

A Financial Argument for:
RFID Baggage Tracking
'Modelling the Impact to the Bottom Line'

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Introduction

- Longest Chance (LC) presented its products and services at the BWG in Seattle on the 23rd of August 2016
- The presentation aimed at the main arguments for implementing an airline RFID baggage tracking infrastructure
- The benefits presented, include:
 - The technical LC capabilities, incl. its middleware and reporting
 - The OPEX model (or utility model – no investment by the airline)
 - The successful IATA – LC pilot with readability rates of >99.99%
 - An improved customer experience

This presentation shows how to build the financial arguments to support the airline's business case for implementing an RFID baggage tracking solution

Mishandled Baggage Rates are Impacted by

- Lack of identification of bags
- Wrong identification of bags
- Wrong physical action by handlers

These drivers are impacted by human intervention

Mishandled Baggage Consequences

- Bags to be located and stored
- Bags delivery to the passenger
- Passenger compensation
- Additional passenger claims
- Reimbursement of passenger paid bag fees
- Customer service agent resources

The airline industry consensus is an average cost of \$100 per mishandled bag

Potential Business Optimization

- Accurate bag identification (less human intervention)
- Process flow optimization for bag identification
- Reduced FTE at specific points in the process
- Accurate & timely “event” data to manage operation
- Improved bag recovery and more timely corrective actions

But is it Worth Doing?

- It's necessary to analyze the projects costs & benefits
- Taking into account flights, # PX, bags & other key data
- It must be modelled accurately and completely
- Time & expertise needed to set up such a model
- LC have already built such a model

The RFID Bag Tracking Savings Model - Logic

The model assumes an OPEX model based on bag tracking services fees and is divided into worksheets that follow a standard ROI pattern

Incremental Savings

- FTE Optimization
- Mishandled Baggage Reduction
- Schedule Optimization

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Net Benefit

Incremental Expenses

- Bag Tracking Service Fees
- RFID incremental bag tag costs



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The following slides do not contain real data for any airline

The figures shown are for demonstration purposes only

The RFID Bag Tracking Savings Model - Parameters

- Operations Data
 - Loose load flights per year
 - ULD flights per year
 - # of domestic bags
 - # of international bags
- Mishandled bags operational costs
 - FTE
 - 3rd Party cost
 - Service fees
 - Compensation
 - Refund baggage fees

Basic Operations Data	Unit	Value	Section Notes
Flights			
Total flights per year	Flight	1,650,895	The model can distinguish between loose load and ULD flights. This distinction is captured because baggage load/offload process is different.
Loose load flights per year %	Flight	42.00%	
Loose load flights per year	Flight	957,519	Source - airline
ULD flights per year	Flight	693,376	Enter the % flights that are loose loaded. If no distinction is required just enter 100% here
			This parameter is combined with the Average Bags per PX to derive the total # bags handled per year
Passengers			
Passenger per year	PX	143,000,000	Source - airline
Number of bags per year	Bags	70,000,000	Model will calculate total bags
Number of domestic bags per year	Bags	50,000,000	Input # domestic bags per year - model will calculate total
Number of international bags per year	Bags	20,000,000	Input # international bags per year - model will calculate total
Average Bags per PX	Bags	0.49	Input the average number of bags per PX

Model Example

Inputs – Airline A

MODEL INPUT (Example)

Passengers per year	100 M
Number of domestic bags	30 M
Number of international bags	20 M
Cost per mishandled bag	\$100



The spreadsheet shows a 10-year projection for Airline A. The columns represent years from Year 1 to Year 10. The rows include various financial metrics such as Cash Outflow, Cash Inflow, Total Cash Outflow, Total Cash Inflow, Net Cash Benefit, and Recommended Cash Benefit. The data is presented in a grid format with alternating yellow and white rows.

Modelling Service

Longest Chance has the expertise to help you model the ROI on your adoption of RFID

If you would like help in this modelling then please contact Peter van der Lende:

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Let's change
the standards of baggage tracking