HIDDEN BENEFITS OF BIOMETRICS FOR AVIATION

Restoring passenger confidence and improving airport efficiency

CONTACTLESS PASSENGER JOURNEY

- Biometrics can eliminate photo ID, passport and boarding pass
- Passenger health monitoring
- Virtual queuing apps for check-in and boarding

PRE-SECURITY

- Non-aeronautical revenue
  - $7.08 per passenger
  - 35.4% of that ($2.51) is spent in retail or F&B
  - 30 min. Time available to shop or eat (dwell time)
  - $0.08 Passenger retail and F&B spend per minute

Saving each passenger from one minute of queuing can be worth $4.2M each year
For an airport with 50 million passengers per year

AIRSIDE

PASSenger SATISFACTION HAS A POSITIVE EFFECT ON NON-AERONAUTICAL SPEND

<table>
<thead>
<tr>
<th>% increase in PAX satisfaction</th>
<th>50M PAX</th>
<th>20M PAX</th>
<th>10M PAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>$1,882,500</td>
<td>$753,000</td>
<td>$378,500</td>
</tr>
<tr>
<td>5%</td>
<td>$9,412,500</td>
<td>$3,765,000</td>
<td>$1,882,500</td>
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<tr>
<td>10%</td>
<td>$18,825,000</td>
<td>$7,530,000</td>
<td>$3,765,000</td>
</tr>
</tbody>
</table>

$2.51 Retail, food and beverage spend per passenger

Source: ACI

BOARDING

FASTER BOARDING CAN REDUCE THE ONGOING COST OF FLIGHT DELAYS

- $112 per minute to an airline
  - Source: The Independent

- $32B cost to U.S. economy
  - Source: FAA

- $8.3B cost to U.S. airlines
  - Source: FAA

Biometrics at the boarding gate
- Less than 15 minutes to board a Boeing 777
- 20 minutes to board 350 Airbus A380 passengers
- Faster boarding = less congestion

SAVINGS FROM REDUCED COSTS

- 30% less time boarding a 777
  - Source: FAA

- Self-service reduces reliance on agent staffing
  - Source: ACI

Source: ACI
Source: FAA
Source: Nigel Dolby Consulting
Source: FAI

$32B cost to U.S. economy
$8.3B cost to U.S. airlines
$112 per minute to an airline