NDC - One Order Pilot

AIRLINE CHOICE
• **Insel Air**
  - Dutch Caribbean carrier that serves as the national airline of Curaçao.
  
  • Serves 5 destinations
    - Aruba
    - Curacao
    - St. Maarten
    - Bonaire
    - Paramaribo
  
  • 3 aircrafts
    - Fokker 50's
    - Embraer 190
Core Platform Functionality

**NextGen** Passenger Handling for Airlines, Airports & Ground Handlers

- Check In
- Kiosk & Web Check In
- Ancillaries
- Bag Drop
- Pax & Crew
- Bag Drop
- Baggage Reconciliation
- Messaging
- Reporting
- Multi-Platform Support

Serving over 45 Airlines, Handlers, Airports
NDC Platform Overall Architecture

- Rich Content Merchandising System (RCMS)
  - Merchandising
- Order Manager
  - Airline Call Center
- Shop
- Order
- NDC API Multiversion
- Internet Booking Engine
- Apps for Indirect Channels
- NDC Interline
- API Direct
- DCS
- Revenue Accounting
- Payment IFG

Real Time Business Intelligence
Enabled IAG strategy to move indirect distribution to a direct channel using:
- Core Retailing Platform
- Travel Agency Portal
- TMC Portal
- Corporate Self Booking Tool
- API

A payment hub designed to simplify payment processing for airlines:
- Supports BSP and ARC settlement
- Integrates with your PSP
- Fraud detection
- Travel Agency monitoring
- Easy switch between PSPs

Enabled an airline Group’s Dynamic pricing and bungling strategy:
- Core Retailing Platform
- Mobile App
- True Dynamic Pricing
- Rich Content and merchandising

Moving airline from PSS to full retailing:
- IBE, CBT
- True Dynamic Pricing
- Rich Content and Merchandising
- Implementation of OO connectivity to DCS
- True Order Management
- Customer Communication platform
The flow: Step 1
Internet Booking Engine

NDC Shop-Order takes place within fly-inselair.com

The site was redesigned, adapted to an NDC flow and directly integrated with the JR Technologies NDC Platform
The Pilot: Goal and Use Cases

Goal
- Identify gaps in the systems and in the standard
- Test the first official One Order release
- Upgrade the NDC Platform to add the “Delivery” step
- Establish the NDC path from the IBE to the Delivery

Use cases

Use Case 1 – Check-in
- DCS is pulling Orders per flight before departure - PNL
- Services status is updated upon check-in
- Bag tag is send to the Order Manager for checked bags

Use Case 2 - Boarding
- DCS is updating status of boarded Passengers
The Pilot: One Order Messages

- Schema used: IATA 18.2
- Messages in scope: IATA_ServiceStatusChangeNotifRQ, IATA_ServiceDeliveryRQ, IATA_UpdateServiceNotifRQ

**Statuses:**

- Ready to Proceed
- Ready to Deliver (check-in)
- In Progress (Boarding)
- Unable to Deliver
The flow: Step 2 – Load Orders (PNL)

Order Management System

ServiceDeliveryRQ

ServiceDeliveryRS

Departure Control System

AIRLINE CHOICE
The flow: Step 3 – Check-in

Order Management System

UpdateServiceNotifRQ

Acknowledgement

Shopping → Booking → Paying → Check In → Boarding → On Board
The flow: Step 3 – Check-in
The flow: Step 4 - Boarding

Gate 07

ServiceStatusChangeNotifRQ
Acknowledgement

Order Management System

SHOPPING  BOOKING  PAYING  CHECK IN  BOARDING  ON BOARD
The flow: Step 4 - Boarding

Scan a boarding pass or enter a passenger sequence number to board

AIRLINE CHOICE
- DCS has the required information in comparison to current standards (e.g. PNL)

- JR Technologies’ NDC Platform managed to leverage the Domain Model allowing Orders to be created in 17.2 (some older orders were in 16.2) and to be tracked using 18.2 One Order

- Real time tracking of the service status is possible

- There was no dependency on the PNR, ticket or EMD
One Order status enumeration

- The semantics are not very clear when it comes to mapping the status codes to actual business functions.

Different implementers might end up using a different status eg. for the check-in.

One order Statuses – how do I map them to actual business functions?
ServiceDeliveryRQ structure doesn’t look very intuitive and flexible to allow more expressive queries

- get orders for a date range (for example, the caterer needs to know all special meals to be delivered for a specific date range/at a specific airport)

- get orders for a flight with services that have a specific status (how many bags were ordered and paid for and how many bags were checked-in?). Query can be supported but it is not very straightforward
Elements like the bag tag are inserted in the **UpdateService** but the rest of the messages do not support them.

**For example:**

- OrderViewRS does not show the bag tag id,
- ServiceDeliveryRS does not show it either
Design changes on the client side of the DCS to reflect the Order based flow

For the selected airport replace the current check-in or boarding process for specific route

Add next steps in the flow e.g. Uplift

Include in a pilot other One Order aspects e.g. Revenue Accounting

Use the NDC path as the primary and remove dependencies with the PSS (in the shop-order flow)
Thank you