Abstract

The aviation industry now is a strategic role of every business and will also be a future role of logistics, especially transportation of passengers' baggage or baggage handling systems. Due to popularity of world travel, to match the increasing demand it will be more difficult to use barcodes because of their limited capacity. This study is about the mishandled baggage problem which needs a reliable technology to solve it.

Radio Frequency IDentification (RFID) which is an old technology that can automatically recognize, identify, track, and trace every object in a value chain, offers an unprecedented real time view of assets and inventories throughout the global supply chain, and it was predicted to be one of the "top ten" technologies in 2004 and 2005 (Janz, Pitts & Otondo, 2005).

This report identifies and analyzes the problems that cause mishandled baggage, using the baggage handling system at the Suvarnabhumi airport as a case study. This report also focuses on a technology selection problem, using Analytical Hierarchic Process (AHP) methodology based on Expert Choice Software. Technology selection criteria are discussed while introducing two alternatives used in the decision making, RFID and barcode tags.

The result of this study will be an initial idea to reduce the problem of mishandled baggage and increase customer satisfaction.

Paper type – Case study (Graduate project)