Airport IT Services for Airlines

Presented By: Kiel Barnekov, Manager - Programs & Projects
Greater Orlando Aviation Authority
In general, when approaching IT projects:
- Include Airlines as a Business Partner
- Seek to implement technology to enhance the airline’s business process

Fundamental Items of Importance
- Safety / Security
- Cost
- Passenger Flow
- Adding real value to Airline Operations

Fundamental Airport Issues
- Outages
- Loss of Functionality
- Loss of Branding
Airline Business Drivers, con’t.

• When it Comes to Standards:
  – In favor of standards –
    • can significantly reduce overall cost
    • Help drive solutions to key issues, such as PCI compliance
  – Airlines lose favor with standards when
    • prohibit flexibility
    • limit future potential
    • Hinder internal business direction
• And the Airline said, Airport IT should ...
  – help to maximize throughput and improve efficiency
  – be an enabler for airlines to try new industry processes
  – Improve the key performance indicator... time
Common Technology Services

• MuFIDS
• Common use passenger processing – (CUTE/CUSS→CUPPS)
• Telephony and data services
• Lightning detection and warning system
• Electronic signage and way finding
• Airport paging
• Baggage Handling System
Service Opportunities

• Network and wireless connectivity for ramp-based applications for baggage and cargo tracking, weight and balance, etc.

• Customized use of airport provided GIDS for airline information, advertising, destination information (weather, events, entertainment, etc.), as well as dedicated functions such as standby processing

• Customized EVIDS displays for airline operational areas and crew lounges

• Cable/satellite TV feed across airport network infrastructure
Service Opportunities

• Ramp Information Display System (RIDS)
• Airport mobile app – interface with airline DCS for check-in and flight status
• On airport remote baggage check – parking garages, drive-thru bag check stations
  – Reduce traffic at curbside and check-in counters
• Feedback to airlines from social media input
• Tenant website for EOC operations, airport status
Passenger Experience / Self Service

• The following slides present information from IATA’s Passenger Experience Management Group
• This information is provided to set a more global perspective of Airline initiatives within the Airport
Passenger Experience Management Group (PEMG)

**JPSC**
(Standards Approval)

**Steering Group**
(Policy Guidance)

**PEMG Committee**

- Paul Behan (IATA)
- Patrice Ouellette (AC)
- Russ Fortson (CX)

- Patty Edwards (ATA)
- Jared Miller (CO)
- Paul Stumbo (AA)

- Jan Dorrington (AU) Ian Neill (UK)
- Samuel Ingalls (LAS)
- Mike Saunders (ARINC)

Secretaries: Stephan Copart (IATA) - Arundhati Gupta (IATA)

**Fast Travel Working Group (FTWG)**

- Chair: Patrice Ouellette (AC)
- Vice Chair: Jared Miller (CO)
- IATA Leader: Stephan Copart

**Common Use Working Group (CUWG)**

- Chair: Samuel Ingalls (LAS)
- Vice Chair: Amy Foltz (CO)
- IATA Leader: Paul Behan

**BCBP Working Group (BCBP)**

- Chair: Peter Van der Zon (KL)
- Vice Chair: IATA Leader: Eric Leopold

**Passenger Facilitation Working Group (PFWG)**

- Co-Chair: Jan Dorrington (AU) Ian Neill (UK)
- Vice Chair: Hasse Joergensen (CPH)
- IATA Leader: Arundhati Gupta

Technical Solutions Groups (as required)
STRONG PASSENGER DEMAND FOR MORE SELF-SERVICE

IATA’s Fast Travel Programme is aligned to the growing demand for more self-service

SITA’s 2011 Passenger Self-Service Survey demonstrates the high levels of demand

* bag drop at check-in counter now just 55%

“Encourage more self-service options both in response to passenger requests and for potential savings to the industry”
Self Boarding

RP1701 – End to End Processing

→ 15 + Airlines

✓ Regulatory reqmnts.
✓ Biometrics usage
✓ Common use reqmnts.
✓ Implementation Guide
Bags Ready-to-Go

RP1701 – End to End Processing

- Standardized bag tag
- Home printed tag
- Industry Capability

- Regulatory Requirement
- XML Requirement for BRG
- Implementation Guide
TSA – Self Tagging Pilots

• Started in 2011

• TSA approved Airline Proprietary and Common Use Self Tagging
  — US destinations – Airline requests standard amendment
  — International destinations require specific amendment

• Airline Responsible for controlling bag tags and stock
  — Active/Inactive
  — Full Reconciliation

• FSD Approval
Self Tagging – Airline Case Study

- AA Very Pleased
- Time studies show 40% to 60% improvement on check-in
- Mis-Tag reduced by 15%
- 45% of passengers w/bags use Self Tagging
- Lessons Learned:
  - Queue and scale placement
  - Use of varied kiosks
  - Collaboration with airport officials
  - Customer perception
  - Bag tag design
Self Tagging – Airline Case Study

• Air New Zealand
  — *Improve customer service for the 95%*
  — *Reduced square foot print by 1/3*
  — Took risk at completely changing passenger check-in process
  — Bag weight restriction enforced post bag acceptance

NZ progress at AKL

Auckland Airport – Domestic Terminal
Operational Excellence

• Low Operational costs / High Operational Efficiency
• Fuel costs is the second-largest expense for airlines after labor and accounts for about 18 percent of the carrier's operating costs.
• Collaborative Decision Making (CDM) is a joint government/industry initiative aimed at improving air traffic management through increased information exchange among the various parties in the aviation community
• Collection and use of aircraft data for CDM is a high priority of the FAA – and many airlines (# is growing)
CDM's success depends upon its participants' access to real-time, current data to effectively plan daily National Airspace System (NAS) operations.

The sharing of data between systems is inherently a problem.

Examples abound, such as:

“...airline’s flight operations centers need to handle different tools provided by different CDM airports to get an overview of their flight status and to deliver back the TOBT / Target Off Block Time”
Airline Survey

• The following slides contain survey results of a small sampling of eight airlines
• Information is presented, only to establish trends
• Most that responded had a more progressive approach to doing business

<table>
<thead>
<tr>
<th>Description</th>
<th>Interest Level</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone and/or data / Internet services (STS)</td>
<td>X X</td>
<td>Airport telephony and VLAN transport – YES. Internet connectivity - NO.</td>
</tr>
<tr>
<td>Common Use – Agent Facing Check-In</td>
<td>X</td>
<td>Tktg, Gate, Service Center, Curb side and Baggage office – Yes: Pricing should include support costs</td>
</tr>
<tr>
<td>Common Use – CUSS</td>
<td>X</td>
<td>ADA support; at off site locations; self-service bag tags; configurable design</td>
</tr>
<tr>
<td>MuFIDS</td>
<td>X</td>
<td>Including GIDS and other x-ID’s</td>
</tr>
<tr>
<td>Electronic signage and way finding</td>
<td>X X</td>
<td>Not necessarily an airline provided system except at our large airports within our lease area.</td>
</tr>
<tr>
<td>Airport Paging</td>
<td>X</td>
<td>Audio and Visual integrated for ADA</td>
</tr>
<tr>
<td>UHF radio system for business communications</td>
<td>X</td>
<td>Shared radio system, trunked, that many organizations could share, police, fire, airlines, etc.</td>
</tr>
<tr>
<td>Baggage Reconciliation System</td>
<td>X</td>
<td></td>
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*Note: X indicates an interest level.*
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<tr>
<td>Network and wireless for ramp-based applications</td>
<td>X</td>
<td>WiFi on ramp, bag makeup &amp; all operational areas incl Gate &amp; Ticketing. Also mission critical tenant applications w/dynamic bandwidth</td>
</tr>
<tr>
<td>Customized use of airport provided GIDS for airline information</td>
<td>X X</td>
<td>We want to drive these and any other screens with our proprietary content. LIDS, BIDS, RIDS, etc...</td>
</tr>
<tr>
<td>Customized EVIDS for airline operational areas and crew lounges</td>
<td>X X</td>
<td>For customer and employee lounges</td>
</tr>
<tr>
<td>Cable/satellite TV feed across airport network infrastructure</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>RIDS</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>Airport Mobile App – interface with DCS</td>
<td>X X</td>
<td>Mobile Podium To be used by carrier to augment existing agent position. Tablet computer that works on the common use system back to a virtual desktop.</td>
</tr>
<tr>
<td>On airport remote baggage check</td>
<td>X X</td>
<td>Nice service but I would not be able to brand it Should support self service bag tag apps</td>
</tr>
<tr>
<td>Social media feedback</td>
<td>X X</td>
<td>They already know how to get our attention via our existing connections...</td>
</tr>
<tr>
<td>Tenant website – EOC, airport status,</td>
<td>X X</td>
<td></td>
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<td>Comment</td>
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</tr>
<tr>
<td>Check in: allowing passengers to receive their boarding pass via self-service channels</td>
<td>X</td>
<td>Airline Responsibility... Branding?? Should be driven by Airlines</td>
</tr>
<tr>
<td>Bags ready-to-go: enabling passengers to deliver their bags tagged and ready for acceptance</td>
<td>X</td>
<td>Nice customer service that the airport could provide and charge for Should be off and on-airport</td>
</tr>
<tr>
<td>Document check: allowing passengers to scan their travel documents at kiosks for data verification</td>
<td>X</td>
<td>Should be available with all CUSS Kiosks. Transmission of data - each carriers application will need to process</td>
</tr>
<tr>
<td>Flight re-booking: allowing passengers to get proactively rebooked via a self-service channel</td>
<td>X</td>
<td>Air carrier responsibility Airports should provide infrastructure</td>
</tr>
<tr>
<td>Self-boarding: allowing passengers to self-scan their boarding token to gain entry to the aircraft</td>
<td>X X</td>
<td>Very interested in this opportunity. Depends on Airport layout</td>
</tr>
<tr>
<td>Bag recovery: allowing passengers to report a missing bag via a self-service channel</td>
<td>X X</td>
<td>Kiosks at baggage claim, works for me... Driven by airline specific applications</td>
</tr>
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</tr>
<tr>
<td>Information sharing among airport stakeholders</td>
<td>X X</td>
<td>Sounds nice and you’d think this is already happening but it always needs a good facilitator... We see a lot of opportunity for structure data sharing</td>
</tr>
<tr>
<td>Collaborative Decision Making (CDM) - improving air traffic management through increased information exchange</td>
<td>X</td>
<td>I really don’t know what this would entail... Ramp radar aircraft movement tracking or??</td>
</tr>
<tr>
<td>Automated Revenue Collection</td>
<td>X</td>
<td>Don’t know what this would entail as our agents account for all monies via our host application for seats and bags.</td>
</tr>
<tr>
<td>Sharing of approved passenger information – through the passenger’s airport journey</td>
<td>X</td>
<td>Agreements would need to be in place and identify who is getting what piece of the nickel...</td>
</tr>
</tbody>
</table>
Thank You

Questions?