The sustainable supply chain management as the challenge for global leadership

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Abstract: In times of globalization, expanding freight transportation and increasing customer sensibility, supply chain management in sustainable way becomes one of the biggest challenges for organizations. Corporate Social Responsibility (CSR) is the management concept, which helps to recognize that the organization’s ability to face the challenge lies – on one hand – in maximizing the creation of shared value for owners, shareholders and other stakeholders, on the other hand – in identifying, preventing, and mitigating possible adverse impacts towards environment, society and all stakeholders. The goal of this article is to discuss, why and how organization implement CSR in its daily operations within supply chain management.

Introduction
In recent years we observe changes in global environment that require reflection on the very basic categories we use to describe businesses as performance, growth and profit. The question on what is the right and what is the wrong way of conducting business emerge every single day not only in large organizations, but also small ones. "The progressive eroding of the relevance of territorial bases for social, economic and political activities, processes and relations" [22], as defined by Scholte, globalization, provides us closer look on processes taking place all around the globe. This process of deterritorialization takes its origins in two kinds of development: 1) technological and 2) political in nature. On the one hand, thanks to communication technology, people can interact despite geographical distance and transportation technologies enable people to travel all around the world. On the other hand, eroding national borders allow semi-free movement of people and goods. Both developments lead to decreasing the importance of territorial distance, as it became easy to overcome. There is a whole range of examples of deterritorialization in the world economy as global communication, global products and services, global finance system and capital markets emerge [8]. The globalization impacts organization in both: positive and negative ways. The enormous increase of international trade and investments seems to be one of the greatest benefits business gained from globalization. Globalization provides an integrated global market by allowing for free-trade, promoting mobility of financial capital across the globe, while foreign direct investment stimulates the transfer of technology and management practices to less developed countries and creates competition that leads to better products and services at better prices. However, critiques point out that globalization provides homogenization of cultures, and the global distribution of income and wealth between the global North and South is increasingly polarised. Global organizations produce cheaper products often by offering unfair working conditions and manufacturing processes that pose major threat to the environment [4]. Those are only a few examples that show an increasing need to call for responsibility in global management. The assumption that business cannot reap benefits from globalization, without taking responsibility for its negative consequences becomes one of the most important drivers of contemporary concept of corporate responsibility [3]. The goal of this article is therefore to discuss why and how organization implement CSR in its daily operations, especially within supply chain management.
Corporate Social Responsibility as a response to globalization

The idea of Corporate Social Responsibility (CSR) is quite well established in economic discourse, both among management scholars and practitioners. In Poland companies act often rather superficially in this area and take CSR as a part of marketing or PR activity [21]. The real idea behind that façade bases however on moral values and trust in business that should always add value to society and minimize its adverse impact. The CSR definition proposed in the Green Paper (2001) by the European Commission (EC) concerned voluntary actions taken by companies over and above their legal obligations towards society and the environment [5]. Today CSR is no longer perceived only as giving back to the communities, but rather as a way, in which organization may strive for reaching goals of sustainable development. The concept of CSR concentrates on a holistic view of the organization and its environment. Companies maximize the creation of shared value by fulfilling promises given to their stakeholders and prevent possible adverse impacts, by avoiding practices that may injure or limit chances for development in terms of the triple bottom line: economic; societal; and environmental [12]. In 2011, EC defined CSR as ‘the responsibility of enterprises for their impacts on society. [...]’ CSR is increasingly important to the competitiveness of enterprises. It can bring benefits in terms of risk management, cost savings, access to capital, customer relationships, human resource management, and innovation capacity’ [13]. Here the changing perspective can be observed: While the first definition stressed the necessity of integration of social and environmental issues into business operations, 10 years later CSR seems to be recognized as a business strategy focused on both improving corporate performance in a wide sense: economic; environmental; and societal outputs, as well as preventing possible negative impacts of businesses on society as a whole. This change reveals well the current shift in the management paradigm. As Peter Drucker (2006) mentioned, the main goal of each organization should not be profit maximization, but rather minimization of losses [11]. This is the starting point for understanding the concept of CSR. While minimizing harm and avoiding value destruction, firms show their responsibility at the very basic level – they try to comply with norms and values in the society. The next level of undertaking responsibility requires recognizing the instrumental value of good relations with its stakeholders, as customers, workers, communities, suppliers, business partners. The last level refers to building ‘sustainable organization’, where the firm understands the synergies between its own and stakeholder’s interest and seeks to maximize the creation of value in economic, social and ecological terms [23]. A good reflection of these levels represents five stages model of organizational learning described by Simon Zadek (Figure 1).

Using well-know brand – Nike’s example Zadek explains how organizations may balance on an edge between minimizing harm and maximizing value creation (Figure 2).

![Five stages model of organizational learning by Zadek (2004)](source: Based on [25])

Fig. 1 Five stages model of organizational learning by Zadek (2004)

The need for sustaining supply chain management

The importance of CSR in sustainable chain management and its support of sustainable development processes can be appreciated in the socio-environmental aspects. Clear trends can be seen over last decades in EU directives addressing the need of CSR and sustainable development, including but not limited to externalization of costs when
using natural resources in manufacturing and production. The impact on taxpayers, future generations and of course on the nature is important here, thus EU Member States are required to achieve certain percentage indicators in order to reduce landfills, having in mind the economy concept of a closed circuit or “zero waste” policy in supply chain management. The main objectives of the recirculation economy include [18]:

- increasing recovery and recycling of municipal waste up to 70% in 2030,
- increasing recycling of packaging waste up to 80% in 2030, taking into account intermediate targets of 60% in 2020 and 70% in 2025,
- a ban on landfill of recyclable by 2025, with an attempt to completely eliminate landfill of waste by 2030.

This is connected with several issues, including: environmental modeling; interpersonal and interregional justice in sustainable development; GDP indicators; critical natural capital; trade and distribution of welfare; ecosystem services value and economic measures support; and last but not least – political instruments and ecological tax reform enforcing the change.

Increasing customer’s awareness and sensibility towards sustainability and CSR issues [15] make companies becoming exposed to risks across their supply chains, as reputational damage. Application of key management principles, such as: Just-In-Time; lean production and Efficient Consumer Response; and the need for flexibility, results e.g. in increasing share of highway transportation in expanding demand for freight transportation. This causes growth in the negative outcomes of transport and may lead to strengthening legislation on transport requirements [9]. On the other hand, implementing new ways of managing the supply chains may save resources and add to organization’s profitability [24]. Defining Sustainable Supply Chain Management is therefore directly linked to improvement of company’s long-term economic performance with reference to ‘the strategic, transparent integration and achievement of an organization’s social, environmental, and economic goals in the systemic coordination of key interorganizational business processes’ [7].

Shaping from triple bottom line criteria Carter and Rogers (2008) argue that sustainable supply chain management refers to four areas: risk management; transparency; strategy; and organizational culture (Figure 3). They point out that social and environmental activities cannot overtake economic performance. Conversely, they state: ‘there are social and environmental supply chain activities that lie at the intersection with the economic bottom line – these are the activities that are defined as sustainable’ [7]. Following literature review done by Carter and Rogers, potential economic advantages are as follows: cost savings due to reduced packaging waste; the ability to design for reuse and disassembly; better product quality; reduced health and safety costs; lower recruitment and labor turnover costs resulting from safer warehousing; transportation and better working conditions; possibility of proactive shaping of future regulation; and enhanced reputation.

![Image](https://example.com/image.png)

**Fig. 2 Nike’s CSR Evolution**

SOURCE: Based on [1], [10]
Responsible and irresponsible practices in supply chain

Evaluation of responsibility towards supply chain should refer to all stages: from planning phase; sourcing; making function; to delivery and return function [2]. During planning process of the supply chain, organizations undertake a number of processes, like: environmental cost accounting, which allows to detect discrete costs to environmentally harmful activities within a broader aspect of the system, or environmental life cycle analysis for quantitatively compiling and evaluating environmental impacts associated with a product or service throughout its life cycle [6]. Other processes include: e.g. designing for environment, which aim is to reduce the environmental impacts of the product at very early stage of its development (e.g. „design for recyclability”, „design for energy efficiency”). During the process of sourcing, organizations often consider environmental and social audits and certification – to assure quality of the desired attributes of materials and products, in addition to evaluation of the supplier’s performance and selection based on environmental (e.g., ISO 14000) or social (e.g. SA 8000) qualifications. Organizations look at suppliers’ codes of conduct at: e.g., safe working conditions, no-child labour polices, and no abuse of union rights, etc. During manufacturing phase, organizations keep in mind CSR aspects of pollution prevention – to eliminate or minimize activities that create excessive waste, often by implementing complex environmental management systems – in order to identify, monitor, and address the adverse impacts of production activities. For example, in environmentally-friendly packaging industry, replacing hazardous materials and processes; automation of physical heavy work; or minimization of repetitive tasks, may lead to productivity increase and savings through resource minimization [14]. During delivery and return phase, organizations concentrate on environmental and societal costs of procurement, transport, inventory control, and distribution activities, i.e. by taking into consideration financial cost, time, reliability of freight services, as well as limited volume of carbon dioxide emissions and choosing environmentally friendly kinds of transport. Other examples connected to logistics, include designing effective return systems, reuse packaging materials, automation of loading and unloading processes, obeying the truck drivers save working hours regulations etc. [2].

An experiment of the sustainable development via centralized controlled CSR, in aspect of environmental and ecological matters, is the approach of making supply chain
more “green” by minimizing the use of natural sources in the production processes. The approach could be for instance, achieved by encouraging companies to use only recycled resources instead of using natural resources for their production, limiting this way the threat of racking natural reserves. This way CSR could be centrally controlled and enforced by local governments, agencies, etc. This approach of so-called recycling logistics could be implemented e.g. in the packaging manufacturing industry based on recycling resources only. CSR in recycling and environment protection would be applied by use of the “supply chain closed loop” – starting from manufacturing a product (e.g. plastic containers for liquids), throughout its distribution, delivery, sales, consumption, then recycling procedures, and finally – remanufacturing same or similar products – closing the loop this way. However, quite problematic here could be the issue of shared responsibility in all common processes. Thus, all players in the closed loop of the supply chain must get some benefits. The spectrum is quite large: from one hand instantly rising prices of natural resources, from the other hand fairly lower prices of recycling production [17]. This approach has been adopted by many companies among different markets, from FMCG to petrochemical industry. The most difficult barrier is the change of the “status quo”, thus the mentality of the employees taking part in the process. The outcome of such implementation is obvious: truly CSR achieved and production costs reduced.

Where it comes to ecological and environmental protection aspects of CSR, some companies use quite twisted approach, based on a phenomenon called “greenwashing”. It is commonly practiced by hotel industry, where guests are encouraged to limit use of hotel’s towels in order to keep in mind the environmental protection issues, while the true aim is to limit laundry costs [16]. This is practiced to the very day by some hotels, and not only limited to towels, but also light, soap, and many other supplies and appliances. One could say this is a part of the hotel’s CSR agenda, but in fact it is cutting-cost factor to minimize the costs while maximizing the profits. This shows, how the idea of CSR actions can be flimsy and misleading for the customers. Companies are likely to misled their customers of the true value of their actions for the environmental protection by use of the greenwashing methods, such as: information hum/buzz, lack of any basis of information whatsoever, or even misleading way of communication about the ecology issues addressed [19]. A good example of such actions naturally connected with green marketing in packaging industry is another slogan, so-called “oxodegradation” of packaging materials. By use of semi-scientific language or even specially designed symbols and signs (e.g. ”\( d_w \)” symbol in water drop shape) producers misled their customers in order to make customers believing in the eco-friendly shopping bag. In fact the process has nothing to do with natural biodegradation, which does not need any chemicals. Furthermore, the chemicals added for the “oxodegradation” cause even more harm – by making impossible to use such package products in the recycling processes – which does not conform the rules of sustainable supply chain and sustainable development [17].

Summary

In times of globalization, expanding freight transportation and increasing customer sensibility, supply chain management in sustainable way becomes one of the biggest challenges for organizations. Corporate Social Responsibility helps to recognize that the organization’s ability to face the challenge lies – on one hand – in maximizing the creation of shared value for owners, shareholders and other stakeholders, on the other hand – in identifying, preventing, and mitigating possible adverse impacts towards environment, society and all stakeholders. This is a way of generating innovation within supply chain, saving costs and satisfying the stakeholder expectations. The real value, however, lies in the effective communication about limiting negative impacts on the social and natural environment in the way that customers fully understand. And that is the CSR in action.

REFERENCES