## ABSTRACT

The main business for airfreight companies is to deliver shipments rapidly, punctually, and with the highest quality possible. The international airline, which is the focus of this case study, has established a service level rate of 97%, which means that 97% of all shipments should arrive on time. To date, the TG Cargo Terminal at Bangkok, which handles airline shipments, has not achieved this level of accuracy. Therefore, the purpose of this project is to study the existing air cargo handling operation of a selected airline, to determine the problems which occur and the causes of the problem associated with the air cargo handling operation, and finally, to propose solutions to the problem uncovered.

The Business Process Reengineering method (BPR), has been utilized as a guide to structure the work. The information was gathered with the assistance of existing TG flowcharts, observations of the actual handling flow, personal interviews, and statistics from airlines which are the subject of this case study. The information was analyzed using existing theories as problem areas were identified. The general factors isolated in the airport terminal that affect time delay, or called *"offloaded."* were Man, Machine, Material and Method.

Two areas with the highest deviation were the ULD reweigh area and the Load Planner & Manifest area. These two areas were selected for further in-depth analysis using a tracking method. The investigation revealed that staffs lack experience, have high turnover rates, with an imbalance in KPI measurements between airlines and TG cargo, and traditional work practices are used.

The primary conclusion is to recommend improving staffs by internal communication within teams. Training is also necessary to increase their specialization while reducing the size of document flows.

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