Novelty Journals

ISSN 2394-7322

International Journal of Novel Research in Marketing Management and Economics
Vol. 2, Issue 2, pp: (111-114), Month: May - August 2015, Available at: www.noveltyjournals.com

EFFECTIVENESS OF QUALITY IN SUPPLY CHAIN MANAGEMENT

[1]Ms.Niketa Tyagi, [2]Prof.Prabhat Srivastava

[1]Research Scholar, [2]Director, SBM
[1, 2] Noida International University, India

Abstract: **The purpose of this paper is to present the effectiveness of quality management in supply chain management practices through literature reviews. Previous studies reported mixed and ambiguous results of the relationship between QM practices and performances in SCM. This study investigated impacts of QM practices on various performance measures of SCM as well as the reasons and the barriers of the SCQM practices of firm. When a company purchases items from a vendor they will receive the items and depending on the nature of those items, a quality inspection may be performed. The inspection of products is also appropriate in other areas of the supply chain such as inspections during the manufacturing process, inspection of the final finished product, and inspections while the items are stored in the warehouse.**

Keywords: **Quality Management, Supply Chain Management, Products and Services.**

I. INTRODUCTION

- **Quality Inspection of Purchased Items:**

The quality inspection occurs so that a company can verify that the product is within certain prescribed tolerances in order for the product to be useful.

- **Inspections at the Vendor:**

The quality inspection can also take place at the vendor's facility. Some companies prefer to perform the inspection before the items are transported to their manufacturing plant. However, the inspections can incorporate more than inspections of the product, but also inspections of the production facility, equipment, documentation, manufacturing processes, and storage facilities. These quality inspections are important when purchasing agreements are being negotiated. Some vendors may have ISO 9001:2000 Quality Management Standards (QMS) certification which offers customers a greater sense of expected quality and may lessen the requirement of regular inspections.

- **Inspections on the Line:**

When a manufacturing company creates finished goods, it cannot afford to wait until the items are coming off the end of the production line before they are inspected. Production issues need to be addressed early in the process in order to correct problems. This can reduce the loss of raw material and reduce the overall time that the production process is shut down. In every type of industry there is a process where quality inspections can be performed during production**.**

- **Finished Goods Inspection:**

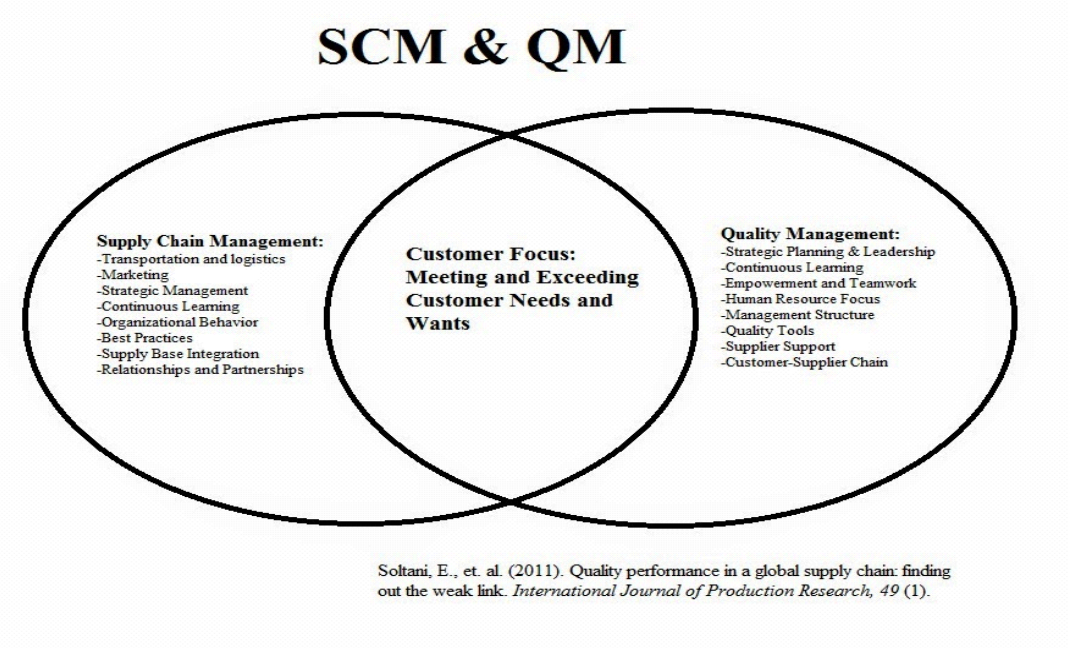
When the finished item comes off the production line it should be inspected to ensure that it conforms to the quality standards within which is to be sold. The final check could include not only the finished good itself but the packaging used to ship it to the customer. If the packaging is damaged or not correctly labeled then this could require the item to be re-worked or scrapped.

- **Inspections in the Warehouse:**

Finished goods can be sent directly to the customer or stored in the warehouse before it is sold. For some items storage for a period of time can alter the characteristics of the product. Inspections in the warehouse can ensure that the finished goods are still able to be shipped to customers.

- **Detailed Study about the Topic:**

In this modern era every industry is more focused on quality rather than quantity. The quality of supply chain itself can provide a path breaking solution at different levels of supply chain management. Moreover, this concept may be applied to address the problems such as product recall, delay in delivery of products etc. regardless of type of industry. QM as an approach to improve effectiveness, profits, safety of products, customer satisfaction and reduce time, cost factor in SCM.



Soltani, E., et. al. (2011). Quality performance in a global supply chain: finding out the weak link. *International Journal of Production Research, 49* (1).

Supply chain management directly impacts product quality and the overall profitability of a company. For these reasons, quality control in the supply chain is critical for maintaining a competitive edge in the marketplace and reducing operating costs. Without quality control, waste becomes prevalent beyond a tolerable amount.

- **Defects and Scrap:**

If raw materials are flawed, it can make entire production lines inefficient and increase defect rates in finished goods inventory. Also, inferior materials may require extra machining or refining, which adds to employees' workloads and total manufacturing costs. Vendors and the materials they provide are often audited by supply chain staff members to ensure raw materials meet specifications. By controlling the quality of production inputs, supply chain managers are protecting the integrity of their company's operations.

- **External Failures:**

When supply chain quality control is poor, products are more likely to break or wear out before their warranty period expires. There are a large number of failures that can occur once a product leaves a manufacturing facility, depending on the nature of the business. Customers who are forced to return items may lose respect for the company from which they purchased the product. Quality control in the supply chain ultimately helps to protect a company's reputation. The better the control over supplier inputs, the less risk of returns and potentially hazardous product failures.

- **Inspections:**

Companies that experience large quantities of defects and other forms of waste produced during manufacturing, often implement manual inspections to ensure product quality. Inspections raise operating costs and are unnecessary if quality controls are functioning properly. Quality control procedures and audits of supplier relationships are critical for avoiding continual inspections on the production line. Otherwise, labor hours will be lost inspecting materials and finished-goods inventory that could be allocated to value-added activities.

Novelty Journals

ISSN 2394-7322

International Journal of Novel Research in Marketing Management and Economics
Vol. 2, Issue 2, pp: (111-114), Month: May - August 2015, Available at: www.noveltyjournals.com

- **Toxic Materials:**

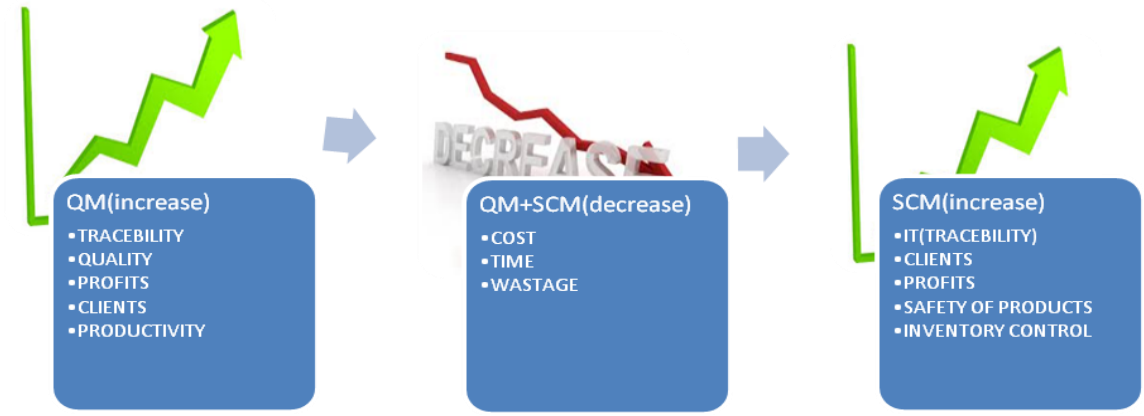
Hazardous materials are used throughout the world for various purposes in manufacturing, especially in defense-related industries. Quality control helps to protect employees and other stakeholders from being exposed to the harmful side-effects of toxic materials. The U.S. Department of Transportation prescribes important rules for the transport of hazardous substances. Non-compliance can lead to penalties or fines, which makes quality control imperative. The more efficiently and effectively toxic materials are handled in the supply chain, the better for all internal and external stakeholders.

II. METHODOLOGY

An extensive overview of the practices of QM and SCM is carried out using published research papers and some major QM and SCM practices were extracted. These identified practices are then studied to explore the relationship between them for better understanding and application. The sources of secondary data's are various literature reviews, Journals, Magazines and websites

III. SUGGESTIONS AND RECOMMENDATIONS

Quality inspections are an important part of the manufacturing process and have a place in a number of areas of the supply chain; from goods receipt, production, goods issue and warehousing. Even as on date the quality is much needed not only for Goods but also required for the Services. The quality plays a vital and crucial role now days in Manufacturing as well as Service Industry.



Therefore, in every types of Industry whether it is related to any area/types should focus more on the quality in supply chain management rather than quantity in the supply chain management. Speedy delivery of goods from the place of origin to the end consumer by maintaining the quality will give more satisfaction both to the Manufactures/Service providers and Consumer.

Though in recent times lots of such services has been started but sometimes they fails to deliver the goods/services as promised to the consumer. It still needs more improvement in this area of maintaining the quality in the supply chain management, like: tracking of goods/services should be more accurate, timely delivery, good condition, packaging, after delivery services.

- **Research limitations:**

This paper focuses only on the literature review of previously published research papers and journals, further empirical study can be undertaken using these identified practices which may allow the validation and generalization of results.

REFERENCES

[1] Agarwal, A., Shankar, R. & Tiwari, M. (2007). Modeling agility of supply chain. Industrial Marketing Management, Vol. 36, Issue 4, pp. 443-457.

[2] Matopoulos, A., Vlachopoulou, M. and Manthou, V. (2007). A conceptual framework for supply chain collaboration: empirical evidence from the agri-food industry. Supply Chain Management: An International Journal, Vol. 12, Issue 3, pp. 177–186.

[3] Ajay Das, Mark Pagell, Michael Behm, Anthony Veltri "Toward a theory of the linkages between safety and quality" Journal of Operations Management 26 (2008) 521–535.

[4] Ahire, S.L and Golhar, D.Y. (1996), "Quality management in large vs small firms",Journal of small business management, January, pp. 1-3.

[5] Ahire, S.L., Golhar, D.Y. and Waller, M.A. (1996), "Development and validation of TQM implementation constructs", Decision Sciences, Vol. 27, pp. 23-56.

[6] Ahmad, S. and Schroeder, R.G. (2002), "The importance of recruitment and selection process for sustainability of total quality management", International Journal of Quality& Reliability Management, Vol. 19 No.5, pp. 540-550.

[7] Berny, L. and Peyrat, O. (1995), "La certification d'entreprise: vrais enjeux et faux de ´bats", Revue Franc¸aisdeGestion. Brown, A. and Van der Wiele, T. (1995), "Industry experience with ISO 9000", Asia Pacific Journal of Quality Management, Vol. 4 No. 2, pp. 8-17.

[8] Casadesu ´s, M., Gime ´nez, G. and Heras, I. (2001), "Benefits of ISO 9000 implementation in Spanish industry", European Business Review, Vol. 13 No. 6, pp. 327-35.

[9] Chandra, Ch. and Kumar, S. (2000), "Supply chain management in theory and practice: a passing fad or fundamental change?", Industrial Management & Data Systems, Vol. 100 No. 3, pp. 100-13.

[10] Forker, L.B., Mendez, D. and Hershauer, J.C. (1997), "Total quality management in the supply chain: what is its impact on performance?", International Journal in Production Research, Vol. 35 No. 6, pp. 1681-701.

[11] Gotzamani, K.T. and Tsiotras, G.D. (2002), "The true motives behind ISO 9000 certification: their effect on the overall certification benefits and long-term contribution towards", International Journal of Quality & Reliability Management, Vol. 19 No. 2, pp. 151-69. IESE (1999), "Estudio de la Gestio ´n de la cadena de subministro en espan ˜a", IESE, Barcelona. ISO (2002), "The ISO survey of ISO 9000 and ISO 14000 certificates", International Standard Organization.

[12] Kennerly, M. and Neely, A. (2001), "Enterprise resource planning: analysing the impact", Integrated Manufacturing Systems, Vol. 12 No. 2, pp. 103-13. Lee, T.Y. (1998), "The development of ISO 9000 certification and the future of quality management: a survey of certified firms in Hong Kong", International Journal of Quality & Reliability Management, Vol. 15 No. 2, pp. 162-6.

[13] Lummus, R. and Vokurka, R.J. (1999), "Defining supply chain management: a historical perspective and practical guidelines", Industrial Management & Data Systems, Vol. 99 No. 1, pp. 11-17. Millen, R. and Maggard, M. (1997), "The change in quality practices in logistics: 1995 versus 1991", Total Quality Management, Vol. 8 No. 4.

[14] Amar Ramudhin, Chaher Alzaman and Akif A. Bulgak " Incorporating the cost of quality in supply chain design" Journal of Quality in Maintenance Engineering Vol. 14 No. 1, 2008 pp. 7186.

[15] Andrew Cox, Glyn Watson, Chris Lonsdale and Joe Sanderson "Managing appropriately in power regimes: relationship and performance management in 12 supply chain cases" Supply Chain Management: An International Journal, Volume 9 • Number 5 • 2004 • pp. 357–371.

[16] Andy C.L. Yeung "Strategic supply management, quality initiatives, and organizational performance" Journal of Operations Management 26 (2008) 490–502. [8] Aref A. Hervani and Marilyn M. Helms and Joseph Sarkis "Performance measurement for green supply chain mananagement" Benchmarking: An International Journal, Vol. 12 No. 4, 2005, pp. 330-353.

[17] Arif Khan K B. Bakkappa Bhimaraya A. Metri and B.S. Sahay " Impact of agile supply chains' delivery practices on firms' performance: cluster analysis and validation" Supply Chain Management: An International Journal 14/1 (2009) 41–48.