Supply Chain Sustainability in Spanish Major Retailer Through Strategic Alliances and Lean Practices

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Abstract Sustainability within the supply chain is an issue that appeared and has been widely studied in the last decade of the twentieth century, but it is only now reaching the maximum level of interest among academics and business executives. In this paper, authors analyze if some specific practices linked to lean operations, superior alliances management integration and people involvement are really supporting sustainability in the largest and most successful Spanish retailer. It was a standard retailer for years, till it changed its company strategy, from price-based competition (based on squeezing suppliers and low wages) to integral supply chain waste reduction and quality improvement, "for life" alliances with its main top suppliers and labor relations based on permanent contracts, polyvalence and employee motivation. Another important aim of this study is to understand to what extend the alliances developed with its top suppliers, have incorporated and replicated the practices developed by this Spanish retailer, thus creating an excellence/amplification mechanism that supports long-term supply chain sustainability.

Keywords Sustainability · Supply chain · Strategic alliances · Lean operations

1 Introduction

Sustainability, in the sense of integrating aspects related to the economic, social and environmental impact into business management, started to appear in the literature during last decade of the twentieth century (Carter and Rogers 2008), largely reflecting the sustainability vision developed by the Brundtland

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Commission (WCED 1987). These aspects were integrated into a global concept that has been named in the literature “the triple bottom line,” developed by Elkington (1998, 2004), corresponding to the idea of always having in mind the three outcomes (and impact) in the management of any twenty-first century’s company. Therefore, only organizations which achieve the right balance in the management of their activities that will lead to economic, social and environmental acceptable results could be considered as a “sustainable organization”.

Forrester (1958) introduced a theory of distribution management that recognized the nature of organizational relationships. Some years later authors such as Cooper et al. (1997) have coined the term “supply chain”, meaning a set of firms that jointly provide goods to the end customer; these organizations are involved in sourcing, manufacturing, and delivering goods and services to the final user and generating adding value, being all members of a supply chain (Christopher 1992; la Londe and Masters 1994; Lambert et al. 1998). Within this supply chain vision, it is essential not only to integrate management practices that promote the achievement of “traditional” chain objectives, such as cost, service quality and reliability, but must go beyond them and having additionally focus on related social and environmental issues (Carter and Rogers 2008; Alzaman 2014).

McKinsey (2012) published a study of more than three thousand online interviews with worldwide business executives, and in this study conclude that the three main issues on which companies are taking action to achieve more sustainable business practices in the supply chain are: (i) reduction in energy consumption (66%), (ii) reduction of waste (64%), and (iii) corporate social responsibility (57%). The second aspect is closely related to practices that have been called “lean operations”, within the concept of “lean” developed by Womack and Jones (2010) and which generated a lot of interest by emphasizing organization’s waste elimination as a step beyond the so call “lean manufacturing” (Womack et al. 1990), which is considered as an extension of the concepts and practices developed under the Toyota Manufacturing System (Ohno 1988). Authors like Govindan et al. (2014) consider aspects of “lean” and “resilience” [ability to recover when an unexpected event happens (Sheffi 2005)] are critical to enable companies to become more sustainable, in a holistic manner, in today’s highly volatile markets.

Authors of this study consider that some organizations have implemented a combination of the above mentioned aspects with their particularities, as part of its business strategy to move further in building sustainable supply chains. The supply chain built by Spanish retail distribution leader Mercadona and its more than one hundred “inter-providers” could be an example of sustainable supply chain that goes way beyond what is usually described. In a previous study, Morcillo and Duran (2015) have described how the collaborative relationships (alliances) between Mercadona and its inter-providers, supported by factors such as “common strategic shares objectives” and “long-term commitment”, generated added value for alliance performance that explained Mercadona’s greater success ratio in partnerships with its inter-providers. According to the authors of this study, these two qualitative factors provide a special “added value” in the partner’s relationship. In the current study, authors want to take one additional step, by checking if this supply chain really exhibits traits that would qualify it as "sustainable". They explore if Mercadona's supply chain sustainability could be explained by the building of a "harmonious whole" of factors that distinguish it from other supply chains: (i) factors that explain the formation of alliances, which also occur in other companies (ii) additional alliance factors that strengthen its partnerships (long term commitment and common objectives) (Morcillo and Duran 2015), (iii) the use of "lean operations" practices, both in Mercadona and its inter-providers, and particularly, (iv) the replication of the model developed by Mercadona in its main inter-providers.

2 Objective and Study Methodology

The main objective is to study to what extent Mercadona and its main suppliers have developed mechanisms that promote the replication by inter-providers of a way of working similar to the one developed by the leader organization itself, thus beefing up the inter-providers' own supply chain. Another objective of this study is to identify lean practices that support sustainability, as studied by Wee et al. (2009).

To carry out this prospective study, in an area still not sufficiently developed, authors have mainly used qualitative research methods (interviews and study of published practices), which Eisenhardt (1989), Yin (1994) and Gummenson (1991) recommend as appropriate for the exploration of innovative aspects in organizational management. This specific case of a study of sustainability practices applies to a whole supply chain (Mercadona), in which supply chain leader's practices could be a mirror for the rest of members' (inter-providers) supply chain practices. Information has been obtained through: (i) in-depth interviews with three senior corporate managers belonging to Mercadona's top inter-providers (Covap, Sovena and Grupo Siro), (ii) analysis of published data (including analysis, forums, conferences, papers,…).

Regarding in-depth interviews, all of them have been performed during the last two years using semi-structured surveys in a minimum of two meetings per person; questions were mainly focused on collecting their substantial experience.

3 Mercadona's Supply Chain Analysis

3.1 The Business Model

Mercadona's business model has been developed as an efficient way to provide consumers with household products at a price that they considered attractive. In 1993, after rejecting offers to sale the company, owner decided to implement what he called a "TQM model" as the basis of all operations within the organization.

The company moved from a pricing policy based on promotions, to a model where customers could find “always the best prices”, in a strategy characterized by quality (in everything linked to customers) and continuous improvement (Ton and Harrow 2010; Blanco and Gutierrez 2010). Mercadona forsook promotions and remained committed to stable prices for its customers, based on long-term agreements with suppliers (Caparrós and Biot 2006). This strategic movement was a revolution, as the former business model was based on maintaining profitability supported on the three pillars that the retail sector had traditionally considered as their profit’s basis: variable prices, suppliers pricing negotiation and temporary employees. While introducing a low-price model through its Distributor Brands, Mercadona launched a bunch of measures to reduced “waste” and discontinued any product or activity that did not provide value to its customers, in line with well-known “lean” practices.

Mercadona developed their own Distributor Brands and traded them at a discount of 20–30% below the manufacturer’s brand. The phenomenon of Distributor Brands or “private labels” is not a unique strategy of Mercadona, since the vast majority of its competitors also apply it, such as Lidl, (the white label in 2013 accounted for nearly 79.6% of its sales in Spain) and Alcampo (in 2014, 19.3% of its turnover is attributable to private labels). But Mercadona used this practice to develop branded products manufactured by its selected inter-providers, while implementing many actions to attain a superior customer recognition in quality and safety through inter-providers’ involvement in quality improvement. Mercadona’s business model reflects how the customer is the center of all the efforts by employees and inter-providers through a high quality vision and lean (no any waste is allowed) practices.

Each participant plays a clear role in the fulfilment of their promise to customers. In 2014, they started a further integration to “fresh products” suppliers, such as fishermen and farmers, within a project called Caspopdona (Mercadona 2014). This means that they are improving the entire supply chain, from the fishing boat to the consumer and this could be a very innovative step forward and could even be categorized as revolutionary in an industry in which, until now, lack of coordination and of common objectives has prevailed. Mercadona’s business model seeks constant innovation throughout the supply chain and wants, as its ultimate aim, to achieve a “sustainable supply chain”. The company is still convinced that there is a clear “opportunity to lay the foundations for growth in the primary sector, enabling those who contribute value to the process to profit, and thereby strengthening social equilibrium in every link of the chain” (Mercadona 2012, 2014).

3.2 Supply Focus: Efficiency and Service Based on Alliances

Mercadona quality commitment to customers is closely linked to the long-term commitments that the company keeps with its suppliers and a strict compliance with food safety standards. They use a system of supplier's categorization, and among them there is an elite group, the so-called "inter-providers". They are perfectly integrated into the Mercadona's business model and their relationship is "forever". Examples of this elite group include partnerships with Sovena (oil), COVAP (milk) and Siro Group (cookies). When analyzing the skills that these inter-providers have developed in this relationship, outstanding performance could be reported in: (i) greater focus on excellent quality, (ii) tight control of processes, Mercadona's strategy with their inter-providers does not allow the slightest area of waste likely to mean a higher cost, with subsequent impact on the final price; suppliers are required to systematically analyze potential improvement areas, and (iii) collaboration in the supply chain integration plan launched by Mercadona with tier two and tier three suppliers, as previously described, which extends till raw materials' suppliers. This obliges inter-providers to develop upstream extra work in order to set quality standards and control their supplier processes, a practice that means additional effort, collaboration and control. One result of this initiative is the pioneering "Girasoles project", which involved participation of 2800 farmers.

Proof of its success are the 690,000 annual pig heads from more than 140 local farmers supplied to Casa Tarradellas, or daily delivery of more than 370,000 l of milk, by 1400 farmers, to Lactiber/COVAP/Iparlat and rice production agreement between Arrocerias Pons and 26 farmers. They are engaged in a double quality guarantee by labeling their own brand on the packaging as proof of commitment. Mercadona wants the consumer to know who produces each item, thus keeping the supplier involved in "the promise to the customer". Mercadona expects from suppliers a continuous improvement process and asks them to replicate throughout its supply chain Mercadona's best practices, keenly aware that any provider's inefficiency is ultimately reflected in its service. The inter-providers conducted, as agreed in their annual improvement plans, significant investments in new facilities and processes improvement as part of the policy of "cross-innovation". To disseminate the best practices knowledge through inter-providers, they have organized an association called Foro Interalimentario whose ultimate aim is to improve their supply chain efficiency.

3.3 Environmental Practices

Within the concept of sustainability as it has been defined earlier in this document, all the practices linked to "waste reduction" are particularly important, since waste could adversely affect both the environment and the economic performance of any company. In this area their focus has been mainly on: (i) improved product design (using "eco-design" practices such as reducing the thickness of the glass bottle while maintaining the security and functionality, or changing the design (from round to square in oil bottles to increase pallet capacity), use of compacted cellulose packaging to reduce the volume of waste) (ii) improvement in the production process (boosting the investment of its inter-providers on processes that use less energy and generate less waste; for example, the Siro group has created a company department to reuse the waste generated in the biscuits production for use in animal nutrition) and (iii) logistics management (Tetris software is used to optimize the trucks' loading in the flow between stores and shops), using trucks that supply stores for reverse logistics (including pallet and packaging), use of equipment specifically designed to minimize noise in the store's midnight downloading (in areas where daytime download would be slow and complex) and using recycled plastic pallets.

3.4 Employees

Employees are another pillar within their "TQM strategy". Approximately 76,000 employees, working in the company as per early 2016, have a labor environment that they recognize is very different from other retailers. Mercadona has a particular way to understand relationships with workers and also encourages the implementation of these practices in their inter-providers. Worldwide retail industry policy is focused on attaining the greatest possible flexibility through employees working with constantly changing schedules, temporary contracts and low wages. However, Mercadona sees this relation very differently because its employees have permanent contracts, receive a month of training while joining the business, family reconciliation (i.e. not working on Sundays), and their salaries are also above the industry average. They do not look for people who do routine work in a particular job but versatile people, even capable to act as "customer's prescribers", so they know the products and advise customers how to use better. Mercadona employees are asked to listen to the customer and propose profitable business practices (Hanna 2010). Employees have social benefits higher than those established in labor standards. The culture of effort and merit is the basis of the organization and the company (Ton and Harrow 2010).

4 Conclusions

According to what stems from the analysis, it is clear that Mercadona's model is organized around the customer, which the company calls "the boss", ensuring that he will get the best market price, an optimal price/quality ratio and a reasonably wide product range. This policy is supported by the implementation of concepts that could be considered as pertaining to the "excellent operation management principles of Lean Operations". Their focus on waste elimination (considering as such everything that does not add value to the consumer) and their obsession with continuous improvement are evidences that the principles of lean operation are present in the model. On top of that, partnership development, as a way to use all the skills and competencies of their supply chain members, enable them to boost

Fig. 1 Mercadona's sustainability model. *Source* Own elaboration

their "supply chain sustainability". All this is supported by a specific and characteristic people management style, quite different from the classic approach in the retail industry; it does not seek to squeeze people with methods such as extreme flexibility, but rather to maintain a balance between flexibility and personal life reconciliation. According to this analysis, Mercadona's supply chain could be considered as an example of fulfilment of the main "triple bottom line" requirements, as indicated by Elkington (1998, 2004). The relationship model that emerges through the collaboration's network of over one hundred inter-providers could be represented by the following illustration (Fig. 1).

It is possible to infer that they have created a solid model and one of the reasons for this strength may be based on its long term objectives and strategy. They understood that their strategy is supported by their key inter-providers, which have been linked to their supply chain improvement practices. Their current and future business is built on long term partnerships (alliances), lean operations strategy and practices (they named TQM) and a clear focus on their inter-providers continuous improvement. Inter-providers are strongly requested to mirror and apply Mercadona's best practices in terms of quality, cost performance through waste elimination, process stability, long-term vision and people involvement to maintain their status and contribute to the Mercadona's aim to be a "sustainable supply chain".

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