Available online at www.sciencedirect.com
ScienceDirect
Procedia - Social and Behavioral Sciences 235 (2016) 178 – 188
Procedia
Social and Behavioral Sciences

12th International Strategic Management Conference, ISMC 2016, 28-30 October 2016, Antalya, Turkey

Modelling of consignment process by using axiomatic design

Gamzegül Yılmaz[a], Semra Birgün[b], Sudi Apak[c*]

[a] *Beykent University, İstanbul, 34396, Turkey*
[b] *Beykent University, İstanbul, 34396, Turkey*
[c] *Esenyurt University, İstanbul, 34510, Turkey*

Abstract

Effective supply chain planning increases both competitiveness and profitability of companies. The present study re-designs consignment order management for a medical company by using axiomatic design principles. The proposed design enables a newly-hired employee to manage the structure from pickup to delivery between the supplier and the customer and effectively complete the process without any difficulty. The role of training in this process is very important. However, the study results also reveal the need for certain other activities for the development of strategic coherence and strategic planning in supply chain management.

Peer-review under responsibility of the organizing committee of ISMC 2016.

Keywords: Consignment process; Axiomatic design principles; Supply chain management

1. Introduction

French origin word *consigne* means order, depository, directive, bespoke and instruction (Gürsoy, 2012). Consignment sale is defined as the sale whereby a seller pays the cost of the goods to another seller, broker or distributor after the goods are sold (TDK). It emerged as a marketing model for small businesses, especially those with a certain customer portfolio and which do not have the necessary capital to purchase any product. The consignment process involving the entire sales process can be defined as a process that brings together all elements of the supply

* Corresponding author. Tel. + 90-533-436-7258 fax. +90-212-699-0990

E-mail address: sudiapak@gmail.com

Peer-review under responsibility of the organizing committee of ISMC 2016.
doi:10.1016/j.sbspro.2016.11.013

chain. The success of a supply chain depends on the business process structure, the use of information systems and the partnerships with supply chain members. Muckstadt, Murray, Rappold and Collins (2001) have argued that there are five guiding principles to be followed in order to achieve perfection in supply chain with the aim of gaining competitive advantage. The principles are as follows: knowing the customers; establishing a supply chain organization that eliminates waste, instability and uncertainty; building tightly-connected information infrastructures; initiating well-integrated business processes and creating interconnected decision support systems. Drawing on the complicated structure of supply chain, the present study aims to model the consignment process, a part of supply chain, using axiomatic design principles to contribute to the effective fulfillment of the process.

2. Consignment And Sales Consignment

Consignment is a process in which an enterprise sends goods to another enterprise to be sold on predetermined rates or the conditions of the day. The trader or the enterprise that sends the goods is called consignor and the trader or the enterprise that receives the goods to sell is called consignee. In the consignment process delivery of goods is not a sale but an entrustment as the consignor has the ownership of the goods until the consignee sells them. The role of the consignee in the process is to mediate the sale of goods (Tolu, 2015). Consignment can also be defined as the delivery of goods to a buyer without transferring the ownership of the goods and to be sold only through introduction. Firm sale is achieved when the buyer accepts and purchases the goods. This sales and payment method is implemented in both domestic and international sales. Consignment also expresses an international sales and payment method in which the importing (buyer) company is introduced the goods, uses and purchases them through the mediation of the consignor after the goods are sent abroad especially by exporting companies. It also covers the sales, payment and export procedures for selling in foreign markets new products which need introduction. Thus, there is a supply chain in the process from consignor to end buyer. In this chain, the consignee is obliged to deliver goods to the consignee at the right time while the consignor is obliged to supply enough product. The consignor and the consignee are required to coordinate and meet the end customer's needs just-in-time.

The properties of consignment sales can be listed as follows (Kaya and Turguttopbaş, 2012):

1. This method depends entirely on trust.
2. The sales are risky as there is no certainty in the sales despite the visibility of the exporter in the foreign market. Waiting time expenses are incurred by the exporter. However, the goods can be sent back to the seller any time until the firm sale regardless of the costs of the sales and receivables. The goods of the exporters is open to the risks that might arise from climate and foreign exchange restrictions due to foreign political reasons beyond their control. The seller has no bill of exchange and no guarantee to cover the losses which may occur due to the fault of the buyer.
3. Open account and consignment sales have the same features in terms of the problems arising due to the delivery of the price and form of sales.
4. "Joint account" refers to a new form of sales suggested for partial guaranteeing of consignment sale considering the risks involved in this type of sales. In such a case of export consignment, the consignor guarantees a minimum sales price for the exporter and the difference between the sales price and the guaranteed price is shared between the exporter and consignor (buyer) after the expenses are deduced.
5. The said type of export often applies to goods that enter a market for the first time, sent for the purpose of introduction, might be spoiled and perished and sold within a long period of time.
6. The export demand in question is made together with the exporter. The duration of the permit issued for export consignment is determined to be 90 days. Consignment goods must be sold within one year starting from their actual dates of issue.

3. Consignment Process And Its Problems

Payment process through consignment sale can be explained as follows (Milli Eğitim Bakanlığı, 2011):

- The consignor i.e. the broker and the importer company make a contract,
- The goods are shipped to the brokerage company that mediates the consignment sale,
- The consignor company protects the goods on sale (merchandise) until a buyer is found (While the goods are consigned to the consignor company, the exporting company has the ownership of the goods),
- The consignor company finds a buyer for the goods and provides the exporting company with detailed information on the sale to be made to the buyer,