

Chapter 6

Introducing Quality of Service Criteria into Supply Chain Management for Excellence

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ABSTRACT

This article is focused on a sub domain of quality, namely, quality of service. Considering supply chain management, the authors believe that it is important to distinguish between a quality of product (also service) offered by producers and service providers and a quality of service which is achieved between any supplier and customer, not only a consumer, along a supply chain. Quality of product represents producer's/service provider's commitment and is subject of various quality certificates issued by inspection authorities. This research examines the quality of service, which is provided by a supplier to its customer along the supply chain, between any pair of chain elements fulfilling this relation, including the common retailer-consumer relation. The authors introduce measurement points into a consumer-centric supply chain model for the defined criteria and defined the method of their monitoring and overall supply chain quality of service evaluation. Finally, the authors assess the envisaged impact of the results of their measurements on supply chain excellence, providing management with an opportunity to identify weak spots.

INTRODUCTION

Linear supply chain structure (on left hand side of Figure 1) was appropriate and sufficient in times of great economical growth. However, its shortcomings became obvious, when the growth

stopped and adaptability to quick market changes was sought. Since the supply overgrew demand on the global level, the economic situation of the companies involved grew worse. At that time mainly the medium and small-sized companies managed to live up to their competitive edge.

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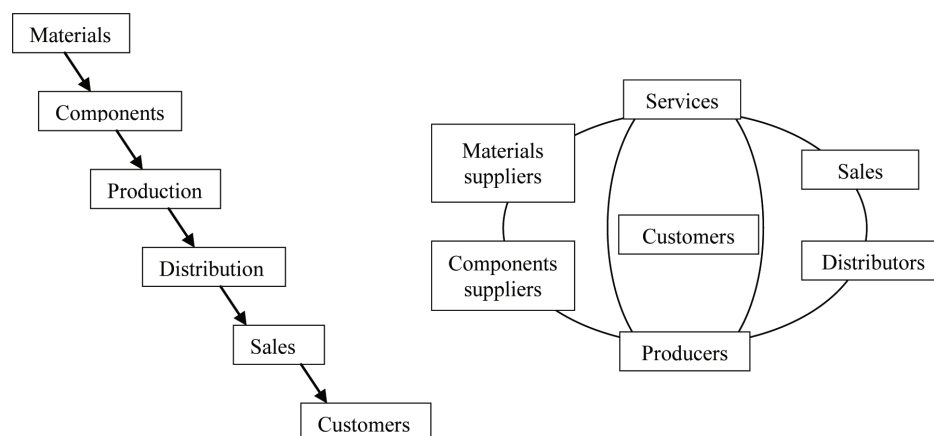
They could more quickly adapt to market changes because of their smaller-sized production and logistics. It became obvious that in times of quick market changes the linear supply chain model, which was aimed at large scale production, was no longer appropriate. One could speculate that the secret of success in the demanding economical situation lies within a different kind of supply chain model and its management automation by employing information and communication technology. Evolution towards a consumer-centric supply chain model (on right hand side of Figure 1) benefited from quicker adaption to reduced demand and easier adoption of new kinds of products/services. Through its introduction and the mentioned technological support capitalization of market changes was made possible.

Different authors (Ketchen, Rebarich, Hult, & Meyer, 2008) emphasize the importance of delivering superior total value to the customer in terms of promptness, cost, quality and flexibility rather than focusing primarily on promptness and cost. The presented article is focused on quality of service (QoS), which encompasses all listed terms in relation to the customer. Considering supply chain management (hereinafter referred to as SCM), we believe that it is important to distinguish between a quality of product or service offered (hereinafter referred to as “item”) that is

produced by one or more suppliers and a QoS which is achieved between any supplier and customer, not only a consumer, along a supply chain. Quality of an item represents producers’ commitment and is the subject of various quality certificates issued by inspection authorities. Although the practice occasionally reports difficulties with given items’ quality, despite the adopted quality certificate, we understand these unpleasant cases as examples of unjustified trust of a supply chain towards a specific subordinated production/service element.

We identified QoS among supply chain elements as vital for supply chain existence and source of trust between supply chain elements. In literature we noticed plenty of contributions dealing with item quality management and methods for assuring and improving their quality. On the other hand, we discovered a lack of research on QoS, which would monitor one or more items’ handover between a supplier and a customer. Our research is focused on the QoS, which is provided by a supplier to its customer along the supply chain, between any pair of chain elements fulfilling this relation, including the common retailer-consumer relation. We are convinced that most supply chains are lacking a consistent method for keeping track of individual connection’s and total supply chain’s QoS.

Figure 1. General linear and customer-centric adaptable supply chains (Ballou, 2004).



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