ABSTRACT

Shortened product life cycles and services, escalating global competition, heightened expectation of customers, and a trend towards vertical disintegration has contributed to the modern business environment becoming progressively more complex. To competing successfully in today’s marketplace, organizations need concurrently to manage effectively and efficiently, the activities of design, manufacturing, distribution, service and recycling of their products and services to customers. Increasing global competition, vertical disintegration and a focus on core activities have led to the belief that firms are links in a networked supply chain; and the battle of competitiveness is increasingly fought between supply chains and not companies. Serving the right customers, finding the right suppliers, and fostering trust with the right partners have a great impact on today’s as well as future business performance. In this context, the SCM approach has thus been increasingly identified by many organizations as an opportunity to achieve these goals. To attain these criteria, it has become imperative for organizations, the world over, to tap the principles of Supply Chain Management (SCM).

In view of the above, researchers would be deeply interested in mapping the SCM terrain and to define the critical dimensions that cover the aspects of SCM. Even though some of the researchers have attempted to map the SCM terrain and conduct studies empirically, there is a definite need to develop a more comprehensive scale that covers the aspects of SCM, particularly in the Indian context, as some of the issues are specific to India.
Also, there is a need to conduct studies on SCM from the perspective of the other entities of the supply chain. This thesis proposes to identify the critical dimensions of SCM in the manufacturing sector in India, from the perspective of the four entities of the supply chain, namely, Original Equipment Manufacturer (OEM), Supplier (Tier-1 and Tier-2 suppliers), Logistics Service Provider (LSP), and Retailer. Further, the present study examines research issues pertaining to the relationship between the various critical dimensions of SCM with the measures of performance, in a moderated environment, from each of the entity’s perspective.

Questionnaire survey method has been adopted to conduct the present study in India. In all, four individual questionnaires were developed to address the specific issues of the four entities. The respondents were practicing managers in the manufacturing sector in India. Data was collected from practitioners of SCM who are working in various manufacturing sectors. The critical dimensions and operating elements of SCM, identified from literature review and contained in the questionnaire, were found to be reliable and valid at the end of the various validity and reliability tests.

The generalized model proposes to check the relationship between a set of critical dimensions of SCM of an entity in a supply chain and the measures of performance (MOP) relating to the particular entity in a moderated environment. It is proposed in this study that the presence of the moderator enhances the relationship between the critical dimensions of SCM of the entity and the measures of performance of the entity, thereby improving the performance of the individual entity (as well as the supply chain).
From the perspective of the OEM, in this study, the uncertainty level at which the supply chain would be operating is determined by the level at which the respondent (OEM) perceives it and therefore the OEM questionnaire also captures the uncertainty level from the respondents. The critical dimensions of SCM identified from the perspective of OEM are: Competitive Priorities, Top Management Commitment, Customer Orientation and Involvement of Employees, Information Technology, Strategic Purchasing, Supply Chain Management Techniques, Supply Chain Management Supporting Tools, External Logistics Integration, Manufacturing Management, Returns Management, Benchmarking of Supply Chain Activities. The MOPs are: Financial Performance, Trading Partner Performance, Business Performance and Customer Related Performance. The dimensions of Trading Partner Management, namely, Selection, Trust and Commitment, Cross Functional Teams and Long Term Relationships, act as moderators that enhance the relationship between the critical dimensions of SCM and the four MOPs noted earlier. From the OEM’s perspective, the critical dimensions of SCM, MOP and the moderators are suitably depicted in the conceptual framework. The effect of each moderator (i.e., Selection, Trust and Commitment, Cross Functional Teams and Long-Term Relationships) and the simultaneous effect of all moderators are studied. The findings indicate that in both the cases, from the perspective of OEM, the moderators have a significant effect on the relationship between the critical dimensions of SCM and the MOP.

Similarly, in the present work, studies were conducted from the perspective of the trading partners, namely, Supplier, LSP and Retailer. The
conceptual framework developed from the individual trading partner’s perspective proposes the relationship between the critical dimensions of SCM and the MOP, with the dimension ‘Supply Chain Orientation’ (SCO) of the trading partner acting as a moderator. The common critical dimensions of SCM from the trading partner’s perspective are Top Management Commitment, Customer Orientation and Involvement of Employees, Information Technology, Returns Management, and Benchmarking of Supply Chain Activities. However, such common factors have items specific to the entity. The specific factors of SCM from the supplier’s perspective are Manufacturing Management and Supply Management. The specific factors from the LSP’s perspective are Integration of Supply Chain Logistics, Freight Forwarding, Distribution/Warehousing, Transportation, and Logistics Design. Similarly, the specific factors from Retailer’s perspective is Materials Management, and Store Management. The MOPs from Supplier’s perspective are Financial Performance, Business Performance, and Customer Related Performance. The MOPs from the LSP and the Retailer’s perspective were Financial Performance and Business Performance. The present study has revealed that in the case of Supplier and Retailer, the moderator (i.e., SCO) has a significant effect on the relationship between the entity’s critical dimensions of SCM and all the MOPs of the entity. From the LSP’s perspective, the results indicate that the effect of the moderator on the relationship between the critical dimensions of SCM and Business Performance is significant, but not significant in case of Financial Performance.