

Collaborative Relationships between manufacturers and retailers: a supply chain collaboration framework

Gerard Costa, Alexis Mavrommatis, Mar Vila, Susana Valdes

Abstract.

The main objective of this study is to develop a framework for supply chain collaboration between manufacturers and retailers, which includes managerial, behavioral, and technical issues. It is claimed that collaborative relationships yield significant benefits in areas like the management of both the private label and national brand. However, supply chain collaboration has proved difficult to achieve and one of the reasons is a lack of understanding of the elements that make up supply chain collaboration. An exploratory multiple case study was carried out in the Spanish Fast Moving Consumer Goods industry, examining both re-tailers and manufacturers from a dyadic approach. From the different elements included in the supply chain collaboration model, the results seem to indicate that the ones used most are related to the design of the collaborative initiative and the behavioral aspects related to inter-organisational relationships (trust and mutuality) and human resources (longevity and informal cross-functional team working).

Introduction.

Collaboration appears when companies discover cases where working and operating alone is not sufficient to resolve common problems and to achieve the desired goals (Corbett et al, 1999; Barratt, 2004). It is just one of the alternatives that national brands manufacturers consider alongside aggressive or partnership strategies (Amrouche and Yan, 2015). Collaboration is a very broad and encompassing term: many authors cite mutuality of benefit, rewards and risk sharing, and the exchange of information as constituting the foundations of collaboration (Min et al., 2005); whereas some authors at the same time cite that manufacturers keep defending their national brands even when they collaborate with retailers (Chan Choi, 2017). Nowadays it is accepted that manufacturers and retailers need to collaborate to improve brand equity for national and private labels, as well as for marketing policies such as planning in-store promotions, product pricing and product assortment (Zondag and Brink, 2015). However, while this collaboration is a necessity, researchers continue to explore the reference framework in each of its facets, including risk (Ali and Shukran, 2016), the obstacles to its development (Richey, Roath, Whipple and Fawcett, 2010), its effectiveness (Yunus and Kurniawan, 2015), and trusting behaviours (Daudi, Hauge and Thoben, 2016).

Despite the fact that collaboration has been referred to as the driving force behind effective supply chain management (SCM) and that it leads to performance improvements (Singh and Power, 2009), few firms have truly capitalised on the potential of collaboration (Crum and Pal-matier, 2004). Collaboration is still far from being attained: we see retailers exercising their power through different policies such as severe listing constraints and fees, or aggressively pursuing private

labels that threaten national brands (Ailawadi, 2001; Lennerts et al., 2016). Several researchers conclude that there is a need for a greater understanding of the elements that make up supply chain collaboration (Barratt, 2004), pointing out that there is a need to understand how the relevant cultural, strategic and implementational elements interrelate.

Literature Review.

Relationship marketing has become the dominant paradigm in both business-to-business and business-to-consumer marketing (Möller, 2013), and the resultant benefit is that these relationships become strategic assets of channel parties and the basis of collaboration. For instance we have insights regarding the influence of private labels on cooperative behaviour between manufacturers and retailers (Zippel, Wilkinson and Vogler, 2013); as well as results showing that manufacturers should cooperate as well as develop marketing activities to enhance consumer willingness for national brands (Steenkamp et al., 2010; Nenycz-Thiel and Romaniuk, 2014).

Elements of SCM collaboration identified in the literature review of recent papers published about collaboration have been classified under the following categories: Collaboration, Antecedents and Enablers. Collaboration is about organisations working together, and we have considered two levels: information exchange (operational level) and knowledge sharing/ joint decision-making (strategic level). The Antecedents of supply chain collaboration have been classified under two categories: organisational support and collaboration design. The Enablers identified in the literature are both tools like process alignment, supply chain metrics and information technology (Sawhney, 2002); and behavioral issues related with inter-organisational relationship issues (trust, mutuality, and openness and communication) and with human resources issues (longevity, constructive problem-solving and managing change).

After reviewing the literature, we developed a supply chain collaboration model that is shown in Figure 1. Our model includes the Antecedents, the Enablers and Collaboration elements identified in the literature review. The main contribution of our paper is that we empirically analyze the relative importance of these elements in making collaboration happen. Specifically, the research questions we aim to answer are: 1) what is collaboration? and, 2) how is collaboration achieved?

Methodology.

In order to develop a better understanding and comprehension of the interaction of different elements of collaborative relationships (tools, behavioral aspects, top management support and collaboration design), we used a qualitative approach. An exploratory multiple case study was carried out in the Spanish Fast Moving Consumer Goods industry, examining both retailers and manufacturers from a dyadic approach. In order to develop a better understanding and comprehension of the interaction of different elements of collaborative relationships (tools, behavioral aspects, top management support and collaboration design), we used a qualitative approach. The unit of analysis was a collaborative manufacturer-retailer relationship. The sampling criteria used was purposeful sampling, with the underlying principle of selecting information-rich cases, in which we had the cooperation of key informants (Patton, 2002). Nine

cases were selected, with one to three interviewees in each case; Table I shows the general characteristics of the companies selected for sample units.

Semi-structured in-depth interviews were conducted between March and June 2015 to collect the data. In order to increase the reliability of the case study analysis an interview protocol was created. Interviews lasted approximately one hour fifteen minutes, and were audio taped for transcription with the participants' consent. After each visit, one re-searcher wrote the final qualitative report, and the other two researchers checked it. We validated our qualitative research design in keeping with the principles outlined by Yin (1989). We used ATLAS/ti software to study our interviews.

Findings.

Findings are analyzed according to the two research questions defined. Regarding "What is collaboration?" all interviewees defined collaboration focusing on win-win situations. Manufacturers considered that there was still a long way to go, as collaboration was limited very often to CRP and very rarely it included joint planning. Main collaboration areas between the manufacturers and retailers are Category Management, mainly in assortment and space management, and collaboration on ad-hoc promotions; they were working also on Continuous Replenishment Programs (CRP), on Cross Docking deliveries and on Electronic data Interchange (EDI). As a framework for classifying these areas, we used the model of Efficient Consumer Response (ECR) Europe, and Table II shows the main collaboration areas between the manufacturers and retailers included in this research.

Regarding "How is collaboration achieved?" companies use all type of elements: organisational support, collaboration design, behavioral issues, and tools. Some significant aspects should be pointed out: collaboration initiatives were pursued to achieve strategic goals, being collaboration included in the company mission and strategy, and with top management involvement as a key issue. Selecting the right partner and setting the goals of the collaborative programs were key elements, as well as behavioral issues such as trust and mutuality. Finally, regarding tools nearly all of the companies used functional reporting.

Analysis and interpretation.

All companies interviewed were collaborating in different Marketing and Operations programs. They defined Collaboration as working together to achieve win-win situations. Regarding our conceptual model shown in Figure 1 it seems that the companies interviewed are collaborating more at an operational level exchanging information than making decisions jointly.

Regarding the Antecedents, it should be mentioned that in all cases collaboration was included in the company mission and strategy, being consistent with the findings of Whipple and Russell (2007). Our results show that the involvement of top management is key at the early stages of the collaboration. Afterwards, top management support is present only when it is needed. Finally, regarding the design of the collaborative program, all companies agreed on the fact that setting the goals of the program, selecting the right partner, and formalizing the agreement were key elements, being consistent with other studies (Min et al., 2005).

Concerning Enablers, the interorganizational aspects of trust and mutuality were mentioned by all companies. This is consistent with previous studies (Matapoulos et al., 2007; Viera et al., 2009). Regarding intraorganisational behavioral issues, it is important to stress the existence of informal cross-functional teams in companies without formal teams. This seems to indicate that collaboration may largely depend on people's personal interest in working together. Our results regarding the need for low employee turnover are consistent with the findings of El-linger et al. (2006) and Koulikoff-Souviron and Harrison (2006).

Concerning the rest of the tools (KPIs, process alignment and technology), none of the companies interviewed mentioned information technology as an enabler. This might be due to the fact that supply chain collaboration does not need to be based on technology; in fact, a major criticism is that an obsession with it is one of the major barriers to collaboration (Barratt, 2004). Our findings are consistent with the results showing that interpersonal collaboration (measured as trust, reciprocity, and interdependence) was the most important element (Vieira et al., 2009).

Conclusions.

This study has two main contributions. First, all the collaboration elements have been considered together, both Antecedents (Organisational support and Collaboration design) and Enablers (Behavioral issues and Tools); the ones used most are related to the design of the collaborative initiative and the behavioral aspects related to inter-organisational relationships (trust and mutuality) and human re-sources (longevity and informal cross-functional team working). Results also show that after a decade of collaborative programs in the Spanish grocery industry, there is still a long way to go, as most of the companies are still at the operational level of collaboration. And the second contribution has been the analysis of collaboration from a dyadic approach as most of the collaborative experiences in the real world have been.

Researchers have been provided with some guidelines for further study: (1) Future research should try to investigate why strategic collaborative programs are very rare and why companies are not working on some tools, such as process alignment and common KPIs. (2) Further research should also analyze the role of top management involvement at different levels of collaboration (operational versus strategic). Furthermore, (3) future studies should also try to test our collaboration model with a survey and investigate why IT has not been mentioned as an enabler.

Professionals are provided with the following managerial implications: (1) Collaboration is typically tailored towards the customer. The "one fits all" approach is not suitable: collaboration was defined by our interviewees as "developing common projects." (2) Collaboration is difficult to achieve, and few programs go further than operational levels. The difficulties encountered in achieving collaboration may be related to the fact that companies are not using the right tools. Another reason may be that very often the human resources aspects of longevity in the company and the importance of having a constructive problem-solving attitude are forgotten.

References

- Ailawadi, K.L. (2001), "The retail power-performance conundrum: What have we learned? ", *Journal of Retailing*, Vol. 77, No. 3, pp. 299-318.
- Ali, I., & Shukran, K. (2016). "Managing supply chain risks and vulnerabilities through collaboration: Present and future scope," *The Journal of Developing Areas*, Vol. 50, No. 5, pp. 335-342.
- Amrouche, N. and Yan, R. (2015), "Aggressive or partnership strategy. Which choice is better for the national brand," *International Journal of Production Economics*, Vol. 166, pp. 50-63
- Barratt, M. (2004), "Understanding the meanings of collaboration in the supply chain", *Supply Chain Management: An International Journal*, Vol. 9 No. 1, pp. 30-42.
- Chan Choi, S. (2017), "Defensive strategy against a private label: Building brand premium for retailer cooperation, *Journal of Retailing and Consumer Services*, Vol. 34, pp. 335-339
- Corbett, C., Blackburn, J. and Van Wassenhove, L. (1999), "Partnerships To Improve Supply Chains", *Sloan Management Review*, Vol. 40 No. 4, pp. 71-82.
- Crum, C. and Palmatier, G. (2004), "Demand collaboration: what's holding us back?", *Supply Chain Management Review*, Vol. 8 No. 1 pp. 54-61.
- Daudi, M., Hauge, J.B. and Thoben, K.D. (2016), Behavioral factors influencing partner trust in logistics collaboration: a review, *Logistics Research*, Vol. 9, No. 1, pp.19.
- Ellinger, A. E., Keller, S. B. and Hansen, J. D. (2006), "Bridging the Divide between Logistics and Marketing: Facilitating Collaborative Behavior", *Journal of Business Logistics*, Vol. 27 No. 2, pp. 1-28.
- Koulikoff-Souviron, M. and Harrison, A. (2006), "Buyer-supplier relationships in inter- and intra-organisational supply contexts: the unobtrusive yet pervasive human re-source picture", *International Journal of Logistics: Research and Applications*, Vol. 9 No. 1, pp. 75-94.
- Lennerts, S., Elisend, M., Lieven, T., Molner, S., Oliver, T., and Tomczak, T. (2016), "The Power of Innovativeness in Manufacturer-Retailer Relationships", *Journal of Business-to-Business Marketing*, Vol. 23, No. 3, pp. 235-251
- Matopoulos, A., Vlachopoulou, M., Manthou, V. and Manos, B. (2007), "A conceptual framework for supply chain collaboration: empirical evidence from the agri-food industry", *Supply Chain Management: An International Journal*, Vol. 12 No. 3, pp. 177-186.
- Min, S., Roath, A., Daugherty, P.J., Genchev, S., Chen, H. and Arndt, A. (2005), "Supply chain collaboration: what's happening", *The International Journal of Logistics Management*, Vol. 16 No. 2, pp. 237-256.
- Möller, K. (2013), "Theory map of business marketing: Relationships and network perspectives", *Industrial Marketing Management*, Vol. 42, No 3, pp. 324-335
- Patton, M.Q. (2002), *Qualitative Research and Evaluation*, 3rd ed., Sage, Thousand Oaks, CA.
- Nenycz-Thiel, M., and Romaniuk, J. (2014), "The real difference between consumers' perceptions of private labels and national brands", *Journal of Consumer Behaviour*, Vol. 13, No. 4, pp. 262-269.
- Richey, R.G., Roath, A.S., Whipple, J.M. and Fawcett, S.E. (2010), "Exploring a governance theory of supply chain management: barriers and facilitators to integration", *Journal of Business Logistics*, Vol. 31, No. 1, pp.237-256.

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Sawhney, M. (2002), "Don't Just Relate, Collaborate", MIT Sloan Management Review, Spring, Vol. 43 No. 3, pp.96.

Singh, P. and Power, D. (2009), "The nature and effectiveness of collaboration between firms, their customers and suppliers: a supply chain perspective", Supply Chain Management: An International Journal, Vol. 14 No. 3, pp. 189-200.

Steenkamp, J., Van Heerde, H. and Geyskens, I. (2010), "What makes consumers willing to pay a price premium for national brands over private labels?", Journal of Marketing Research, Vol. 47, No. 6, pp. 1011-1024

Vieira, J., Yoshizaki, H. and Ho, L. (2009), "Collaboration intensity in the Brazilian supermarket retail chain", Supply Chain Management: An International Journal, Vol. 14 No. 1, pp. 11-21.

Whipple, J.M. and Russell, D. (2007), "Building supply chain collaboration: a typology of collaborative approaches", The International Journal of Logistics Management, Vol. 18 No. 2, pp. 174-196.

Yin, R.K. (1989), Case Study Research. Design and Methods, SAGE, Thousand Oaks, CA

Yunus, E.N., and Kurniawan, T.. (2015), "Revealing Unsuccessful Collaboration: A Case of Buyer-Supplier Relationship in the Pharmaceutical Industry.", Supply Chain Forum: An International Journal, Vol. 16, No. 2, pp. 14-28.

Zondag, M.M. and Brink, K.E. (2015), "Developing a New Theory of Frontline Manufacturer-Retailer Relationships for Consumer-Packaged Goods, Journal of Business-to-Business Marketing, Vol. 22, No. 4, pp.313-331.

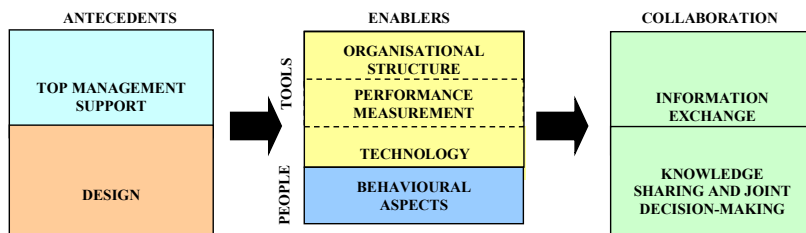


Figure 1 – Supply chain collaboration

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Table I – General characteristics of the companies selected for the sample units

Case	Activities	Geographical coverage	Market share	Functions of managers interviewed
Manufacturer 1	Multinational: detergents and cosmetics	National	23% in the category	-Key Account Manager for Retailer 1 -Key Account Manager for Retailer 2 -Key Account Manager for Retailer 3 -Logistics Manager
Manufacturer 2	Multinational: food, detergents and cosmetics	National	21% in the category	-Key Account Manager for Retailer 1 -Key Account Manager for Retailer 2 -Key Account Manager for Retailer 3 -Logistics Manager
Manufacturer 3	Multinational: food	National	61% in the category	-Key Account Manager for Retailer 1 -Key Account Manager for Retailer 2 -Key Account Manager for Retailer 3 -Logistics Manager
Retailer 1	Multi-format: supermarkets and convenience stores	National	2% total market	-Logistics Manager -Purchasing Manager
Retailer 2	Multi-format: hypermarkets, supermarkets and convenience stores	National	16% total market	-Logistics Manager -Purchasing Manager for Manufacturer 1 and 2 -Purchasing Manager for Manufacturer 3
Retailer 3	Multi-format: hypermarkets, supermarkets and convenience stores	National	23% total market	-Logistics Manager -Purchasing Manager for Manufacturer 1 and 2 -Purchasing Manager for Manufacturer 3

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Table II – Areas of collaboration according to Efficient Consumer Response (ECR) classification

	Demand Management	Supply Management	Enablers	Integrators
Manufacturer 1 /Retailer 1	Category Management. Adhoc Promotions. On line Promotions. Special events.	CRP Flow.	Point of Sales (POS) data exchange to be used for manufacturing planning. EDI. Global Data Synchronisation.	
Manufacturer 1 /Retailer 2	Category Management. Optimisation of product POS formats. Ad-hoc promotions. Direct Marketing and loyalty card. Private label.	CRP. Optimisation of total logistics cost. Cross Docking.	EDI	Manual Collaborative Planning, Forecasting and Replenishment (CPFR) for promotions and new SKUs.
Manufacturer 1 /Retailer 3	Category Management. Optimisation of product POS formats. Ad-hoc promotions. Direct Marketing and loyalty card.	CRP. Cross Docking.	Electronic Data Interchange (EDI). Global Data Synchronisation.	Manual Collaborative Planning, Forecasting and Replenishment (CPFR) for promotions and new SKUs.
Manufacturer 2 /Retailer 1	Category Management. Adhoc Promotions. On line Promotions. Special events.	CRP Flow.	Point of Sales (POS) data exchange to be used for manufacturing planning. EDI.	

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	Demand Management	Supply Management	Enablers	Integrators
Manufacturer 2 /Retailer 2	<p>Category Management.</p> <p>Optimisation of product POS formats.</p> <p>Ad-hoc promotions.</p> <p>Direct Marketing and loyalty card.</p> <p>Market Research.</p> <p>Private label.</p>	<p>CRP.</p> <p>Optimisation of total logistics cost.</p> <p>Cross Docking.</p> <p>Unidentified loss.</p>	EDI	<p>Optimisation of retailer's supply chain management.</p> <p>Retailer's processes optimisation.</p> <p>CPFR for promotions and new SKUs.</p>
Manufacturer 2 /Retailer 3	<p>Category Management.</p> <p>Shopper Marketing.</p> <p>Sales Fundamentals in launching new products.</p> <p>Loyalty card.</p> <p>On-line business management.</p> <p>Shopper marketing.</p> <p>Private label.</p>	<p>CRP.</p> <p>Cross Docking.</p>	<p>Electronic Data Interchange (EDI).</p> <p>Global Data Synchronisation.</p>	<p>Optimisation of retailer's supply chain management.</p> <p>CPFR for promotions and new SKUs.</p>
Manufacturer 3 /Retailer 1	<p>Category Management.</p> <p>Adhoc Promotions.</p> <p>On line Promotions.</p> <p>Special events.</p>	CRP.	EDI	
Manufacturer 3 /Retailer 2	<p>Category Management.</p> <p>Adhoc Promotions.</p> <p>On line Promotions.</p> <p>Special events.</p> <p>Private label.</p>	CRP.	EDI	<p>Optimisation of retailer's supply chain management.</p> <p>Retailer's processes optimisation.</p> <p>CPFR for promotions and new SKUs.</p>