

Chapter 8

An Introduction to Sustainable Supply Chain Management and Business Implications

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ABSTRACT

The chapter will explain the concept of sustainability in supply chain management. Sustainability in business operations is fast becoming a vital element to successful global acceptance. It is also one of the major marketing strategies for Points-of-Difference (POD) product positioning. It is necessary to have a basic knowledge of how sustainability is brought about in supply chains in order to truly comprehend the opportunities from it. An understanding of the basic elements to sustainability in supply chain management and global models adopted for implementation of sustainability by corporations is essential. The chapter further focuses on introducing the concept of reverse logistics as sustainability supply chain process and the strategic advantage for industries from adoption of reverse logistics across the supply chain. An insight into United Nations Global Compact program for sustainability across businesses and sustainability governance has been provided.

INTRODUCTION

Sustainability in business operations is a challenging issue that corporates have been facing due to growing awareness of environmental issues and cause factors by public and governments. The increasing contribution of business operations such as sourcing, manufacturing and logistics to environmental issues, created a need for optimization of business operations with reduced negative effects. The increasing stakeholder pressures on companies further influence adoption of sustainability by companies. The increasing competition among corporates to show their environment commitment through green supply chains and its marketing, complete supply chain revolution into sustainable is in trend. In order

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to understand the decision making process behind this change, it is essential to recognize the areas in supply chain wherein the changes are being implemented by corporates. This ground zero knowledge of the business supply chain is essential while planning of operations, especially in a global sense. This is also essential since sustainable changes are not a short-term application, and responsible decisions made might lead to a successful green company in the future.

Learning Objectives

After reading this chapter, readers will be familiar with concepts on:

1. An understanding of sustainability and its ranking.
2. Understand sustainability in supply chain management and its parameters.
3. Familiarize with the green concept of reverse logistics.
4. Explore the UN Global Compact Management for sustainable supply chain management.

SUSTAINABILITY

Sustainability is based on the simple fact that all activities for survival depend on the natural environment. The objective of sustainability is to preserve harmony in the environment, fulfilling the social, economic and economic requirements of the current generation and preserving for future generations. The Brundtland Report of 1987 popularized sustainability and described it to be any development meeting present needs without affecting future generation's capability to survive. The maintenance of practices and factors supporting environment conservation summarize sustainability. This is an initiative taken in order to repair the damages from direct and indirect human actions on the environment. A business is said to be sustainable when it considers sustainability issues in its decision making, provides environment-friendly products or services, have a green supply chain, have made environmental commitment as part of its operations. The sustainable activities emphasize on maximum utilization and minimal wastage. Environmental sustainability involves serious decision-making and provides a balance between environment commitment and interest of the company. It is not a short-term application, and responsible decisions made might lead to a successful green company in the future. Several models of sustainability have been developed over the years. The Brundtland Report depicted sustainability as a three-legged stool of profit, planet and people. Businesses try to cover these three areas while implementing sustainable activities. The Triple Bottom Line (TBL) model of Elkington (1998), collaborating economic, environmental and social dimensions of sustainability and their interdependency, is another accepted study in research circles (Figure 1). This model focuses on holistic development considering the three spheres of social, economic and environmental impacts on society, business and environment. A sustainable approach focuses on understanding the interactions among the environmental, social and economic pillars as a way to measure the impact of business operations. The environmental pillar includes activities like ecosystem services, green engineering, air quality, water quality, stressors, resource integrity, while social pillar includes environmental justice, human health, participation, education, resource security, sustainable communities. The economic pillar consists of activities like incentives, jobs, supply and demand, natural resource accounting, costs and prices. Other researches on sustainability also brought

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