Exploring the Operation Model of Supply Chain for Taiwanese Notebook Industry

Student: Chia-Yi Tsen Advisors: Dr. Cheng-Min Feng

Institute of Traffic and Transportation National Chiao Tung University

ABSTRACT

This study deals with the operation model of supply chain for Taiwanese notebook industry. This study classifies the operation model and analyzes the important factors considered by different operation models. The operation model of supply chain defined in this study mainly includes the business model (OEM/ODM) and the process model (BTF/BTO/CTO).

Twelve Taiwanese notebook computer companies are our surveyed target groups. The mail survey with the questionnaire to 12 companies and the depth interview survey to 6 representative companies. Due to the characters of small samples, We use the Grey Relational Analysis method to find the key factors considered by different operation models.

It is shown that from the empirical result, the different operation model the considered the different key factors, due to the companies characteristics and operation targets. In the aspect of supply chain operation process, the important factors are to reduce the inferior goods ratio and to adopt advanced technique. In the aspect of factory location choice, the low labor cost and the advantage of transportation location are important factors. In the aspect of alliance cooperation, the factors of the commitment and relative size are important. In the aspect of supply chain operation performance, to raise the rate of the good product and to shorten the product delivery time, to diversify the product design and to increase the product flexibility are important factors.

keyword: Notebook (NB), Supply Chain Operation Model, Grey Relational Analysis (GRA)