Solutions for Air Travel and Transportation
Olivier Houri, Global Head, Transportation
Agenda

- Key Facts
- Sub-Industry Point of Views
- Case Studies
- Summary
Fast Facts

20% of world passenger boardings are processed through Unisys Passenger solutions

Unisys airport solutions are used by over 100 airports worldwide

Unisys cargo solutions are used by carriers that move over 25% of the world’s air freight
Unisys is a consistent service provider to the aviation industry with powerful credentials.
Unisys Transportation POVs

- Airline: The Future of Passenger Travel
- Cargo: Cloud Collaboration and Digital Commercialization of Air Cargo
- Airport: The Airport of the Future
Unisys Transportation POVs

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• Modern consumer expectations continue to evolve and drive the business.
• Web, mobility, social networking have reached critical mass. Capturing traveler mindshare is on every player’s agenda.
Today: Selling Tickets vs. Merchandizing Products

Product Consistency + Product Differentiation = Business Value

- Targeted offers
- Higher yield
- Ancillary sales

Business objectives

Solution requirements

Changes by All Channels

Value Creation Platforms

Legacy PSS:
- higher unit costs; poor time to market;
- compromised capabilities

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Unisys “AirCore”
NextGen Passenger Systems Solution

Customer-centric
- Use of consistent customer information
- Decisions and processes revolve around customer value and their preferences versus bookings

Business flexibility
- Rules and parameters versus programming
- No limits (dates, names, record storage, etc.)
- Controls by market, by channel, etc.

Technical flexibility
- Entirely Java EE
- Service Oriented layered architecture
- Separate interface layer
- All functionality available through services
### Client Collaboration

**TravelSky**

<table>
<thead>
<tr>
<th>Provide autonomy to largest airline clients while maintaining economies of scale/performance of overall hosting operations</th>
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<tbody>
<tr>
<td>Replace legacy with modern AirCore applications in phases tied to airline business drivers and expansion into Asia market</td>
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<tr>
<td>AirCore applications tailored to architecture and China market. AirCore source code/knowledge transfer</td>
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Focus on introducing new revenue sources and cost savings through rapid delivery of surround applications and enhancements to legacy passenger system.

AirCore applications replicated across multiple revenue-generating surround solutions and AirCore inventory suite repurposed as proxy to provide multi-million savings in distribution costs.

Unisys Spain team design and build surround applications while global team develops core passengers systems.
Unisys Transportation POVs

Airline: The Future of Passenger Travel

Cargo: Cloud Collaboration and Digital Commercialization of Air Cargo

Airport: The Airport of the Future
Air Cargo (Freight) is a Global Driver of Trade
Cloud Collaboration and Digital Commercialization Driving Transformation

Client transformation required to capture market growth

- **Air Freight Moves Over Third of Global Trade Value**
  - $6.8 Trillion worth of goods, 35% of total trade by value, will be transported around the world by air

- **World Air Cargo to Double By 2033**
  - World air cargo traffic will increase from 207.8 billion RTKs in 2013 to 521.8 billion in 2033

- **Client challenges center around Flexibility, On Time Delivery/Reliability and Cost-Effectiveness**

Technology is driver for change

- **IATA aiming to cut average transit times by up to 48 hours by 2020**
  - Modernized processes (e.g., e-Freight), diversification of services, and improving quality and reliability

- **Cloud Collaboration and Digital Commerce Driving Rapid Transformation**
  - e-AWB (Airway Bill) penetration to up to 28.8% (45% target by end of 2015)
  - Cloud-based models speed technology change and enhancements and electronic-supply chains enable more dynamic and optimized business

- **Unisys positioned to drive industry change**
  - Unisys solutions used by clients who move about 25% of the world’s air cargo

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6. IBID.
Solutions Used by Clients who Move About 25% of the World’s Air Cargo

- **Logistics Management System (LMS)**
  - Our air cargo enterprise system

- **Cargo Revenue Accounting (CRA)**
  - Our newest application

- **Cargo Portal Services (CPS)**
  - Leading multi-carrier and own brand e-business portal

- **In-transit Service Manager (ISM)**
  - Cargo 2000 CDMP

- **3rd party revenue optimization, postal mail, devices, etc.**

Selected LMS Cloud clients:
- Delta Cargo
- Air France Cargo
- Air Canada Cargo
- China Cargo
- Air China Cargo
- Cathay Pacific Cargo

Selected LMS license clients:
- Air FRANCE CARGO
- Cathay Pacific Cargo

Selected CPS/ISM clients:
- American Airlines Cargo
- SAS Cargo
- Air FRANCE KLM Cargo
- United Cargo
- Virgin Atlantic Cargo

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Modern, Modular and Integrated Technology to Achieve Control, Value and Compliance

**Logistics Management System**

<table>
<thead>
<tr>
<th>Flights</th>
<th>Routings</th>
<th>Rating</th>
<th>Sales &amp; AWB Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booking &amp; Inventory</td>
<td>Warehouse</td>
<td>Customs &amp; Security</td>
<td>ULD Control</td>
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<tr>
<td>Claims</td>
<td>Revenue Acct'g</td>
<td>Archive</td>
<td>Data Warehouse</td>
</tr>
</tbody>
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**Shared utilities, rules engine, interfaces**

**The latest technologies**

- JBoss
- Oracle Database
- WebSphere MQ
- Linux

**Reduces change costs and deployment time by up to 33%**
Work Smarter with More Integration
Access When, Where and How You Want It — PC, Tablet, Smartphone
"I hired some brilliant IT people in companies I have ran. I have spent millions of dollars on IT solutions we developed in-house. Most never came to fruition. In hindsight I would have been farther ahead by buying IT solutions already available. The overall cost is less and the time to have an operational system is much quicker."

Jim Crane, founder of Eagle Global Logistics
Keynote at Air Cargo 2015 conference
Enhanced Customer Experience with Online Self Service Booking Portal: Scandinavian Airlines Cargo

Increased self service with measurable reductions in call center cost

Reduced delays in invoicing and payments and prevented incorrect accounting

Increased operational flexibility at lower costs resulting in more satisfied clients and higher margins

“Our new Booking Portal developed in close cooperation with Unisys has helped us increase collaboration within the air freight value chain by helping us provide pricing transparency. It is clear that we have planted an important seed that will innovate our industry.”

Leif Resmussen, President and CEO, SAS Cargo Group
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Airport: The Airport of the Future
Changing Role of the Airport Operator

Airports can play an active role that goes far beyond being a landlord for the premises. To help achieve airport of the future vision, the airport operator to take on a more active role by providing key functionality and technologies on top of the basic infrastructure.

**LCCTs Stagnation**
“Low Cost Airport Terminals (LCCT) still popular in APAC but declining in significance in Europe” *3

**Collaboration Complexity**
"67% of airports are planning to share data with other key stakeholders" *4

**Growing Privatization**
“…450 airports worldwide with…private-sector participation either in management or ownership. Airports remain attractive assets. ” ""Brazil Raises $9.1 Billion in Privatizing 2 Airports” *1,2

**Disruptive Technologies Impact**

1. Aviation Economics; 2. NY Times ; 3. CAPA; 4. SITA 2012 Airport IT Trends
Challenge: Improve the passenger experience and gain operational efficiencies while enabling revenue opportunities and squeezing more movement AND passengers through stretched facilities.

Approach: Transform the door to door experience by empowering passengers and staff through phased introduction of updated operations and disruptive technologies.
## Unisys Airport Solutions

### Passengers
- Local Check-in
- Internet Check-in
- Load Planning
- Common Check-in
- Common Bag Drop
- Common Load Planning
- Common Boarding Control
- Common Use (CUSS)
- Loyalty
- Check-in Agent Mobility
- Home Printed Bag tags
- Fast Bag Drop

### Operations
- Operational Management
- Operational Database (AODB)
- Flight Information Management
- Messages & Alerts
- Information Access
- Management Information
- Pricing & Billing
- Emergency Control
- Message Broker (middleware)
- FIDS
- Resource Management
- Baggage Reconciliation

### Security
- Passenger and Staff Access
- Passenger Tracking
- Passenger Self Service
- Fast Lane Management
- Lounge Access
- Border Control
- RFID Bags
- Secure Messaging
- Perimeter Security
- Surveillance Control

### Unisys Airport Solutions Services
- Mobility
- Cloud
- Networks & Infrastructure
- MSI & Consulting Services

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Unisys Airport Presence
Summary

• Market is expected to double in volume in the next 20 years but systems are antiquated
• Airlines and airports are in a position to invest
• We expect significant transformation in the next five years
• Unisys is well-positioned to drive the transformation
Expanding Self-Service Bag Drop at Rotterdam The Hague (RTM) Airport with Modern Fast Bag Drop Technology – Aviapartner

For the client, having one system across all airlines allows for a consistent bag check experience

Ground Handling Productivity:
Reduced the total working hours for passenger handling by 10%

Passenger Facilitation:
Reduced 30% of queue time at the check-in/bag drop in combination with use of self service kiosks

Customer Service:
Improved customer satisfaction by 7%