

Effects of Green Marketing on Supply Chain Management

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***Abstract---** In the last decade, sustainability marketing and the ecological supply chain have attracted the attention of scholars and professionals alike. No comprehensive structure on how to create industrial corporate brands and green industrial brands has been established nevertheless. It is still uncertain whether or not sustainable / carbon supply chains can be combined with green industrial marketing in building greener companies and industrial products. However, little is understood about the considerations surrounding green new industrial product development or how companies implement green new industrial products. In fact, as learned little about whether and how the renewable supply chain allows the production of environmentally new industrial goods. This special issue is designed to reflect the current developments in green industrial marketing, eco / sustainable supply chains and their interplay in green industrial branding, and to discuss potential paths in science. The researchers hope the requested research paper will be able to provide insight into the effect of renewable or green supply chains on marketing strategy in manufacturing and business-to-business industries.*

***Keywords---** Industrial markets, Marketing strategies, Green Marketing, Supply Chain Management, Product Development.*

I. INTRODUCTION

“Green branding” and innovation have gained a great deal of attention from experts as well as scholars from various business fields such as communications, supply chain management and information management. Nevertheless the increasing salience of being greener and more sustainable (due, for example, to climate change and environmental legislation), there is no holistic framework for building green industrial brands and corporate industrial brands. Building better “Green Industrial Brands” requires not just green marketing but green operations as well as managing the green supply chain. It is still uncertain whether or not sustainable / carbon supply chains can be combined with green industrial marketing in developing greener companies and industrial products. For starters, it is not well designed whether industrial companies will make use of both the sustainability supply chain and green industrial marketing to create a competitive advantage on the markets and along the supply chain network. From the logistics and supply chain hand, for instance, waste reduction (such as quality of production, procurement and distribution network), that is the fundamental principle of lean activities, could be interpreted as a sign of sustainability.

Developments in information technology may also contribute to some degree for decreasing the waste (e.g., energy and paper). A variety of other methods are required for life cycle evaluation, cradle-to-cradle product development eco-design, etc. These are, though, not usually related to industrial marketing, like lean theory. This is not surprising, because

the tools or techniques mentioned above are internally more visible than externally. For example, from a marketing perspective, although some attention has been paid to green consumers and consumption, little is known about the factors on green B2B marketing and green organizational buying behaviour. Better knowledge of why and how green suppliers are chosen by organizations has important implications for green B2B marketing "Green industrial branding" could be a significant industrial marketing effort to convey sustainability capabilities. However, further development is needed in this regard. Furthermore, green industrial branding demands the development of green industrial products [1]. Little is understood about the reasons leading to the production of green new industrial products or how companies implement green new industrial products. Furthermore, as learned little about whether and how the green supply chain allows the production of environmentally new industrial goods.

Strategy of Green Marketing:

"Green marketing" and management is a competitive problem, not only because being environmental makes an organization "healthy," but also as being green costs. In fact, demand from societal and customers is pushing the implementation of a green marketing strategy. The incorporation of environmental issues into the strategic communication cycle has become necessary for businesses to gain systemic authority and competitive advantage, rather than voluntary policies. Over the past two decades Green / environmental marketing strategy has attracted considerable academic attention [2].

Researchers suggested that an efficient green marketing strategy must be supported by the principles of environmental marketing, which refer to the "process for formulating and implementing entrepreneurial and environmentally beneficial marketing activities with a view to generating revenue through the provision of exchanges that meet the economic and social performance objectives of a company." The degrees of companies adopting entrepreneurial marketing differ [3].

Researchers incorporated both environmental strategies and orientations, and developed the corporate environmentalism concept. There are two core elements of organizational environmentalism: sustainability responsibility and an environmental policy. Environmental orientation refers to the recognition by senior executives of the importance of environmental issues facing their companies, while the environmental strategy alludes to the extent to which environmental problems are integrated into the company's strategic plans. The environmental orientation has a positive impact on environmental strategy, which in turn has a positive impact on performance under some conditions, according to researchers [4]. Researchers established a conceptual framework on entrepreneurial marketing antecedents and outcomes. They indicated entrepreneurial marketing can have an impact on business results and corporate image, and such impacts appear to be greater if there is a higher reputation for the sector of the organization. They also claimed that the entrepreneurial marketing of a business would be influenced more by the company's internal policy (e.g., top environmental protection management), internal structure (e.g. decision-making centralization), external policy (customer environmental awareness, regulatory intensity), and external economy (e.g., competitive intensity) [5].

These were philosophical assumptions, though, lacking scientific evidence to support them. Researchers built an entrepreneurial marketing metric and empirically observed that entrepreneurial marketing has a positive impact on the capacities of companies, such as the performance of new product development. They described a similar set of corporate environmentalism antecedents, and empirically evaluated them. These backgrounds include senior management engagement, public concerns, and regulatory forces and so on. They also find that the field of business (high and low

environmental impact sectors) balances the impacts of the antecedents of some corporate environmentalism [6].

Introduction to Green Supply Chain Management:

A supply chain can also be described as a channel of companies that work together towards the achievements of the entire supply chain (e.g. fulfilment, customer service, etc.). Supply chain management is therefore highly linked to allocation of resources and a wide range of optimization techniques can also be discovered in the study to assist in decision-making. The connection between and supply chain management and marketing cannot be ignored. Researchers, for example, investigated how supply chain activities and marketing can be incorporated from a demand chain perspective. The paper's aim is to suggest a new business model that can add values along chain [7]. Green supply chain management and green marketing cannot be deemed separately by the same token. The interfaces between green supply chain analysis and sustainability marketing are nevertheless quite vague. This is particularly obvious if only marginal benefits arise from the commitment dedicated to maintaining the green supply chain. To illustrate this, below are summaries of some important themes in the research:

Product Development:

The development of green products is also observed to be coupled with the performance of companies. Researchers have found, in particular, that innovations in green product and green manufacturing processes are positively associated with the competitive advantage of companies. Nevertheless, the findings of some research on this topic are cautious. Therefore, extending this into the debate about integrating green supply chain management and green marketing is important to acknowledge the interaction between two practices and possible overlaps between them. Researchers have proposed a life-cycle approach for analysing an electronic product's options for green product development. These strategy, though, is perhaps too cumbersome in terms of data collection, and is hard to link to green marketing effort, as the study is not easy to introduce to consumers. Moreover, this method is mostly employed at the level of the product, not the level of the supply chain. In other words, making such efforts visible to consumers is no easy task.

Corporate Performance:

Most studies of the green supply chain management are coupled with corporate performance and thus try to conclude that the green supply chain can influence profits or even competitive advantages for companies. Researchers argued that financial incentives are the main driving force for green supply chain implementation. They investigated the connection between the competitiveness of companies and green supply chain management practices, as well as economic performance, and confirmed that there is a positive relationship [8]. Researchers also come to a similar conclusion although their study is focused on the Taiwanese market alone. In their survey they concluded there is a correlation between environmental performance and competitive advantage. Despite the huge amount of literature studies in relation to the above, the connection between green supply chain management practices, e.g. green procurement management, green marketing and green purchases, e.g. green branding, seems to be lacking [9].

Lean, also referred to as just-in-time, and strives in a broader sense to automate the cycle by eliminating waste. The idea was implemented in some fields other than conventional production systems, such as the healthcare sector. An interruptive and smooth way is the major assumption or pre-requisite of lean systems which is the ability to ensure the resources are consumed. In other terms, high degree of uncertainty would impede the implementation of lean theory not

only to green supply chain or green marketing practices but also to their interfaces [10].

Reverse Logistics and Distribution:

Distribution system plays an important role between the communication between the advertisement and the supply chain. Clearly this is the main concern in supply chain management from the standpoint of expense and stock movement. In addition, this is also the point where a company can meet the customers, particularly for industrial business. Like above mentioned life-cycle assessment, carbon footprint is another parameter to describe the "greenness" of a product or process. Scientists, for example, used such metrics to measure the so-called "last mile" distribution network and tried to evaluate various scenarios.

Contrary, for example, to the distribution of goods from a supplier to the consumers, reverse logistics requires moving in the opposite direction. Definitely useful for raising the environmental impact of a supply chain are the reuse, remanufacture and recycle of recycled goods. Unfortunately, normally regulations drive these activities, including the aforementioned green product design. The value of the products returned cannot, however, be underestimated. Therefore, one cannot overlook the role of reverse logistics in industrial marketing. That is particularly important when it is not necessary to neglect industrial marketing.

Significance of Innovation and Technology for Green Supply Chain:

The definition of "Clean" was largely imposed by policymakers as early as two decades ago. The United States "Federal Trade Commission" started the auditing phase for commercial branding in Green Marketing in the early 1990s. Around the same time period, the Australian Trade Practices Commission (replaced after 1995 by the Australian Competition and Consumer Commission, ACCC, 2011) has identified a set of criteria for regulating industrial promotion, two of which apply especially to the Green Supply Chain. These are: 1) when launching a new product when contrasting the characteristics relevant to the Green definition with others in the current labels, these need to be clearly defined and introduced to the customers; 2) thorough explanation of the circumstances that can produce benefits for the climate. Also since then, manufacturing norms have accompanied the demands from government initiatives such as the ISO 14000 series established by the International Organization for Standardization to create environmental-oriented management systems. Compliance with the standard nowadays brings not only the green images to companies, but also often a demand from the major business customers (e.g. Toyota and GM require their suppliers to meet such standards). In fact, the above standards and conditions cover the processes and products in various supply chain activities [11].

As illustrated in the previous section and shown in Fig. 1. The design of a supply chain consistent with the Green initiatives includes processes for transforming inputs into products that may benefit the environment. Reflecting on the complex nature of supply chain management, the literature also addresses diverse aspects of the Green Supply Chain. Nonetheless, the methods may include the procurement of renewable products, environmentally friendly packaging design (e.g., less electricity or less pollution), production, storage and distribution, and retailing, and the outputs should produce less waste by reverse logistics for commodity reclamation, reuse or disposal.

There are two major enablers to facilitate the adoption of a green supply chain, in addition to the industrial standards and government legislation. Therefore, performance measurement frameworks were developed as one of the principal enablers. Not only as methods for planning and measuring the efficiency of the green supply chain, such mechanisms can also help to ensure the associated benefits such as the reduction of discarded material, the production of waste by-products,

and systematic monitoring of the produced hazardous content and less energy consumption. The other opportunist, innovation and technology utilization appear to be under research from the managerial aspects. In fact, performance control implementation relies on information systems for aggregating operational figures. Regarding success assessment, in the last 10 years there have been only a few research published from the areas of information systems in main stream publications and all of them are empirical. Notwithstanding that innovation and technology are definitely seen as the main drivers of the green supply chain in the sectors.

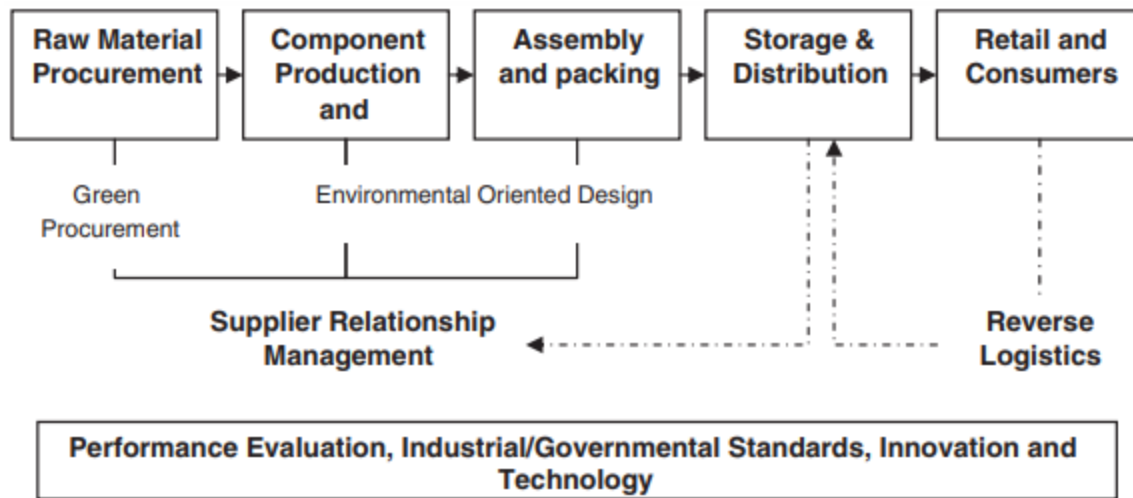


Fig. 1: Enablers and activities of green supply chain.

II. CONCLUSION

The research on business marketing has not discussed public procurement activities before. From the point of view of retail consumers, this work examines the effects of greener perceptions on buyer–seller ties. A comprehensive study reveals that new environmental laws call for new structural and social standards. Sustainable procurement entails new environmental standards, a decrease in the supply base, a need for constant improvement, integrity of the buying process and an alternative to total ownership costs. Consequently, the level as well as the nature of supplier expectations are changing.

The work provides insights into how opportunistic activities and toxic collaboration tension in green supply chains will mitigate the positive effect of relationship-orientation on inter-organizational strategy consistency. It compares with previous studies that concentrate more on the antecedents to the consistency of inter-organizational approaches. Moreover, their study contributes to green supply chain research by integrating the economic and relational perspective into the study of relational governance in green supply chains, which is not addressed in previous studies. At last, this paper broadens on current research by emphasising the role of value-based partnerships from the partners' economic and relational point of view.

REFERENCES

- [1] M. Han, M. de Jong, Z. Cui, L. Xu, H. Lu, and B. Sun, "City branding in China's Northeastern region: How do cities reposition themselves when facing industrial decline and ecological modernization?," *Sustain.*, 2018.
- [2] A. Karpf and A. Mandel, "Does it Pay to Be Green?," *SSRN Electron. J.*, 2017.

- [3] J. J. Cronin, J. S. Smith, M. R. Gleim, E. Ramirez, and J. D. Martinez, "Green marketing strategies: An examination of stakeholders and the opportunities they present," *J. Acad. Mark. Sci.*, 2011.
- [4] S. A. Rahim, Y. Fernando, and R. Saad, "Sustainable Green Supply Chain Management and Impact on Organisations," *J. Emerg. Trends Econ. Manag. Sci.*, vol. 7, no. 3, pp. 147–155, 2016.
- [5] S. A. Al Khattab, A. H. Abu-Rumman, and M. M. Massad, "The Impact of the Green Supply Chain Management on Environmental-Based Marketing Performance," *J. Serv. Sci. Manag.*, vol. 08, no. 04, pp. 588–597, 2015.
- [6] "The Importance of Green Supply Chain Management and Its Role in Marketing Management," *Int. J. Econ. Financ. Issues*, vol. 7, no. 3, pp. 265–269, 2017.
- [7] L. M. Ellram and M. L. Ueltschy Murfield, "Supply chain management in industrial marketing—Relationships matter," *Ind. Mark. Manag.*, vol. 79, pp. 36–45, 2019.
- [8] M. Gandhi and H. Vasudevan, "Green supply chain management practices and its impact on business performance," *Lect. Notes Mech. Eng.*, pp. 601–611, 2019.
- [9] C. S. Lin, R. Y. Chang, and V. T. Dang, "An integrated model to explain how corporate social responsibility affects corporate financial performance," *Sustain.*, 2015.
- [10] A. M. Colpan, T. Yoshikawa, T. Hikino, and E. B. Del Brio, "Shareholder Heterogeneity and Conflicting Goals: Strategic Investments in the Japanese Electronics Industry," *J. Manag. Stud.*, 2011.
- [11] H. K. Chan, S. Yin, and F. T. S. Chan, "Implementing just-in-time philosophy to reverse logistics systems: A review," *Int. J. Prod. Res.*, 2010.