

Behavioral aspects of Supply Chain Management: Strategy, Commitment, Integration and Firm Performance – A Conceptual Framework

Hiren Jayantkumar Patel ^{a,*}

^a V M Patel Institute of Management Ganpat University, Gujarat, India

Abstract

Supply Chain Management is one of the key areas in the field of operations management to improve the performance of the firm. This study proposes a model with four constructs named as (Supply Chain Management Strategy, Supply Chain Management Commitment, Supply Chain Management Integration and Firm Performance) into it. The proposed model is unique in the way of providing four constructs simultaneously with its possible inter-relationships. Total five Inter-relationships are offered in the form of propositions for the Fore mentioned model. Previous studies in the field of Supply Chain Management are failed in offering all the four constructs and its relationship simultaneously. This model lay down new foundation in the field of Supply Chain Management which helps practitioner and academician to do further research on it.

Keywords: Supply chain management strategy; Supply chain management commitment; Supply chain management Integration and firm performance.

1. Introduction

Morgan (1997) defined integrated SCM as the alignment of buyers, suppliers and customers and their processes to achieve an advance form of competitive advantage. It clearly mentioned that for overcoming the competition, focus on supply chain management is needed.

Management of performance in supply chains is no longer based on functional hierarchies, ownership, or intra-company power but rather cross-company relationships (vanHoek, 2001;Lehtinen and Ahola, 2009). It shows the importance of the linkages among supply chain members.

As John Gossman (1997), Vice President, Materials Management at AlliedSignal, recently noted; competition is no longer company to company but supply chain to supply chain. This shows strategic importance of supply chain management (Vickery, Calantone and Droge, 1999). Old scenario concentrates on silo view of supply chain while current view concentrates on holistic view from the chain perspective. Above narration conveys the importance of supply chain Management in business. Present study tries to propose a model with interrelationship among important factors of supply chain.

2. Literature review

2.1. Firm Performance

All the activities of SCM should be ultimately result into firm performance. It has been suggested that excellence in managing supply chains is directly linked to superior organizational performance (D'Avanzo et al., 2004). This shows

Corresponding author email address: facultyhiren@gmail.com
(Document type: Technical note)

importance of firm performance in the field of supply chain management. In the current study the firm performance is one of the constructs under study. Altekar (2005) narrated that value chain is mapped out to analyze all steps from the beginning to the end and redesign them to ensure that they add value to the final product. Firm performance is considered from both marketing and financial perspective.

2.2. Supply Chain Integration and Firm Performance

The term supply chain integration is defined as the extent of close relationship with supplier and customers (Frohlich & Westbrook, 2001). If integration is not done properly issues of bullwhip effect and conflicts among supplier chain members arise (Shah, 2009). This clearly mentions that integration is essential in supply chain management.

Leuschner, Rogers and Charvet (2013) found that supply chain integration enhances the firm performance. Collaboration is a value adding resource for firms seeking to reduce costs, increase their agility and satisfy their clients (Spekman et al., 1994). Ntayi and Eyaa, (2010) found out that there is a strong positive impact of collaborative relationships on firm performance for small and medium enterprises. Knowles et al; (2005) also argue that collaboration among supply chain firms may have a significant impact on the performance of participating firms. A truly integrated supply chain does more than reduce costs. It also creates value for the company, its supply chain partners and its shareholders (Lee, 2000).

Sanders and Premus (2005) found that internal collaboration has a direct and positive impact on firm performance. Stank, Keller and Closs (2001) found that integration of Chain was associated with overall performance improvement. Gimenez and Ventura (2005) found external integration had a positive and direct effect on performance.

P1: Supply Chain Integration positively affects firm performance.

2.3. SCM Commitment and SC Integration

SCM commitment is a promise or agreement to do something in the future in supply chain relationships. Commitment is defined as the desire on the part of each party to a business relationship to maintain and strengthen that relationship (Morgan and Hunt, 1994).

Commitment provides the basis for a cooperative spirit in marketing Channel relationships and leads to an overall stronger partnership (Anderson and Weitz, 1992). The understanding that commitment is crucial to the long-term success of a business relationship is central to understanding organizational success (Andaleeb, 1996). Wu (2012) found that there is a positive relationship between SCM Commitment and SC Integration.

It was proven by Salam (2011) that supply chain commitment is directly related to supply chain integration. SCM commitment affects integration of the SC (Wu et al., 2004). These two are major research clearly mentions positive relationship between SCM commitment and SCM integration. Based on above literature researcher proposes second proposition as under.

P2: SCM Commitment positively affects SC Integration.

2.4. SCM Strategy and Firm Performance

A study conducted by Green Jr., McGaughey and Casey (2006) revealed that supply chain management strategy is closely linked to firm performance. According to Zelbst et al; (2010), firm performance focuses on the ability of the supply chain to satisfy the needs of the ultimate customers of the supply chain. To achieve better performance, an organization should develop and implement an appropriate supply chain management strategy. According to (Green, McGaughey and Casey, 2006), no study to date, however, tests the interrelationships between SCM strategy and organizational performance.

Green et al; (2006) found a positive relationship between market orientation, supply chain management strategy and organizational performance and concluded that there is need for more research which incorporates supply chain performance.

Wisner (2003) also found out that supply chain management strategy influences firm performance. Roh, (2008) stipulates that supply chain management is important for successful supply chain outcomes. Hence Researcher proposes the following proposition.

P3: SCM strategy positively affects firm performance.

2.5. SCM Strategy and SC Integration

Successful SCM initiatives require cross-functional integration, and marketing must play a critical role. The challenge is to determine how to successfully accomplish this integration (Lambert and Cooper, 2000).

The objective of integration is to achieve operational efficiencies and strategic effectiveness in the supply chain through collaboration. Achieving this objective requires purposeful commitment and coordination with another firm's functional areas and processes (Stank, Keller and Closs 2001).

Companies with a low internal integration strategy will achieve low level of external integration and companies implementing the full internal integration strategy will have the highest levels of external integration (Stevens, 1989; Gimenez and Ventura, 2005; Otchere et al, 2013). It is confirmed that, the best integration strategy must involve "complete integration" (Frohlich and Westbrook, 2001; Kim, 2006; Kannan and Tan, 2010; Otchere et al, 2013).

Lummus and Duclos (2003) narrated that Supply chain strategy is prerequisite of the integration of supply chain. SCM and marketing have not always been seen to be closely linked in many firms (Rainbird, 2004). Above literature review supports for the proposition as under.

P4: SCM strategy positively affects SC Integration.

2.6. SCM Strategy and SCM Commitment

Goodman and Dion (2001) and Anderson and Witz (1992) described that idiosyncratic investments are investments specific to a channel relationship. SCM Strategy is positively related to commitment for the supply chain management (Il Ryu, SoonHu So, Chulmo Koo, 2009).

Based on available citation following proposition is offered.

P5: SCM Strategy positively affects SCM Commitment.

3. Research Gap

Wisnor (2003), Leuschner, Rogers and Charvet (2013), Wu (2012), Ryu et al; (2009) and (Frohlich and Westbrook, 2001; Kim, 2006; Kannan and Tan, 2010; Otchere et al, 2013) five studies gave discrete relationship among any two constructs and silent on remaining two. Comprehensively, an integrated model is offered based on the detailed literature review. Researcher has proposed an integrated model based on the given relationship among constructs of supply chain. This integrated model is an addition into body of knowledge of SCM from behavioral perspective.

4. Measurement

Above given variables can be measured based on past studies conducted by Wisner (2003), Allen and Meyer (1990), Davenport (1993); Lambert et al. (1998), Kohli and Jaworski (1990).

5. Conceptual Framework

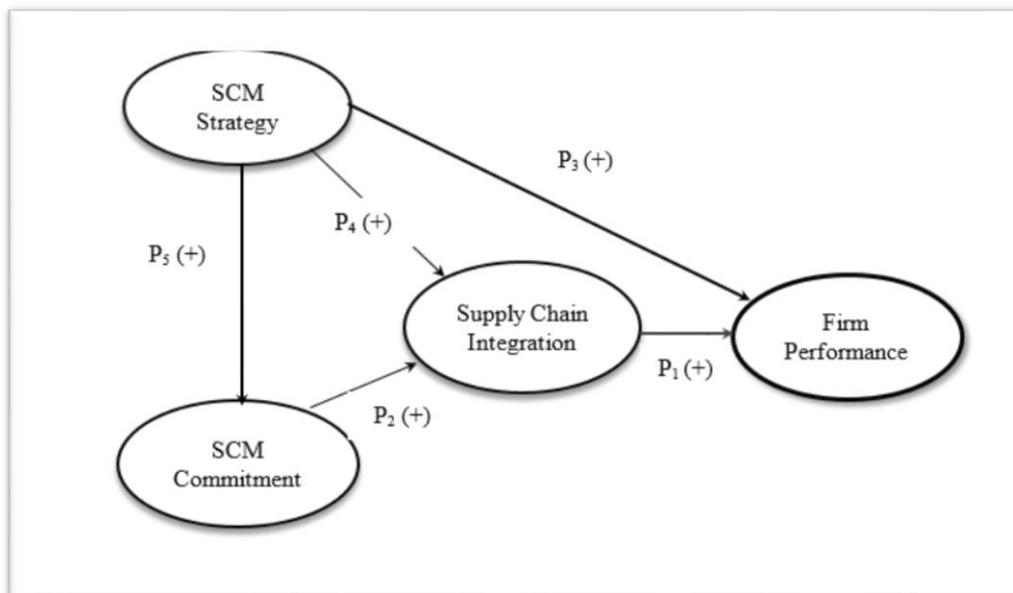


Figure 1. Proposed Conceptual Framework

6. Conclusion

This study proposes integrated model of supply chain management in a comprehensive way by considering all the four constructs simultaneously. This approach was missing in the work of earlier researchers. This paper adds to the existing body of knowledge by offering this integrated model. Further application of this model is based on its validity test and its results.

7. Future Scope

In the future, the proposed model can be tested for its validity. Based on The proposed model following propositions at prima facie level can be offered. In future proper literature review can be done in the context of these two propositions.

P6: SCM Commitment mediates between SCM Strategy and SC Integration.

P7: SC Integration mediates between SCM Strategy and Firm Performance.

References

- Allen, N. and Meyer, J. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*. Vol. 63. pp.1-8.
- Altekar, Rahul V. (2005). *Supply Chain Management: concept and cases*. PHI, New Delhi. p. 101.
- Andaleeb, S. (1996). An experimental investigation of satisfaction and commitment and marketing channels: the role of trust and dependence. *Journal of Retailing*. Vol.72, pp.71-93.
- Anderson, E. and Weitz, B. (1992), The use of pledge to build and sustain commitment Distribution channels. *Journal of Marketing Research*. Vol.29, pp.18-34.
- Claycomb,C., Dro "ge, D. and Germain, R. (1999). The effect of just-in-time with customers on organizational design and performance. *International Journal of Logistics Management* .Vol.10 (1), pp.37-58.
- Davenport, T. (1993). *Process Innovation, Reengineering Work through Information Technology*, Harvard Business School Press, Boston, MA.
- D'Avanzo, R. L., Starr, C. E. and vonLewinski, H. (2004). Supply chain and the bottom line: a critical link", *Outlook: Accenture*, Vol.1, pp. 39-45.
- Frohlich, M. T., & Westbrook, R. (2001). Arcs of integration: An international study of supply chain strategies. *Journal of Operations Management*. Vol. 19 (2), pp. 185-200.
- Gimenez, Cristina and Eva Ventura (2005). Logistics-Production., Logistics-Marketing and External Integration: Their Impact on Performance. *International Journal of Operations & Production Management*. Vol. 25(1), pp. 20-38.
- Goodman, L. E. and Dion, P. A. (2001). The determinants of commitment in the distributor-manufacturer relationship. *Industrial Marketing Management*, Vol.30, pp. 287-300.
- Gossman, John (1997). Presentation to supply chain management council meeting, Kellogg center, Michigan state University.
- Green Jr Kenneth W. McGaughey Ron and K. Casey Michael (2006). Does supply chain management strategy mediate the association between market orientation and organizational performance? *Supply Chain Management: An International Journal*, Vol.11 (5), pp. 407-414.
- Il Ryu, SoonHu So, Chulmo Koo. (2009). The role of partnership in supply chain performance. *Industrial Management and Data Systems*. Vol. 109 (4), pp. 496-514.
- Kannan, V. R., Tan, K. C., (2010). Supply chain integration: cluster analysis of the impact of Span of integration. *Supply Chain Management: An International Journal*, Vol. 15(3), pp. 207-15.

- Kim, S. W., (2006). Effects of Supply Chain Management Practices, Integration and Competitive Capability on Performance. *Supply Chain Management: An International Journal*, Vol.11 (3), pp. 241-48.
- Knowles Graeme, whicker Linda, Javier Heraldez Fema and Francisco del campo Canales (2005). A conceptual model for the application of six sigma methodologies to supply chain improvement. *International journal of logistics: research and applications*, Vol. 8(1), pp. 51-65.
- Kohli, A. K. and Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing*. Vol. 54(2), pp.1-18.
- Lambert, D., Copper, M. and Pagh, J. (1998). Supply chain management: implementation issues and research opportunities. *The International Journal of Logistics Management*. Vol.9(2), pp.1-18.
- Lambert D M and Cooper M C (2000), "Issues in Supply Chain Management", *Industrial Marketing Management*, Vol. 29, pp. 65-83.
- Lee,H.L.(2000), Creating value through supply chain integration. *Supply Chain Management Review*. Vol.4. pp.30-60.
- Lehtinen ,J. and Ahola, T.(2009). Is performance measurement suitable for an extended enterprise?", *International Journal of Operations & Production Management*, Vol.30 (2), pp.181-204.
- Leuschner, Rudolf., Rogers Dale S., and Charvet, Francois F (2013). A meta-analysis of supply chain integration and firm performance. *Journal of Supply Chain Management*. Vol. 49 (2), pp. 34-57.
- Lummus, R. R., Duclos, L. K. and Vokurka, R. J. (2003). The Impact of Marketing Initiatives on the Supply Chain. *Supply Chain Management: An International Journal*, Vol.8 (3 and 4), pp. 317-323.
- Morgan, J. (1997). Integrated supply chains: how to make them work!. *Purchasing*. May 22, pp. 32.
- Morgan, R.M. and Hunt, S.D. (1994).The commitment-trust theory of relationship marketing. *Journal of Marketing*, Vol. 58(3), pp. 20-38.
- Ntayi, J. M. and S. Eyaa, (2010). Collaborative Relationships, Procurement Practices and Supply Chain Performance: The Case of Small and Medium Enterprises in Uganda.
- Otchere, A. F., Annan, J. & Anin, E. K., (2013) Achieving Competitive Advantage through Supply Chain Integration in the Cocoa Industry: A Case Study of Olam Ghana Limited and Produce Buying Company Limited. *International Journal of Business and Social Research (IJBSR)*. Vol. 3(2), 131-145
- Rainbird M (2004). Demand and Supply Chains: The Value Catalyst. *International Journal of Physical Distribution & Logistics Management*, Vol. 34(3 and 4), pp. 230-250.
- Roh James Jungbae, Hong Paul and Park Youngsoo (2008). Organizational culture and supply chain strategy: a framework for effective information flows. *Journal of Enterprise Information Management*, Vol. 21(4), pp. 361-376.
- Sanders, Nada R. and Robert Premus (2005). Modeling the relationship between IT capability, Collaboration and Performance. *Journal of Business Logistics*. Vol 26(1), pp.1-24.
- Salam, Asif Mohammad (2011). Supply chain commitment and business process integration. *European Journal of Marketing*, Vol. 45(3), pp. 358-382.
- Shah, Janat (2009). *Supply Chain Management: Text and Cases. Supply Chain Integration*. Dorling Kindersley (India) Pvt. Ltd. pp. 213-238.
- Spekman, R., D.Salmond and J. Kamauff (1994). At Last Procurement Becomes Strategic. *Long- Range Planning*, Vol. 27(2), pp. 76-84.
- Stank, Theodore P., Scott B. Keller and David J. Closs (2001). Supply Chain Collaboration and Logistical Integration. *Transportation Journal*. Vol 41(2/3), pp. 32-46.

- Stevens, G., (1989). Integrating the supply chain. *International Journal of Physical Distribution and Materials Management*, Vol. 19(8), 3-8.
- vanHoek,R.I.(2001).The contribution of performance measurement to the expansion of third party logistics alliances in the supply chain”, *International Journal of Operations and Production Management*. Vol. 21 (1/2), pp.15-29.
- Vickery, Shawnee, Calantone, Roger and Droge, Cornelia (1999). Supply Chain Flexibility: An empirical study. *The Journal of Supply Chain Management*, Vol. 35 (3), pp. 16-23.
- Wisner, J.D. (2003). A structural equation model of supply chain management strategies and firm performance. *Journal of Business Logistics*, Vol. 24 (1), pp. 1-26.
- Wu, Wann-Yih; Chiang, Chwan-Yi; Ya-Fung, Wu; Hui-Fu Tu (2004). The influencing factors of commitment and business integration on supply chain management. *Industrial Management and Data Systems*; Vol. 104, ¾. pp. 322-333.
- Wu, Mei-Ying., Yung-ChienWeng and I-Chiao Huang (2012). A study of supply chain Partnerships based on the commitment – trust theory. *Asia Pacific Journal of Marketing and Logistics Vol.24 No.4*. pp. 690-707.
- Zelbst Pamela J., Green Jr Kenneth W, Sower Victor E. and Baker Gary (2010). RFID utilization and information sharing: the impact on supply chain performance. *Journal of Business & Industrial Marketing*, Vol. 25 (8), pp. 582–589.