Unlocking the potential of Airport Infrastructure

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SITA Regional Vice President
Healthcheck
Today's objectives

- Share our industry research and implications for Airport operations
  - IT trends for Airlines 2010
  - IT trends for Airports 2009
  - Passenger Survey 2009
- What is SITA's response and vision
- Opportunity for Africa
Statistics
Statistics
What do passengers want?
Passengers are asking for improvements at the various steps in their journey

- Passengers are now asking for improvements at the security screening and passport control and airport dwell-time steps of the journey.

- 57.8% of passengers (up by 18%) are ready to give confidential data to speed their way through airport terminals.

Chart 3:
Which step of the journey would passengers most like to change in order to make their travel experience more enjoyable?

- Security screening: 18.2%
- Dwell-time at airport before departure flight: 14.8%
- In-flight experience: 14.6%
- Waiting for checked baggage on arrival: 9.3%
- Check-in process: 8.1%
- Planning stage: 6.7%
- Journey to airport: 6.7%
- Transfer process if connecting to other flight: 6.5%
- Passport control, immigration and customs: 4.8%
- Boarding process: 4.7%
- Bag drop point: 1.7%
- Journey at arrival to final destination: 1.6%
Passengers welcome the expansion of self-service

**Chart 18:**
**How often would you like to use the following options in the future?**

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequently</th>
<th>Intermittently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote check-in and baggage drop off</td>
<td>29%</td>
<td>30.6%</td>
<td>40.4%</td>
</tr>
<tr>
<td>Automated border control and security</td>
<td>32.5%</td>
<td>25.3%</td>
<td>42.2%</td>
</tr>
<tr>
<td>Automated boarding gates</td>
<td>29.4%</td>
<td>27.7%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Self-service transfer kiosk</td>
<td>29.4%</td>
<td>29.5%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Kiosk to report a lost baggage claim</td>
<td>24.6%</td>
<td>23.2%</td>
<td>52.2%</td>
</tr>
</tbody>
</table>
What do the airlines want?
IT Priorities: Areas for investment

<table>
<thead>
<tr>
<th>Area</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger operations &amp; related services</td>
<td>44%</td>
<td>35%</td>
</tr>
<tr>
<td>Flight operations</td>
<td>37%</td>
<td>46%</td>
</tr>
<tr>
<td>Aircraft operations</td>
<td>35%</td>
<td>41%</td>
</tr>
<tr>
<td>Passenger security</td>
<td>33%</td>
<td>35%</td>
</tr>
</tbody>
</table>

82% "Reducing cost of business operations is top priority in driving IT investments"
Passenger Operations & Self Service

Check-In:
- Key element in self-service
- Multi Channel as reality

Currently
- Agent: 50.7%
- Internet: 21.6%
- Kiosk: 19.5%
- Mobile phone: 2.4%

By 2013
- Agent: 28.9%
- Internet: 35.5%
- Kiosk: 19.9%
- Mobile phone: 12.4%
What are the airports saying?
Expected change in Airport IT investment in 2010

- Decrease 14%
- Increase 45%
- Stay the same 41%
Priorities in the IT investment decision

Investment Areas

- Passenger processing & services: 61% High Priority, 28% Medium Priority, 6% Low Priority, 6% No plans
- Passenger security: 56% High Priority, 34% Medium Priority, 8% Low Priority
- Aircraft operations (managing schedules, flights, etc): 51% High Priority, 42% Medium Priority, 4% Low Priority
- Business support functions, e.g. finance, HR: 47% High Priority, 38% Medium Priority, 16% Low Priority
- General IT infrastructure upgrades: 44% High Priority, 43% Medium Priority, 12% Low Priority
- Baggage processing & management: 40% High Priority, 36% Medium Priority, 13% Low Priority, 11% No plans

Investment Drivers - Top Priorities:
1. Airport safety & security 73%
2. Customer service & satisfaction 69%
3. Reducing cost: 62%
4. Workforce productivity 54%
Plans to change IT strategy as a result of current economic climate

- Invest in applications to improve organisational productivity/efficiency: 67% more, 32% less.
- Invest in IT infrastructure consolidation (e.g. virtualisation): 66% more, 27% less, 7% no change.
- Invest in solutions that lower enterprise costs: 63% more, 35% less.
- Renegotiate IT supplier contracts: 57% more, 40% less, 3% no change.
- Rationalisation of IT suppliers: 47% more, 49% less, 4% no change.
- Defer individual IT projects: 45% more, 46% less.
- Extend partnership with strategic IT supplier: 45% more, 51% less.
- IT outsourcing: 37% more, 50% less, 13% no change.
- Business process outsourcing: 16% more, 80% less, 4% no change.
- Invest in solutions with ROI of under 1 year: 13% more, 77% less, 11% no change.
- Reduce airport IT headcount: 13% more, 77% less, 10% no change.
## Trends with the most impact on organisations’ IT&T infrastructure & systems over the next three years

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact 1st</th>
<th>Impact 2nd</th>
<th>Impact 3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic documents (aircraft maintenance, boarding passes)</td>
<td>52%</td>
<td>29%</td>
<td>20%</td>
</tr>
<tr>
<td>Multi-stakeholder Collaborative Decision Making</td>
<td>50%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Mobile device based services for staff</td>
<td>21%</td>
<td>50%</td>
<td>29%</td>
</tr>
<tr>
<td>Mobile phone based services for passengers</td>
<td>29%</td>
<td>37%</td>
<td>35%</td>
</tr>
<tr>
<td>Travel biometric solutions</td>
<td>24%</td>
<td>41%</td>
<td>35%</td>
</tr>
<tr>
<td>IATA Fast Travel Programme (end-to-end self service)</td>
<td>32%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Off-airport processing of passengers/baggage</td>
<td>23%</td>
<td>40%</td>
<td>37%</td>
</tr>
<tr>
<td>Automatic tracking/tracing of people/objects</td>
<td>26%</td>
<td>30%</td>
<td>44%</td>
</tr>
</tbody>
</table>
## Expectations to implement new self service functionality

<table>
<thead>
<tr>
<th>Service</th>
<th>Already done</th>
<th>By end of 2010</th>
<th>By end of 2012</th>
<th>No plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiosk for Check-in</td>
<td>63%</td>
<td>13%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>Self-scanning of passports/ID documents at kiosk</td>
<td>32%</td>
<td>11%</td>
<td>15%</td>
<td>43%</td>
</tr>
<tr>
<td>Print bag-tags at kiosks</td>
<td>17%</td>
<td>14%</td>
<td>20%</td>
<td>49%</td>
</tr>
<tr>
<td>Common bag-drop locations (no agent)</td>
<td>12%</td>
<td>13%</td>
<td>23%</td>
<td>53%</td>
</tr>
<tr>
<td>Automated boarding gates</td>
<td>3%</td>
<td>8%</td>
<td>26%</td>
<td>58%</td>
</tr>
<tr>
<td>Kiosks for transfer self-service</td>
<td>11%</td>
<td>11%</td>
<td>17%</td>
<td>62%</td>
</tr>
<tr>
<td>Kiosks to report lost baggage</td>
<td>5%</td>
<td>14%</td>
<td>17%</td>
<td>64%</td>
</tr>
<tr>
<td>Kiosks for disruption management</td>
<td>6%</td>
<td>6%</td>
<td>10%</td>
<td>78%</td>
</tr>
</tbody>
</table>

- **Kiosk for Check-in**: 63% already done, 13% by end of 2010, 14% by end of 2012, 10% no plans.
- **Self-scanning of passports/ID documents at kiosk**: 32% already done, 11% by end of 2010, 15% by end of 2012, 43% no plans.
- **Print bag-tags at kiosks**: 17% already done, 14% by end of 2010, 20% by end of 2012, 49% no plans.
- **Common bag-drop locations (no agent)**: 12% already done, 13% by end of 2010, 23% by end of 2012, 53% no plans.
- **Automated boarding gates**: 3% already done, 8% by end of 2010, 26% by end of 2012, 58% no plans.
- **Kiosks for transfer self-service**: 11% already done, 11% by end of 2010, 17% by end of 2012, 62% no plans.
- **Kiosks to report lost baggage**: 5% already done, 14% by end of 2010, 17% by end of 2012, 64% no plans.
- **Kiosks for disruption management**: 6% already done, 6% by end of 2010, 10% by end of 2012, 78% no plans.
## IT projects/services implemented/planned at airport

<table>
<thead>
<tr>
<th>Service</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>No plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated gate docking systems</td>
<td>29%</td>
<td>6%</td>
<td>9%</td>
<td>56%</td>
</tr>
<tr>
<td>Ground &amp; vehicle tracking systems</td>
<td>27%</td>
<td>13%</td>
<td>11%</td>
<td>49%</td>
</tr>
<tr>
<td>Collaborative Decision Making (CDM) tools</td>
<td>15%</td>
<td>17%</td>
<td>19%</td>
<td>49%</td>
</tr>
<tr>
<td>Receiving flight updates through AIDX (Aviation Information Data Exchange) message</td>
<td>14%</td>
<td>15%</td>
<td>28%</td>
<td>44%</td>
</tr>
<tr>
<td>Digital PMR services</td>
<td>13%</td>
<td>6%</td>
<td>12%</td>
<td>69%</td>
</tr>
<tr>
<td>WiMAX coverage for operations</td>
<td>11%</td>
<td>11%</td>
<td>27%</td>
<td>51%</td>
</tr>
<tr>
<td>Foreign Object Debris (FOD) systems</td>
<td>11%</td>
<td>6%</td>
<td>16%</td>
<td>67%</td>
</tr>
</tbody>
</table>
What's the outlook?

- "Computers in the future will weigh no more than 1.5 tons." (Popular Mechanics, forecasting advance of science, 1949.)
- "I think there's a world market for maybe five computers." (Thomas Watson, chairman of IBM, 1943.)
- "There is no reason why anyone would want to have a computer in their home." (Ken Olson, president, chairman and founder of Digital Equipment Corp, 1977.)
- "This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." (Western Union memo, 1876.)
- "640K ought to be enough for anybody." (Bill Gates of Microsoft, 1981.)
We offer business solutions to the ATI
Digital airport: effectiveness and connectivity

Technology platform to enable process optimisation

- ePassport
- Bag Drop
- Security Checkpoint
- Registered Travellers
- Automated Border Control
- Biometric Visa
- Biometric solutions apply throughout the passenger journey

Delivering personal and context aware services

Enabling mobility

Integrated & Collaborative
Biometric security solutions are maturing

Biometric solutions apply throughout the passenger journey

- ePassport
- Bag Drop Check In Self Service
- Biometric Visa
- Security Checkpoint Registered Travelers
- Automated Border Control
- Self Boarding
Workforce mobility is increasing efficiency and profitability

Applications for SITA mobile middleware

Current SITA live trialé

Passenger Check-in & Boarding with Mobile devices

- Allow us to deliver any service, anywhere
- Will become an engine for driving competitive advantage
  - Sell more services to passengers, payment solution across the airport
  - Queue busting & disruption management
  - Sales tools – culture change opportunity
Passenger@Airport

- Addresses a range of Business Intelligence applications for Airports, Airlines and Security Entities
  - Passenger counts
  - Passenger tracking for revenue maximisation
    - Knowing when passengers are in the airport
    - Dwell time analysis
    - Flight demographics and purchasing habits
    - Track time through security
  - 2DBC validation
    - Display mobile 2DBC contents to security staff for validation
    - Duplicates, forgeries, right terminal, suitable timing
    - Check embedded digital signature
The Africa Airport Environment

- ACI Africa airports acknowledge the need to improve passenger processing, and reduce costs;

- Africa Airports have some differences, which are critical when developing a solution for this market:
  - Airports manage an average of 1m pax pa
    - Therefore a passenger processing solution needs to be cost effective;
  - Less permanent resource at these airports to manage faults
    - Therefore little opportunity to re-use supplier staff to manage faults etc;
  - Inconsistent power supply
    - Therefore the solution needs to have additional resiliency built-in;
SITA Approach

- Based on ACI demand and airport feedback *(from questionnaires received to date)* SITA is adapting our core proposition to meet the uniqueness of the Africa market environment;
  - SITA would welcome the opportunity to work with an airport to further develop

- For example, CUTE Africa solution will:
  - Re-use existing platform and expertise
    - Build on the existing SITA CUTE platform;
    - Be customised for ACI Africa using SITA design experts
    - Be fully supported to improve airports current service levels;
  - Focus on value for money:
    - Reducing infrastructure costs:
      - By hosting infrastructure remotely (DUS data centre)
    - Redesigning Service Model:
      - Remote Service Management
      - Skill local airport staff
Summary

- Passenger processing remains as the top but 'value for money' is critical for all airport stakeholders.
- Maximize return on investment, with pre-positioning of new technology and reuse, and the integration of applications, to optimize running costs.
- Facilitating airline and wider stakeholder access to airport IT infrastructure will enable collaboration, commercial benefits and facilitate innovation.
Thank you