

# Green Supply chain and firm performance in apparel industry of china: A Review of literature

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**Abstract:** With an aim to find out a way towards the future of green supply chain management practices and its impact on organizational outcomes, this investigates the available literature on green supply chain management. For this purpose a number of studies are being briefed in this manuscript to ensure that the researchers can get a guidelines and move forwards towards the deeper undemanding of the work already have been done and take it as a starting point for further research, as advised by most of the authors that it is required. This going to lead the practioners of supply chain management exercised around the globe in general while apparel industry of China in specific. After explaining a background and introduction to the topic this study discusses one by one the work already done in the area of green supply chain management practices and then firm performance as an outcome. It further highlights the problem prevailing in the area which provides a starting point for researchers and practioners.

## I. Background to the Study

In today's corporate world scenario, the consumer awareness is increasing regarding various environmental issues such as global warming. Therefore, as suggested by Martin, (2017), the firms have to determine on how to tackle manufacturing processes in supply chain and effects of the commodities they produce. Because of firms, there has been a rise in environmental pollution and greenhouse emissions, a need to align their supply chain processes in regard to the scarce resources is raised and emphasized on organizations. Green Supply Chain Management (GSCM) is an approach to be employed and develop procedures of environmental regulations (Hsu & Hu 2008). According to Vachon & Klassen, (2007), the managements are required to settle on choices that help the joining and coordination of environmental practices all through the inventory/ supply chain so that services be rendered without harming the environment as per customers' demands (Vachon & Klassen, 2007)

The anxieties and concern with environment regarding contamination has been growing rapidly for the last few decades because of frequent changes in atmosphere, therefore Sheu et al., (2005), suggested that initiative regarding Green Supply Chain Management should be taken for the growth of businesses. In the supply chain management, GSCM functions as additional resource for environmental where companies acknowledge its progressive and adaptability features (Chen & Sheu, 2009). The existing atmospheric needs that affected manufacturing activities are increasing considerably and so are the environmental management (EM) schemes for invention system to cope with problems. Zhu & Sarkis, 2006; Rao & Holt, 2005), said that the idea of GSCM emerged and turning into an imperative factor for business exercises today. According to Zhu et al. (2008) GSCM can be viewed as an ecological development. The production network coordinating with green supply chain is an innovation, where supply chain is an immediate connection with he environment (Zhu, Sarkis, & Lai, 2008).

## **II. Green Supply Chain Management Practices**

According to Wang and Lin (2011), green supply chain management practices, achieved by the control of unfinished products, spare parts and processes from suppliers to manufacturers to customers, is the improvement on environmental impact. GSCM integrates a given ecological rationale with Supply Chain Management that not only deals with the end-of life organization of the goods after a valuable life but also deals with material sourcing, product design, and selection, industrial process as well and subsequently distribution of finished goods to the final customers/consumers. Aref et al., (2005), found that GSCM has developed an ecologically sensible mind-set to supply chain management with a number of the ultimate industrial procedures.

(Hsu & Hu, 2008) considered Green supply Chain Management (GSCM) a method to enhance and in the implementation of the procedures and products as demanded by the while (Chen & Sheu, 2009) found it vital in sustainable supply chain management and business implications in some areas that is directly linked to business performance. To reduce impending environmental issues and systemically create persons is called sustainable manufacturing. Green Logistics to meet the customers demand while trying to disengage any negative effects from logistics operations is called green logistics while Reverse Logistics deals with management of waste materials in the supply chain loop and return.

A modern innovation that firms use to create win-win strategies is Green Supply Chain Management practices. The strategies of green supply chain management are beneficial to get desirable market share through lower prices and as suggested by Van & Hock, (2000), by improving environmental efficacy and lowering atmospheric threats. Green supply chain management is advantageous for firms. Bowen et al., 2001; Hall, 2003; Rao, (2002), described that they benefit from reduction of cost all the way to integrating suppliers to more involvement in the conclusion making procedure that bring ecological improvement. For any particular consumer-established firm, as per statement of Michael Fournier, experiencing green is a vital step for firms. There are a number of challenges about the value-chain that need to be discussed in detail. Moreover these challenges may be a superfluity of substances, having doubt regarding market situation, adjustment, investors as well as 'trepidations, .

## **III. Firm Performance**

To measure the efficiency of firm in terms of economic development as well as where the company sets up its premises to operate, is called Firm Performance argued Umer, M. & Afzal, F., (2012). A firm's financial well-being and performance can be measured by different measures such as stock ratios, profit margin, sales growth, and revenue etc. it varies in different industries, mostly in manufacturing companies, certain ratios will be considered more meaningful to determine a firms' performance. The totals unit sales, prices of its stock, cash flow, operating revenue and income revenue are taken into consideration by manufacturing firms.

The main focus of the supply chain management is ability to facilitate competitive advantage and how the firms control their main suppliers' procedure technology. According to (Lee & Billington, 1992) SCM is based on how often within firm processes of logistics, manufacturing, distribution, materials, and transportation operates. To measure the performance the supply chain along with management performance should be seen in the designed system. To enable the firm run its day- to-day activities and productivity it is the total strategic values and total dependable variables that are undertaken by the management. To enable them to make sound informed decisions (Bahae, 1995) suggested that different stakeholders' requirement should give indicators.

The performance of supply chain can be measured through either by client responsiveness, costs incurred by the firm, flexibility, and time allocated for each activity. Cohen & Lee, (1988), proposed that an evaluation of usage to overcome any shortcomings in actualizing the current measurement framework and measurement system of supply chain performance execution should be improved (Cohen & Lee, 1988).

## **IV. Research Problem**

The practices that have heightened the deteriorating environmental conditions are the main drivers of green supply chain. The environmental conditions such as increased waste materials, reduction of crude material and high levels of contamination are among such drivers. Every company management or production unit has a great concern with Green supply-chain management (GSCM). Thus a need arises to decide how the performances of organizations are influenced by the usage of GSCM practices, complimented by higher profits and great negotiating practices in business. Therefore A Sharma, GR Iyer - Industrial Marketing Management, (2012), suggested that organizations have to incorporate the environment into their economic activities.

A firm strategy decisions regarding its production considers both natural and monetary gains suggested Zhu et al., (2004). The supply managers in firms are compelled to consider usage of different GSCM practices with the increase in demands that would give direction in production. It means that for a commodity to meet a certain criteria, it would have to undergo the laid procedures. An immediate connection between GSCM initial usage and business execution was discovered by Lee et al. (2012). The business execution would be enhanced when GSCM improves operational effectiveness as showed by the outcomes.

Additionally efforts to minimize natural difficulties through rehearsing a few parts of GSCM were undertaken but not the full reception of the system. However, the GSCM practices and their effect on general firm execution have not been focused so far (Mwirigi, 2007) Mohamed, (2012), however found positive affect of GSCM in producing firms in Mombasa through utilization of raw materials to give maximum output and competitive advantage they have with other firms.

It is obvious from above discussion that none of these studies addressed the performance of soft drink manufacturing companies and the issue of green supply chain management.

## **V. LITERATURE REVIEW**

### **Green Supply Chain Management Practices**

Awaysheh & Klassen, (2010), stated that green supply chain management practice is carried out by organizations to reduce the impact of organizational activities on the environment. The green supply chain management practices involves green procurement, green distribution practices, green manufacturing practices, practices and Reverse logistics that is turnaround of end life (van Donk, van der Vaart, Awaysheh, & Klassen, 2010).

### **Green Procurement Practices**

The practice that involves the reduction, re-use and recycling of materials during the time spent buying in consideration with the environment is designated as Green Procurement (GP). For environmental concern and financial tradition in some businesses, green procurement is a solution as well as a way of getting items and supply as stated by Salam, (2008), it limits natural effect. Anticipating waste and contamination by considering the environmental effect, for example, value, execution and different variables is related with Green Procurement when buying choices as indicated by Holbrook (2004),.

The green procurement is characterized by Carter et al. (1998), as a specific end goal to encourage reusing assets and the buying division ought to buy reused materials in order to lessen the utilization of raw materials (Carter & Jennings, 2002). However green procurement is defined as an arrangement of standards and strategies implied considering the effect on the environment by (Zsidisin & Siferd, 2001)

When organizations are required to do an examination of the natural effect of an items end lifecycle, Green procurement is the determination of merchandise and activities that limits environmental effect, thus can also be referred to as Favorable Procurement. It appears to be the purchase of environment friendly services and commodities. According to Mulwa, (2010), goods and services obtained always have little impact on the environment during their life usage as compared to the standard equivalent.

In the organization counsels that guide the leadership to enhance business growth and efficiency green procurement is an office suggested by Zhu et al. (2002). The leadership is guided to reduce costs related to materials and end life cycle, ensuring assets and upgrading the business face in the society. Martha & Houston (2010), stated that Green procurement aims at managing waste and cut down on aggregate costs spent in disposing of the wastes (Martha & Houston, 2010).

### **Reverse Logistics**

According to Stock (1998: 20), the work of product returns, logistics in basis reduction, material substitution, reuse of materials, recycling constitutes the term Reverse Logistics. A mechanism is required to switch the regular logistics process from manufacturers to customers with aim of stock considered unacceptable is traced back to original producers in a convenient way, developed by the firms. includes Forward and reverse data flow that may empower the organization to start green logistics and lean logistics are included in Reverse Logistics Practices, which according to Lyons & Farrington, (2006), would be advantageous for firms.

Invert logistics according to (Swinehart & Smith, 2005), help an organization to distinguish issue and point out imperfections to

reduce the commodities' return. Moreover, Wisner and Stanley, (2007), confirmed that Reverse Logistics Practices involve returned stock, regular stock handling, inadequate stock, restock, and salvages (Wisner & Stanley, 2007).

### Conclusion

The firms in industrialized countries may employ "green" by a number of ways to decrease energy and resource expenditure, use again plus recycling are very important is the suggestion put forward by this study. It is also recommends that practices entails reduction of consumed energy, reuse, recycling and using biodegradable and environment-friendly materials, minimized waste can be reused and minimizing harmful emissions. Through the government green procurement, green supply chain may be improved, corporate social accountability, and sustainable practices. Joint efforts of buying firms and suppliers are needed to improve performance therefore firms need to adopt collaborative practices with their suppliers.

### References:

- [1.] Bahae, M. S. (1995). Characteristics of Iranian entrepreneurs. *International Journal of Commerce and Management*, 5(3), 62-72.
- [2.] Carter, C. R., & Jennings, M. M. (2002). Social responsibility and supply chain relationships. *Transportation Research Part E: Logistics and Transportation Review*, 38(1), 37-52.
- [3.] Chen, Y. J., & Sheu, J.-B. (2009). Environmental-regulation pricing strategies for green supply chain management. *Transportation Research Part E: Logistics and Transportation Review*, 45(5), 667-677.
- [4.] Cohen, M. A., & Lee, H. L. (1988). Strategic analysis of integrated production-distribution systems: models and methods. *Operations Research*, 36(2), 216-228.
- [5.] Hsu, C.-W., & Hu, A. H. (2008). Green supply chain management in the electronic industry. *International Journal of Environmental Science & Technology*, 5(2), 205-216.
- [6.] Lee, H. L., & Billington, C. (1992). Managing supply chain inventory: pitfalls and opportunities. *Sloan Management Review*, 33(3), 65-73.
- [7.] Martha, T., & Houston, P. (2010). Purchasing: The key to successful green strategy. *China Logistics & Purchasing*, 7, 20-22.
- [8.] Mwirigi, F. M. (2007). The Role of Government policy in Enhancing Technology Innovation and creativity among Micro, small and Medium Entrepreneurs. *JKUAT Scientific, Technological and Innovation Conference JKUAT*.
- [9.] Swinehart, K. D., & Smith, A. E. (2005). Internal supply chain performance measurement: A health care continuous improvement implementation. *International Journal of Health Care Quality Assurance*, 18(7), 533-542.
- [10.] Vachon, S., & Klassen, R. D. (2007). Supply chain management and environmental technologies: the role of integration. *International Journal of Production Research*, 45(2), 401-423.
- [11.] van Donk, D. P., van der Vaart, T., Awaysheh, A., & Klassen, R. D. (2010). The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations & Production Management*.
- [12.] Wisner, J., & Stanley, L. (2007). *Process management: Creating value along the supply chain*. Nelson Education.
- [13.] Zhu, Q., Sarkis, J., & Lai, K. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International Journal of Production Economics*, 111(2), 261-273.
- [14.] Zsidisin, G. A., & Siferd, S. P. (2001). Environmental purchasing: a framework for theory development. *European Journal of Purchasing & Supply Management*, 7(1), 61-73.