The Seybold Report

ISSN 1533-9211

DOI: 10.5281/zenodo.8357759

BARRIERS IN IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT - CASE STUDY ON GB SPRING PVT LTD, DEHRADUN

Dr. SUMAN VIJ

Professor, Shri Guru Ram Rai University, Dehradun, Uttarakhand, India.

BHUSHAN AGGARWAL

Research Scholar, Shri Guru Ram Rai University, Dehradun, Uttarakhand, India.

Dr. MINI SRIVASTAVA

Associate Professor, Shri Guru Ram Rai University, Dehradun, Uttarakhand, India.

Abstract

The Indian business has begun to recognize the value of Supply Chain Management and has begun to put programs in place to compete on the world market. Thus, in the contemporary business supply chain management (SCM) has become a crucial organizational strategy. Many manufacturing sectors have adopted, but the industry in the hilly areas is particularly affected because of its distinctive locational particularities. The primary objective of this research was to find obstacles towards the adoption of supply chain management in Uttarakhand. An organization's strategy for innovation often includes the idea of green supply chain management (GSCM). Incorporating environmental factors into all facets of supply chain management (SCM), including product design, material sourcing and selection, manufacturing processes, final product delivery to customers, and end-of-life management of the product after it has served its purpose, is the aim of global supply chain management (SCM). **Purpose:** The purpose of the study is to identify the internal and external constraints that affect the adoption of supply chain management (SCM) practises and to evaluate the efficacy of these practises using the business in Uttarakhand as a case study. **Method:** Interviews were conducted to acquire data. In order to develop specific areas of interest from which to develop the research questions, the topic for this paper was thoroughly investigated before the collection of primary data through reading the literature and the identification of common themes. Participants were managers at the top and middle levels as well as other employees from the sales, marketing, and sustainability divisions of the various business unit at Uttarakhand. To obtain the necessary data from the respondent, the study used an interview-based research methodology. Open interview questions were the method utilised to acquire the data. The remarks made during the interview were then recorded, coded, and used to analyse the interview responses. In qualitative research, Bryman and Bell (2011), claims that you deliberately choose knowledgeable respondents who will provide with the information needed. Due to the size of the entire research population, non-probability purposive sampling was used to choose the sample. According to Creswell and Creswell (2018) the purposeful sampling technique is used to reach out to people who are particularly knowledgeable or experienced with a certain issue. It's crucial to keep in mind that while choosing a sample, you should pick one that will provide you a true and accurate representation while not restricting the broader population under study. Hence to closely understand we interacted with all top management and supervisor

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

INTRODUCTION

Small and medium-sized businesses (SMEs) are currently seen as the main source of vitality, innovation, and flexibility in emerging and developing countries as well as to the economies of the majority industrialized nations in today's increasingly globalized economy. They make significant contributions to Economic growth and the creation of jobs (Koh et al., 2007). SMEs are developing as a potential economic pillar in many locations and provide significantly more to employment than huge corporations do (Peng, 2009). SMEs have the potential to be a major force in India, where a comparable tendency is also present. There is a huge opportunity for expansion because SMEs are significant economic engines in many countries. The current competitive business environment and global marketplace can make it challenging for SMEs to survive and expand; customers are increasingly seeking better and more affordable products, higher service standards, more product variety, and faster delivery, additionally, the transformation of business models due to lower production costs, the provision of ever-increasing customer value, flexibility with superior service, and the pervasive impact of information technology (Chandra and Kumar, 2000) is making it more and more difficult for companies to survive. These difficulties highlight how crucial it is to manage cross-border interactions between business partners. Due to this, many businesses have started to realize that supply chain networks now compete with one another rather than individual enterprises (Li et al., 2005; Koh et al., 2007; Chow).

Demand, sourcing and procurement, production, and logistics process management are all addressed holistically by SCM (Chow et al., 2008). It is a network made up of all parties involved in producing and delivering goods or services to final consumers on both the upstream and downstream sides through physical distribution, the flow of information, and financial transactions (Stock and Boyer, 2009). These parties include manufacturers, suppliers, retailers, customers, and others (Mentzer et al., 2001). Modern SCM concept in the new economy incorporates strategic differentiation, value enhancement, operational efficiency improvement, cost reduction (Bidgoli, 2010), supply chain integration and collaboration, operational excellence, and virtual supply chains (Chow et al., 2008). This is because SCM is undergoing a significant transformation (Melnyk et al., 2009) and evolving rapidly. The study of SCM has advanced quickly. To achieve the highest levels of performance, the focus has shifted from internal integration (Monczka et al., 2009) to supplier (Lummus and Vokurka, 1999) and customer (Lagrosen, 2005). Asian businesses are lagging behind in understanding how integrated supply chains drive significant changes in business processes and work with favorable results in better quality services, cost reduction, and efficiency (APO, 2002). American and European SMEs are well aware of the advantages of integrated supply chains through collaborative relationships (Mudambi et al., 2004; Meehan and Muir, 2008). Due to its innovative business approach and competitive advantage, supply chain management (SCM) has seen a sharp increase in attention. Small and medium-sized organizations (SMEs) are falling behind in understanding how an integrated supply chain promotes spectacular growth. Large companies are aware of the benefits of SCM. Improvements in corporate operations and activities lead to improved service quality, cost savings, and efficiency. Particularly, SMEs in India undervalue the potential advantages of SCM because they lack appropriate understanding

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

about it. The potential to expand Indian SMEs through SCM is enormous, given that SMEs are significant growth engines in India. As a result, this paper discusses the suitability of SCM for SMEs by emphasizing their requirements and difficulties by the mean of case study on in Dehradun Uttarakhand.

Research Question

- What are the internal barriers influencing the SCM implementation in G.B. Springs Pvt Ltd?
- What are the external barriers influencing the SCM implementation in G.B. Springs Pvt Ltd?

Research Objectives

1) To assess the internal barriers influencing the SCM implementation.
2) To assess the external barriers influencing the SCM implementation.

SME of Uttarakhand Dehradun, the capital of Uttarakhand, was chosen for the establishment of new businesses because it is a well-known global education centre, a tranquil state, has a healthy, pollution-free environment, less expensive power, less expensive industrial land, and requires less capital. In order to generate employment possibilities for the entire state of Uttarakhand, which is full of difficulties due to the hills, natural disasters, and the slow pace of life in the highlands, a zone of zero industry was proclaimed for the development of Uttarakhand. SME entrepreneurs were invited in 1983.

From 1983 onward, SMEs encountered significant challenges in establishing industries in the region. However, the trend shows that 90% of these industries stayed in Uttarakhand for a short period of time before failing due to either poor industrial infrastructure or inadequate implementation of their SCM procedures. The pattern indicated that SMEs frequently relocated their businesses to the newly established industrial Zero zone of Dehradun and other industrial areas in what would later become known as Uttarakhand following September 11th, 2000.Why haven't industries built an industrial environment in all 13 districts of Uttarakhand, reduced unemployment, boosted the general public's standard of living, and increased their purchasing power? Research has shown that the supply chain plays the most crucial role in the administration of industries. Further flexible use of enhanced processes and procedures aid SME in industry expansion & diversification. The Ministry of MSME defines SME in India as having a maximum investment of Rs. 5.0 crore in machinery and plant that is installed by the SME In his unit. After twenty years, the maximum was raised from two crore to five crore. The number of industries (MSMEs) that wished to move to Uttarakhand has decreased as a result. The State Industry, GMDIC in Uttarakhand issues certificates for industrial registration under the SME industry category. It was created following the verification of the equipment installed in industrial facilities within the state of Uttarakhand that was listed in the list of gezet under the khasra numbers and was determined to be eligible for industrial incentives and benefits under the SME's Industrial Incentive Policy (1983–1988). After visiting the SME site to inspect and physically verify the new equipment and machinery, and after comparing the list value of

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

purchase invoices provided to the GMDIC office for the purpose of issuing the SME certificate, the GMDIC issued the SME certificate. It will assist in collecting the incentives once the date of purchase listed in the purchase bills and the date of installation in the manufacturing facility—which excludes cables, electrical panels, etc.—have been matched. Two new SMEs, Garg Woollen Pvt. and G B Springs Pvt. Ltd., arrived in the Dehradun industrial area in 1984 and made every attempt to stay by using integration of SCM processes and procedures. Both had prosperous industrial operations, but Garg Woollen stopped down after ten years. However, G B Springs is still around and has expanded and diversified; this information is crucial for research and will lead to conclusions about how to address the issues with SCM in Uttarakhand.

Company Overview

The GB Group, founded by Late Amrit Lal Gupta, is amongst India's few business houses serving Indian Railways, Defence Sector, Power Sector, Heavy Earth Moving Equipment, Oil Sector etc and also exporting its products to South East Asia, Europe & the Middle East. With a covered area of roughly 12000 square metres, the GBS Industrial Unit has a total area of about 20000 square metres and is situated about 22 kilometres from Dehradun towards Chakrata. With 150 employees, GBS has the most modern manufacturing and testing facilities. About 3000 MT per year of laminated bearing leaf springs and 5000 MT per year of various types of hot coil helical springs are produced by GBS.

This SSI unit, in Punjab was manufacturing helical coil springs for railways.GB Spring operational unit decided to shift his SME to Dehradun zero industry zone with industrial incentives from (Barnala) Punjab) in1983 due to disturbance. Director, Engineer, Mr. Bipin Gupta, set up his industry, in spite of all challenges of poor industrial infrastructure of new industrial area of Uttarakhand, started manufacturing of Helical Springs for railway bogies his new industry in Rampur village of Dehradun District, which had been declared, zero industry zone. He has past industrial experience, expertise and passion, for experimenting. Innovative ideas of SCM. He progressed well in Dehradun by using flex integration of Process & procedure of SCM has done expansion, diversification with long sustainability of SME through technical know-how providing jobs to hundreds local population of nearby areas which ultimately helped Uttarakhand in development and increase in employment.

GB spring has closed a running plant at Barnala (Punjab) and was aware of teething problems, of new baby unit, like a passionate of mother to manage SCM of all needs, of new born child SME, in new industry Area, without industrial infrastructure. All the family members plus staff, were given duties of work to be completed as per PERT chart & took a trail run in 1985 & started commercial production after release of power connection from UP power corporation, having production experience of optimum operation in Barnal Plans. The SME invested Rs. Two crore limit, in investment of new plant & machinery, became eligible for availing industrial incentives of industrial policy (1983-1988)The Directors, industrialist of Punjab, had good political rapport, could arrange all NOC, project clearances, loans etc necessary for project SME started construction of boundary wall of their Project for manufacturing Railway Helical Coil Springs, in February1984.The offices of industrial infrastructure was so scattered,

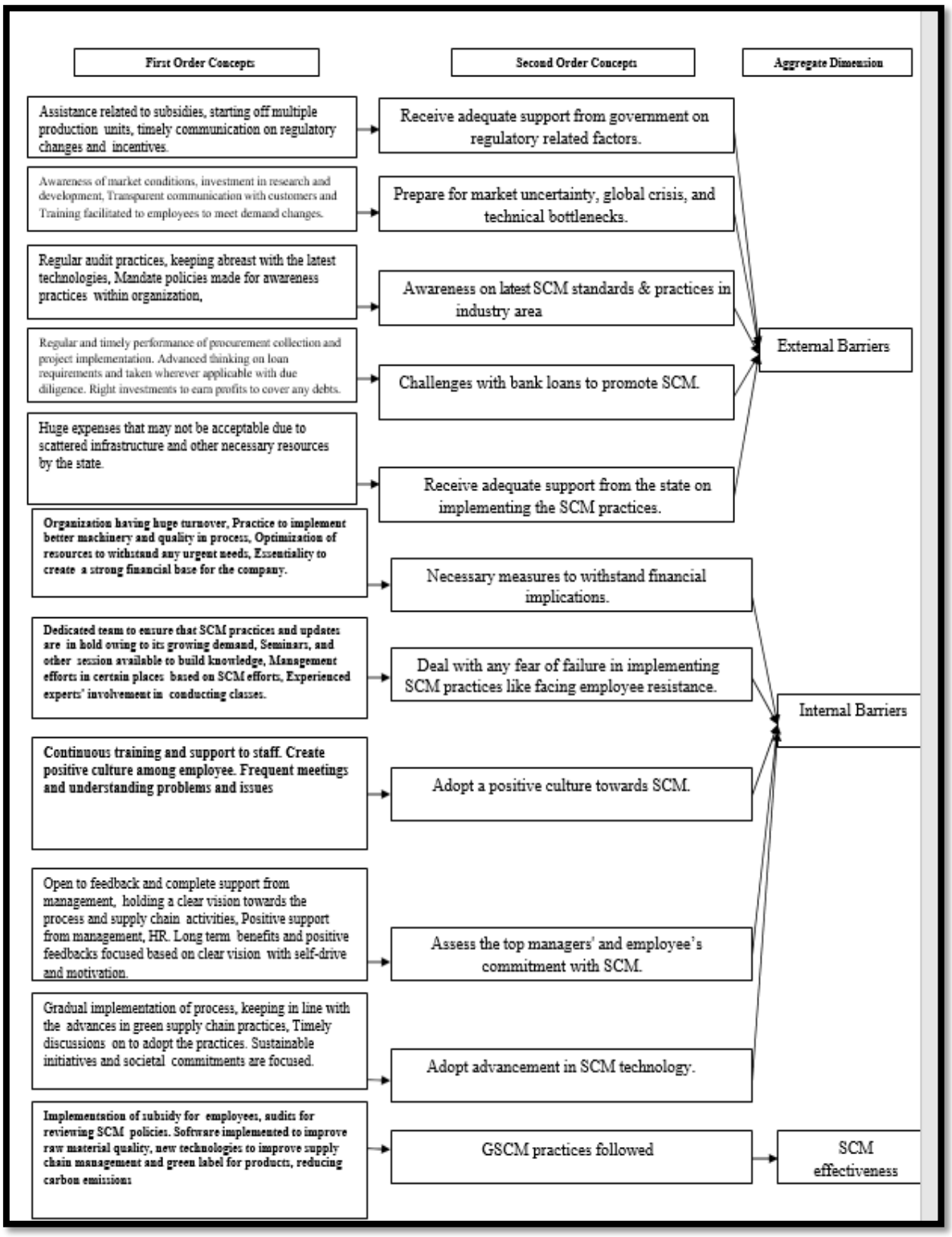
The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

that SME wasted time, money, energy for collection of NOC & permission like

- SME Registration by GMDIC Dehradun was in Patel nagar
- Project approval from PICK UP office Lucknow
- Finance sanction by UPFC Kanpur
- Industrial land allocation in UPSIDC Industrial are Kanpur
- Power sanction from UP Power Corporation, Lucknow.
- Tendering process of different Railway ICF, RCF &wagon manufacturing Yards scattered7Finished product section arrangements of Inspectors deputed by railways. Billing & payments liaison WORK at railway workshops & offices scattered all over India.
- Pollution NOC from Lucknow.
- Factory act Licence & Maps approval and labour licences from Haldwani.
- NSIC Registration (NOIDA)12SISIl office in Haldwani, Labour commissioner office at Haldwani.
- Textile commissioner office Kanpur
- Import & export licence at Kanpur
- Director of industry HO at Kanpur.

Due to scattered poor infrastructure, the new industry entrepreneur faced lot of difficulties for making SME successful without air connectivity. But those SMEs who were passionate, to make their SMEs successful, worked consistently. Although SME had an expertise in the field and anticipated minor problem in the new state, but the locational peculiarities raised problems that were not expected by them. The company came into existence before State of Uttarakhand. Since it is capital equipment establishment the power supply is crucial for its growth. The company was informed about the proper power distribution along with alternate power distribution, from Mazara(NH72), Jhazra & Selaqui power station, that supplies upgraded and continuous power supply. But Transformer at Jhajra caught fire & power Transformer of Selaqui power station got burst, due to poor quality and the alternate source promised could not provide the required assistance, In the situation SMEs had to pay 20% extra tariff, but is still suffered huge losses due to unavailability of continuous power supply. From this point the owner started comparing the business in two different states. Apart from all this poor logistics, hilly and difficult terrain; gaps in infrastructure; lack of connectivity; problems of raw materials availability; limited access to markets

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759



The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

The table, shown in the above figure, displays the first-order and second-order concepts linked to green supply chain management practices, as well as its obstacles from an organizational standpoint and an evaluation of the effectiveness of the message. We have discovered about 10 second-order concepts based on the many first-order concepts, which are then further condensed to the aggregate dimensions of internal and external obstacles. The key second-order concepts are explained including getting the government's support for regulatory-related issues, preparing for market uncertainty, the global financial crisis, and technical bottlenecks, raising. Industry awareness of SCM standards and practices in the industry, overcome difficulties with bank loans to promote SCM, overcome various customer-related bottlenecks in implementing SCM practices, and taking the necessary precautions to withstand financial implications.

The responses from the interviews further emphasise that the businesses also take the required steps to form an internal committee to consider the most effective use of resources. In this course, it is known that internal and external audits are planned for the organisation, and that these audits identify deficiencies with regard to the entities and the corrective actions that need to be implemented. Resources would refer to material, man, process, and machine based on the idea from interview responses. The company makes an effort to educate/train its staff about the advantages of supply chain management. It is was concluded that factory incorporate better machinery to improve production. Several interview comments mention that despite market uncertainty, GB Springs is in a very good position as a company. There are currently no catastrophic issues affecting the organization because it is operating in a large market, but it is necessary to have comprehensive business continuity plans and emergency procedures in place just in case the organisation is forced to deal with a scenario that emerges.

References

1) Basnet, C., Corner, J., Wisner, J. and Tan, K-C. (2003). Benchmarking supply chain management practice in New Zealand. Supply Chain Management: An International Journal. 8, 57-64.

2) Chin, K-S, Rao Tumalla, V.M., Leung, J.P.F. and Tang, X. (2004). A study on supply chain management practices: The Hong Kong manufacturing perspective. International Journal of Physical Distribution & Logistics Management. 34, 505- 524.

3) Deshmukh S.G. and Mohanty, R.P. (2004). Reengineering of supply chain: Lessons from Select Case Studies. In Sahay, B.S. (Ed.), Supply Chain Management for Global Competitiveness. 2nd Edition, Macmillan, New Delhi, 509-526.

4) Feldmann., M. and Muller, S. (2003). An incentive scheme for true information providing in Supply Chains. Omega, 31, 63-73.

5) Fernie, J., (1995). International Comparisons of Supply Chain Management in Grocery Retailing. Service Industries Journal. 15, 134-147.

6) Galt, J.D.A., and Dale, B G., (1991). Supplier Development: A British Case Study. International Journal of Purchasing & Materials Management. 27, 16-22.

7) http://www.etintelligence.com

8) http://www.indianrail.gov.in

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.8357759

9) http://www.nhai.org

10) http://www.weforum.org/

11) Joshi, V. and Chopra, S.K. (2004). Best Practices in Supply Chain Management at Modi Xerox. In Sahay, B.S. (Ed.), Supply Chain Management for Global Competitiveness. 2nd Edition, Macmillan, New Delhi, 549-562.

12) Kankal, R.A. and Pund, B.S. (2004). Reengineering of supply chain: The case of Crompton Greaves. In Sahay, B.S. (Ed.), Supply Chain Management for Global Competitiveness. 2nd Edition, Macmillan, New Delhi, 527-537.

13) Kemppainen, K. and Vepsalainen, A.P.J. (2003). Trends in industrial supply chains and networks. International Journal of Physical Distribution & Logistics Management, 33, 701-719.

14) Moberg, C.R., Cutler, B.D., Gross, A. and Speh, T.W. (2002). Identifying antecedents of information exchange within supply chains. International Journal of Physical Distribution & Logistics Management. 32, 755-770.

15) Quayle, M. (2003). A study of supply chain management practice in UK industrial SMEs. Supply Chain Management: An International Journal. 8, 79-86.

16) Sahay, B.S. and Mohan, R. (2003). Supply chain management practices in Indian industry. International Journal of Physical Distribution & Logistics Management. 33, 582-606.

17) Sahay, B.S., Gupta, J.N.D. and Mohan, R. (2006). Managing supply chains for competitiveness: the Indian scenario. Supply Chain Management: An International Journal. 11, 15-24.

18) Saxena K.B.C. and Sahay, B.S. (2000). Managing IT for world-class manufacturing: the Indian scenario. International Journal of Information Management. 20, 29-57.

19) Tan, K.C. (2002). Supply Chain Management: Practices, Concerns, and Performance Issues. The Journal of Supply Chain Management. 35, 51- 62.

20) Tan, K.C. and Wisner, J. (2000). Supply Chain Management Practices in the United States and Europe. Research Paper Series of the APICS Educational and Research Foundation and The Supply-Chain Council, Stock No. 07029, pp. 43.

21) Vrat, P. (2004). Supply chain management in India: Issues and challenges. In Sahay, B.S. (Ed.), Supply Chain Management for Global