An Efficiency and Effectiveness model for International Tourist Hotels in Taiwan

謝玲芬,黃羿蓁,陳奕璇 Technology Management Management lfhsieh@chu.edu.tw

## Abstract

According to the social change and industry transfer, the tourism industry can be the important strategy industry for the government in Taiwan. The tourism industry is not only maintaining local economic but also offering the chance of employment. Therefore, this paper evaluates how international tourist hotels operate, using Data Envelopment Analysis (DEA) to measure the operational efficiency and effectiveness, and then adopted VIKOR method, to rank the hotels which is either efficiency or effectiveness, out of the 14 international tourist hotel in Taiwan. Based on the evaluating criteria, the tourism industry has more emphasis in customer's loyalty and interactions. It is expected to attract, keep loyalty, and get the visible and invisible feedbacks from customers. This paper proposes an evaluation model to evaluate international tourist hotels in two aspects: efficiency and effectiveness. Proprietor can discover the problems either do not have efficiency value at input internal resources or the output operation revenue does not reach operation effectiveness for the tourism industry. Furthermore, the DEA model can give the directions and suggestions for hotel improvement by slack variable analysis, and last adopted VIKOR method, to rank the hotels which are either efficiency or effectiveness to come up with our last result.

Keyword: Efficiency, Effectiveness, Data Envelope Analysis, VIKOR