

# An Effective Demand Management Model for the Airline Industry

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## Abstract

For the supply of products and services with respect to leisure tourism, inter-related travel suppliers such as hotels, transportation and tourism industries have constituted a framework of service supply chain. The effective service supply chain management is one of the strategies for leisure tourism industry to improve the competitiveness, while the management of demand forecast and performance evaluation are the keys for improving the effectiveness of service supply chain management. In this study an overall performance evaluation model is proposed, it is with respect to the non-preservation characteristic of airline products which includes not only the operational perspective and financial perspective, but also the safety factor for consideration. Based on the characteristics of airline industry, three dimensions of production efficiency, marketing effectiveness, and executive effectiveness are considered for performance evaluation first. Data Envelopment Analysis is applied and the suggestion on improvement of efficiency and effectiveness is provided by slack analysis. Secondly Grey Forecasting is used to predict the number of passengers, then feedback to the performance evaluation model to adjust the resources allocation, and enhance the competitiveness of service supply chain.

Keyword : Demand Management, Service Supply Chain Management, Data Envelopment Analysis