ABSTRACT
of
The Thesis entitled

STUDY ON COORDINATION AND RESPONSIVENESS ISSUES OF SUPPLY CHAIN MANAGEMENT IN INDIAN SMALL AND MEDIUM ENTERPRISES (SMEs)

Submitted to the Faculty of Technology, University of Delhi in fulfillment of the requirement for the award of the degree of

DOCTOR OF PHILOSOPHY
In
Production Engineering
By
Ravinder Kumar

Under the supervision of

Dr. Rajesh Kr. Singh
Associate Professor
Department of Mechanical and Production Engg.
Delhi Technological University
Delhi-110042

Dr. Ravi Shankar
Professor
Department of Management Studies
Indian Institute of Technology
Delhi-110016

Department of Production Engineering,
Faculty of Technology, Delhi University,
Delhi-110007
India

2013
STUDY ON COORDINATION AND RESPONSIVENESS ISSUES OF SUPPLY CHAIN MANAGEMENT IN INDIAN SMALL AND MEDIUM ENTERPRISES (SMEs)

ABSTRACT

Supply chain management (SCM) with multiple perspectives has gained significant importance among researchers and practitioners. It has been considered as a competitive strategy for coordinating suppliers and customers with the objective of improving responsiveness and flexibility of manufacturing organizations. Supply chain coordination is necessary to integrate all the activities of a supply chain. It helps in improving performance of whole value chain, which is essential for sustainable growth of all organizations.

This research is aimed at examining the current orientation of Indian small and medium enterprises (SMEs) towards coordination and responsiveness issues of SCM. It seems that the coordination and responsiveness issues of supply chain are much explored in the context of large enterprises but less attention is paid to SMEs. In response to this, the reported research has attempted to fill some of the gaps in contemporary research.

The contribution to knowledge recorded in this study is four fold. First a comprehensive literature review on SMEs is done and classification scheme is suggested. Secondly, an extensive multi-sector survey of Indian SMEs from different parts of the country is conducted to investigate various coordination and responsiveness issues related with SCM. Two hundred and fifty one organizations belonging to different sectors such as auto component, electronic, plastic etc. have participated in the study as respondents. The third contribution to knowledge is made through development of two case studies to obtain further insights into SMEs supply chain. The fourth contribution to knowledge is made by developing ISM based model. Major contributions of study are as follows.

- Studied the literature on coordination and responsiveness issues of SCM in SMEs for gaps identification.
- Identified major priorities while forming supply chain strategy for SMEs.
- Identified the problems faced by SMEs during implementation of SCM.
• Identified the risks SMEs feel while working in supply chain.
• Identified the importance of different factors for improving coordination in supply chain of SMEs.
• Identified the importance given by SMEs while selecting and evaluating the key/preferred suppliers.
• Identified the level of involvement of key suppliers with SMEs in decision making on different issues.
• Identified the level of involvement of key customers with SMEs in decision making on different issues.
• Identified the different issues related to distortion of actual demand in supply chain of SMEs.
• Identified the level of information technology (IT) applications for different function in supply chain of SMEs.
• Identified the level of use of modern technologies /tools used by SMEs.
• Identified the critical success factors (CSF) for implementation of SCM in SMEs.
• Analyzed the effect of different SCM issues on performance of SMEs on certain criterions of customer service and satisfaction, innovation and growth, financial and internal business.
• Analyzed coordination and responsiveness issues of SCM in Indian SMEs through select case studies.
• Developed a structural relationship model for critical success factors of coordination and responsiveness.

Observations from this study will help SMEs in developing suitable strategies for improving coordination and responsiveness of their supply chain.

**Key Words:** Small and medium enterprises, Supply chain management, Coordination, Critical success factors, Responsiveness, Performance.