



DEVELOPMENT IN CORPORATE SUSTAINABILITY: THE GREEN SUPPLY CHAIN MANAGEMENT PERSPECTIVE AND CHALLENGES

Solomon, C.

School of Management, Universiti Sains Malaysia, Penang, Malaysia

Mohamad, M. N.

School of Management, Universiti Sains Malaysia, Penang, Malaysia

Jamaluddin, R.

School of Business Innovation and Technopreneurship, University Malaysia Perlis, Perlis, Malaysia

ABSTRACT

In recent years, the area of corporate sustainability and green supply chain management has been gaining popularity. Corporate Sustainability refers to ensuring that it contributes to a better quality of life today without compromising the quality of life of future generations. Green Supply Chain Management is commonly understood as the integration of environmental thinking into supply chain management. Sadly however, while interest in Corporate Sustainability is increasing, the supportive literature that collects the sustainability issues in current literatures is rather scarce. Therefore, the purpose of this paper is to provide a current review of researches and challenges in both these areas.

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Keywords: Corporate social responsibility, Supply chain management, Green supply chain management, Corporate sustainability.

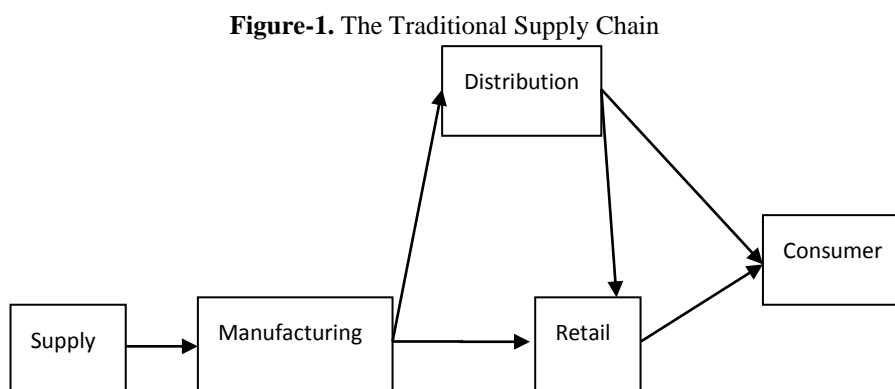
1. INTRODUCTION

In recent years, the area of Corporate Sustainability and Green Supply Chain Management (GSCM) has become very popular. Sustainability is an emerging business megatrend that is causing a fundamental shift in the competitive landscape [1] and quickly becoming a key driver of innovation [2]. As such, businesses in all areas of the supply chain are considering the adoption of a variety of greening initiatives in order to achieve competitive advantage, or at least maintain a competitive parity. Corporate sustainability is also no longer an exhortation, for many industry leaders and corporations, it has become an important tool for exploring ways to reduce costs, manage risks, create new products, and drive fundamental internal changes in the environment, economy and social dimensions. In order to develop a better understanding in this research area, a review of relevant literature is needed. Therefore, the purpose of this paper is to provide an up-to-

date review of researches in Corporate Sustainability by linking it with GSCM. The results from this review are suggested as a foundation for future researches on Corporate Sustainability from the GSCM perspective.

2. GREEN SUPPLY CHAIN MANAGEMENT CONCEPTUAL DEVELOPMENT

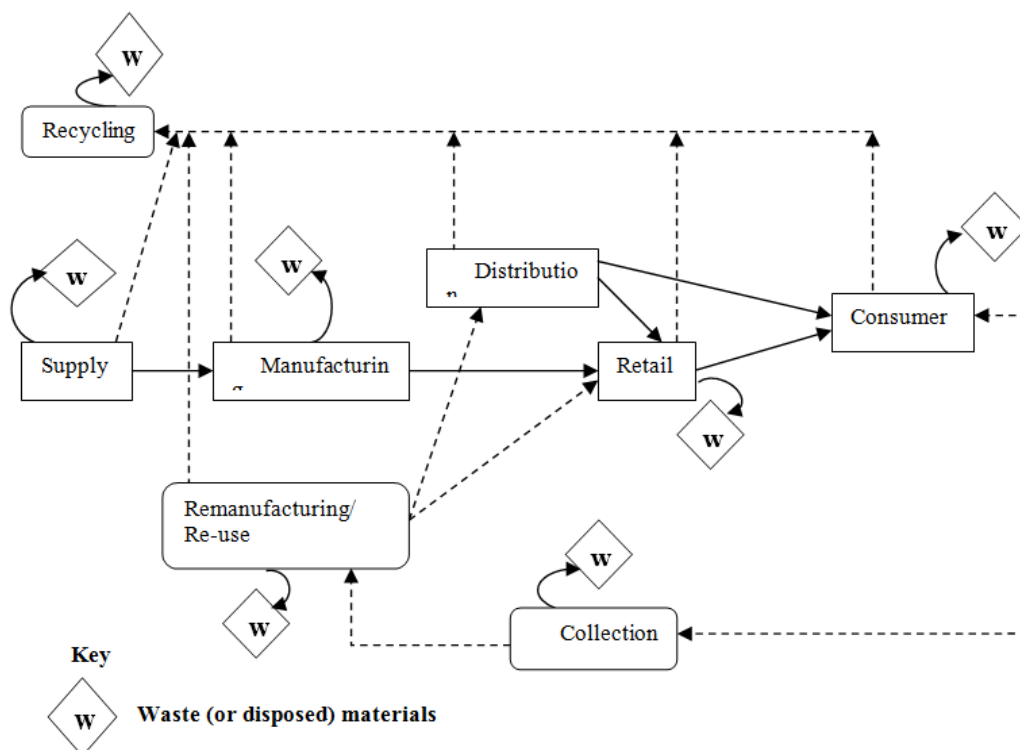
On the whole, SCM can be defined as “the management of materials and information both in and between facilities, such as vendors, manufacturers and assembly plants and distribution centres” [3]. Supply chains are a continuous chain of processes from total market supply and demand for products to customer payment. Generally, SCM is a network of facilities that acquires raw materials, transform them into semi-finished goods and into final products, and lastly deliver the products to final consumers through a distribution system. SCM covers all the information and physical flow of goods from the supplier’s supplier to the customer’s customer. Figure 1 illustrates the structure of the traditional supply chain whereby the design, modelling and analysis is primarily focused on optimizing the procurement of raw materials from suppliers and the distribution of products to customers [4].



Source: Adopted from Beamon [4]

The concept of GSCM has been growing in popularity around the world, since there has been much debate on the conservation and the sustainability of the environment and the resources in its natural environment. According to Srivastava [5], GSCM can be defined as, “integrating environment thinking into SCM, including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumers, and end-of-life management of the product after its useful life”. According to Bowen, et al. [6], organisations would implement GSCM practices if they identify that this will bring about financial and operational benefits. It is also generally perceived that Green Supply Chain Management, as seen in Figure 2 encourages efficiency and synergy among the business partners and their respective corporations. This, therefore, enhances environmental performance, minimize waste and achieve cost saving.

Figure-2. The Green Supply Chain



Source : Adopted from Beamon [4]

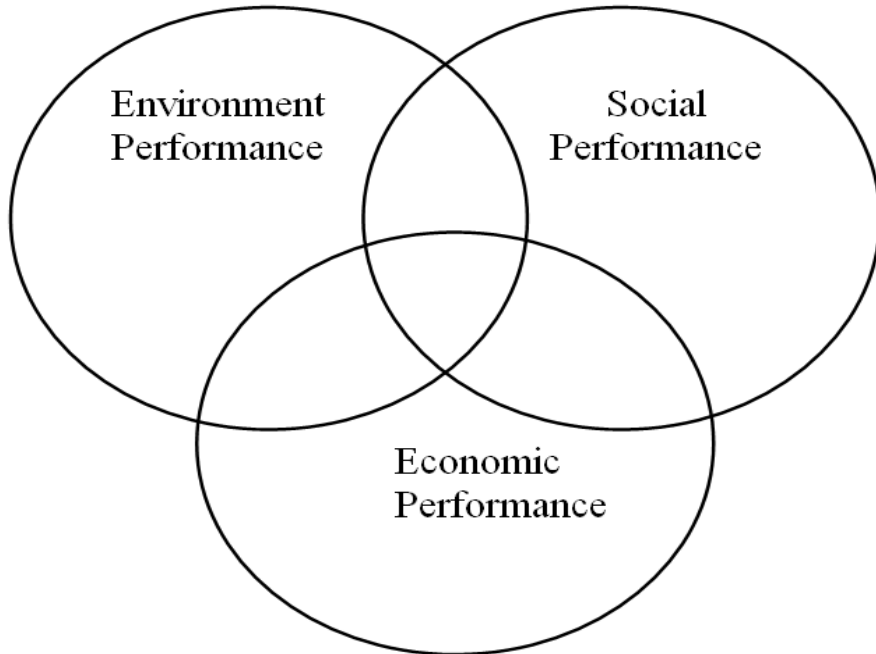
3. CORPORATE SUSTAINABILITY CONCEPTUAL DEVELOPMENT

Historically, Corporate Sustainability has evolved as a result of economic growth, environmental regulations, and a push for social justice and equity. In the 1950s and 1960s, concerns in environmental conservation became a subject of interest when the push for industrialization increased the awareness of the limits to growth. With an increasing awareness towards social obligations, the propagation of Corporate Social Responsibility (CSR) definitions and developments of related theories contributed to the emergence of early CSR modelling. The concept of CSR is related to ethical and moral issues concerning corporate decision-making and behaviour. The debate is concerning the extent as to which firms take responsibilities regarding the social impacts of their activities.

CSR being a current requirement to meet the society's needs has inclined towards the triple bottom line concept has been identified as a tool to contribute directly or indirectly to the company's bottom line and to ensure its long-term sustainability as stated by Bihari and Pradhan [7]. While Corporate Sustainability recognizes that corporations' growth and profit are important, it also requires the corporation to identify and achieve societal goals, specifically in relation to the three dimensions. The collective and multidisciplinary research efforts has resulted in the recording and reporting of the triple bottom line (TBL) concept in various fields. Over time, the interest in sustainability and reporting expanded beyond the initial investing purposes to be embraced by the entire international community as a voluntary instrument for TBL disclosure. Figure 3 displays the

triple bottom line structure, which represents the Corporate Sustainability concept as initially introduced by Elkington [8].

Figure-3. The Triple Bottom Line Structure



Source: Adopted from Elkington [8]

4. CHALLENGES IN GREEN SUPPLY CHAIN MANAGEMENT AND CORPORATE SUSTAINABILITY

Organizations now face diverse challenges, both anticipated and unanticipated. Therefore a review on past literatures concerning internal and external GSCM barriers in an organisation is listed. Hanna, et al. [9] discussed the need for aligning sustainable strategy with corporate strategy and having sustainable vision and mission. Yu and Hui [10] identified the importance of technology advancement for sustainable supply chain. Also the lack of information sharing can prevent innovative GSCM practices [11]. Finally, [12] mentioned cost implications as barrier to GSCM. A review on external GSCM barriers recognized that, suppliers are important for the overall performance of the supply chain [13]. Lack of supplier commitment and supplier's reluctance to change towards environmental sustainability are significant to the adoption of GSCM [14]. Customer demand [15], competitive pressures [11] and market uncertainty [10] are keys for organizations to adopt sustainable solutions.

In addition, challenges associated with Corporate Sustainability are mainly because companies' stakeholders largely ignore those issues. These issues are industry, company or even plant specific, where companies lack the capacity and motivation to collect and process data on social and environmental issues [16]. Also identified issues are, soft organizational factors such as a proactive corporate cultures and top management commitment [17]. Furthermore, top management

commitment can end abruptly in times of financial difficulties or after a management reshuffle [18]. While corporate sustainability may not be the next "big thing", it is certainly here to stay. Its future role is determined by both companies and their stakeholders, and it will be very industry-specific [19].

5. FUTURE AREAS FOR RESEARCH

From an industrial perspective, firms are continuously striving to achieve competitiveness in their business activities in both the domestic and global arena. Previous research suggests, through the implementation of green in their supply chains, they would be able to enjoy cost savings and new market opportunities. All of which, would contribute to the economic performance of the firm. Therefore, for the achievement of this goal, the move towards sustainability has been identified and highlighted for future research.

In view of recent researches in the area of corporate sustainability, Sarkis [20] in his paper, did not use the term sustainability or environmental sustainability to avoid confusion. Corporate sustainability differs from corporate social responsibility where it incorporates other dimensions that is absent from the CSR concept, such as the "triple bottom line" factors and inter-generational ethics [21] and Carter and Rogers [22]. Typically, when the term sustainable supply chain is used, the default perspective has naturally been environmental or ecological sustainability [23]. A rather complete inclusion of sustainability is occurring, although not at the pace of environmental integration into supply chain researches. But, issues related to boundaries and flows within an organisation will arise by evolving into corporate sustainability alongside green supply chain practices. However, possibilities of the boundaries and flows to play a larger or smaller role and become an issue are still not wholly known. It is important to reemphasize that corporate sustainability is fundamentally a complex problem and there are no approaches that universally apply. Corporations are faced with differing stakeholder demands, continually shifting priorities, and a multitude of alternatives to address their sustainability challenges. In recognition of these realities, corporations must develop approaches to sustainability that is suited to their local contexts.

6. CONTRIBUTION

Past researchers have identified corporate sustainability as an initiative to seek the development of organizational processes and systems, placing organizations to foresee and meet the demands of present and future stakeholders. This, in turn puts an emphasis on the need to address economic, environmental, and social aspects simultaneously in an integrated manner for corporate sustainability. Thus, this study contributes to the existing literatures on green supply chain management and corporate sustainability by taking on the challenges perspective to further develop solutions or alternatives to overcome the identified challenges, for corporate sustainability.

7. CONCLUSION

In recent years, the area of Corporate Sustainability and GSCM has become very popular. Sustainability is an emerging business megatrend that is causing a fundamental shift in the

competitive landscape. Therefore, in addressing the challenges of Corporate Sustainability requires organizations to develop the capacity to continuously address emerging issues as time passes. However to better orchestrate organisational changes to incorporate and institutionalise Corporate Sustainability in their companies, company leaders must consider: planning and orchestrating Corporate Sustainability change through Green Supply Chain Management; making Corporate Sustainability part of the institutional framework, connecting all systems and business functions; identifying Corporate Sustainability drivers and barriers to change; and applying a set of strategies that match the different types of barrier to change. The Corporate Sustainability organisational change orchestration has to be integrated harmoniously with GSCM initiatives in the company, such as changes in operations and production, management and strategy, organisational systems, procurement and marketing, also assessment and communication.

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