A premiere in Canada
IPS International has success in RFID baggage Solution

Each Airline Company and Airport should have its own Luggage and hand luggage Management System: Now it is done by IPS International

Actual situation

Airlines have to carry baggage, and the infrastructure needed to take a bag from a passenger and return it to them at the end of their journey is both complex and costly. Recent security restrictions and increasing of the number of passengers have made carrying baggage on the plane more difficult. The current system for scanning baggage is based on barcode label. Read rates for bar code scanners rarely top 90 percent, and quickly drop below 85 percent as equipment ages and becomes dirty. Also optical read rates are very dependent on line of sight; we have to make sure the bar code has to be seen by whatever automated device they have. This leaves airlines and airports with thousands of bags to sort manually each day, increasing the chance that baggage will be misrouted or lost and therefore reducing security and increasing charges due to the compensation costs when baggage is mishandled.

According to SITA, in 2005 the industry paid $1.21 Billion in direct compensation, and IATA estimate that the total industry costs, including labour, were $3.6 billion.

Aerosoft solution

As an alternative to barcode technology, IPS International offers RFID (Radio Frequency IDentification) solution to track and identify baggage from the check-in desks to the baggage reclaim halls, where each piece of baggage is subject to a series of screening operations. The RFID technology offers enormous possibilities in the areas of security and airport baggage management. Unlike traditional bar code scanning technologies, its high throughput capabilities and ability to write information to the tags, makes RFID the best choice to efficiently process and track baggage. Real-time data access means that IPS International solution enhances not only reconciliation process productivity and management, but also greatly increases flight security.

IPS International undertook trials to prove that RFID could actually deliver a significantly higher read rate than the currently used barcode. Results showed that RFID could achieve 99% efficiency in the baggage environment. From an airport operational perspective, this reduces the requirement for manual intervention for 'miss reads'. By eliminating manual operations as far as

possible, the processing time for each piece of baggage is decreased so that the time between check-in and take off can also be reduced.

The Aerosoft solution allows performing the productivity, the security and the cost-effectiveness as following:

- Tracking baggage in real time
- Preventing the miss-loading and loss of baggage
- Preventing baggage cross-pickup
- Eliminating sorting errors by the baggage handling system
- Eliminating the time needed to match passengers and baggage
- Improving maintenance and tracking of unclaimed baggage
- Checking passenger information regarding dangerous baggage in real time
- Checking passenger information to help identify suspicious people in real time
- Displaying information about arrived baggage to baggage handlers and passengers.

The management process baggage works in the following way

Recording

When generating the label, an RFID chip (i.e. the tag) is encoded using a specialized printer. The choice is available to store either a simple identifier or a complete itinerary of the passenger with all information pertaining to their route of travel. This way the information is always traveling with the baggage and is made available to the system when ever a reading takes place.

Security Control

RFID identifiers (tags) are automatically tracking any baggage that was suspected at the check points, identified from the security operators. The marking of suspected baggage will be done with the writing of information on the tags already assigned to the baggage. Each marker will hold a unique identifier which will be read at the exit zone where detectors (readers) will be placed.

Sorting

RFID readers placed along the sorting conveyor significantly improve the follow up and minimize the need for manual sorting. The frequent reading of chips during their progression of travel, allows baggage to be efficiently located fast.

Reconciliation

When embarking the baggage into the container, a manual reconciliation is necessary to ensure that the baggage, the passenger and the flight number correspond. RFID readers allows for this process to be automated making the process of reconciliation faster, more reliable and reduces the cost.

There are many advantages whether for airports, airlines and air travelers and are summarized as follows

Airlines potential benefits

Increase revenue and Brand positioning

Decrease number of claims limiting compensation cost
Improve passenger service

- More responsive delivery for mishandled baggage research
- Better information & transparency to passenger reducing stress develop customer loyalty

Reduce Operating Costs

Optimize customer relationship resources
Improve planning and operational global visibility and traceability
Improve operational decision making
Improve global performance measurement productivity via automated tools (dashboards…)
Better fault identification belonging to other carrier connections

Optimize Contracts in place

Improve measurement visibility of Service Level Agreement
Optimize resource allocation & employed and renegotiate contract with Ground Handlers

Enhance Safety and Quality Control

Increase security management & record security levels for all bags
Enhance responsiveness to baggage process & baggage visibility
Better monitor of baggage process and optimize the audits
Reduce Theft

Airports potential benefits

Increase Brand positioning

Attract airlines
Develop the well-run airport picture

Optimize Operating Costs

Reduce maintenance cost
Reduce manual activities
Improve operational global visibility and traceability for all airlines
Define new optimized ways of working and working conditions

Better manage the infrastructure

Accommodate to the future passenger growth and better foresee the future installations and flows in a global approach when adding capacity
Accommodate to any regulations impacting the infrastructure and baggage flows

Enhance Safety and Quality Control

Guarantee security management & record security levels for all bags
Reduce extra time by reducing the number of lost bags dispatched to high security level
Identification of zones causing issues with a high detailed level
Improve process control & performances
Reduce Theft

Passenger potential benefits

Increase Customer satisfaction

Put passenger mind at ease by providing a high level of service
Benefit customers by helping ensure quicker and more accurate baggage handling and transfer
Improve customer information & query resolution