

Best Practices in Sustainable Supply Chain Management

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ABSTRACT

Supply chain sustainability refers to the impact a company's supply chain can have on promoting human rights, fair labor practices. There is a growing need to incorporate sustainable options into supply chain management. The growing attention to sustainability is changing the way companies do business. Whether driven by customers, company values or business opportunity, traditional priorities such as quality, efficiency and cost often compete for attention with issues such as working conditions and the environmental impact. Sustainable supply chains capture value chain opportunities and provide early adopters and process innovators with a significant competitive advantage. This study is based on learning the fundamental concepts of sustainable techniques in supply chain management.

KEYWORDS: *Supply Chain, Sustainability, Best Practices, Challenges*

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1. INTRODUCTION

A sustainable supply chain is an important part of improving a company's environmental, social and governance (ESG) score, which has an impact on attracting more customers and investors. Supply chain activities are responsible for the majority of greenhouse gas emissions within a company. In addition, corporations that source raw materials or intermediate products from developing countries could inadvertently exploit their suppliers' employees who work in inhumane conditions. Supply chain managers are struggling to ensure greener operations. According to EY's 2022 survey, the main challenges for supply chain managers are:

Nearly 40% of businesses struggle to identify and achieve ESG goals to improve supply chain sustainability, and 20% of businesses have no idea how to improve supply chain sustainability. Nearly 60% of executives complain about a lack of visibility across the supply chain, making it difficult to understand the financial and environmental performance of the supply chain.

What is a sustainable supply chain?

A sustainable supply chain tries to transmit goods as cheaply and quickly as possible to the upstream supply chain or end customers while reducing or eliminating negative environmental and social impacts. A sustainable supply chain refers to the efforts made to plan and implement policies, processes, materials and technologies across all logistics systems and operations that are aimed at achieving a more positive impact on the environment, society and the economy. There are several steps an e-commerce owner can take to improve supply chain sustainability, from the way products are manufactured to the type of packaging used for shipments to reducing carbon offsets during last-mile delivery.

2. SUPPLY CHAIN SUSTAINABILITY STATISTICS

As businesses focus more on supply chain sustainability, many have studied trends across industries, countries and impact areas. Here are some notable stats:

Demand: Nearly half of U.S. consumers say they would change their shopping habits to reduce their environmental impact, according to Nielsen.

Environmental Impact: According to McKinsey & Company, the supply chain accounts for more than 90% of the environmental impact of most consumer goods companies.

Social risk: The U.S. Department of Labor listed 148 goods from 76 countries as produced with child or forced labor in 2018 when it released the Comply Chain app to help U.S. businesses eliminate child labor from their supply chains.

Data Systems: A 2019 Carbon Disclosure Project (CDP) survey found that 65% of its corporate members use environmental metrics to inform supplier management and hold their business partners accountable to supply chain sustainability goals.

Progress: CDP reports promising progress in reducing greenhouse gas emissions: In its 2019 survey, 29% of 7,000 suppliers to some of the world's largest corporations reported a decrease in emissions.

3. OBJECTIVES:

The objectives of the present study are:

1. To study the trend across industry about the sustainability in supply chain.
2. To understand the best practices in supply chain sustainability.
3. To understand the challenges in supply chain sustainability.

4. RESEARCH METHODOLOGY:

The present research study uses the most recent available published secondary data. To achieve the above stated objectives, secondary data was used. The secondary data that is mainly used is from different websites, research papers and books. This study is based on learning the fundamental concepts of planning, sourcing, and procurement with applied sustainable techniques.

5. SUPPLY CHAIN SUSTAINABILITY BEST PRACTICES:

Implementing sustainability into your supply chain means being conscious of your efforts and the decisions you make, from the type of manufacturers you work with to the way you package and ship orders.

Here's an overview of sustainability best practices:

A. Create sustainable supply chain goals

Start your sustainable supply chain journey by identifying the goals you and your team would like to achieve and how you will pursue those goals. Make sure you consider sustainability when making decisions to optimize your supply chain. Once you've

set your goals, put systems in place to help you measure the effectiveness of your initiatives and reinforce related efforts by communicating them to customers, supply chain partners, and other stakeholders.

B. Map your supply chain to identify waste

By setting goals, you will have greater awareness of how your supply chain runs, from production to supply management. Once you begin to identify the ways in which your supply chain accumulates waste and energy, highlight key areas for improvement. Once you identify the areas that are negatively impacting the environment, you and your team can implement programs, processes, and other ways to promote sustainability while streamlining your supply chain. For example, in an effort to reduce food waste, Irish food brand People can sign up knowing it's an imperfect looking product in exchange for a discount. Rather than waste products that look less than ideal during the manufacturing process, we have a more sustainable solution without compromising the customer experience.

C. Implement a stock management system

It's no surprise that clothing can lead to a lot of waste. For example, fashion brand H&M struggled with inventory that resulted in \$4.3 billion worth of unsold clothing. Unsold inventory can result in a build-up of what's called "dead stock," which is the result of stocked items being expired, outdated, of poor quality, or out of season. Dead stock is bad for business. It reduces profit margins and unwanted inventory ends up as waste (and/or inventory write-offs). To optimize inventory, it's always important to implement an inventory management system that helps you track inventory in real time, identify slow sellers vs. fast-selling items and give you a better idea of when it's time to reorder more stock. An inventory management solution not only helps you track your inventory, it also gives you the data and tools you need to forecast demand so you can be more proactive in reducing inventory waste. Since demand forecasting is never 100% accurate, the accumulation of dead stock can be unavoidable at times. Another option is to consider donating items to nonprofits like GiveNKind, which obtain usable goods from businesses that want to donate their products and make those goods available for free to local nonprofits. Be sure to study your ideal order points and reorder quantities so you don't go overboard with bulk inventory that you won't be able to sell.

D. Analyze supply chain data

Implementing data collection systems provides better visibility into the supply chain. With visibility, you get the data you need for supply chain planning,

which consists of defining processes for different operational phases, from inventory tracking to efficient shipping of orders to customers. For example, you can use the data to determine the ideal inventory allocation plan. You can look at historical order data, see where your customers are, and stock inventory closer to customers. This way, orders can be shipped faster using the shortest, most cost-effective route while using less fuel. By implementing an inventory distribution model, you will not only meet customer expectations for fast and affordable shipping, but also maintain a more sustainable shipping solution.

E. Create a sustainable supply chain policy

Together with your team, you can create a sustainable supply chain policy that includes the rules and regulations that your business will follow. Your policy should reflect your sustainability goals and can be used to attract the right suppliers and logistics partners. A sustainability policy can also be used to ensure transparency in logistics operations, so you can attract customers who value sustainability.

F. Communicate expectations with suppliers

Once you've established a policy, it's important to choose manufacturers and suppliers that meet your sustainability standards.

It is your supplier's responsibility to deliver high quality products that meet your sustainable standards. Consider how and where your products are sourced and manufactured. When selecting suppliers, communicate your expectations regarding factors such as:

- Health and safety
- Working conditions
- Fair wages
- Power consumption
- Carbon emissions
- Use and treatment of water
- Recycling

G. Evaluate environmentally friendly delivery options

In addition to manufacturing best practices, think about the other partners and third parties that make up your supply chain – especially when it comes to shipping and handling.

H. Train your employees on sustainability

Last but not least, educating your employees on how to maintain and improve sustainability throughout your supply chain is key. Sustainability can only be done properly if everyone understands what they are trying to do.

6. SUPPLY CHAIN SUSTAINABILITY CHALLENGES

Cost is a major barrier to sustainable supply chains, with smaller companies finding it particularly difficult to afford the upfront costs of a more sustainable supply chain. However, investing in something like compact packaging can, over time, lead to a reduction in the size and number of shipments, a lower environmental footprint and cost savings. Other companies are finding that there are simply no sustainable options for components, or that they have inherited supply chains from acquisitions that are difficult to shift toward sustainable practices due to complexity or organizational structure. These challenges can be overcome, but 20% of survey respondents said customers simply weren't interested. This makes it difficult for some companies to justify the increased cost or effort.

7. CONCLUSION:

Research has shown that for most companies, the supply chain is responsible for most of their environmental impact. By their very nature, supply chains often involve energy-intensive production and transportation, as goods are produced and transported around the world. Therefore, organizations can often make the biggest difference by making changes in their supply chain rather than other business operations. The complexity of myriad supplier relationships and border crossings also makes supply chain sustainability difficult. This complexity can prevent visibility into important operational aspects, such as working conditions at a supplier's factory thousands of kilometers away.

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