and supported by a regular business flow (Jawab and al., 2004). According to these authors, the creation of these networks would be, by the emergence of hostage, a way to thwart the supplier's opportunism by locking the relationships into an hierarchy appearance.

6. Outsourcing contracts complexity

1. The outsourcing contracts are complex (Barthélemy and Bertrand, 2006). Indeed, they concern at the same time an asset disposal and future services. The question of the asset disposal does not raise insuperable problems. Certainly, it is enough to resort to the third party evaluation or to introduce a compensation clause of the provider if the information supplied by the company on its equipment turns out erroneous (Barthelemy, 1998). The contract complexity result much more from the fact it has to allow the company to avoid the provider opportunist behavior in a long-term (Sanchez, Cruz and Goes, 2014). Thus it has to contain the performance analysis instruments, the quality and the implication of the provider.

We can, however, take as a road map the example of Seu and Jose in their approach based on a survey (Seu and Jose, 2009), they used a sample pulled from the Australian exporters database to estimate the various elements which connect the nature of the outsourced logistics services and the contractual arrangements. On the basis of this study, they showed that the contracts complexity has an indirect influence on the performance, and that the contractual arrangements must be differentiated according to the nature of the outsourced logistic activities and the objectives of the performance.

6.1. Development of the research question

The research includes three concepts: the logistic outsourcing, the contract complexity and the company performance, as shown in the figure 1. A general hypothesis of this research is that the influence of the logistic outsourcing on the company performance is livened up by the contractual complexity (Seu and Jose, 2009). The relation between the

logistic outsourcing and the performance, and between logistic outsourcing and the complexity of the contract are examined alternately as follows.

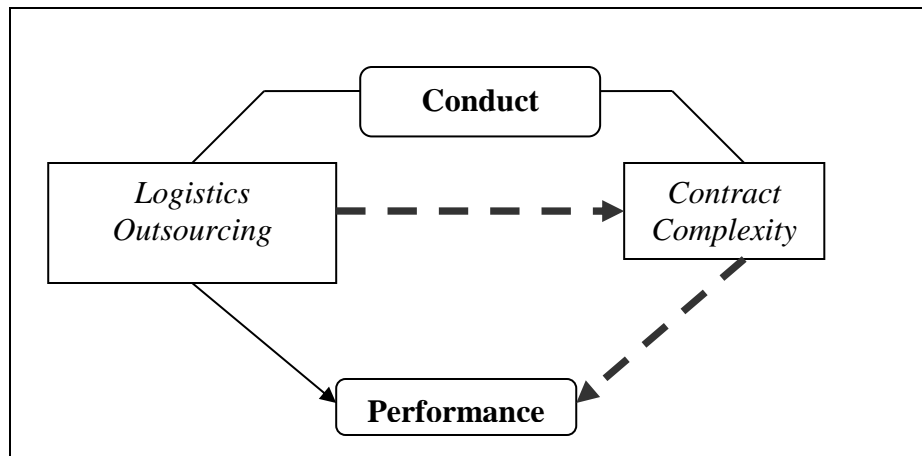


Figure 1: Conceptual model and hypothesized relationships

6.2. Logistics outsourcing and performance

Companies possess resources and skills forming the base of the competitive advantage, but no company holds the set of these attributes to contribute effectively (Barney, 1996). The resource-based theory postulates that the strategic alliance, as the logistic outsourcing, is a way by which companies share their resources and capacities (Kedia and Lahiri, 2007).

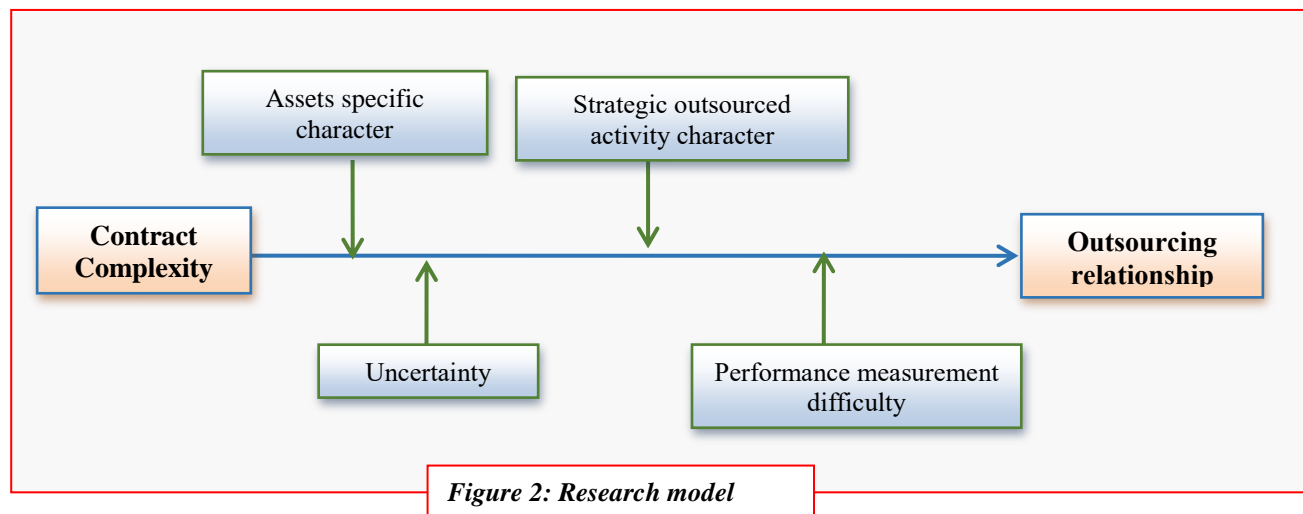
Companies are, through the outsourcing of their logistic activities, in measure to benefit by betting on the expertise of the LSP in the base of high-level skills, which end up in integrated and innovative solutions (Kedia and Lahiri, 2007). For example, Knemeyer and al. (2003) underline that companies are able of reducing the cost and of improving the customer service through the outsourcing of their logistic activities. Cho and al. (2007) Also noticed that the outsourcing contributes to increase the logistic capacity of a company, which allows it to design strategies improving the business performance (Handley, 2012).

6.3. Logistics outsourcing and contract complexity

Although there are advantages of the logistics outsourcing, however, the outsourcing is subjected at the exchange risk. Generally, three types of exchange risk are defined as follows: the assets specificity, the performance measurement difficulties and the uncertainty (Williamson, 1981, 1985, 1991). Globally, the exchange risk occurs because the LSP can be opportunist in their conduct.

The exchange risks require the contractual complexity (Williamson, 1991). Thanks to the contractual complexity, the users can better control the LSP performance and make sure that they supply them a successful service, with essential resources and innovative solutions, to face the uncertainties and increase consequently their business performances (Selviaridis and Norrman, 2014).

Yet, the relationship of logistics outsourcing is moderated by the specific character of the necessary assets for the execution of the outsourced activity, the uncertainty which surrounds it, its strategic character as well as the difficulty of measurement of performance as shown in figure 2.



6.4. Asset specific character

When assets used to realize an activity are little specific, there is a large number of potential providers. When the selected provider knows that he can be easily replaced by another one, he should not rather behave in an opportunist way with his customer. On the contrary, the more assets used to realize an activity are specific, the more the number of potential providers is limited. The selected provider can then benefit from this situation of "small number" to adopt an opportunist behavior without fear of contract breach.

When assets used to realize an activity are strongly specific, the elected provider can be tempted to renegotiate the contract. The company will then should rather agree to renegotiate than to change the provider. Consequently, the more or less specific character of assets used to realize an activity should strengthen the impact of the time passed since the contract signature.

6.5. Uncertainty surrounding the outsourced activity

The logistic outsourcing is characterized by the existence of a hierarchical relationship, as summarizes it Conner and Prahalad (1996). The existence of such a hierarchical relationship confers a very big flexibility on the vertical integration (Williamson, 1991a). On the contrary, the outsourcing rests on a contractual relationship which requires to plan ex ante the maximum of contingencies susceptible to occur during the contract life expectancy (Hooper, 2008). These contingencies must be then integrated into the contract (McLeod and Malcomson, 1993). However, any contract remains irreparably incomplete for two main reasons. On one hand, the rationality limited of the individuals prevents them from being able to plan the set of the events susceptible to occur during the contract life expectancy (Williamson, 1975). On the other hand, the opportunism involves that the contractual clauses will never be unambiguous and that their interpretation will be frequently difficult (Hypko, Tilebein and Gleich, 2010a).

The more the uncertainty which surrounds an outsourced activity is raised, the more it will be difficult to draft a complete contract and the more the gap between the contract contents and the environment will quickly increase. Consequently, the uncertainty should strengthen the impact of the elapsed time since the contract signature on the number of renegotiations.

7. Key Performance Indicators Implementation

We thought of determining a number of Key Performance Indicators (KPI), to support our model proposal. These indicators are completed by "Performance Attributes" predefined in the SCOR model (Supply Chain Council, 2001), and at the level of whom the outsourcing intervenes in an explicit or implicit way. We also distinguished the quantitative and qualitative indicators. We finally synthesize, in **tableau 1**, all the KPI identified and validated with the technical department of The **VOIE EXPRESS**, which is a logistic service provider specialized in storing, picking, preparation and transport in Casablanca, Morocco.

Tableau 1: Performance Indicators

Indicator	Character	Type
The provider capacity is reserved for the company: the customer buys a precise volume of the space which the provider reserves him but if he does not occupy all this space, he has to pay a minimum.	Quantitative	Managerial
Reliability: deliver the command in time, honor the commitments	Qualitative	
Flexibility: adapt itself to the customer needs	Qualitative	
rapidity of the information flows: management by an ERP shared with the customer	Qualitative	
Number of the provider quality certificates: according to the requirements of the customer, for example, a customer requires an English standard, the customer returns his specifications (camera, no storing on the ground, etc)	Quantitative	Quality
Rate of conformity with regard to a quality standard: the standard differs according to the customers at the international level	Qualitative	
Company satisfaction rate	Qualitative	
Company retention rate	Qualitative	
Rate of undertaken complaint: setup a Department for treatment and following up the complaints	Quantitative	
Provider service level: realized/required	Quantitative	Reliability
Lead Time	Quantitative	
Provider financial capacity	Qualitative	Cost
Company logistic costs	Quantitative	
Total provider cost	Quantitative	

The implementation of KPI is inevitable within the framework of the logistics outsourcing. But the most mattering is to liven up these indicators. It is necessary to understand the non-performance causes. Dashboards by indicators and over a given period must be used, and every problem met in the logistics outsourcing process must be listed and explained. This allows voucher following up of the LSP performance and to regularly review with him. In parallel, the evaluation criteria must be decided together with the LSP to define realistic performances. It is essential to make the LSP participate in the logistics outsourcing evaluation, because he also contributes to improve it.

8. Conclusion

Undoubtedly, in the face of the fast multiplication of the outsourced activities, the reactivity and the performance of the logistic service are partially registered in a certain formalization of the relationship, developing new problems of management of the LSP. At the same time, the questions of the contract complexity and the logistic service performance are a currently interesting perspectives of research.

At first, we looked for a theoretical lighting in this problem and we were able to raise the necessity of opening the researches on the implementation of the contractual device between a contractor and his LSP. Therefore, this work has for objective to stick the finger at the advantages that dresses a management personalized by the LSP at the same time the role of the contract and the contractual devices to be set up in the optics to protect itself of opportunist behavior of the actors. An introduction in a new problem of research, worth knowing the way to create a satisfactory relationship with the LSP is necessary.

Finally, our objective is to reveal another dimension research in the field of logistics outsourcing by analyzing the contractual complexity and its influence on the performance of the logistic service. By making this tour, we believe to have managed to bind the literature of the contractual complexity with the literature of logistic outsourcing. Our challenge for the following research will consist in spreading the frame worked out to answer the question to know how multiple networks of outsourcing and their associated contractual arrangements, which is another shape of the contractual complexity, influences the performance within these networks....

References

- Argyres, N., and Mayer, K., Contract design as a firm capability: An integration of learning and transaction cost perspectives. *Academy of Management Review*, 32(4), 1060- 1077, 2007.
- Barney, J., Firm resources and sustained competitive advantage. *Journal of Management*, 17 (1), 99–120, 1991.
- Barthélémy J., La dimension contractuelle de l'outsourcing : analyse théorique et étude de 15 cas informatiques français , Communication au Congrès de l'Association Internationale de Management Stratégique, mai 1998.
- Bellingkrodt, S., and Wallenburg, C. M., The role of external relationships for LSP innovativeness: A contingency approach. *Journal of Business Logistics*, 34(3), 209-221, 2013.
- Boissinot A., Le management des prestataires : vers une approche personnalisée de la relation?», XVIIème Conférence Internationale de Management Stratégique, Nice Sofia Antipolis, 2008.
- Boulay, J., and Isaac H., Contrôler les réseaux d'entreprises avec les technologies de l'information, *Revue Française de Gestion*, N° 170, pp. 103-115, 2007.
- Bouquin, H., Les fondements du contrôle de gestion, Presses universitaires de France, Coll. Que sais-je ?, 2ème édition, Paris, pp. 127, 2005.
- Cao, Z., and Lumineau, F., Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, 33-34(January), 15-42, 2015.
- Cho, J.K., Ozment, J., and Sink, H., Logistics capability, logistics outsourcing and firm performance in an e-commerce marke. *International Journal of Physical Distribution & Logistics Management*, 38(5), 336-359, 2007.
- Coeurderoy, R., and Quélin, B., La théorie des coûts de transaction : fondements théoriques et applications managériales, *Repenser la stratégie : Fondements et Perspectives*, H. Laroche et J.-P. Nioche (éds.), Vuibert, Paris, p. 26-60, 1998.
- Conner, K., and Prahalad, C.K., A resource-based theory of the firm: knowledge vs. opportunism, *Organization Science*, 7, 5, 477-501, 1996.
- Conso, P., and Hemicci, F., L'entreprise en 20 leçons, Dunod, 4ème édition, Paris, 490p, 2006.
- Frankel, R., Whipple, J.S. and FRAYER, D.-J., Formal versus Informal Contracts: Achieving Alliance Success, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, n° 3, pp. 47-63, 1996.
- Handley, S. M., The perilous effects of capability loss on outsourcing management and performance. *Journal of Operations Management*, 30(1), 152-165, 2012.
- Hesterly, W., Liebeskind J. and Zenger T., «Organizational Economies: An Impending Revolution in Organization Theory? », *Academy of Management Review*, Vol. 15, n° 3, pp. 402-420, 1990.
- Holweg, M., Disney, S., Holmstrom, J., and Smaros, J., Supply chain collaboration: making sense of the strategy continuum. *European Management Journal*, 23(2), 170-181, 2005.
- Hypko, P., Tilebein, M., and Gleich, R., Benefits and uncertainties of performance based contracting in manufacturing industries: An agency theory perspective. *Journal of Service Management*, 21(4), 460-489, 2010a.
- Ishizaka, A. and Blakiston, R., The 18C's model for a successful long-term outsourcing arrangement. *Industrial Marketing Management*, 41(7), 1071-1080, 2012.
- Jabir, A. and Jawab, F., Risk Matrix Model Applied to the Outsourcing of Logistics' Activities », *Journal of Industrial Engineering and Management*, 8(4): 1179-1194, 2015.
- Jabir, A. and Jawab, F., Towards the risk modeling of outsourcing logistics: Case of mass market retailing », *International Journal of Application or Innovation in Engineering & Management*, Volume 2, Issue 10, October 2013.
- Jawab, F. and Bouami, B., La démarche supply chain management, enjeux et stratégies, cas du commerce électronique et de la grande distribution. *Revue des sciences de gestion– France*, 2003.

- Jawab, F. and Bouami, D. and Talbi, A., Le réapprovisionnement continu dans les réseaux industriels, vers une meilleure gestion des interfaces de la supply chain. *Revue des sciences de gestion – France*, 2004.
- Barthélemy, J. and Bertrand, V.Q., Complexity of Outsourcing Contracts and Ex Post Transaction Costs: An Empirical Investigation. *Journal of Management Studies*. Volume 43, Issue 8, pages 1775–1797, December 2006.
- Kedia, B. and Lahiri, S., International outsourcing of services: a partnership model. *Journal of International Management*, 13: 22-37, 2007.
- Knemeyer, A. M., Corsi, T.M., and Murphy, P.R., Logistics outsourcing relationships: customer perspectives. *Journal of Business Logistics*, 24(1), 77-109, 2003.
- Lambert, D.M., Knemeyer, A.M., and Gardner, J.T., Supply chain partnerships: model validation and implementation. *Journal of Business Logistics*, 25(2), 21-42, 2004.
- Leung, L. C., Wong, W. H., Van Hui, Y., and Wan, Y., Managing third-party logistics under uncertainty: A decision scheme and managerial implications. *International Journal of Production Economics*, 145(2), 630-644, 2013.
- Lieb, R.-C., *Third Party Logistics: a Manager's Guide*, JKL Publications, Houston, 2000.
- McLeod, W. and Malcomson J., Investments, Holdup, and the Form of Market Contracts. *American Economic Review*, vol. 83, n° 4, p. 811-837, 1993.
- Min, S., Roath, A.S., Daugherty, P.J., Genchev, S.E., Chen, H., and Arndt, A.D., Supply chain collaboration: what's happening?. *The International Journal of Logistics Management*, 16(2), 237-256, 2005.
- Lavastre, O., Gunasekaran, A., Spalanzani, A., Supply Chain Risk Management in French Companies. *Decision Support Systems*, vol. 52, n°4, pp. 828-838, 2012.
- Parkhe A., « Partner Nationality and the structure performance relationship in strategic alliances », *Organization Science*, vol.4.2, 1993.
- Quélin, B., Externalisation stratégique et partenariat : De la firme patrimoniale à la firme contractuelle?. *Revue française de gestion* n° 143 pages 13 à 26, 2003.
- Quélin, B., *Les Frontières de la firme*, Coll. Gestion, Économica, Paris, 2002.
- Sanchez, O. P., Cruz, M. A., and Goes, P. B., Success of IT outsourcing contracts: Effects of the complexity of the activity, relational governance and structure of incentives. In *35th International Conference on Information System*, Auckland, NZ, 2014.
- Sauvage, T., Quelles relations contractuelles pour l'externalisation logistique?/ *Revue d'économie industrielle*. Vol. 106, pp. 69-91, 2004.
- Selviaridis, K., and Norrman, A., Performance-based contracting in service supply chains: A service provider risk perspective. *Supply Chain Management: An International Journal*, 19(2), 153-172, 2014.
- Selviaridis, K., and Wynstra, F., Performance-based contracting: A literature review and future research directions. *International Journal of Production Research*, 53(12), 3505- 3540, 2015.
- Seu, K. and Jose, T., Logistics Outsourcing, Contract Complexity and Performance of Australian Exporters. *9th Global Conference on Business & Economics*, October 16-17, Cambridge, UK, 2009.
- Sohail, M.S. and Sohal, A.S., The use of third party logistics services: a Malaysian perspective. *Technovation*, 23, pp. 401-408, 2003.
- Sumo, R., van der Valk, W., Duysters, G., and van Weele, A., Using performance-based contracts to foster innovation in outsourced service delivery. *Industrial Marketing Management*, 59(11), 12-24, 2016.
- Supply Chain Council, (2001) « Supply Chain Operations Reference-Model », SCOR Version 5.0.
- Wallenburg, C. M., Innovation in logistics outsourcing relationships: Proactive improvement by logistics service providers as a driver of customer loyalty. *Journal of Supply Chain Management*, 45(2), 75-93, 2009.

- Wallenburg, C. M., Cahill, D. L., Goldsby, T. J., and Knemeyer, A. M., Logistics outsourcing performance and loyalty behavior: Comparisons between Germany and the United States. *International Journal of Physical Distribution & Logistics Management*, 40(7), 579-602, 2010a.
- Wang, L., Yeung, J. H. Y., and Zhang, M., The impact of trust and contract on innovation performance: The moderating role of environmental uncertainty. *International Journal of Production Economics*, 134(1), 114-122, 2011.
- Williamson, O. E., *Les Institutions de l'économie*, Inter Editions, Paris, 1994.
- Williamson, O.E., *Markets and Hierarchies: Analysis and Antitrust Implications*, New York, Free Press, 1975.
- Williamson, O.E., Comparative economic organization: the analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36, 269-296, 1991.
- Williamson, O.E., *The Economic Institutions of Capitalism*. Free Press, New York, 1985.
- Williamson, O.E., The economics of organization: the transaction cost approach. *American Journal of Sociology*, 87, 548-577, 1981.
- Zeynep, H., and Higgins, M., The effect of contractual complexity on technology sourcing agreements. MPRA Paper No. 4979, Georgia Institute of Technology, 2007.

Biographies

Jabir Arif graduated as a State Engineer from the National School of Applied Sciences at Abdelmalek Essaâdi University. He completed his PhD's degree in Industrial Engineering and Logistics at Sidi Mohamed Ben Abdellah University. He began his career as a Production Planner within a multinational company operating in the automotive wiring harness. Then he joined the Ministry of Public Services and Modernization of Administration where he was in charge of the national major projects. He is currently serving as an Assistant Professor at Abdelmalek Essaâdi University. His primary research interests are in the field of Supply Chain Management, Outsourcing of Logistic Activities, Risk Assessment and Modelling. His passion is to make a change in people's lives and Education is one of the important aspects that can make a difference.

Imane IBN Farouk from MOROCCO, is currently serving as an Assistant Professor in National School of management and trade of EL JADIDA (ENCG), graduated with doctorate degree in hospital logistic from SIDI MOHAMED BEN ABDEALLAH UNIVERSITY in FES in 2014, and also a diploma of advanced studies in Engineering Logistics from Hassan II in Casablanca university, MOROCCO, in 2004. Ms. Imane was also a consultant in supplier logistics in the automotive sector and host of supplier performance since 2005.

Fouad Jawab is a professor of higher education at the College of Technology of Sidi Mohamed Ben Abdellah University - Fez in Morocco. He is director of the research laboratory in "International Management, Decision and Logistics" (MIDLO)". He is interested in management sciences and industrial engineering. He specializes in the field of logistics, transport, and Supply Chain Management. He is the founder and coordinator of the International Colloquium of Logistics and Supply Chain Management "LOGISTIQUA".