

A Study on The Effectiveness of Green Supply Chain Management

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ABSTRACT

This study explores the concept of Green Supply Chain Management (GSCM), which integrates environmental thinking into supply chain operations, including product design, material sourcing, manufacturing processes, delivery, and end-of-life product management. The research aims to analyze the drivers, practices, and benefits of GSCM implementation across various industries. It also examines the challenges faced by organizations in transitioning to environmentally friendly supply chain models. Through a review of literature, case studies, and industry data, the study highlights the positive impact of GSCM on organizational performance, regulatory compliance, and environmental sustainability. The findings suggest that adopting green supply chain practices not only reduces environmental footprints but also enhances competitiveness and corporate reputation. This research underscores the importance of strategic planning, innovation, and stakeholder engagement in achieving sustainable supply chain goals.

KEYWORDS: Green Supply Chain Management (GSCM), Sustainability, Environmental Management, Sustainable Logistics, Eco-friendly Practices, Supply Chain Optimization, Sustainable Development, Corporate Social Responsibility (CSR), Waste Reduction, Green Manufacturing

INTRODUCTION

Green Supply Chain Management (GSCM) is one of the recent innovations for the enhancement of capabilities of Supply Chain Management. An environmentally conscious supply chain, also called a green supply chain, is a new concept appearing in recent literatures. Although this environmental issue has been realized very important for business, its introduction to supply chain management has only been developed recently. The inception of Green Supply Chain Management (GSCM), conceptually taken its roots during the Industrial Revolution. However lately it came to the forefront with increased sensitivities of the nations & society towards mitigation of the industrial or other waste's malefic effects on environment. As the concept of Supply Chain Management (SCM) gained attention making manufacturing firms integrated with suppliers & customers through various supply & distribution logistics networks in order to ship products to customers with competitive advantage, the environmental concerns led the companies to incorporate mechanisms regarding disposal, recovery, recycling & reuse of material/energy waste generated within the ambit of supply chain infrastructure.

The Green supply chain management, environmental sustainability, global and local environmental problems in recent years as a result of the natural environment has become a challenging issue for business organizations. Such outsourcing business, manufacturing, and logistics operations, responsible for most of these problems are considered. As a result, government agencies such as the conduct of business, workers, neighbours, and not for-profit groups, as the pressure from different stakeholders inside and outside the organization and are under increasing scrutiny. More

environmentally friendly products for the customers and the environment is above society's growing demand. These challenges and pressures of their business, while severely push companies to consider environmental impacts.

SCOPE OF THE STUDY

This study focuses on understanding the principles, practices, and impact of Green Supply Chain Management (GSCM) within modern business environments. It aims to explore how organizations integrate environmental considerations into their supply chain operations, from product design and procurement to production, distribution, and end-of-life management. The study covers various industries, with emphasis on sectors that have significant environmental impacts, such as manufacturing, logistics, and retail.

The research includes an analysis of the key drivers behind the adoption of GSCM practices, including regulatory pressures, consumer awareness, and corporate social responsibility initiatives. It also examines the benefits and challenges of implementing GSCM, including cost implications, technological requirements, and organizational change management. The geographical scope of the study may be limited to a specific region or country depending on data availability but includes references to global best practices for comparative insights. The findings are intended to support policymakers, industry leaders, and academics in promoting sustainable supply chain strategies.

OBJECTIVE OF THE STUDY

The objectives of the proposed study are

- To identify the demographic profile of the employees of Diamond Shipping Agencies Pvt. Ltd, Chennai.
- To brief out the importance of green supply chain in term of its competitiveness and benefits.
- To conceptualize the benefits of green supply chain in warehousing, distribution and transportation.
- To offer recommendation and suggestion for effective green supply chain management.

RESEARCH METHODOLOGY

1.4.1 Sampling design

In this study questionnaire method is used to collect data. Convenience Sampling method is used to collect the primary data from the respondents.

1.4.2 Sample Size

The Sample size consist of 96 respondents and their data were collected.

1.4.3 Data Collection

The data for this study are of two types: -

- Primary data
- Secondary data

a) Primary Data

The primary data implicates the collection of information through direct observation, personal interviews, questionnaire

and conducting conversation. This is basically the data collected by the researcher during the project which is only used for the project for the research work. These questionnaires were collected among the Employee working in the Diamond Shipping Agencies Pvt. Ltd, Chennai District.

b) Secondary Data

Secondary data is collected from various Journals, books, websites, Government reports, News papers, and other research reports.

STATEMENT OF THE PROBLEM

In order to identify the awareness and barriers in implementing the green supply chain management in manufacturing sectors this study is made. It covers the study covered the traditional supply chain and green supply chain management, the merits and demerits of green supply chain management in manufacturing sectors. The study covered the following areas on traditional supply chain and green supply chain management, the merits and demerits of green supply chain management in Diamond Shipping Agencies Pvt. Ltd, Chennai. To identify the awareness and barriers in implementing the green supply chain management in Diamond Shipping Agencies Pvt. Ltd, Chennai.

SUGGESTION

- * Regular training programs may be conducted to create awareness about green practices which will further help in organizations adoption and encouragement.
- * Top management commitment is required to encourage implement current technological advancements relevant to green practices.
- * Government should take initiatives to make the organisation aware about green products and how they are helpful to them. Organizations implementing green practices can compete and export their products in world market.
- * Innovative green practices may be motivated with Government support systems, Top management commitment, Technology advancement adoption, Organization encouragement, Quality of human resources and IT enablement.
- * Green product development is the consideration of environment-friendly processes and materials at developmental stage. Design for environment is the consideration of recyclable and non harmful materials in design phase.
- * Green procurement strategies will help in purchasing environment-friendly materials and tools for the production. Use of environment-friendly transportation will help in reducing pollutions.
- * Instituting an annual competition in enterprises to recognize excellence in green procurement.

CONCLUSION

Green supply Chain Management (GSCM) has been identified as an approach for improving performance of the processes and products according to the requirements of environmental regulations. Besides, the perception of GSCM, the creator of pressures for GSCM is different for the companies. To help enterprises enhance the awareness of GSCM, a group of initiatives which includes categories of education, support, promotion, and best practices should be developed.

Cost and complexity are perceived as the biggest barriers to implementing Green SCM, which highlights the need for cost effective and easy to implement solutions. Brand building is one of the top incentives for green SCM, highlighting the importance of public perception of how companies operate. Hence GSCM implementation should be considered not just within the organization but has to be extended to the supply chain for long term environmental sustainability.

REFERENCES

- **Abrie De Swardt**, “Green Supply Chain Overview”, International Journal of Managing Value and Supply Chains Volume 2, Issue 6, pp 38–47.
- **Anil S. Dube (2011)**, “Green Supply Chain management – A literature review”. International Journal of Computer Applications , Volume 2, Issue 2, PP 18-28.
- **Anoop A.T., Dr. Regi Kumar V(2013)**. “A Review of Green Supply Chain Management Issues in Indian Bottled water Industry”. IJRSET -Volume 2, Issue 1, pp 420-443.
- **Aref A. Hervani and Marilyn M. Helms (2005)**, “Performance measurement for green supply chain management”. Benchmarking: An International Journal, Volume - 12, Issue - 4, pp 330-353.
- **B.L.Lakshmi Meera , Dr.P.Chitramani (2014)** , “Environmental Sustainability through Green Supply chain management practices among Indian Manufacturing Firms with special reference to Tamilnadu”. International Journal of Scientific and Research Publications, Volume 4, Issue 3,pp 223-239.
- **EM Ojo, C Mbohwa and ET Akinlabi (2015)**, “Green Supply Chain Management in Developing Countries”, International Journal of Managing Value and Supply Chains Volume 3, Issue No. 1, PP 111- 118.
- **Jamal Fortes (2009)**, the study based on “Green Supply Chain Management: A Literature Review”. Otago Management Graduate Review Volume 7, Issue 5, pp 51-59.
- **Kishore Bhattacharjee (2015)**,”Green Supply Chain Management- Challenges and Opportunities”.Asian Journal of Technology & Management Research Volume - 05 , Issue – 01,pp 120- 136.
- **Kshitij Dashore and Nagendra Sohani (2013)**, “Green Supply Chain Management: A Hierarchical Framework for Barriers”.International Journal of Engineering Trends and Technology (IJETT) – Volume 4, Issue 5, pp 54-65.
- **Michael Mutingi (2013)**, “Developing green supply chain management strategies: A taxonomic approach”. JIEM, Volume – 6, Issue – 2, pp 525-546.
- **Monika Gábriel (2016)**, “ Green Supply Chain Management – Motivation, Methods and Expectations – in Hungarian Automotive Oems”. Vol. 12, Issue 1, pp 37-45