Opening Remarks

Aleksander Popovich, SVP, Financial Distribution Services, IATA
The digital airline vision

**Digital Retailers**
- Airline Industry Retailing (AIR) Portfolio

**Digital financial organizations**
- Financial simplification and disruption

**Digital Infrastructures**
- Innovation ecosystem, Airline Industry Data Model, API Ecosystem
The innovation ecosystem

- Ideation
- Incubation
- Developer Lab
- Communication
- Partnership
# Digital Transformation

<table>
<thead>
<tr>
<th>Legacy Process</th>
<th>Offers</th>
<th>Ticketing</th>
<th>Payment</th>
<th>Check-in</th>
<th>Supply Chain Invoicing</th>
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<tbody>
<tr>
<td>Filed fares, inventory</td>
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<th>Dynamic Offers</th>
<th>NDC / OO</th>
<th>IATA Pay</th>
<th>One ID</th>
<th>Digital Finance</th>
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- **IATA Projects**
  - Airline Industry Data Model, API Ecosystem

**Sponsored by:**

[Accelya](#)
Matching supply and demand – data driven network optimization

Moderator: **Henry Coles**, Head of Airline Distribution Standards, IATA

**Eric Nordling**, COO, Revenue Management Systems, Inc, an Accelya Group Company

**Jorga Ahlborn**, Head of Business Development & Analytics, Network Management, Lufthansa Group

**Vadim Skritskiy**, Data Scientist, Infare
Networking Break
IATA AVIATION DATA SYMPOSIUM
ATHENS, GREECE 25 – 27 JUNE 2019
The Future of Offers and Orders: Industry Opportunities with Dynamic Offer

Sébastien Touraine, Head, Dynamic Offer, IATA
The Future of Offers and Orders

Sébastien Touraine
*IATA FDS Transformation*
Head - Dynamic Offers Project

IATA Aviation Data Symposium
Athens - 29. June 2019
Airline Retailing Vision

Dynamic Offers

Airline
Offer Management
Revenue Management
Inventory
Price
Booking
Ticketing
Revenue Accounting
Product Delivery

Aggregator
Offer
Order
Receipt

Shop

Order

Seller

ONE Order

NDC
Challenge #1
Granularity of price points

To RBD or not to RBD?
this is the question!

Suboptimal results with today’s fares filing?

Continuous or Discreet Price point?
Challenge #2
Total Revenue management

Overlapping systems and processes

Optimizing revenue of a complete offer

Control over interline and 3rd party partners
Challenge #3
Personalization

Knowing “who is asking?” with EDIFACT

Shopping context is key

Agility to change product characteristics for contextualization
Dynamic Offers scope

Relevant offers based on shopping context

Continuous price points

Total offer management

Dynamic Offer Creation

IATA Geneva - October 2018
Authors: Sébastien Touzaine and Henry Coles - IATA

This paper proposes Dynamic Offer Creation, a concept that leverages emerging distribution standards and enhances the relevance of offers made to consumers. Dynamic Offer Creation involves removing the current separation between inventory and price.
The next chapter in Revenue Management?

1980

- Yield Management
  - Capacity control
  - Leg based
  - Fare rules segmentation

2000

- O&D Revenue Management
  - Network optimization
  - BidPrice
  - Dynamic Availability

2020

- Merchandising
  - Ancillaries
  - Fare families

- Dynamic Offer Engine
  - Continuous Pricing
  - Dynamic bundles
  - Total Offer Management
ONE Order
Industry today: two references

Booking

What: in general a 6 character-code

Why: proof that a reservation has been made

Electronic ticket

What: in general a 15 figure code

Why: proof that a payment has been made (receipt)

A third reference – EMD – is used as payment receipt for ancillaries
ONE Reference

- Consistent **communication** between airlines, travel partners and service delivery suppliers

- **Improved** customer service
Simplified ecosystem

• **Modernize** travel **ecosystem** to cater with **digital** processes

• **Facilitate** product delivery with real time tracking of services

• **Reduce** processes and systems **complexity**
Expanded partnership

• Connect with wider industries and enable greater interoperability

• Take travel retailing to the next level
ONE Order Certification – Status
Future of analytics with Offers & Orders
Opportunities with Offers

Know “who is asking?”

Store offers not accepted with shopping context

More data & dimensions in Revenue Management algorithms

RBD Less Pricing Distribution
Opportunities with Orders

Consolidated flight and ancillaries

Real time reporting

Structured data feeding Revenue Management systems

Freedom to create and fulfil any retail-oriented products
Thank you

Sébastien Touraine
touraines@iata.org
www.iata.org
Monitoring/Comparing Retailing Offers

Nils Gelbjerg, CEO, Infare
PRICING INTELLIGENCE | THE REASONS WHY

- Personalisation
- External effects
- On-demand driven charges
- Holistic offer management
- Supply driven
- Bundles
- Ancillaries
WHAT THE FUTURE HOLDS

Ancillaries & Fare Families
Leverage “unbundled” Pricing Insight to maximise new revenue streams

NDC
The technical “backbone” of offer management

An increased need for Pricing Intelligence solutions & More Frequency & more Data

Personalisation
The ability to change pricing according to various factors

Dynamic Pricing
The ability to change pricing according to various factors

New Revenue Sources

New Channels

Targeting

Speed

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THE RISE OF ANCILLARY REVENUES

Global Airline Ancillary Revenue Represented an Even Larger Share of Total Revenue in 2018

In Billions

- Ancillary Revenue
- Percent of Total Global Revenue

*Estimates as of November 27, 2018  
Source: IdeaWorks, CarTrawler, U.S. Global Investors

AIRLINE REVENUE MIX
The airline revenue mix is changing due to the global growth of low-cost carriers.

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ANCILLARY REVENUE & THE FARE COMPARISON DILEMMA

Pricing Curve

Pricing Curve after baggage price is added
Baggage
Priority boarding
Seat upgrades
Flight change fees
Fast track security
Meals/sandwiches/snacks
Drinks
Much more…
PARTNERING TO OFFER “UNBUNDLED” PRICING INSIGHT
BRINGING TRANSPARENCY TO FARE COMPARISON

- Non-transparent Bundled fares
- Hybrid models
- Shrinking profits

INFARE

- Enhanced fares comparability
- Offer more relevant products and services for successful ancillary revenue strategy
WE ARE INFARE

The leading supplier of airfare data and pricing intelligence tools in the aviation industry worldwide
WHAT WE DO | OUR UNIQUE GIVE-TO-GET MODEL

~2 Billion unique airfares collected daily
Covering 90% of commercial aircraft routes
Which equals 130,000+ routes

~3.5 Billion observations distributed daily
Via bespoke data files and our flagship BI Tools

Machine Learning & Artificial Intelligence
Among our major areas of investments

From 1,300+ online Sources
Thank you!
Enhancing Airline Offerings

Daniel Friedli, MD, Travel in Motion
Enhancing Airline Offers

IATA Aviation Data Symposium

June 2019
The Logic...
The Formula... 

\[ R = W + C \]
The Formula...

Relevance = Who + Context
The Formula...

Conversion Loyalty

Dynamic Segmentation

Relevance = Who + Context

How When What Where

Dynamically Optimised Offer

Revenue
RELEVANCE
Key Performance Indicators
Derive Context from Environmental Variables

HOW  How is the contact being made (channel, device, etc.)?
WHAT What are they asking for – what do they really want – Need and Desire
WHEN When, in the customer journey lifecycle, is the traveller contacting us?
WHERE Can we understand where this person is on the context of the journey or question they are asking us?

To answer many of these questions, it may be helpful to take external factors such as weather, geopolitics, events, social trends and other factors into account.
Focus on different aspect of context at different stages of the customer journey
Dynamic Customer Segmentation

John Doe
Leisure weekend w. partner

Weighting
Price -
Comfort ++
Pers Interaction --
Spontaneity +

Revenue $452k
Conversion 18.2%
Revenue per Pax $364.28
TAKE ACTION
Recipes for Success

• Start simple, but start
• Use the data at hand
• Value and evaluate the use cases
• Think of the complete customer interaction / customer journey
Use Cases throughout the customer journey
Recipes for Success

VALUE

OUTPUT

INGREDIENTS

COST

REVENUE
- Conversion
- Wallet share

CUSTOMER EXPERIENCE
- Better service
- Seamless experience

EVALUATIONS
- Reports
- Statistics

REAL-TIME
- Inject into processes
- Trigger actions

FEEDS
- Bookings
- Offer requests

REAL-TIME
- Weather, news
- Social media

FIX COSTS
- Setup costs
- Licenses
- Data Subscriptions

VARIABLE COSTS
- Connectors
- Success
- Transactions / Compute Power / Service
The Formula...

Relevance = Who + Context
Advancing pricing capabilities with data

Tom Gregorson, Chief Strategy Officer, ATPCO
What Makes AI Intelligent?

big data → machine learning → model

automatically tracked survey → semi-automated

feedback → real-time → analytics results

outcome → actions → decisions
## What’s the Right AI Technology for You

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<th>AI</th>
<th>improve CX</th>
<th>increase efficiency</th>
<th>grow revenue</th>
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**Business Impact**
- **improve CX**: deepen engagement, boost conversion, gain loyalty
- **increase efficiency**: reduce bottom line, raise productivity, increase throughput
- **grow revenue**: expand top line, grow margin, drive profitability
Empirical measurement of disutility costs

observe customer choices
Possible use case for big data and machine learning

Calculate customer disutility

**Disutility cost** – perceived inconvenience cost associated with an attribute of a purchased item

*Examples* of air travel attributes perceived as inconvenient
- Lack of adequate leg room
- No food
- No onboard entertainment
- No WIFI
Assume customer has 3 choices:

- FAR-CLE NONSTOP ECONOMY - $200
- FAR-CLE NONSTOP EXTRA LEG ROOM - $240
- FAR-CLE NONSTOP EXTRA LEG ROOM WIFI - $250

Example

$200 fare
$50 disutility of no extra legroom
$5 disutility of no WIFI
Total $255

$240 fare (with extra leg room)
$0 disutility of no extra legroom
$5 disutility of no WIFI
Total $245

$250 fare (with extra leg room/WIFI)
$0 disutility of no extra legroom
$0 disutility of no WIFI
Total $250

Customer disutility
(perceived cost of not having it)
WIFI = $5.00, Extra Leg Room = $50
Empirical measurement of disutility costs: observe customer choices

Complete documentation all attributes of each option

Calculation Logic

- Origin/Destination
- Passenger attributes
- Path quality
- Timing
- Aircraft type
- Marketing/operating airline
- Seat
- Food
- Entertainment
- WIFI
- Fare restrictions
- Baggage
- Point of sale
- Etc.
1. Capture all attributes of each option considered
2. Note purchased product
3. Calculate probability distributions (Bayesian Statistics) to characterize the disutility associated with various attributes by contrasting attributes considered versus chosen along with the cost of each option.
Where it can be used

- Digital customer experience (Internet)
- Airline offer optimization (Business)

What else can we do?
Better understand Willingness to Pay (WTP)

But is WTP constant?
- Weather
- Purpose of the trip
- Events
- Emotional factors
- Short-term surplus of funds
How do we move forward?

- We need to test and learn!
- Data sharing
- Comprehensive data
- Access to data, open API
- Data usability (data dictionaries, data cleansing, data normalization)
Big data is at the core of your big idea
Let's innovate together

atpco.net/bridge-labs

MENTORING, EXPERTISE, ACCESS TO BIG DATA
Analytics with Offers & Orders

Moderator: Sébastien Touraine, Head, Dynamic Offer, IATA
Roland Jaggi, CCO, Aegean Airlines
Jost Daft, Manager Revenue Management & Distribution Strategy, Lufthansa Group
Julia Reichel, VP Sales t-Data, OpenJaw
Tom Gregorson, Chief Strategy Officer, ATPCO
George Khairallah, CEO, JR Technologies
Networking Dinner

Buses depart from the Lobby at 19:00 Sharp