

ABSTRACT

Nowadays, the freight forwarder in Thailand is in a competitive industry since the customers are always concerned about their logistics costs to move the goods from one country to another country. Airfreight is a transportation mode that customers may prefer due to the short transportation lead time, but it incurs the highest transportation cost when compared with other modes of transportation. However high transportation costs of airfreight can be offset by low inventory costs and holding costs. FF Company, the researched firm, is one part of an international supply chain that offers the airfreight services to its customers. Besides the airfreight procurement and service level deliver to the customers, the total operations cost of the airfreight department of FF Company is a major factor in securing business and generating revenue for the company.

This research was conducted to study the make or buy decision by applying total cost of ownership (TCO) concept. Not only was TCO considered, but also the service quality and pros and cons of insourcing versus outsourcing were analyzed. In addition, this research explored the understanding of all related costs in the airfreight operation of FF Company that might impact the competitive advantages of the company. Moreover, this research could be used by the top management in order to make the right decision whether to insource the process or outsource it to a third party. The three TCO models, one for insourcing and two for outsourcing, were applied to understand the total operating costs of each model. After that the comparison among three TCO models was done based on the TCO per kilogram, service quality, and pros and cons of both insourcing and outsourcing in order to select the most appropriated strategy for the company.

The result was found favor to insourcing, the operating cost per kilogram of insourcing was lower than two outsourcing models, due to the advantage of economy

of scale. In the view of service quality, insourcing allowed the company to manage and control its own service level delivered to the customers. On the other hand, the service level of outsourcing option would be more depended on the performance of the third party supplier. Therefore the risk to select the bad supplier cannot be avoidable.

