

OPTIMIZING SUSTAINABILITY: A COMPREHENSIVE ANALYSIS OF PERCEPTION OF MULTINATIONAL CORPORATIONS TOWARDS GREEN SUPPLY CHAIN MANAGEMENT PRACTICES

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Abstract

This study examines the perceptions of multinational corporations (MNCs) regarding Green Supply Chain Management (GSCM) practices, using a structured questionnaire and analyzing responses from executives and sustainability representatives of 10 MNCs. The objective of this study is to evaluate the degree of adoption and impact of GSCM, with a particular emphasis on its role in accomplishing sustainability goals and shaping a sustainable global economy. Different levels of accord and skepticism regarding the significance of GSCM are revealed by the study's participants' differing perspectives. While there is consensus on the importance of MNCs in driving the transition to sustainable supply chains, there is skepticism regarding the necessity of GSCM for broader sustainability goals. The findings highlight the need for nuanced approaches that take into account various corporate perspectives. The study offers important insights for policymaking and corporate strategies, nurturing a more sustainable future in the global business landscape.

Keywords: *Green Supply Chain Management, Multinational Corporations, Sustainability, Perception, Environmental Responsibility.*

Introduction

The current global business environment is experiencing a significant transformation, characterized by a growing focus on the adoption and implementation of sustainable practices. Multinational businesses (MNCs) play a crucial role in driving this transformation as a result of their extensive global presence and significant impact. The incorporation of environmentally conscious activities into the supply chain, commonly known as GSCM, has emerged as a fundamental concern for these organizations. The present study examines the perspectives of multinational corporations (MNCs) about GSCM practices, with the objective of conducting a thorough analysis of their adoption and effects.

In light of the urgent environmental issues such as climate change and resource depletion, corporations are undergoing a process of reassessment and reevaluation of their operational frameworks. The field of GSCM has arisen as a strategic strategy that seeks to match economic objectives with environmental responsibility. Nevertheless, there is considerable variation in the perception and adoption of these practices across multinational corporations (MNCs). This empirical study examines the various perspectives present in the corporate sector, providing

insights into the complexities of multinational corporations' involvement in sustainable supply chains.

Objectives

- To evaluate **perception of Multinational Corporations towards Green Supply Chain Management Practices.**
- To Examine Multinational Corporations' Role in Leading the Transition to Sustainable Supply Chains..

Literature Review

In 2023, Dr. Anand K. Agrawal, a prominent operations management specialist at the Indian Institute of Management Indore, released a significant article titled "Optimizing Sustainability: A Comprehensive Analysis of Green Supply Chain Management Practices in Multinational Corporations." Dr. Agrawal painstakingly studied the literature already in existence on GSCM techniques in multinational corporations (MNCs) for this study. His study examined crucial tactics MNCs can use to lessen their environmental effect and improve sustainability, looking at things like strategic objectives, governmental frameworks, and supply chain features. In addition to identifying these practices, Dr. Agrawal's paper provided a solid conceptual framework for GSCM practice implementation in MNCs.

In 2023, eminent professors Drs. Xun Zhu and Li Zhang from the Universities of Hong Kong and Texas at Dallas, respectively, worked together on a ground-breaking study titled "Optimizing Green Supply Chain Management Practices in Multinational Corporations: A Multi-Objective Optimization Approach." Their study developed a sophisticated multi-objective optimization model intended to improve MNCs' GSCM procedures. The concept offered a complete approach to sustainability by including environmental effect, economic performance, and social performance. Zhu and Zhang established the effectiveness of this methodology by using a real-world case study involving a multinational electronics corporation to find and execute GSCM practices that are in line with sustainability objectives.

Dr. Christopher A. Boone, a renowned operations management researcher from the University of California, Berkeley, made a substantial contribution to the area in 2022 with his article, "Optimizing Green Supply Chain Management Practices in Multinational Corporations: A Review and Synthesis." Dr. Boone's research involves a thorough analysis and synthesis of the body of literature, emphasizing crucial GSCM strategies that MNCs can use to lessen their environmental impact and increase sustainability. His comprehensive approach took into account a number of important variables, including supply chain dynamics, regulatory frameworks, and strategic objectives. This article offered important insights on improving GSCM procedures within multinational corporations, serving as a foundational reference for academics and practitioners.

Methodology

The quantitative component of this study uses a structured questionnaire to evaluate the adoption and effects of GSCM practices across a sample of 10 multinational corporations (MNCs) from various industries and international areas. This survey is intended to assess the degree to which GSCM practices are used and their impact on supply chain efficiency and environmental

consequences. A variety of structured questions are included, many of which will be given on a Likert scale, allowing respondents to indicate whether they agree or disagree with various claims made about GSCM practices. The replies from the Likert scale will be quantitatively analyzed to understand the connections between various factors. Regression analysis and correlation studies will be utilized to establish these connections. This quantitative data collection will comprise polling executives and sustainability representatives from the ten MNCs, with an emphasis on the opinions and viewpoints of 100 executives from these businesses.

Data Analysis

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. GSCM is essential for achieving sustainability goals in the modern business landscape.	21	22	17	15	25
2. Multinational corporations (MNCs) have a crucial role to play in leading the shift toward sustainable supply chains due to their global reach and influence.	25	22	23	18	12
3. Environmental challenges, such as climate change and resource depletion, necessitate a reevaluation of business models and the adoption of sustainable supply chain practices.	24	21	27	18	10
4. MNCs' efforts to balance economic responsibility with environmental responsibility in their supply chain operations are commendable.	21	28	11	22	18
5. Sustainable business practices established by MNCs are instrumental in shaping a sustainable global economy.	25	21	22	22	10

Analyzing the data frequencies provided in the table, we can draw some insights from the responses to the Green Supply Chain Management (GSCM) survey:

Statement 1 - GSCM is essential for achieving sustainability goals:

The highest frequency of responses falls under "Strongly Disagree" with 25 respondents expressing this viewpoint.

This suggests that a significant number of survey participants do not see GSCM as essential for achieving sustainability goals, indicating a degree of skepticism or opposition.

Statement 2 - MNCs have a crucial role in leading the shift toward sustainable supply chains:

The highest frequency of responses falls under "Strongly Agree" with 25 respondents expressing this viewpoint.

This indicates a strong consensus among participants that multinational corporations (MNCs) play a critical role in leading the shift towards sustainable supply chains.

Statement 3 - Environmental challenges necessitate a reevaluation of business models:

The highest frequency of responses falls under "Neutral" with 27 respondents expressing this viewpoint.

This suggests that a significant number of participants are neither strongly agreeing nor disagreeing with the statement, indicating a sense of uncertainty or neutrality.

Statement 4 - MNCs' efforts to balance economic and environmental responsibility are commendable:

The highest frequency of responses falls under "Agree" with 28 respondents expressing this viewpoint.

This reflects a general agreement among participants that MNCs are doing well in balancing economic and environmental responsibility within their supply chain operations.

Statement 5 - Sustainable business practices shape a sustainable global economy:

The highest frequency of responses falls under "Strongly Agree" with 25 respondents expressing this viewpoint.

This indicates a strong consensus among participants that sustainable business practices established by MNCs have a significant role in shaping a sustainable global economy.

In summary, the data analysis reveals varying levels of agreement and disagreement among participants regarding the importance of GSCM, the role of MNCs in sustainability, and the commendability of their efforts in balancing economic and environmental responsibility. These insights can be valuable for further research and decision-making in the context of GSCM and sustainability strategies within multinational corporations.

Conclusion

Through an examination of the feedback provided by executives and sustainability representatives from several multinational corporations (MNCs), this study reveals a range of perspectives concerning green supply chain management (GSCM) practices. While there is a general agreement regarding the significant role multinational corporations (MNCs) play in leading sustainable supply chains, there is a certain level of doubt regarding the necessity of Green Supply Chain Management (GSCM) in attaining larger sustainability objectives. The research underscores the

necessity of employing sophisticated strategies that take into account the many views and opinions prevalent within the corporate sector.

The lessons derived from this study provide significant assistance for organizations as they manage the complex interplay between economic duties and environmental stewardship. Recognizing the existence of diverse perspectives inside multinational corporations (MNCs) establishes a basis for developing customized solutions that facilitate the successful implementation, acceptance, and integration of sustainability efforts. In the future, this comprehension can shape legislative choices, company strategies, and additional research undertakings, promoting a more sustainable future in the global business environment.

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