



IMPACT OF SUSTAINABLE SUPPLY CHAIN MANAGEMENT ON MULTINATIONAL CORPORATION

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Abstract: This paper examines the sustainable supply chain, the tactics being used by major international corporations, and the effects on the environment. One of the largest package delivery companies, UPS, is investing an increasing amount of money on sustainability. UPS has made significant investments in green technology. By 2050, they want to achieve carbon neutrality across the board. Numerous forums conducted studies to see how organizations are focused on sustainability and its impact on the supply chain. In view of the above, the idea of sustainable supply chain management (SSCM) has attracted the interest of both business and academia due to the significance it places on corporate responsibility in terms of the environment, society, and the economy.

Key Words: Sustainable supply chain management, Green technology, Environmental impact, Economic Performance.

1. INTRODUCTION:

The phrase "sustainable supply chain" describes an organization's attempts to take into account the effects of its supply chain on both people and the environment. It begins with the sourcing of the materials and continues through production, storage, distribution, and every link in between. The main objective is to have less of an influence during and around their operations while reducing the environmental impact from elements like energy consumption and water consumption.

The technique of sourcing, producing, storage, and transporting among all supply chain partners in order to maximize efficiency and customer satisfaction is known as supply chain management. Businesses all across the world rely on significant time and money savings from supply chain management. SCM frequently seeks to centrally link or manage the production, shipping, and distribution of a product.

By optimizing the supply chain, businesses can reduce wasteful spending and speed up the delivery of items to customers. To do this, a close check is kept on internal stocks, internal production, internal distribution, internal sales, and the inventory of firm vendors. The speed, cost-savings, and dependability of operations are always prioritized in the traditional supply chain management approach, but the fundamental objective of sustainable supply chain management is to protect social and environmental values. Addressing global problems like climate change, water scarcity, deforestation, etc., is the main objective.

2. RESEARCH OBJECTIVES:

Following are the objectives of the study:



2.1 PRIMARY OBJECTIVE

- To find out the benefit or importance of implementing sustainability in supply chain management.
- To evaluate how technology plays a vital role in sustainable supply chain management.

2.2 SECONDARY OBJECTIVE

- To understand the impact of sustainable supply chain in corporate goals.

3. RESEARCH METHODOLOGY:

A descriptive research design is being used in this study to describe the extent of Sustainability in supply chain management. The study uses a secondary data collection strategy. The information was gathered through articles from magazines, newspapers, research journals, survey reports from various research organizations, books, and online sources. Descriptive research studies are ones that focus on describing the personality of a certain person or group.

4. REVIEW OF LITERATURE:

Mr. Pulin Kumar Sahu, Dr. R. N. Mahapatra, Prof. Uma Sankar Mishra (2021) In new industries, such as the global use of emerging technologies and resources, sustainable supply chains are growing. The development of market operations and performance are directly impacted by the construction of robust grounds and integrated systems.

Mahmoud Al-Odeh and Jim Smallwood (2012) Two conclusions have been drawn after evaluating a random sample of literature review research. The first one provides a timeline of how SSCM methods have evolved over the past 20 years. The second is a framework for managers to use as they create SSCM strategies for their firms.

Sánchez-Flores, Rebeca B., Samantha E. Cruz-Sotelo, Sara Ojeda-Benitez, and Ma. Elizabeth Ramírez-Barreto (2020) By conducting a literature evaluation of publications (published in the last ten years and making them available on specified databases, this study aims to advance knowledge in the research field. The chosen publications were classified and analyzed using a variety of methods, which helped to offer and discuss results on the state of current research. The supply chain and its sustainable practices are undoubtedly being developed and sought after in rising economies, but there are still prospects for further research on this topic, which is still in early stages of study.

EstebanKoberg, AnnachiaraLongoni (2018) Businesses in GSCs are under pressure to produce favorable results in terms of the environmental, social, and economic spheres. However, establishing SSCM to manage sustainability in GSCs is still difficult. This analysis provides opportunities for future research to advance the discipline and identifies critical components of SSCM specific to GSCs as a first step in resolving this difficulty.

Malin Song, Ron Fisher, Ana Beatriz Lopes and Ernesto D.R. Santibañez Gonzalez (2022) Platforms are widely used across many industries, which has created new prospects for GSSCM research. This special book analyses research that used diverse methodologies to examine sustainability-related SCM concerns.

Stefan Seuring, Martin Müller (2008) the purpose of this paper is twofold. First, it offers a literature review on sustainable supply chain management taking 191 papers published from 1994 to 2007 into account and it offers a conceptual framework to summarise the research in three parts.

5. CASE ANALYSIS:

“UPS SUSTAINABLE SUPPLY CHAIN”

New environmental and social governance (ESG) goals that UPS unveiled in 2021 will help the firm achieve carbon neutrality across all of its global operations by 2050.

According to UPS, investments in sustainability will be the trends driving innovation over the next ten years. In their effort to improve supply chains' sustainability and meet their environmental objectives, they have included a variety of cutting-edge green technologies into their warehouses.

UPS STRATEGIES AND IMPLEMENTATION TO SUSTAINABLE SUPPLY CHAIN:

“Reduction of energy consumption and waste”

Warehouse execution system:

New warehouse network technology was introduced by UPS Supply Chain Solutions in 2020 to improve the distribution centre's efficiency and reduce energy use. With the help of their warehouse execution system, energy usage has decreased while productivity has grown.



Super hubs:

New warehouse network technology was introduced by UPS Supply Chain Solutions in 2020 to improve the distribution centre's efficiency and reduce energy use. With the help of their warehouse execution system, energy usage has decreased while productivity has grown.

Robotics and automation:

Additionally, UPS uses robotics to streamline waste management and warehouse operations. The robots don't require heat or light to function. They concentrate on conserving energy in areas that are used by their employees while consuming less in other areas. Deploying robots also improves space utilization and increases shipping output, both of which lower UPS warehouses' overall carbon emissions.

Ship more with less impact:

One of the largest alternative fuel and advanced technology fleets belongs to UPS. Their fleet of 110,000 ground vehicles use fuel-saving techniques. In order to reduce fuel consumption and emissions, they also plan their routes using technology, diligently maintain their vehicles, and avoid unnecessary mileage. Additionally, UPS has 7000 low-emission cars to further boost its sustainability rating.

Additionally, they have updated current models, bought fuel-efficient aircraft, and brought its whole air fleet into line with all applicable noise reduction laws.

By following sustainable methods UPS estimates its delivery trucks save 28million miles and burn 3 million fewer gallons of fuel each year as a result of using advanced technology in business and reduce carbon footprint and shifting there focus more on sustainable supply chain management.

Carbon neutral warehouses and green electricity:

UPS has currently has 18 facilities that have received a green building certification from U.S. Green building council LEED, Building Research Establishment Environmental Assessment Methodology[BREEAM] and the Green Globe standards.

UPS is currently working towards a goal to source more electricity from renewables. By 2025 the goal is to get 25%

of energy from renewable source in their facilities and by 2035 they will run on 100 % renewable energy. As now sustainability has become increasingly critical for organizations to remain relevant and stay competitive in today's world.

Efficiencies to make world of differences:

In order to reduce greenhouse gas emissions from its fleet and facilities, UPS has adopted a global, enterprise-wide strategy. Their network, which manages all of their services through a single integrated system, forges strong ties between the business, its partners, and the globe.



Fig-1 UPS Sustainable supply chain

6. RESEARCH FINDINGS:

Currently, UPS is paying more attention to environmental issues and spending more money on sustainable supply chains. The information about UPS's sustainable supply chain is displayed in the image above. Over 60% of organizations, according to the World Economic Forum, are implementing sustainable supply chain strategies. For businesses to be relevant and competitive in today's environment, sustainability has become more and more important. Organizations are capable of making long-term investments, according to McKinsey & Co.



- Company with sustainable strategies
- company without sustainable strategies

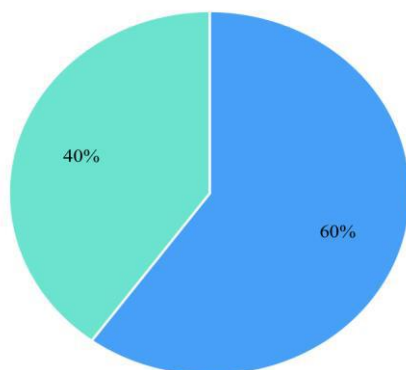


Fig-2 Sustainability Strategies

There is a widespread misunderstanding that investing in sustainability will harm corporate goals and achievements. The reality however, is that given the rising demands for corporate social responsibility and transparency, sustainability is essential to the expansion of businesses in the future. Orange Business Services commissioned Longitude to carry out a thorough research of 320 of the biggest firms worldwide, covering 18 countries, as well as to interview six of the leading supply chain specialists.

How multinational firms are advancing their digitalization, data analytics, and artificial intelligence (AI) projects to solve supply chain issues including sustainability is investigated in the paper Real-time intelligence and the future of supply chains. As more customers demand from corporations transparency and attention to today's social and environmental challenges, Many companies are gradually beginning to feel compelled to include environmentally friendly and socially conscious activities into their corporate strategies. Customers are concerned with a brand's values.

In a global poll, 82% of consumers stated that they patronize companies that share their personal values. Sustainability changes can also contribute to the success of the company overall, in addition to social and environmental changes.

42% of American consumers choose long shipment times or wait longer for products that are better for the environment. According to the 2022 Retail and Sustainability Survey from international business applications firm CGS, sustainability was neglected during the pandemic's peak in 2020 but is now taking centre stage as a crucial objective that people want their favourite firms to adopt.

In fact, nearly half of respondents (42%) said they would rather wait longer to acquire goods from online suppliers who practise more sustainable business practises than they would prefer quicker shipment.

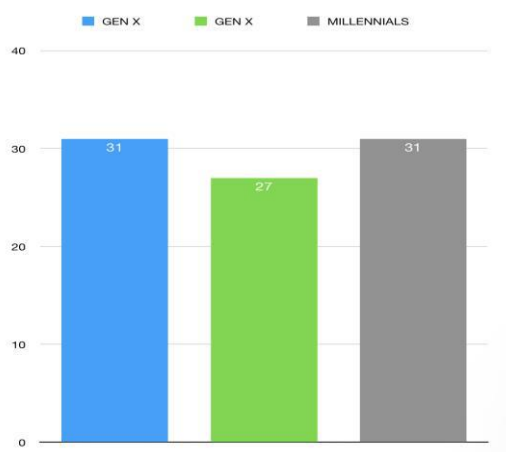


Fig-3 Demand for sustainability



7. CONCLUSION:

Whether you run a global corporation or a small cottage firm in a developing market, you should use technologies to create strong, interconnected global communities. As one of the world's leaders in logistics, UPS provides a wide range of environmentally friendly supply chain solutions, such as facilitating worldwide trade and shipping packages and freight by utilizing cutting-edge technology.

Large corporations all around the world are making significant efforts to incorporate sustainable business practices into their operations and to address social and environmental issues. Digitalization is necessary to build more sustainable supply chains. Real-time data, AI-powered analytics, and digital work instructions will be provided to businesses to aid in decision-making. Together with other cutting-edge technologies like blockchain, they will support sustainable growth by increasing productivity, reducing waste, and satisfying consumer demands for greener products and services.

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