



How technology can improve  
baggage performance

[www.qataraviation.com](http://www.qataraviation.com)

**Bag View**



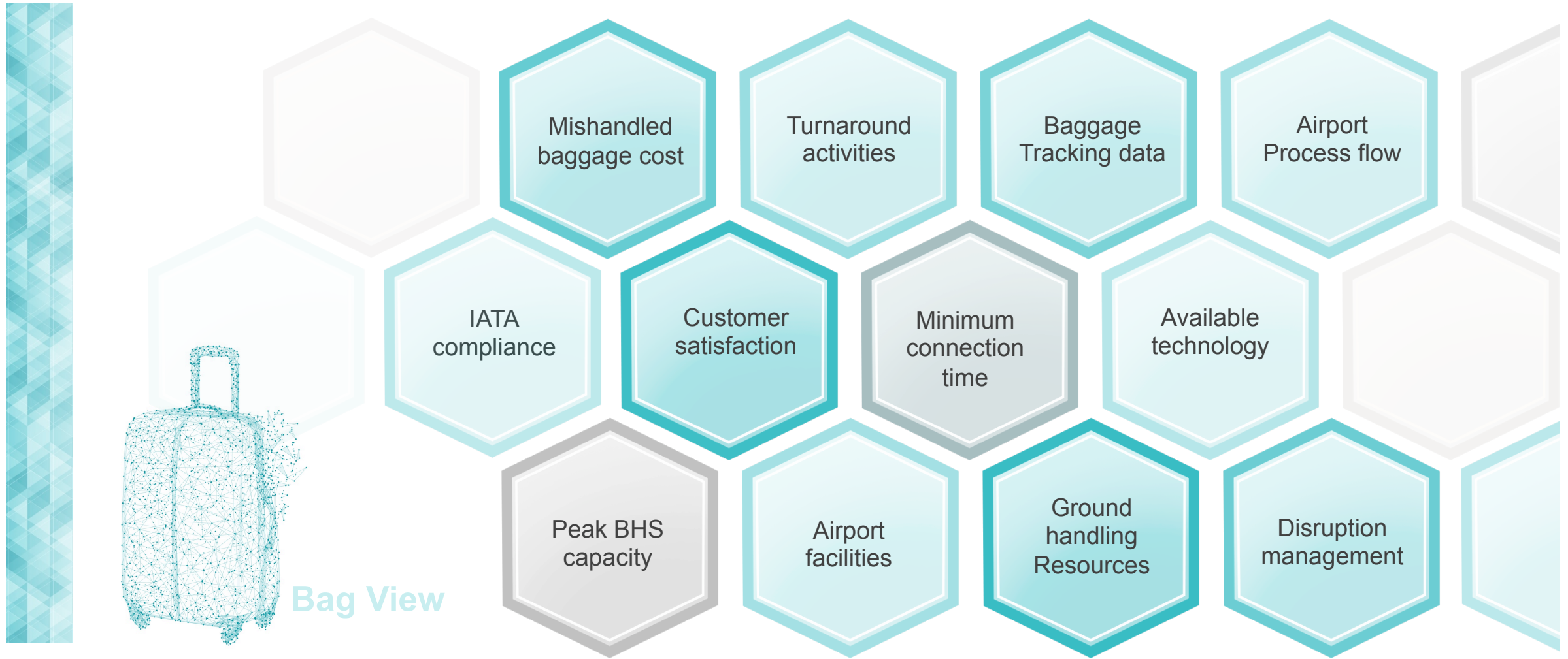
# Bag View

“ State-of-the-art real-time baggage operations monitoring tool designed for airport environment that enables QAS to achieve improved baggage performance, customer satisfaction and baggage cost reduction ”

Bag View



# Industry challenges



# QAS in figures

## Delivering Excellence Service to

**26** Airlines

**05** Cargo freighter airlines

## Passenger Handled

Over **94,000** Per day

**34** Million per annum

## Baggage Handled

**124,000** Per day

**45** Million per annum

## Number of Ground Service Equipments

**1,400** Motorised

**4,000** Non motorised

## Number of Load sheets

**368** Per day

**134,000** Per annum

## On-time Performance

**99.15%**

## Cargo Handled

**6,030** Tonnes per day

**2.2** Million per annum

## Mishandled Baggage rate

Only **0.76** files

Per **1000** customers (2018)

## Staff Strength

**8,000** From **54** Nations

Speaking over **28** Languages

## Aircraft Movement

Over **600** Per day

**222,000** Per annum



Figures as of April 2018 – March 2019

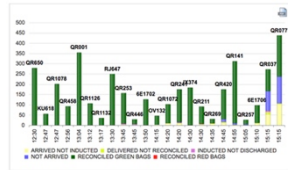


# Bag View Today



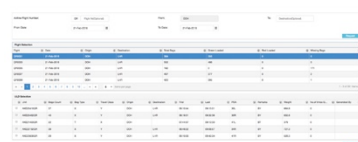
## Loaders

Induction Monitor  
Reconciliation Monitor



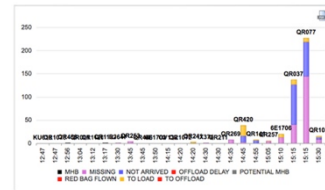
## Baggage Transport

Quick Baggage Real-time  
Tracking ULD Movement  
Recording



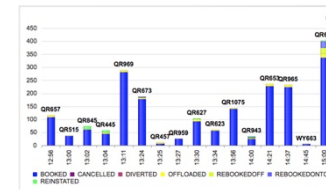
## Baggage Team leader

MU Monitor  
Pending Working Monitor  
Baggage Risk Analysis

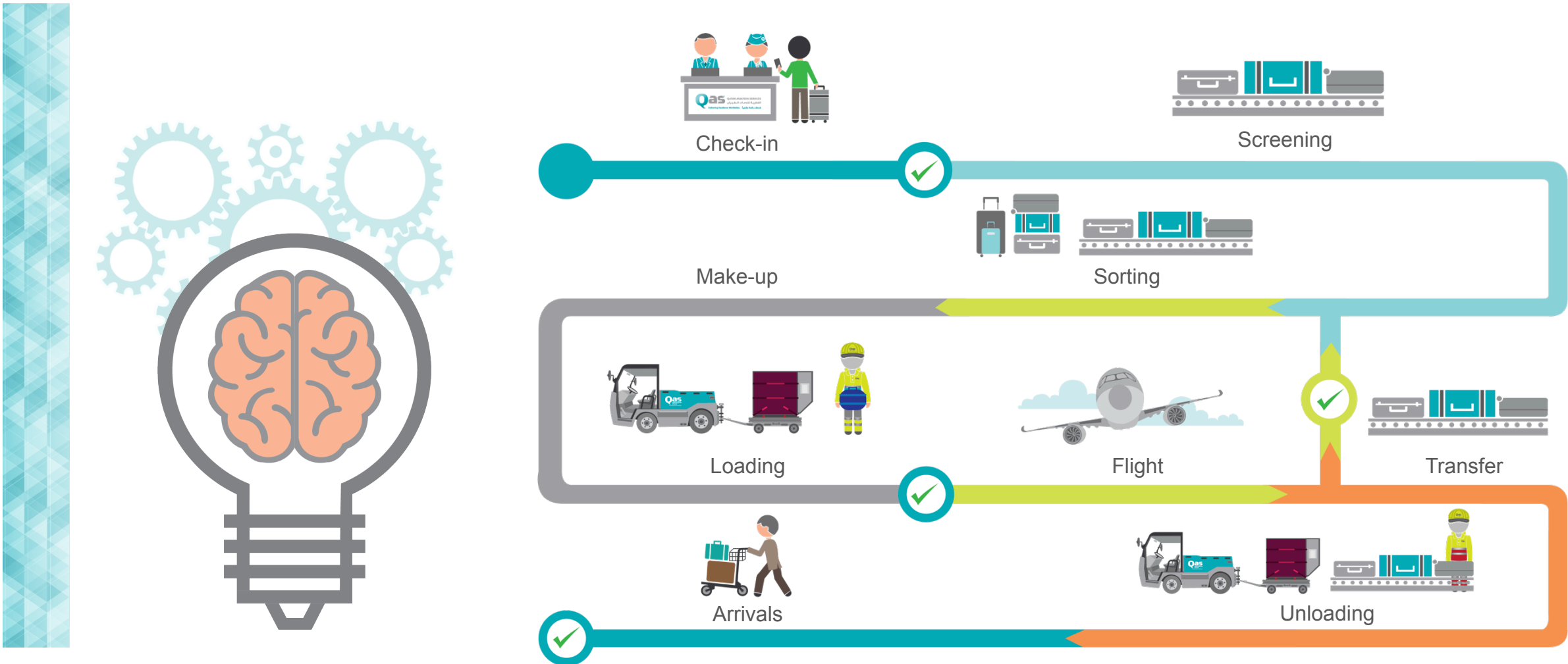


## Re-Fighting Team

Left Behind Bags  
Service Recovery  
Baggage Booking status Monitor



# How to eliminate mishandled baggage?



# Baggage Journey at Hamad International Airport

45 million bags handled per annum

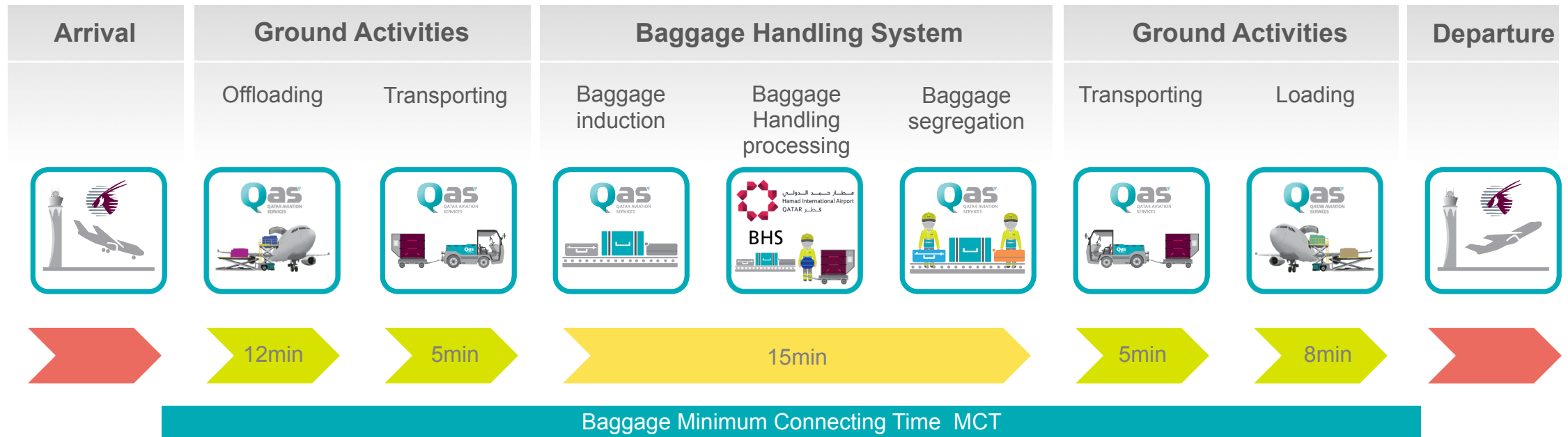
More than 70% inbound transfer baggage flow

45min Minimum Connecting Time (MCT)

Up to 30.000 departure bags handled in a peak (04AM– 09AM)

Existing 3 Transfer in feed areas

Only 0.76 files Per 1000 customers (2018)



# Case study – Impact of late inbound flights on Mishandled baggage

Period of study 01<sup>st</sup> – 20<sup>th</sup> Jan '19  
Flights 15 min and more inbound delays  
Time frame 2300 – 0300h

## Observations

Increased trend in minimum/ quick and short connection baggage to be processed

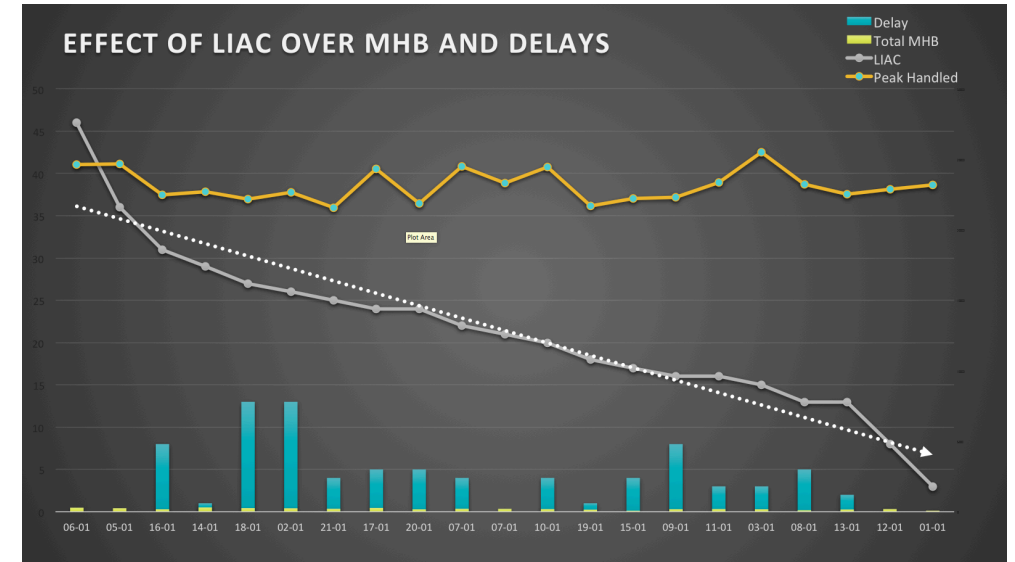
Increased number of total baggage units ULDs for processing at baggage facility during the peak hour

## Results

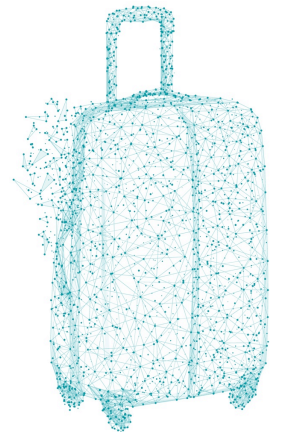
Total number of late arrivals has higher impact on mishandled baggage ratio (MHB) than total departure baggage to be handled

Average of 8% increase in total MHB rate per delayed flight

10% of baggage misconnected whereas chance for connection was high based on available processing time



Bag View



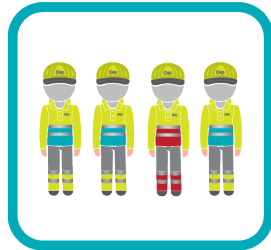


# Usual approach

CONNECT THE  
BAG!



MANPOWER?



REACTIVE  
PLANNING.....



MHB and/or  
OTP = COST



## Result

Increased baggage mishandling from affected late arrivals

Reduced probability for connections from scheduled flights

Service recovery resulting in:

- Customer dissatisfactions
- Claim charges
- Delayed baggage delivery

# New approach

Usage of available baggage data through Bag View as a tool for increasing success rate of bags with reduced connection time with relatively higher probability for connection

## Requirement

Early forecast for available connection time

Exact baggage loading position

Calculated actual ground time

Prediction of connection probability with expected impact on mishandled baggage ratio



# Solution

Calculated probability will be evaluated by various factors



Integrated probability tool will be displayed as **Decision Dashboard** visible by various stakeholders at HUB for decision to be made



**Connect baggage without delay**



**Connect baggage with delay**



**Misconnect and reprocess the bag**

# Benefits

Transparency – Real connection transfer time for each bag

Reduced Baggage Misconnection by 10%

Flexible decision making

Resource optimization

Proactive approach by all stakeholders

Information at a glance

Improved service quality

User friendly

## Bag View

