

Chapter 10

Information Technology and Communication Management in Supply Chain Management

Cláudio Roberto Magalhães Pessoa

FUMEC University, Brazil

Marco E. Marques

FUMEC University, Brazil

ABSTRACT

Information Management policies must be provided, according to various SCM studies. Companies that need to operate in an integrated form, have in common the necessity that these policies must be communicated, in an efficient way, to everyone involved in strategic decisions to allow effective decision-making. In addition to that, it is of utmost importance to try to understand the customer's values, thought data prospected on the market. Then, Information Management must be done in order to efficiently apply them in the day-by-day of the organizations. This chapter explores information management in SCMs.

INTRODUCTION

Modern organizations have been trying to plan their business in an efficient way with the perspective of competition that is dynamic by nature. One of the approaches that have been used is to bring the suppliers to collaborate in this planning, many authors have suggested that Supply Chain Management (SCM) as a right tool for that (New, 1997; Beske & Seuring, 2014).

According Lavastre, Gunasekaran and Spalanzani (2014), the very competitive and dynamic market induces the companies to adopt Supply Chain Management (SCM) to achieve better finance results. According to the authors the interrelation between the company and suppliers, treated as partners, is directly tied to customer satisfaction. In addition, they claim that the SCM encompasses planning and

DOI: 10.4018/978-1-7998-0417-8.ch010

management of all activities involved on the supply, purchase, manufacturing and logistics management that must include the coordination and collaboration with partners, suppliers, third part professionals and costumers channels.

Cox (2012) explains SCM both from the strategic and operational perspective. He explains that the correct implementation of SCM is directed linked with the organization relative power structures that work with then.

Eckler and Schneller (2015, p.22) state that SCM is a key factor to maximize quality and performance, and collaborate to ensure that decision-making process will be made according organization's interests. According to them, one failure in the decision-making process can bring some risks, as for example, the organization can be excessively dependent on the suppliers. Thus, managers must focus the purchase process on the value of the product to the business. This approach could bring better results to the organization.

Seth, Goyal, and Kiran (2015) states that much effort and attention in the implementation of a SCM system are focused on the evaluating the results obtained after implementation. However, according to the authors, during implementation, greater importance should be given to planning, because is in this phase that the organizations should think in their Business Plan, which would include "the strategy and tangible benefits, resources, risks, costs and schedule". The authors suggest that the implementation of a SCM system can be split into two parts: the technological and one that contemplates organizational factors. The second one is more important than the first when implementing the SCM.

According to Seth, Goyal and Kiran (2015), SCM became important for organizations due to globalization and the increasing growth of market competition. According to the authors, the SCM aims circulation of goods and services from one end of the chain to the other, in several stages, to improve the "efficiency, effectiveness, productivity and profitability of the process as a whole" and then, SCM management becomes critical in searching for competitive advantage.

According to Seth, Goyal and Kiran (2015), besides goods and services, other factor that requires attention is information flow. It will serve as a "lubricant" that will allow those involved in the supply chain to create an integrated and coordinated chain. The flow of information gained importance with the advent of Information Technology (IT) tools, which have facilitated the exchange of information with customers (internal and external), distributors and other partners in the SC (Supply Chain). The authors call attention to the need to manage IT tools related to SCM, as these tools have a major role in the management and flow of information, from its origin (raw material) to their arrival to the customer.

According to Madhani (2015), in the past decade the organizations noticed that SCM could be more efficient to contribute to the reduction of deadlines and sales forecasts errors. However, actually, the SCM focus is on meeting customer's needs, this new focus reduces costs related to "forced markdowns or empty stocks". However, for the author, achieving a level of services that fulfil customer needs will require a greater integration between organizations areas and functions. Efficient cost management is the biggest challenge for the SCM, and only an efficient implementation of SCM can help to overcome this challenge.

According to Madhani (2015), an efficient SCM often becomes inefficient when it is not aligned with market changes. A system focused only on replacement products, for example, may fail by not knowing what is the real costumers demand, or the value that the client seeks to find on these products. Therefore, product replacement will be done in such a way that will not fulfill customer needs. To avoid this, according to the author, it is important for SCM manager's work to integrated with the organization's marketing professionals in order to draw product strategies, thus reaching the customer satisfaction.

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/information-technology-and-communication-management-in-supply-chain-management/242131

Related Content

Parallelization and Performance Evaluation of an Edge Detection Algorithm on a Streaming Multi-Core Engine

Hashir Karim Kidwai, Fadi N. Sibai and Tamer Rabie (2009). *Journal of Information Technology Research* (pp. 81-91).

www.irma-international.org/article/parallelization-performance-evaluation-edge-detection/37411

Using Incoming Traffic for Energy-Efficient Routing in Cognitive Radio Networks

Constandinos X. Mavromoustakis, Athina Bourdena, George Mastorakis and Evangelos Pallis (2015). *Journal of Information Technology Research* (pp. 1-24).

www.irma-international.org/article/using-incoming-traffic-for-energy-efficient-routing-in-cognitive-radio-networks/127047

Increasing the Accuracy of Predictive Algorithms: A Review of Ensembles of Classifiers

Sotiris Kotsiantis, Dimitris Kanellopoulos and Panayotis Pintelas (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 1906-1910).

www.irma-international.org/chapter/increasing-accuracy-predictive-algorithms/13838

Interactive and Collaborative Learning in Virtual English Classes

Lan Li (2013). *Journal of Cases on Information Technology* (pp. 7-20).

www.irma-international.org/article/interactive-and-collaborative-learning-in-virtual-english-classes/102715

Life After a Disastrous Electronic Medical Record Implementation: One Clinic's Experience

Karen A. Wagner, Frances Wickham Lee and Andrea W. White (2001). *Annals of Cases on Information Technology: Applications and Management in Organizations* (pp. 153-168).

www.irma-international.org/chapter/life-after-disastrous-electronic-medical/44613