

Learning-Based Decision Models in Supply Chain System

Jui-Hsiang Chiang

Department of International Business, Toko University, Taiwan

**chiang.jh@msa.hinet.net*

Abstract

Traditional competitions among enterprises have transformed into an antagonism among supply chains since the globalization and the growth in information technology. Knowing how to promote the profitability, the number of accepted orders and the service level becomes the key factors to continuous competition among supply chain systems. For this purpose, we propose maximal profit model and minimal lead-time model by using learning algorithm into the process of optimizations. There are no missing orders and the profit of supply chain is maximized in maximal profit model. The minimal lead-time model assures a maximal service level in terms of product lead-time and no orders are lost. Finally, numerical simulations are presented at the end of this paper to illustrate the procedures of the proposed models.