

Exploring Supply Chain Collaboration: Evolution, Definition and Benefits

Wee Sin Yi, Noriza Binti Mohd Jamal and Thoo Ai Chin
Faculty of Management, Universiti Teknologi Malaysia, Skudai, 81310 Johor, Malaysia

Abstract: The stepped up global competition and fast-paced business motivate firms looking external sources for opportunities to build competitive advantages through Supply Chain Collaboration (SCC). Collaborative supply chain continue to evolve and acquire prominence based on the assumption that closer inter and intra firm relationships and reinforced information exchange will definitely enhance the quality of decision-making, reduced supply-demand uncertainty thus leads to improving on supply chain performance. SCC is defined as “two or more autonomous partners working jointly to plan and execute a supply chain to achieve common goals through a predetermined negotiation based on rules and structures to govern their mutual relationship”. The aim of this study is to uncover the nature evolution of SCC, its definition and explored its benefits to the practitioners. Furthermore, the lack of an overarching SCC definition may affect the right application of SCC practices in both academic and business field. Hence, an encompassing and inclusive definition of SCC is of overriding importance to assist learners and practitioners to develop comprehensive SCC strategies. Nevertheless, there is a limited amount of literature empirically dig into the concept of SCC and describing benefits of SCC. Thus, this review provides insight to researchers and practitioners to deliver a better understanding towards implementation of an effective and efficient SCC.

Key words: Supply chain collaboration, supply chain collaboration evolution, supply chain collaboration benefits, no empirical finding, all langues and sentences has been proofread

INTRODUCTION

For the past years, practitioners and academicians has established generous amount of information that could assist the transition of the collaboration's concept from theoretical idea to highly accepted practices in supply chain (Kumar, 2001). Collaboration is strategically important to a successful supply chain network and efficient and effective relationships are essential for achieving better Supply Chain Management (SCM). SCM basically looks into the interrelationship and inter-linkages between various functions, processes and supply chain members to analyse the impact of their interaction on value additions and profit maximization (Ballou, 2007).

In this fast paced business era, many companies have begun to identify that today's competition occurs between supply chain networks rather than individual firms. Supply Chain Collaboration (SCC) involves not only external integration (supplier-firm-customers) but also the internal integration of the different departments of the firms such as procurement, production, marketing, information systems and logistics. The proper information flow within the supply chain members can be fully leveraged through SCC. Furthermore, the changing global

business environment also presents an opportunity and a challenge for academics and industry practitioners to conduct further research on the connection and interaction between supply chain entities and the development of efficient and effective collaborative networks within the supply chain. The popularity of SCC concept can be seen from widely examined across disciplines like management (Kumar and Dissel, 1996; Ahuja, 2000; Cross *et al.*, 2002; Singh and Mitchell, 2005); marketing (Perks, 2000; Ellinger, 2000; Gadde *et al.*, 2003); sociology (Powell *et al.*, 2005) and SCM (Holweg *et al.*, 2005). Thus, SCC can serve as a vehicle for redesigning the decision making, workflow and resources assigned to individual entities to improve the overall performance of the supply chain, through higher profit margins, improved customer service and faster response times (Lee, 2000; Simatupang and Sridharan, 2002; Xu and Beamon, 2006).

SCC EVOLUTION

With the increased economic challenges and competitive pressures, organizations are being pushed to change their current business operation strategies to the one that can cope with the real challenging business world. For instance, customers are demanding for quality

products and services with the competitive price. Nevertheless, the fundamental principle behind the concept of collaboration is that a single company cannot successfully compete with itself. Furthermore, organizations throughout the world have been calling for bold steps to go down both intra- and inter-organizational barriers to smooth uncertainty and enhance control of supply chains through the collaboration with supply chain partners (Stevens, 1989). Therefore, many firms seek to organize cross-firm activities and work reciprocally over time to develop superior performance (Walters, 2002). Organizations enter into revising a set of strategies which include two or more independent firms (external) and within the firm (internal) with different complementary capabilities achieve their common aspirations and goals in a competitive environment that cannot be achieved individually (Lambert *et al.*, 2004; Kumar and Banerjee, 2012). Frohlich and Westbrook (2001) added further support to the Supply Chain Integration's (SCI) view by stating that "in the new millennium, upstream and downstream integration with suppliers and customers has emerged as a vital element of manufacturing strategy". They find empirical support for the view that integration of data and information is crucial and beneficial to operational performance. Yet, Frohlich and Westbrook (2001) go further in their concluding discussion by enhancing the data and information sharing view of integration to include collaboration also.

SCI can be defined as "the degree to which an organization strategically collaborates with its supply chain partners and manages intra- and inter-organization processes to achieve effective and efficient flow of products, services, information, money and decisions, with the objective of providing maximum value to its customers" (Zhao *et al.*, 2008). Nevertheless, SCC and SCI occasionally been used interchangeably due to both of the business strategy refer to a close combination process between supply chain partners. So, "integration" and "collaboration" have emerged as two major conceptual pillars of SCM research. Nevertheless, the term integration means the "unified control (or possession) of several successive or similar process formerly carried on independently" (Flynn *et al.*, 2010). Therefore, it places more focus on central control, ownership, or process integration governed by contractual means. Practitioner-oriented literature has successfully shown that SCC able to benefit supply chain members and very often exhibiting the benefits obtained by MNC such as Dell which is a worldwide IT company that is capable to manage the complex operations of information sharing between supply chain members (Zhou and Benton., 2007).

However, the practitioner assumed SCC as a potential extension to or ideal kind of SCI due to the conflicted term of SCI and SCC. For example, both SCI and SCC have been understood as a term of data sharing among supply chain members (Horvath, 2001). Therefore, it shows that the use of term collaboration is rather vague with integration due to both of them implies quicker in information sharing between supply chain members.

Besides that, collaboration is attractive to the organizations since it lays more focus on regulating through relational means other than regulating through contract means (Nyaga *et al.*, 2010). Done clarifies that SCI refers to the configuration of intra- and inter-organizational structures, mainly at the business process level, in coalition with the overall strategic goals of partner entities. However, SCC is considered to stand for the behavioral and soft aspects that drive, facilitate, execute and check the above flow at three stages of functioning: strategic, tactical and functional. Although, they are some overlaps between SCC and SCI but SCC is still a better tool to get the mutual relationship between supply chain partners. Also, the knowledge of SCC has been clouded by the obscure term of integration (Goffin *et al.*, 2006). Hence, SCC can be sorted out as a relationship oriented "Collaboration" while SCI is structural configuration-oriented "integration" (Whipple and Roh, 2010). Furthermore, information technology has essentially altered the way organizations and industries operate, such as the move from cost to revenue management and the change in focus from a functional to an order fulfillment operation, from inventory to information management and from partners' transactional relationships with strategic alignments. While, Ketikidis *et al.* (2008) indicate that the above-stated factors are making the modern supply chain network increasingly complicated and sophisticated, thus the competition between supply chains is becoming serious. As a result, the collaborative and combinative relationships among entities are, therefore, indispensable for ensuring the competitiveness of supply chain networks. Nevertheless, Frohlich and Westbrook (2001) utilized of the word collaboration should have more application rather just emphasized on information integration and sharing. Hence, their logical connection is that "the degree and extent of SCI technologies and practices are liable to develop so that thoughts, expertise and knowledge can be interchanged" (Bowersox *et al.*, 2003). While the literature above recognizes the value of SCC as an ideal, but little research has empirically dig into the concept of SCC that able to differentiate from SCI. The revisit on SCC evolution could clearly advance the new opportunities and challenges for practitioners and academicians.

Table 1: Definitions of Collaboration in Supply Chain

Authors	Definition
Anthony (2000)	“Two or more companies sharing the responsibility of exchanging common planning, management, execution and performance measurement information.”
Simatupang <i>et al.</i> (2004)	“Collaboration is a cooperative strategy of supply chain partners with a common goal of serving customer through integrated solutions for lowering costs and increasing revenue.”
Samaddar and Kadiyala (2006)	“Collaborative relationship as one in which an organization initiates and implements a knowledge creation endeavor and a collaborating organization shares the expense and benefits of newly created knowledge, including its joint ownership through patents and licenses.”
Kampstra <i>et al.</i> (2006)	“Financially independent entities try to get the dependent parts of the chain to ‘play’ together, i.e. ensuring that the entities in a chain interact successfully to provide the necessarily coordinated outputs.”
Jin and Hong (2007)	“The degree of cooperative activities and behaviors across organizations in terms of resolving conflicts, generating problems solutions, coordinating cross-organizational activities and implementing inter-organizational decisions (product design and resources allocation) in response to environmental and organizational changes.”
Fawcett <i>et al.</i> (2008)	“The ability to work across organizational boundaries to build and manage unique value-added processes to better meet customer needs. It involved the sharing of resources-information, people and technology-among supply chain members to create synergies for competitive advantages.”
Simatupang and Sridharan (2008)	“Collaboration describes the cooperation among independent, but related firms to share resources and capabilities to meet their customers’ most extraordinary or dynamically changing needs.”
Kohli and Jensen in 2010	“A win/win arrangement that is likely to provide improved business success for both parties.”
Cao and Zhang (2011)	“A partnership process where two or more autonomous firms work closely to plan and execute supply chain operations toward common goals and mutual benefits.”
Daughtery (2011)	“The responsibility of exchanging common planning, management, execution and performance information.”
Fawcett <i>et al.</i> (2012)	“A vital dynamic capability based on trust, respect and commitment that can provide better performance to the supply chain members.”
Al-Rafaie in 2014	“Two or more autonomous partners working jointly to plan and execute a supply chain to achieve common goals through a predetermined negotiation based on rules and structures to govern their mutual relationship.”

SCC DEFINITION

In the field of SCM, collaboration is a well-known concept for the academicians and practitioners since it emphasizes on achieving advantages and sharing results with business partners. Myhr and Speakman (2005) interpreted collaboration in the supply chain as “A critical linking pins, as greater specialization brings in more about integration in the overall supply chain”. Furthermore, Bahinipati *et al.* (2009) defined the broader view on collaboration as “A business agreement between two or more companies at the same level in the supply chain or network in order to allow greater ease of work and cooperation towards achieving a common objective”. In general, SCC was mainly categorized into process focus and relationship focus (Goffin *et al.*, 2006; Cao and Zhang, 2011); from collaborative communication to supplier development (Oh and Rhee, 2008) or from inward facing to outward facing (Frohlich and Westbrook, 2001). Collaboration has been defined as the driving force behind effective SCM (Ellram and Cooper, 1990; Horvath, 2001) and as such, may be considered the ultimate core capability (Sanders and Premus, 2005). Therefore, collaborating with supply chain partners only can form as they were a piece of an individual enterprise (Lambert and Cooper, 2000). A study by Mentzer *et al.*, (2001), Manthou *et al.* (2004) and Sheu *et al.* (2006) stated that SCC has been reckoned as a business process whereby two or more supply chain partners collaborate toward commonly agreed goals while Bowersox *et al.* (2003), Golobic *et al.* (2003) and Cao and Zhang (2011) view SCC

as the formation of close, long-term partnerships, where supply chain members work together and share information, resources and risk to accomplish objectives. Additionally, the collaborative supply chain goes beyond not just information exchange between suppliers and customers but also comprised of joint decision making among the supply chain partners (Kumar, 2001). Henceforth, collaborative SCM systems move organizations by optimizing its operational information exchange and transform a commercial enterprise and its partners into more competitive organizations. Collaboration comes easy when the organization has the right partners. Thus, an important facet of collaboration is the selection of supply chain members. Barrat (2004) defined SCC as sharing joint objectives, intellectual agility, trust, respect and commitment, to get the best outcome for each member. Nevertheless, all research has assumed that collaboration is a unilateral phenomenon that focuses on a particular feature of collaboration. The supply chain members need to often meet up for discussing and redesign a particular agreed strategy which will lead them to create better business performance (Corbett *et al.*, 1999; Lambert *et al.*, 2004). In Table 1, the summary of different available definitions is provided.

SCC BENEFITS

SCC is a sort of business strategy that encourages individual entities to share information and resources to benefit the entire supply chain and allows entities to leverage each other on an operational basis so that they

can perform better together than they would separately, i.e. collaboration occurs when supply chain entities work in concert for common welfare to achieve greater economic benefits (Paulraj *et al.*, 2008; Ngaya *et al.*, 2010). Hence, the flexibility of supply chain would determine the speed of organizations in the meet and respond to different customer demand and requirements at minimal costs. According to Lam, supply chain members are required to coordinate and collaborate with each other to sustain the responsiveness and performance of the entire network. For instance, the levels of collaboration between the supply chain members vary from basic execution to operation planning for the cooperative optimization of the supply chain. The collaboration relationships could evolve over time especially the SCC at the origin was a small or limited scope can grow into deeper, closer collaborative arrangements. As overall, collaboration can provide mutual benefits to all parties in the supply chain, such as improved information availability, improved service levels, improved end-customer value, increased flexibility in doing business and reduced cycle time (Simchi-Levi *et al.*, 2003; Holweg *et al.*, 2005; Daugherty *et al.*, 2006).

The benefits of collaboration among supply chain partners can be seen from increased responsiveness toward customer requirement, competitiveness in the market and also the reduction of waste in the supply chain (Nyaga *et al.*, 2010). For instance, Fawcett *et al.* (2008, 2012) stated that the supply chain partners should work close together to devise and implement better methods to provide solutions and deliver value for customers expect. Therefore, to bring down the inefficiencies in the supply chain, organizations should increasingly employ data systems in their organization systems. Effective SCC and information synchronization among supply chain partners able to eliminate excessive inventory, shorten lead times and efficient decision making. The competitive pressure arises from the business environment has driven organizations to create more demand-driven and flexible supply chains that will be competent to satisfy customers' expectations (Madenas *et al.*, 2014). Conversely, the traditional cooperation among business partners is no longer competitive in today's business world. With the application of SCC, the bullwhip effect can be reduced by emphasize on the management, coordination of the supply chain and making end-customer demand information readily available to the entire supply chain (Lee *et al.*, 1997). "Bullwhip effect" defined as "the effects of uncertainty in demand and lead time cause order sizes and lead times to be inflated the further up the supply chain and away from the end customer actually get" (Lee *et al.*,

1997). This will lead to a much greater amount of excessive and obsolete inventory in the supply chain due to protecting stocks again out between each link in the supply chain. Instead, organizations are moving towards collaborative supply chain in an endeavor to fetch down the information imbalances while increased the responsiveness of market and customer needs. Still, if merely the dominant partner drives supply chain optimization decisions, this can cause an asymmetrical distribution of information, inventory and ultimately bargaining power between the partners (Iacovou *et al.*, 1995). Hence, for the purpose of optimizing the entire supply chain network and not only create local optima in one or two organization but the organizations must also jointly make supply and demand decisions with their supply chain members respectively.

Works by Ha *et al.* (2011) illustrated organizations that involved in long-term collaborative partnerships can improve the efficiency of the supply chain. Specifically, the collaborative partnership in the supply chain can be inferred as an arena for a continuum of possible relationship styles between firms. Gardner *et al.* (1994) illustrated the determinants of successful partnerships such as mutual operating controls, systematic operational information exchange, sharing of benefits and burdens and extendedness. Benefits and burden sharing refer to the willingness of both parties to accept short-term conflicts, with the expectation that the opposite party would do the same, resulting in mutual long-run benefits. While the extendedness of partnerships means the loyalty and long-term expectations of the two parties in the cooperative relationships. The systematic operational information exchange requires the systems designed to provide timely, accurate and usable day-to-day operational information. As a result, SCC offers significant opportunities for supply chain members to develop collaborative and cohesive relationships between members in the supply chain. According to Cao *et al.* (2010), collaborative advantages could form as this synergistic force that brings in supply chain members to create superior performance collectively. In fact, collaboration can extend the collaboration benefits and each of the members will be able to receive the gain that could not be generated by themselves (Jap, 1999). Furthermore, SCC involves the transfer of best practices, capacity enhancement and joint decision making among the partners. Hence, the combination of resource and innovation among the supply chain members will be able to make the value creation more significant. Similarly, Chen and Paulraj (2003) argue that by collaborating with suppliers and

customers, it actually can reduce the main source of supply chain uncertainty which are supply uncertainty, demand uncertainty and technological uncertainty (Boon and Wong, 2011) by coordinating customer demand with supplier and manufacturer production plan (Mamillo, 2015).

CONCLUSION

An integrated SCC is needed to form in the supply chain network in order to reduce the perennial supply chain challenges such functional silos, poor transparency of knowledge and information and the inadequate formation of appropriate upstream and downstream relationships. For the most part, SCC plays a crucial role in stimulating organizational performance (Boon and Wong, 2011; Ha *et al.*, 2011). The future of SCC could be based on multi-partner information sharing among vital stakeholders, collaborative warehouses and collaborative transportation and distribution in the supply chain network. SCC can only be effective as sufficient information transparency among the partners, especially the free flow of data and information is essential to make sure the supply chain partners obtain real-time data and information. Therefore, high levels of trust and commitment among the supply chain partners are a crucial enabler for realizing integrated sustainability improvements in the supply chain. The definition provided by Al-Rafaie on SCC that two or more independent supply chain partners cooperation together to plan, implement and achieve a mutually-agreed goals through a predetermined negotiation based on rules and structures to govern their mutual relationship is relatively more directly and significant in giving a snapshot about SCC compare to others definition shown in Table 1. All in all, the collaboration in supply chain allows the practitioner to take advantage of the synergy created and encourages them to real-time information exchange with their partners. For instance, maintain a stable and robust relationship with supply chain partners able to increase the likelihood of organization's willingness to exchange critical information according the agreed collaborative plan (Mentzer *et al.*, 2001). It is hoped that this paper has provided insights for researchers and practitioners to have a better understanding towards the effectiveness and efficiency of SCC.

REFERENCES

Ahuja, G., 2000. The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages. *Strategic Manag. J.*, 21: 317-343.

- Anthony, T., 2000. Supply chain collaboration: Success in the new internet economy. *Achieving Supply Chain Excellence Through Technol.*, 2: 41-44.
- Bahinipati, B.K., A. Kanda and S.G. Deshmukh, 2009. Horizontal collaboration in semiconductor manufacturing industry supply chain: An evaluation of collaboration intensity index. *Comput. Ind. Eng.*, 57: 880-895.
- Ballou, R.H., 2007. The evolution and future of logistics and supply chain management. *Eur. Bus. Rev.*, 19: 332-348.
- Barratt, M., 2004. Understanding the meaning of collaboration in the supply chain. *Supply Chain Manage. Int. J.*, 9: 30-42.
- Boon, I.S. and C.Y. Wong, 2011. The moderating effects of technological and demand uncertainties on the relationship between supply chain integration and customer delivery performance. *Int. J. Phys. Distribution Logist. Manage.*, 41: 253-276.
- Bowersox, D.J., D.J. Closs and T.P. Stank, 2003. How to master cross-enterprise collaboration. *Supply Chain Manage. Rev.*, 7: 18-27.
- Cao, M. and Q. Zhang, 2011. Supply chain collaboration: Impact on collaborative advantage and firm performance. *J. Oper. Manage.*, 29: 163-180.
- Cao, M., M.A. Vonderembse, Q. Zhang and T.S. Ragu-Nathan, 2010. Supply chain collaboration: Conceptualisation and instrument development. *Int. J. Prod. Res.*, 48: 6613-6635.
- Chen, I.J. and A. Paulraj, 2004. Towards a theory of supply chain management: The constructs and measurements. *J. Oper. Manage.*, 22: 119-150.
- Corbett, C.J., J.D. Blackburn and L.N.V. Wassenhove, 1999. Partnerships to improve supply chains. *MIT Sloan Manage. Rev.*, 40: 71-82.
- Cross, R., S.P. Borgatti and A. Parker, 2002. Making invisible work visible. *California Manage. Rev.*, 44: 25-46.
- Daugherty, P.J., 2011. Review of logistics and supply chain relationship literature and suggested research agenda. *Int. J. Phys. Distribution Logist. Manage.*, 41: 16-31.
- Daugherty, P.J., R.G. Richey, A.S. Roath, S. Min, H. Chen, A.D. Arndt and S.E. Genchev, 2006. Is collaboration paying off for firms? *Bus. Horizons*, 49: 61-70.
- Ellinger, A.E., 2000. Improving marketing/logistics cross-functional collaboration in the supply chain. *Ind. Marketing Manage.*, 29: 85-96.
- Ellram, L.M. and M.C. Cooper, 1990. Supply chain management, partnership, and the shipper-third party relationship. *Int. J. Logist. Manage.*, 1: 1-10.

- Fawcett, S.E., A.M. Fawcett, B.J. Watson and G.M. Magnan, 2012. Peeking inside the black box: Toward an understanding of supply chain collaboration dynamics. *J. Supply Chain Manage.*, 48: 44-72.
- Fawcett, S.E., G.M. Magnan and M.W. McCarter, 2008. A three stage implementation model for supply chain collaboration. *J. Bus. Logist.*, 29: 93-112.
- Flynn, B.B., B. Huo and X. Zhao, 2010. The impact of supply chain integration on performance: A contingency and configuration approach. *J. Operat. Manage.*, 28: 58-71.
- Frohlich, M.T. and R. Westbrook, 2001. Arcs of integration: An international study of supply chain strategies. *J. Operat. Manage.*, 19: 185-200.
- Gadde, L.E., L. Huemer and H. Hakansson, 2003. Strategizing in industrial networks. *Ind. Marketing Manage.*, 32: 357-364.
- Gardner, J.T., M.C. Cooper and T.G. Noordewier, 1994. Understanding shipper-carrier and shipper-warehouse relationships: Partnerships revisited. *J. Bus. Logist.*, 15: 1-121.
- Goffin, K., F. Lemke and M. Szwajkowski, 2006. An exploratory study of close supplier-manufacturer relationships. *J. Oper. Manage.*, 24: 189-209.
- Golicic, S.L., J.H. Foggin and J.T. Mentzer, 2003. Relationship magnitude and its role in interorganizational relationship structure. *J. Bus. Logist.*, 24: 57-75.
- Ha, B.C., Y.K. Park and S. Cho, 2011. Suppliers' affective trust and trust in competency in buyers: Its effect on collaboration and logistics efficiency. *Int. J. Oper. Produc. Manage.*, 31: 56-77.
- Holweg, M., S. Disney, J. Holmstrom and J. Smaros, 2005. Supply chain collaboration: Making sense of the strategy continuum. *Eur. Manage. J.*, 23: 170-181.
- Horvath, L., 2001. Collaboration: The key to value creation in supply chain management. *Supply Chain Manage. Int. J.*, 6: 205-207.
- Iacovou, C.L., I. Benbasat and A.S. Dexter, 1995. Electronic data interchange and small organizations: Adoption and impact of technology. *Manage. Inform. Syst. Q.*, 19: 465-485.
- Jap, S.D., 1999. Pie-expansion efforts: Collaboration processes in buyer-supplier relationships. *J. Marketing Res.*, 36: 461-475.
- Jin, Y. and P. Hong, 2007. Coordinating global inter-firm product development. *J. Enterpr. Inf. Manage.*, 20: 544-561.
- Kampstra, R.P., J. Ashayeri and J.L. Gattorna, 2006. Realities of supply chain collaboration. *Int. J. Logist. Manage.*, 17: 312-330.
- Ketikidis, P.H., S.C.L. Koh, N. Dimitriadis, A. Gunasekaran and M. Kehajova, 2008. The use of information systems for logistics and supply chain management in South East Europe: Current status and future direction. *Omega*, 36: 592-599.
- Kumar, G. and R.N. Banerjee, 2012. An implementation strategy for collaboration in supply chain: An investigation and suggestions. *Int. J. Serv. Oper. Manage.*, 11: 407-427.
- Kumar, K. and H.G. Van Dissel, 1996. Sustainable collaboration: Managing conflict and cooperation in interorganizational systems. *MIS Q.*, 20: 279-300.
- Kumar, K., 2001. Technology for supporting supply chain management: Introduction. *Commun. ACM.*, 44: 58-61.
- Lambert, D.M. and M.C. Cooper, 2000. Issues in supply chain management. *Ind. Market. Manage.*, 29: 65-83.
- Lambert, D.M., A.M. Knemeyer and J.T. Gardner, 2004. Supply chain partnerships: Model validation and implementation. *J. Bus. Logist.*, 25: 21-42.
- Lee, H.L., 2000. Creating value through supply chain integration. *Supply Chain Manage. Rev.*, 4: 30-36.
- Lee, H.L., V. Padmanabhan and S. Whang, 1997. The bullwhip effect in supply chains. *Sloan Manage. Rev.*, 38: 93-102.
- Madenas, N., A. Tiwari, C.J. Turner and J. Woodward, 2014. Information flow in supply chain management: A review across the product lifecycle. *CIRP. J. Manuf. Sci. Technol.*, 7: 335-346.
- Mamillio, D., 2015. Supply chain collaboration under uncertainty in the Albanian beer market. *Manage. Dyn. Knowl. Economy*, 3: 99-117.
- Manthou, V., M. Vlachopoulou and D. Folinas, 2004. Virtual e-Chain (VeC) model for supply chain collaboration. *Int. J. Produc. Econ.*, 87: 241-250.
- Mentzer, J.T., W. DeWitt, J.S. Keebler, S. Min, N.W. Nix, C.D. Smith and Z.G. Zacharia, 2001. Defining supply chain management. *J. Bus. Logist.*, 22: 1-25.
- Myhr, N. and R.E. Spekman, 2005. Collaborative supply-chain partnerships built upon trust and electronically mediated exchange. *J. Bus. Ind. Marketing*, 20: 179-186.
- Nyaga, G.N., J.M. Whipple and D.F. Lynch, 2010. Examining supply chain relationships: Do buyer and supplier perspectives on collaborative relationships differ?. *J. Oper. Manage.*, 28: 101-114.
- Oh, J. and S.K. Rhee, 2008. The influence of supplier capabilities and technology uncertainty on manufacturer-supplier collaboration: A study of the Korean automotive industry. *Int. J. Oper. Produc. Manage.*, 28: 490-517.

- Paulraj, A., A.A. Lado and I.J. Chen, 2008. Inter-organizational communication as a relational competency: Antecedents and performance outcomes in collaborative buyer-supplier relationships. *J. Operat. Manage.*, 26: 45-64.
- Perks, H., 2000. Marketing information exchange mechanisms in collaborative new product development: The influence of resource balance and competitiveness. *Ind. Marketing Manage.*, 29: 179-189.
- Powell, W.W., D.R. White, K.W. Koput and J.O. Smith, 2005. Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences. *Am. J. Sociology*, 110: 1132-1205.
- Samaddar, S. and S.S. Kadiyala, 2006. An analysis of interorganizational resource sharing decisions in collaborative knowledge creation. *Eur. J. Oper. Res.*, 170: 192-210.
- Sanders, N.R. and R. Premus, 2005. Modeling the relationship between firm IT capability, collaboration and performance. *J. Bus. Logist.*, 26: 1-23.
- Sheu, C., H.R. Yen and B. Chae, 2006. Determinants of supplier-retailer collaboration: Evidence from an international study. *Int. J. Oper. Prod. Manage.*, 26: 24-49.
- Simatupang, T.M. and R. Sridharan, 2002. The collaborative supply chain. *Int. J. Logistics Manage.*, 13: 15-30.
- Simatupang, T.M. and R. Sridharan, 2008. Design for supply chain collaboration. *Bus. Process Manage. J.*, 14: 401-418.
- Simatupang, T.M., A.C. Wright and R. Sridharan, 2004. Applying the theory of constraints to supply chain collaboration. *Supply Chain Manage.*, 9: 57-70.
- Simchi-Levi, D., P. Kaminsky and E. Simchi-Levi, 2000. *Designing and managing the supply chain: Concepts, strategies and case studies.* McGraw-Hill/Irwin, United States, ISBN-10: 0072357568, pp: 321.
- Singh, K. and W. Mitchell, 2005. Growth dynamics: The bidirectional relationship between interfirm collaboration and business sales in entrant and incumbent alliances. *Strategic Manage. J.*, 26: 497-521.
- Stevens, G.C., 1989. Integrating the supply chain. *Int. J. Phys. Distribution Mater. Manage.*, 19: 3-8.
- Walters, D., 2002. *Operations Strategy.* Palgrave Macmillan, Basingstoke, UK.,.
- Whipple, J.M. and J. Roh, 2010. Agency theory and quality fade in buyer-supplier relationships. *Int. J. Logist. Manage.*, 21: 338-352.
- Xu, L. and B.M. Beamon, 2006. Supply chain coordination and cooperation mechanisms: An attribute based approach. *J. Supply Chain Manage.*, 42: 4-12.
- Zhao, X., B. Huo, B.B. Flynn and J.H.Y. Yeung, 2008. The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. *J. Oper. Manage.*, 26: 368-388.
- Zhou, H. and W.C. Benton Jr., 2007. Supply chain practice and information sharing. *J. Operat. Manage.*, 25: 1348-1365.