

EVALUATION OF AIR CARGO LOGISTICS: SUARNABHUMI AIRPORT, BANGKOK

Kulchalee Hongdalud*

School of Management, Assumption University of Thailand, Bangkok

ABSTRACT

Air shipment has become a growing solution for international shipments. It is traditionally used for high-value merchandises such as electronics parts, orchids, tropical fruits. There are many factors that influence a customer's decision to move cargo by air. These factors include high value, urgency of need or use, product sensitivity, being lightweight but important in the production process (i.e. spare parts).

However, due to lack of visibility, sometimes cargo can disappear or get damaged before reaching the destination. Problems in the cargo logistics system range from damaged cargo, miss-routing, missing cargo, or even missing documents. Performance measurements are required to analyze the effectiveness and efficiency of the cargo logistics system. Performance measures can be distinguished by many aspects, such as Relational Performance, Operational Performance and Cost Performance (Stank et al., 2003). In the case of the new Suvarnabhumi Airport, the operational performance of air cargo is difficult to control by the air cargo service providers. This is because the operations at the cargo terminal are centrally operated by Thai Airways International (Thai Cargo Terminal) and Bangkok Flight Service (BFS Terminal).

The purpose of this study is to identify and analyze the hidden factors and elements that affect the performance of air cargo service providers. This study reviews the flow of cargo from booking and receiving to the end. It also examines the operation process starting from the Cargo Terminal, to customs formality and inspection, unloading, to being put on standby before exporting. The flow of cargo and operation process will be described and examined after being investigated and analyzed at the International Cargo Terminal. A Root Cause Analysis (RCA) will be applied to identify the hidden factors and elements which affect the performance of the operation process.

The result of this analysis shows the sensitive points in the cargo system. This analysis and resulting suggestion will increase the air cargo service providers' ability to manage

*This article is a condensed version of a graduate project report which Ms. Hongdalud, MSc, BBA, completed as part of the Master's course in Supply Chain Management at Assumption University, and which enabled her to receive her MSc degree in 2008.

their performance. This study will serve as a basis for the improvement of performance of airport cargo logistics systems.

INTRODUCTION

Manufacturers and exporters are continually upgrading to international standards and are evolving into multinational corporations with global networks, an important factor in international business. The increasing importance of efficiency and a focus on core competencies open up many business opportunities for manufacturers and companies to sell or offer the products beyond their domestic customers to customers in other countries. These products can be materials, electronic items, equipments, spare parts, machinery, fresh foods & daily foods, flowers, animals, services.

To sell these products to other countries, there are three basic components: seller, buyer, and logistics. Transportation becomes an extremely important factor for its logistics part, as it is a movement service. It is the creation of place and time utility. When goods are moved to places where they have higher value than they had at the places from where they originated, they have place utility. Time utility means that this service occurs when it is needed. Time and place utility are provided to cargoes when they are moved from where they are produced to places where they are needed at the demanded time. Sellers are largely providing the same product to their end customers as they always have. The big difference is there is growing demand for "build to order" products, driven mainly from their clients' need to keep fewer inventories on the shelf. This shift in requirements is straining the supply chain. Sellers are no longer "pushing products", because end customers are now "pulling" products through the supply chain.

Thus, customers increasingly expect shorter cycle times through the Just-in-Time technique (JIT). The speed, delivery time or transit time between manufacturer's and customer's warehouse at destination countries, and more accurate services, are factors that are being focused on for the transportation part.

The concept of JIT is increasingly applied in many industries. It is important that the seller adjust its business strategies and operation practices to respond to the changing requirements of its customers and to maintain competitiveness. By applying JIT, buyers will place their orders more frequently while the lot size is smaller. With JIT, sellers might suffer when they want to satisfy customers, and so one choice is to keep more stocks so as to have product availability to meet demand.

However, many companies who also adapt their business strategies, respond to JIT by producing smaller lot size, keeping stock as low as possible. As a result, there may be product unavailability when there is demand, and thus customers are lost. To operate the business with