

**Logistics outsourcing and performance management:
Exploratory study of ten Moroccan major agri-food companies**

**Externalisation de la logistique et pilotage de la performance:
Etude exploratoire de dix grandes entreprises de l'industrie
agroalimentaire au Maroc**

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Abstract

The literature on the logistics outsourcing phenomenon, mainly focuses on the study of its benefits and risks, without giving much interest in exploring its mediating role in improving companies' logistics performance. Therefore, this work attempts to analyze the determinants of logistics outsourcing and apprehend its contributions to improving companies' logistics performance. This paper had based on a qualitative approach of 10 Moroccan major agri-food companies; we note that the logistics outsourcing in Morocco had motivated, first, by operational factors, related to the objectives of reduction and cost control followed by the search for the improvement of the outsourced function's performance. Second, by the strategic factors, importance is giving to the reallocation of resources and refocusing on the core business. Thus, as part of this exploratory study, the outsourcing companies report a very high degree of improvement of logistics indicators after outsourcing.

Key words: Outsourcing logistics, Explanatory factors, Risks, Logistics performance, Development measures.

Résumé

La littérature sur le phénomène de l'externalisation de la logistique se concentre principalement sur l'étude de ses avantages et ses risques, sans donner beaucoup d'intérêt à l'exploration de son rôle médiateur dans l'amélioration de la performance logistique de l'entreprise qui l'adopte. Par conséquent, ce travail tente d'analyser les déterminants de l'externalisation de la logistique et d'appréhender ses apports en termes de performance logistique. Ce présent article se base sur une approche qualitative portant sur dix grandes entreprises de l'industrie agroalimentaire au Maroc; nous notons que l'externalisation de la logistique au Maroc est motivée d'abord, par des facteurs opérationnels liés aux objectifs de réduction et de maîtrise des coûts, suivis par la recherche de l'amélioration de la performance de la fonction externalisée. Deuxièmement, par des facteurs stratégiques, l'importance est donnée à la réaffectation des ressources et au recentrage sur le cœur de métier. Ainsi, dans le cadre de cette étude exploratoire, les entreprises externalisatrices témoignent d'une très grande amélioration des indicateurs logistiques après l'externalisation de leurs fonctions logistiques.

Mots clés: Externalisation logistique, Facteurs explicatifs, Risques, Performance logistique, Mesures de développement.

Introduction

Economic developments characterized by the globalization of markets, more competition, instability, and volatility of demand have led to a profound change in the company's organizational structure. The company has moved from vertical integration and internally diversification of activities, in the same organization, towards a refocusing mode on core business and outsourcing (Zouggar, 2009). On this basis, outsourcing has become a strategic approach that transforms the structure, organization and human resources of the company that adopts it (Fimbel, 2006). If traditionally outsourcing's principal objective was to reduce the costs, today, companies resort to this practice to create value for their shareholders. Outsourcing must enable companies to focus their financial and managerial resources on value-creating activities (Quinn & Hilmer, 1994) and transfer workers and equipment to specialized service providers to lighten the balance sheet and increase their profitability (Barthélemy, 2004). However, outsourcing is not always advantageous. Mainly logistical activities still internally realized, other companies can decide, at any time, to re-internalizing an activity previously outsourced, for a strategic goal or in case of outsourcing failure. Outsourcing's contribution to improving logistics performance had conditioned by several determinants (Aubert, and al., 1996). The literature suggests that these determinants can be grouped into two categories: first one, the characteristics of the outsourced activity, mainly proximity to the core business and uncertainty (Mir, 2018), and second one, the provider's skills, particularly the quality of contract management and the quality of relationship with the provider (El Yamani & Moutmihi, 2018).

This paper tries to produce an exploratory qualitative study, of 10 Moroccan major agri-food companies, to answer this problematic: what factors explain why a company will choose to outsource its logistics activity rather than maintaining it internally knowing that other companies are showing a cautious position on the idea of outsourcing?

Thus, the interest of our investigation is to apprehend the current state of outsourcing logistics in Morocco, its explanatory factors, its risks, to evaluate its mediating role in the improvement of the logistics performance of the outsourced functions and while highlight the various measures necessary for its development in Morocco.

As such, this paper will focus on four axes: the first one will present our research methodology. The second will explore a literature review of logistics outsourcing, its explanatory factors and its contribution to improving logistics performance. The third axis

will highlight the main results of our exploratory study these results, will be discussed on the last axis.

1. Research Methodology

To answer our research problematic this paper opts for a qualitative study of multiple cases, using semi-structured interviews with ten Moroccan major agri-food companies. Considering, the absence of studies, on understanding the logistics outsourcing phenomenon and its impact on logistics performance in the agri-food industry in Morocco, it proved necessary to explore the sector using a qualitative approach. As objectives and work process, this study tries to describe, explain and apprehend the situation of the logistics outsourcing as well as to search its determinants and its role in improving the logistics performance of Moroccan agri-food companies.

Our qualitative study had composed of several stages. As a first, we have created our sample of actors, shown in Table 01 for the interviews; the choice of this sample is non-probabilistic. Without compromising the scientific aspect of our methodology, the collected information's processing will be confidential. These actors include companies belonging to different branches of the AFI (Dairy Industry, Beverage Industry, Meat Industry, Cereal Processing Industry.....) and different structures (national, multinational). In a second step, we interviewed 10 logistics managers using a semi-structured interview guide that was developed based on our literature review. This type of interview allows addressing the research theme while maintaining the freedom and the flexibility of the respondents (Giordano, 2003).

Table 1 : Exploratory empirical filed

	Industrial branch	Structure	Outsourcing	Interviewed
Case 1 Company « Cp1 »	Distribution, Meat Industry	Moroccan	No	Logistics Manager
Case 2 Company « Cp2 »	Cereal processing industry	Moroccan	Yes	Logistics Manager
Case 3 Company « Cp3 »	Dairy industry	Multinational	Yes	Logistics Manager
Case 4 Company « Cp4 »	Beverage industry	Multinational	Yes	Supply chain Director
Case 5 Company « Cp5 »	Food industry	Moroccan	No	Logistics Manager
Case 6 Company « Cp6 »	Beverage industry	Multinational	Yes	Regional Logistics Manager
Cas 7 Company « Cp7 »	Dairy industry	Multinational	Yes	Logistics Manager
Cas 8	Groundfish	Moroccan	No	Logistics Manager

Company « Cp8 »	industry			
Cas 9 Company « Cp9 »	Dairy industry	Moroccan	No	Logistics Manager
Cas 10 Company « Cp10 »	Industry of greasy substances	Moroccan	No	Finance Director

Source : Authors

The interview guide developed consisted of 4 phases:

- After introducing the study's subject, its usefulness and its objectives, we asked the interviewed about their vision on the logistics outsourcing trend in Morocco;
- Then, the discussion focused on the company's framework data, while evoking its structure, the reasons which push the company to opt for the logistics outsourcing and the risks inherent to this practice;
- After that, the interview had oriented towards the management of the company's logistics performance and the contributions of the logistics outsourcing strategy;
- Finally, the last phase focused on the future vision of technological, institutional and regulatory developments in logistics services and the measures to be recommended to develop logistics outsourcing in Morocco.

The interviews' duration varied between 40 and 80 minutes. During these interviews, the interviewees answered all our questions but the discussion focused on the determinants of logistics outsourcing and its impact on the company's logistics performance. The resulting speech had analyzed through qualitative content analysis (Thiétart and al., 2014).

Each interview was treated according to both vertical (case-by-case) and horizontal (question-by-case) analysis while comparing the different responses.

The study's results will discuss after the presentation of a literature review of logistics outsourcing.

2. Logistics outsourcing: Literature review

To be able to conduct this qualitative study on logistics outsourcing, it's necessary to present its definition, to bring a deeper understanding of this concept, then to question its theoretical foundations.

2.1. Logistics outsourcing: Definition

Overall, outsourcing is the fact of entrusting the management of an activity to an external provider after having done it internally (Barthelemy and Donada, 2007).

As for logistics outsourcing, it is from the 1990s that it began to emerge. Fulconis and al. (2011) argue that logistics outsourcing is «*a widely circulated maneuver that corresponds to the logic of deep restructuration of value chains leading to the formalization of long-term contractual relationships with partners having complementary skills and resources*». For these authors, the logistics outsourcing restructures value chains and involves the commitment of the company and its provider in a generally sustainable relationship.

Thus, mainly researchers had examined the concept of logistics outsourcing (Lieb & Randall, 1996, Langley, and al., 1997, Murphy & Poist, 1998, Skoejtt-Larsen, 2000), according to them, the logistics outsourcing is the transfer of the management, from all or part of a supply chain previously provided internally to an external service provider, with the possible transfer of resources, the objective is performance improving (Franzil, 2009).

According to this definition, outsourcing concerns a logistics function previously realized internally to improve its performance. Hence the importance of evaluating its impact on the outsourced activity's logistics performance.

2.2. Logistics performance : Definition

The concept of performance previously had been linked to financial criteria. In 1980, is defined as a function that took into account costs, quality, and deadlines (Hronec, 1995). Since then, its evaluation requires integrating notions of efficiency and effectiveness. Performance is the set of measures used in quantifying the efficiency and effectiveness of action (Shepherd & Günter, 2010).

Similarly, logistics performance had defined as the efficiency and effectiveness of an action (Lo, and al., 2009). To be effective a logistics chain, must be controlled and well managed which is why its performance evaluation is both qualitative and quantitative. Indeed, supply chain management requires monitoring and measurement of performance. Performance measurement is a tool that helps to identify the contributions that each company hopes to receive in return for an adoption strategy. As part of a strategy, the company relies on mainly performance indicators to measure the effectiveness or efficiency of all or part of the processes related to a set objective (Gruat La Forme-Chretien, 2007). In logistics, performance measurement indicators are put in place allowing decision makers in supply chain management (SCM) to set the objectives to had achieved for a given time (François, 2007). A supply chain had considered as a process offering good quality services, as soon as

possible and at the lowest cost, to satisfy the customer and guarantee its competitiveness in the market.

Indeed, the literature review shows the need for an integrated system of measurement indicators to evaluate the performance of the supply chain. For this reason, several research studies tried to propose global supply chain performance indicators and generated rich literature. Thus, mainly reverential indicators had established: the ABC-ABM method, the BSC method, the SCOR model and the ECOGRAI method. Performance indicators are well represented and formulated, in fact, these standards still very difficult to use to evaluate the company's logistics performance.

The mentioned models present a large number of performance measurement indicators, to simplify, this study adopts the model established by Rodrigues, and al., (2004). These authors have identified the most relevant logistic performance measurement indicators (Abouddrar & Batrich, 2014), of which there are six: Logistical costs; Speed of delivery; Delivery reliability; Delivery capacity; Stock rotation rate; Customer satisfaction.

After focusing on the main concepts used in our study, we present, in the following paragraph, the theoretical foundations of logistics outsourcing.

2.3. Logistics outsourcing: theoretical foundations

The majority of researchers, in the management sciences, use two theoretical approaches to explain logistics outsourcing decision.

The first is that of Coase (1937), Williamson (1975, 1985, 1996), it is the most advanced theoretical approach to the question of the choice, for a company, between doing itself (internalization) or third-party "do-it-yourself" (outsourcing), based on the tradeoff between production cost differentials and governance costs between the hierarchy and the market (Mir, 2018). Other approaches (agency theory, stakeholder theory, contingency theory and neo-institutional theory) also point to complementary ways of analysis (Meftah & El Hadad, 2017, Mir & Balambo, 2018). It seems to us, therefore, that the most motivating factors for a logistics outsourcing operation had repaired in these two theoretical approaches that we use to conduct our qualitative analysis, and had thus illustrated in the following table (2):

Table 2: The explanatory factors of the logistics outsourcing decision

Mobilized theories	Explanatory factors	Authors
Transaction costs theory	<p>Operational factors:</p> <ul style="list-style-type: none"> -Reduction and cost control; -Transformation of fixed costs into variable costs; -Injection of liquidity following the asset recovery -Improved performance of the outsourced function; -Respect rules and standards of practice; -Respect for deadlines. 	Razzaque & Shang, (1998); Chanson, G. (2003); Quélin & Duhamel, (2003); Barthélemy (2004); Ivanaj & Masson-Franzil, (2006); Jiang & Qureshi, (2006); Power, & al., (2007); Sanders & al., (2007). Quélin (2007); Barthélemy & Donada, (2007); Solakivi & al., (2011).
Resources based theory	<p>Strategic factors:</p> <ul style="list-style-type: none"> -Reuse of resources; -Recentring on the core business; -Structure relief and flexibility gains; -Response to an internal need; -To deal with the uncertainty of the environment 	Razzaque & Shang, (1998); Quélin & Duhamel, (2003); Barthélemy (2004); Quélin (2007); Barthélemy & Donada, (2007); Boissinot, A. (2010).

Source: Authors

Although most of the research work on outsourcing addresses, in particular, the benefits of an outsourcing strategy. Other researchers differ in describing the risks or the obstacles of outsourcing logistics. The literature has allowed us to identify the risks presented in the table below (Table 2):

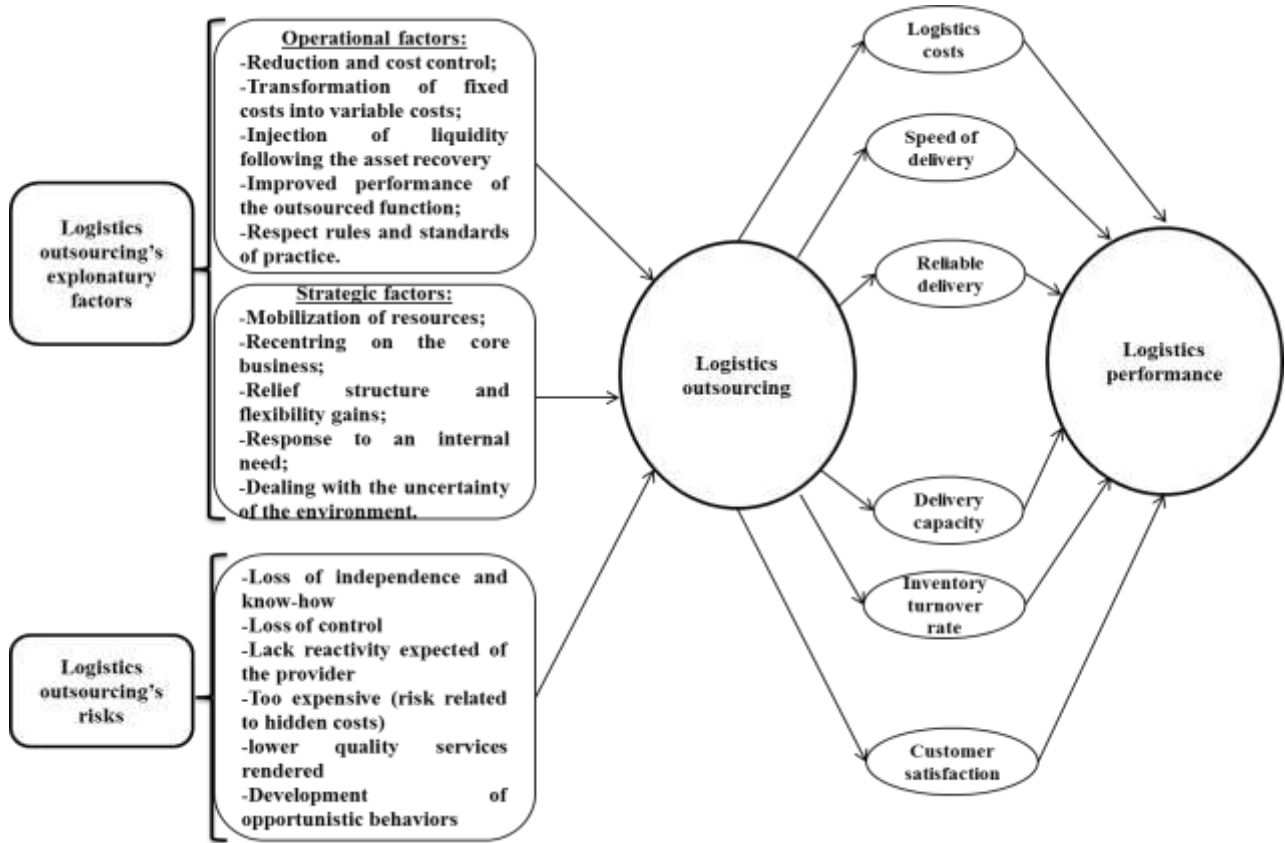
Table 3: Risks related to the logistics outsourcing process

Authors	The risks of outsourcing logistics
Barthélemy (2007) ; Agnadal & Nordin (2009)	Loss of autonomy
Quélin, B. (2007) ; Médan and al., (2008)	Loss of control
Barthélemy (2007); Lebraty, J. F. (2007)	Lack of responsiveness
Quélin, B. (2007); Europe, B. O. (2008)	Too expensive (Risk related to hidden costs)
Quélin, B. (2007) ; Guiennet & Sauvage (2009)	Services rendered of lower quality
Paché & Médina (2007) ; Abbad & Boissinot (2009)	Development of opportunistic behaviors

Source: Authors

According to these theoretical contributions, this qualitative analysis aims to apply the following research model (figure 1) in Moroccan agri-food sector.

Figure 1: Research model



Source: Authors

The results of this study will be discussed in the following paragraph.

3. Result of the qualitative study

The qualitative analysis evaluates (1) the general vision, of those responsible, of the logistics outsourcing phenomena and its tendency in Morocco, explains (2) the determinants of the logistics outsourcing, identifies (3) the mediating role of the logistics outsourcing in improving the company's logistics performance and finally asks (4) about the different measures to develop the logistics outsourcing in Morocco.

3.1. Logistics outsourcing in Morocco: tendency

Logistics outsourcing is an operation that continues to develop around the world.

In Morocco, through the actors of the logistics service sector, this strategy receives a significant interest. The majority of respondents confirm that logistics outsourcing in Morocco is developing.

The managers of the outsourcing companies (Cp 2, 3, 4, 6, and 7) consider that logistics outsourcing is developing, despite some dysfunctions related to the regulatory framework and the quality of training in logistics.

« ... *The logistics outsourcing in Morocco is under development despite the lack of compliance with regulations, the lack of suitable transport for each type of product and the training of competent professionals*».

Source: Interviewed the company Cp2.

« *According to my vision, logistics outsourcing in Morocco is developing, but it is necessary to move from first party logistics to third-party logistics and developing the regulatory framework, especially for refrigerated products.*».

Source: The interviewed of the company Cp3.

The managers of the companies that carry out their logistical functions internally (Cp 1, 5, 8, 9 and 10), they mention the role of the State in terms of investment in logistics platforms and tax subsidies even before to confirm the importance of new technologies in improving the outsourced function.

« *According to my experience, the government has to invest in the logistics sector and reduce taxes. Also, the new technologies will certainly change the quality and efficiency of the outsourced function*».

Source: The interviewed of the company Cp5.

«*Of course, the logistics outsourcing in Morocco is developing, except it should strengthen the government's controls, build distribution platforms and develop the mentality of logistics actors to meet the technological and regulatory needs of the logistics function* ».

Source: The interviewed of the company Cp10.

The managers' declarations, of the ten companies, are concretized in three elements:

- The regulatory aspect and professional training: the regulation in the logistics sector has a crucial role in developing logistics outsourcing strategy (Cp 2, 3 and 4) as well as the improvement the logistics services quality require special skills hence the importance of logistics training (Cp 6 and 7);
- Government role in investment in logistics platforms (improve logistics functions, build distribution platforms Cp 1, 8 and 10) and tax subsidies (reducing taxes for new logistics providers Cp 5);
- The importance of new technologies in the development of logistics outsourcing (Cp5 and 9).

For the ten companies studied, according to the confirmations of the logistic managers, logistics outsourcing strategy is under development in Morocco, it did not take the deserved place, but it constitutes a commitment "voluntarist" and not an obligation for the company.

3.2.Determinants of logistics outsourcing in Morocco

The second part of the qualitative study focuses on the determinants of logistics outsourcing in Morocco. In this study, the determinants mean the reasons that push a company to opt for this practice and the risks inherent in this strategy.

According to the literature review¹, interviewees' views accord a crucial role of the operational factors to make a logistics outsourcing decision. Also, strategic factors significantly influence this decision.

All interviewees argue that logistics outsourcing can cause risks for the company. However, these risks may constitute, for some companies, obstacles to logistics outsourcing.

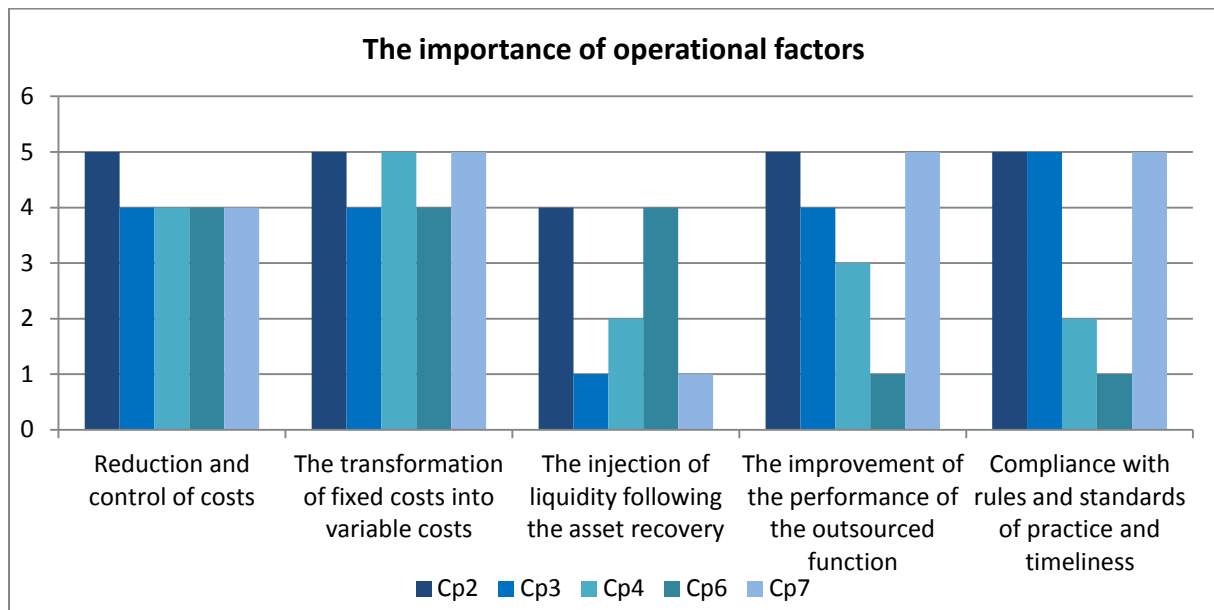
The determinants of logistics outsourcing, repairing in the literature review and taking into account the contextualization of the Moroccan terrain, do not all have the same weight among the different interviewees.

We first present the importance of operational factors, then, the strategic factors and finally the inherent risks of logistics outsourcing strategy.

In this sense, operational factors motivate logistics outsourcing (Reduction and control of costs, the transformation of fixed costs into variable costs, injection of liquidity following the asset recovery, improvement of the performance of the outsourced function, Compliance with rules and standards of practice and timeliness). The figure below presents the importance of these items for each company studied on a Likert scale from 1 to 5.

¹ Transaction cost and Resources based theories.

Figure 1: The importance of operational factors in logistics outsourcing decision



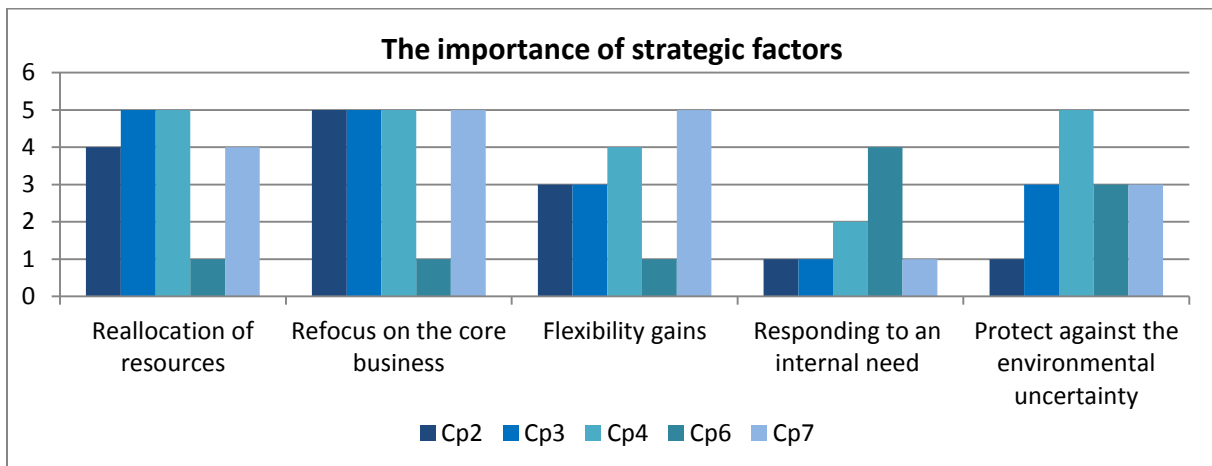
Source: Authors

Looking at the figure above, the cost reduction and the transformation of fixed costs into variable costs are the most motivating factors for logistics outsourcing operation, so all interviewees, accord scales 4 and 5 for these factors. Followed by, the search for the improvement of the performance of the outsourced function and the respect of the standards of exercise, quality, and deadlines. On the other hand, the injection of liquidity into the asset recovery was declared as a motivating factor by only two respondents.

Also, strategic factors push the company to opt for logistics outsourcing. The following items represent the main factors: reallocation of resources; refocus on the core business; flexibility gains; responding to an internal need and protect against the environmental uncertainty.

Figure (2) illustrates the importance of the strategic factors for each firm studied on a Likert scale from 1 to 5.

Figure 2: The importance of strategic factors in the logistics outsourcing decision



Source: Authors

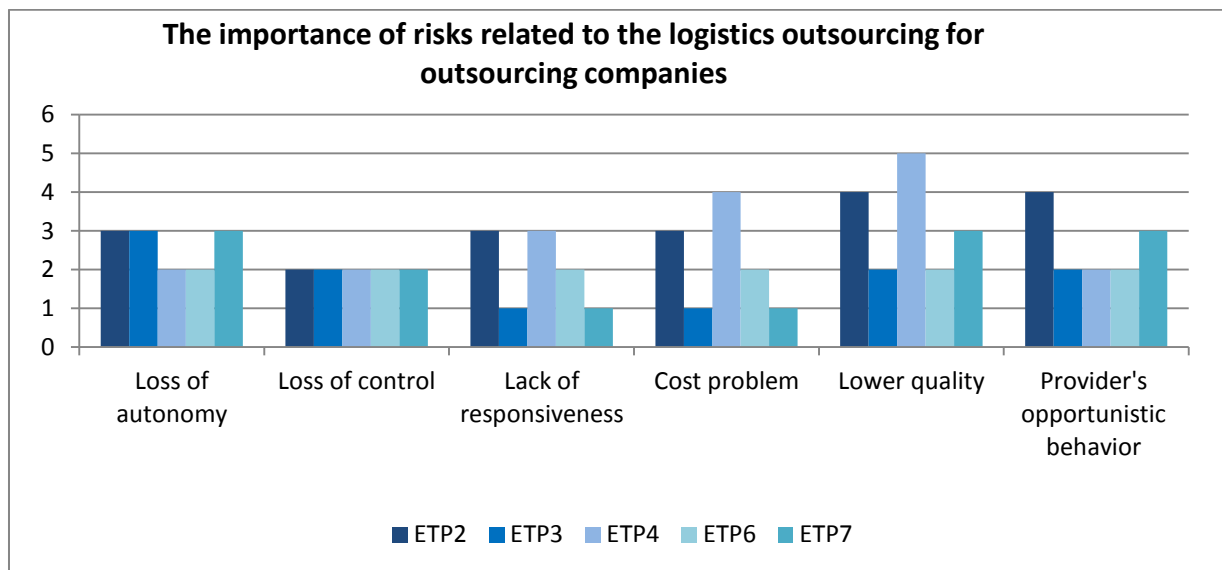
From figure (2), the reallocation of resources and refocusing on the core business are the more motivated factors in logistics outsourcing operation. Then, the search for flexibility ranks third.

Finally, before making the logistics outsourcing decision, it is necessary, for the company, to analyze the risks it can run. The outsourcing company can support these risks by the implementation of the various control measures, which can mitigate or eliminate its impact. However, these risks may constitute, for some companies, obstacles or hindrances to the logistics outsourcing.

Figure (3) presents the importance of logistics outsourcing risks for each outsourcing firm studied on a Likert scale from 1 to 5.

According to this figure, the outsourcing companies do not give much importance to these risks, since the majority of the interviewees attributed to these risks, the scales 3, 2 and 1. Nevertheless, Cp2 give the scale 4 to the lower quality risk and the provider's opportunistic behavior, for example, Cp4 accord scale 4 to the cost problem and scale 5 to the lower quality of logistics services.

Figure 3: The importance of risks related to the logistics outsourcing for outsourcing companies

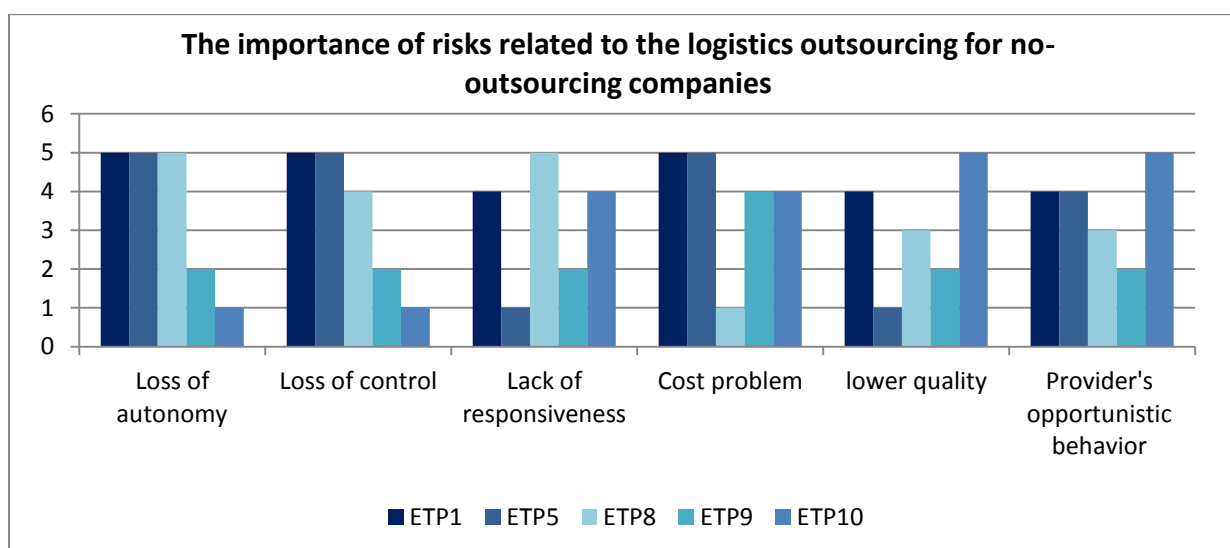


Source: Authors

For the internalizing companies, the risks, associated with the logistics outsourcing operation, are so important.

Figure (4) below, illustrates this caution towards the logistics outsourcing practice. Most of the respondents gave scales 4 and 5 to the different risks inherent in an outsourcing operation.

Figure 4: The importance of risks related to the logistics outsourcing for no-outsourcing companies



Source : Authors

3.3. Management of the logistics performance

Performance measurement is a tool that helps to identify the contributions that each company hopes to receive in return for an adopted strategy.

According to the literature review, the exploratory study showed that the companies studied are fully aware that logistics performance had based on purely logistics indicators.

The table below (Table 3) structures the information collected describing the degree of improvement of the logistics performance indicators over the last three years according to the vision of the ten interviews conducted:

Table 4: Level of improvement of logistics performance indicators

Company	Logistics performance indicators					
	Logistics costs	Delivery speed	Delivery reliability	Delivery capacity	Turnover rate stocks	Customer satisfaction
Cp1	++++	++++	++++	++++	++++	-
Cp2	++	+++	+++	+++	++	++
Cp3	+++	++++	-	++++	++++	++++
Cp4	+++	++	++	++	-	++
Cp5	-	+++	+++	+++	+++	++++
Cp6	++	++	++	++	++	++
Cp7	+++	++++	-	++++	++++	++++
Cp8	++	+++	+++	+++	+	+++
Cp9	++	+++	+++	+	+	+++
Cp10	+++	++	++	+++	-	-
Levels of improvement of the indicators: Very important (++++) ; Important (+++); Moderately <i>Important</i> (++); Slightly Important (+); Not at all important(-)						

Source: Authors

However, there are some disparities in the degree of improvement of each indicator over the last three years.

For outsourcing companies (Cp 2, 3, 4, 6, 7), only Cp 3 and 7 have reported a very high degree of improvement in all logistics indicators, except for the delivery reliability, while the others estimate a moderately important of improvement its logistics indicators.

The internalizing firms (Cp 1, 5, 8, 9 and 10), meanwhile, are giving moderately important improvement to its logistics indicators.

Thus, outsourcing companies gave more importance to the quality of the service provider to improve the outsourcing function's performance. Consequently, a good choice of the service provider positively impacts the improvement of the logistics performance indicators for the company.

The companies use several criteria to choose the right provider, table (4) shows the level of impact of provider selection criteria:

Table 5: Level of impact of the selection criteria of logistics providers

Company	Level of impact of the selection criteria of logistics providers							
	Provider notoriety	Guarantee time	Respect of distribution schedules	Provider financial situation	Traceability	Services quality	Reduced price	Flexibility
Cp2	+++	++++	++++	+++	++++	++++	++++	++++
Cp3	+++	+++	+++	++++	+++	+++	+++	++++
Cp4	++	++++	++++	+++	++	++++	+++	+++
Cp 6	+++	-	-	++	-	+++	+++	+++
Cp7	+++	+++	+++	++++	++++	+++	+++	+++

Level of impact of the selection criteria of logistics providers:

Very important (++++); Important (+++); Moderately Important (++); Slightly Important (+); Not at all important (-)

Source: Authors

Looking at the table above, it is clear that, the outsourcing companies gave great importance to the criteria of choice of provider, which shows the importance of this actor in the logistics outsourcing success.

3.4. Measures to develop the logistics outsourcing in Morocco

According to the vision of all interviewees, and in general, the development of logistics outsourcing logistics strategy in Morocco requires the implementation of four main measures: Legislation in the logistics sector, digitization, training and logistics platforms.

Companies (Cp 1, 2 and 3) discussed the issue of regulation and its importance in the development and encouragement of logistics outsourcing in Morocco.

« ...logistics outsourcing is a strategic operation, the development of the contract, which is the main component, and the legislation between the customer and the service provider is an important measure, to perpetuate the relationship between the two parties and guarantee the rights of each».

Source: The interviewed of the company Cp1.

« Outsourcing is a very broad subject, but from my point of view, I confess the importance of the government's support and its responsibility in regulation and oversee the respect of the legislation in the logistics sector».

Source: The interviewed of the company Cp2.

« The development of logistics outsourcing had based on the development of regulations in the sector, which allows the structuring of the logistics sector and subsequently the elimination of the informal».

Source: The interviewed of the company Cp3.

The companies Cp 2, 3, 4, 5, 6 and 9, accord importance of logistics digitalization, which proves the crucial role that digitalization, can play in the development of logistics outsourcing.

« According to my vision and my lived experience, the digitalization makes it possible to reinforce the development of the logistics outsourcing through the creation of a panoply of new digital services with high added value which makes it profitable for the client to outsource to a provider with new technologies».

Source: The interviewed of the company Cp2.

« The stronger integration of IT solutions including TMS: Transport Management System (TMS), among service providers, with instantaneous interaction with real constraints in the sector is necessary to encourage donors order to outsource their logistical functions».

Source: The interviewed of the company Cp3.

« ... Logistics digitization and the use of IT tools, such as the electronic trading system (EDI), by logistics operators, allow commercial transactions to be faster and more efficient. This technology facilitates communication, between various supply chain's actors, it will contribute to the improvement of the service provider and client company relationship».

Source: The interviewed of the company Cp4.

« ..Quite simply the logistics digitalization allows follow-up transactions in real time».

Source: Interviewed the company Cp5.

« From my own experience, the more the logistics provider integrates new technology, the more customer loyalty, and the new customer base».

Source: The interviewed of the company Cp6.

« The development of logistics outsourcing in Morocco relies mainly on technological innovations; the prime contractor alone cannot keep pace with technological developments in the logistics sector, while the logistics providers will be able to see that its main activity is the logistics services».

Source: The interviewed of the company Cp9.

The statements of the six companies on the importance of digitization in the development of logistics outsourcing revolve around two axes:

- Digitalization allows the creation of a wide range of new high value-added digital services, which encourages companies to outsource their logistics services (Cp2 and Cp3);
- The logistics digitalization makes business transactions faster and more efficient, it allows real-time monitoring, it contributes to improving the service provider/client company relationship (Cp4, Cp5, and Cp6);

According to the logistics managers' confirmations, for three studied companies (Cp1, 2 and 9), to develop the outsourcing operation it is recommended providing good quality of training for logistics' actors.

«Have logistic operators who know their job (in terms of quality and standards) and organize the linkage with the loading operators. Thus, the development of knowledge in logistics will contribute to the development of the entire sector».

Source: The interviewed of the company Cp1.

«...Encouraging firms to outsource their logistics services requires training from professionals to understand the business and upgrade knowledge in this area».

Source: Interviewed the company Cp2.

« Incentive mechanisms had based on raising the managers' companies on the benefits and benefits of outsourcing logistics through the realization of training and coaching workshops».

Source: The interviewed of the company Cp9.

Finally, the development of logistics platforms acquires particular importance, the companies' interviewees (Cp 1, 3, 5, 8 and 10) insist on the role of the creation of logistic platforms in the development of the logistics sector and the practice of the outsourcing.

«...I argue that the incentive taxes dedicated to the creation of logistics platforms will have a positive impact on the restructuring of the sector and therefore its development including the development of various value-added creative strategies example of the logistics outsourcing».

Source: The interviewed of the company Cp1.

« In the context of logistics strategies, the development of logistics hubs could encourage the creation of national champions and therefore the improvement of competitiveness nationally as well as internationally».

Source: The interviewed of the company Cp3.

« *Development of road infrastructures, especially direct access from motorways to logistics areas, makes logistics outsourcing a strategic decision with the aim of reducing costs*».

Source: The interviewed of the company Cp5.

« *.... Offer benefits for the acquisition and lease of land to create logistics platforms in consultation with professionals to identify their needs*».

Source: The interviewed of the company Cp8.

« *Development of exchange and sharing platforms, shared platforms, pooling, real-time monitoring of "its" goods constitute measures to improve the competitiveness of the logistics sector*».

Source: The interviewed of the company Cp10.

This exploratory study reveals that the companies studied are fully aware that the development of logistics outsourcing goes beyond traditional incentives, according to the logistics delivery market requirements, in terms of skills and competitiveness, companies recommend measures to restructure and improve the performance of the logistics sector and encourage outsourcing. Thus, regulations, digitalization, logistics training and the development of logistics platforms, which meet international standards, are therefore the main measures to be put in place to develop this sector.

4. Discussion of results

The exploratory study for ten major Moroccan agri-food companies, allowed us to identify the main determinants of a logistics outsourcing operation and to evaluate the impact of this operation on the performance logistics of its companies. The synthesis of the existing literature as well as the qualitative exploratory study, which we conducted, allow us to note that the phenomenon of outsourcing logistics in Morocco is in perpetual development. Thus, the strategy of outsourcing logistics is motivated, first, by operational factors, related to the objectives of reduction and cost control followed by the search for the improvement of the performance of the outsourced function and the respect of standards of practice, quality, and timeliness. As for the strategic factors, we note importance given to the reallocation of resources and refocusing on the core business as factors triggering a logistics outsourcing operation. Thus, the company is searching for quality, flexibility, and innovation, to anticipate changes in its environment.

Nevertheless, before the company embarks on an outsourcing process, it makes sense to carry out an analysis, however, on the risks that it can run. These risks must be carefully considered to mitigate or eliminate their impact. However, these risks may constitute, for some companies, hindering the outsourcing of logistics. As part of our exploratory study, we found that companies, having opted for the outsourcing of logistics, do not give much importance to the risks are related, since the majority of the interviewees gave, at these risks, scales 3, 2 and 1. On the other hand, the internalizing companies show great prudence towards the question of logistics outsourcing the risks related to this operation is very important.

Confirming to the literature review, the companies surveyed use several logistics indicators to measure its performance. Despite the existence of some disparities, among the companies studied, most outsourcing companies, report a very high degree of improvement of logistics indicators during these three years. On the other hand, the internalizing companies confess the moderate importance of its logistics indicators improvement.

The outsourcing companies have stated that the success of an outsourcing operation and improvement of the logistics performance of the outsourced function depends above all on the good choice of the service provider based on pre-established criteria.

Regarding the measures necessary to encourage companies to outsource their logistical functions, the legislation in the field of logistics, digitization, training and the development of logistics platforms are the main tools for developing the logistics sector in Morocco as well as encouraging the practice of logistics outsourcing.

Conclusion

Logistics outsourcing has become a strategic process attracting the researchers' attention, in economics and management, especially when it comes to identifying explanatory factors or analyzing its impact on the company's logistics performance.

Knowing that logistics outsourcing reaches very high rates up to 90% in the industrialized countries (Langley and Capgemini, 2016, Langley and Capgemini, 2017, Langley and Infosys, 2018), we find a reverse trend in developing countries such as Morocco. According to a study conducted by AMDL and Capital Consulting (2016), only 15% of Moroccan companies outsource their logistics.

It is legitimate to be interested in understanding why companies, in industrialized countries, are much more oriented towards logistics outsourcing while companies in developing countries still prefer to internalize their logistics function. Without being interested in

explaining this differentiation, we focus on identifying, for Moroccan agrifood companies, the logistics outsourcing's explanatory factors as well as analyzing the impact of this operation on their logistical performance.

Through this exploratory study of ten Moroccan major agri-food companies, we found that the use of outsourcing was mainly motivated, firstly, by operational factors such as the search for the reduction of logistics costs and the improvement of the performance of the outsourced activity. Secondly, the reallocation of resources and the refocusing on the core of the business, as well as the search for flexibility and innovation, are all the strategic factors that pushed the companies studied to use outsourcing. On the other hand, the internalizing companies, show great prudence towards the question of outsourcing of their logistics, the risks related to this operation still very important.

Despite some disparities between the studied companies, concerning the degree of improvement of logistic performance indicators during the last three years, most of the outsourcing companies report a very high degree of indicators' improvement. While internalizing companies are giving an average of their logistics indicators improvement.

According to the majority of interviewees, the logistics sector is in full development, but some measures must be put in place to accelerate its development and encourage outsourcing. Legislation in the logistics sector, digitalization, training and the construction of logistics platforms are the principal tools to develop the Moroccan logistics sector and encouraging logistics outsourcing.

However, this study has some limitations it also suggests new avenues of research. First, despite having reached the saturation at the fifth studied, case it would be advantageous to add the opinions of other interviewees, to better contextualize the obtained results. Then, it would be interesting to make a comparison of visions between outsourcing companies and those internalizing, to detect possible disparities in terms of determinants of outsourcing, the perception of logistics performance and practice development measures outsourcing logistics in Morocco.

Empirically, future research could develop appropriate tools to evaluate the benefits of logistics outsourcing strategy. It would be interesting to analyze small and medium-sized Moroccan firms using a quantitative study.



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