A study on the willingness of the baggage management stuff's acceptance of the RFID technology_ the example of Taiwan TaoYuan International Airport.

student：Yang-Ching Chang   Advisors：Dr. Jiuh-Biing Sheu

Institute of Traffic & Transportation
National Chiao Tung University

Abstract

Taiwan discussed the issue about the significance of RFID to the future public life, development of economy and trade and competition of industry in 2005 Strategic Review Board convention. It also established the strategies of the RFID application and the industry development and planed to anticipate the constitution of international standards to develop Taiwan become the key position of RFID manufacturing in the world. By means of the integration of public RFID application area to develop popular RFID projects drive the development of RFID integrated industry. The application of aviation emphasizes the application of civil aviation and air cargo, and the pilot run project has launched in August 2006. There are few efforts devoted in RFID applications in the airport and civil aviation area and related academic research. So far the management and academy is concerned should do the research further.

The study was motivated by orientation above, and adopted the "Innovation Adoption Process Model" to research the RFID technology cognition of baggage management stuff, the cognition of current baggage management fault and the investigation of willingness and assessment to use RFID application in baggage management. The study was conducted with statistical hypothesis and analysis.

The result of the research announced that the most concerned of RFID technology by current baggage management stuff are " read rate", "read accuracy" and "cost", and they consider the main reasons of the baggage handling fault are "the quantity of baggage is too much", "the design of operation area is undesirable" and "the identification rate is such low". It means that there still has some opportunity to improve the baggage management. The baggage management stuff are willing to use new technology, but there are some obstacle with RFID technology like "cost".

Keywords: RFID, Innovation Adoption Model, baggage management.