Supply Chain Permissible Delay in Payments Depending on the Order Quantity in Vendor -buyer relationship inventory model 賀力行,賴順來 Technology Management Management ho@chu.edu.tw

Abstract

This study is to develop an improved inventory model and its solution algorithm to help the enterprises to advance their cost decreasing in a single vendor-single buyer environment with permissible delay in payments which depending on the ordering quantity and imperfect production. The goal of this paper is to derive simultaneously the optimal order quantity and the number of lots which are delivered from the vender to the buyer. So for more closely conforming to the actual inventories and responding to the factors that contribute to inventory costs, our proposed new model can be the references to the business applications.

Keyword: Inventory model, Permissible delay in payments, Order quantity, Imperfect production