Customer Perspectives in Aviation
– A Process Oriented View –

Hamburg Aviation Conference 22-24. February 2012
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Many activities in research and development have been **focused on technological functions**, i.e. aerodynamics, aircraft, radars, airfield design, etc.

- Air transportation technologies have reached a very **high level of maturity**
- **No real breakthrough** since the seventies
- **Optimization and Quality** are mainly addressing **partial** areas of the entire transportation chain
- VISION2020 and FLIGHTPATH2050 are setting **extreme and holistic challenges**
- Air Transportation faces **increasing social concerns**
- Passengers are more **demanding**
- Are passengers the only **customer**?
A Customer in the Air Transportation System – Who is it?

- Many providers are customers as well
- Each service provider is optimizing himself to fulfill specific customer expectations in his area…
A customer perspective… the passenger

A is customer of B

Overall travel Expectation:
- Connectivity
- Travel times
- Comfort
- Predictability
- Fluency

Pre-booking:
- Connectivity
- Travel times
- Predictability

In-flight:
- Comfort
- Catering
- IFE

Pre-flight:
- Transport
- Parking
- Check-in
- Security
- Shopping
- Lounges
- Boarding

Post-flight:
- De-boarding
- Baggage
- Transfer flights
- Transport
A customer perspective... the airline

A is customer of B

- Efficient aircraft (low SFC, low emissions, low MRO)
- Low acquisition costs
- Available as required

- Low costs
- High reliability
- High utilization
- High availability

Overall travel Expectation :
- Connectivity
- Travel times
- Comfort
- Predictability
- Fluency

- Sufficient capacity (slots, gates)
- Low fees
- Low turnaround-times
- Low transfer times

- Sufficient capacity
- No detours
- Low fees
A customer perspective… the airport

A is customer of B

Overall travel Expectation:
- Connectivity
- Travel times
- Comfort
- Predictability
- Fluency

- Slot/gate compliance and information about delays
- Preparing PAX with basic informations by airlines
- Efficient work flows
- Quality (safety, reliability)

- Adequate legal restrictions (noise, CO₂)
- Support for adequate airport development
- Efficient landside connection
- Quality (safety, reliability)
- Short ROT/ taxi time
...but interactions between all stakeholders determine overall passenger satisfaction

Aircraft design
- Flight time
- Noise level
Cabin design
- Individual space
- Boarding time

Cabin design
- Individual space
- Boarding time

Standards & procedures
- On-time performance
- Delay management

Safety & security standards for aircraft, airlines, airports, ATM

Check-in time
- Baggage handling
- Turn-around time
- Cleanliness

needs to consider all steps of the transportation chain
Air travel quality and performance are common goals
Air travel performance and quality requires a common approach

Overall passenger satisfaction influenced by several factors that are partly beyond airline control (e.g., boarding experience, baggage claim, space in overhead storage)

JD Power 2011 North America Airline Satisfaction Survey
Air travel performance and quality requires a common approach

Overall passenger satisfaction influenced by several factors that are partly beyond airport control (e.g., public transport, security screening, staff attitudes, baggage delivery times)

Skytrax Airline and Airport Ranking
What passengers are looking at when selecting an airline

Passenger request for:
- Airline customer orientation
- Comfort
- Value for money

IATA Corporate Air Travel Survey 2009
Nearly 70% of overall travelling time is associated with airport access, stay and departure.

These losses in time are compensated by higher energy and emission effort of air transport.

Balancing speed and energy effort provides a better transportation chain.
Technologies to improve Fluency

Passenger Services and Flow

Total Airport Management

Communication and Software Technologies

Measures for quality:
- Total trip time = t(fixed) + t(flight) + t (displacement)
- Fluency = no delay or remarkable distortion

Time is value, more than only money
Future Perspectives

- Low quantitative growth should be supplemented by qualitative growth.
- Qualitative growth requires better overall performance and quality to add value.
- Each part of air transport reaches higher quality if the entire chain improves.
What leads to quality and satisfaction in Aviation?

- Fluent, comfortable travel from door to door without delay
- Robustness and predictability, which includes recovery of small disturbances
- Balance of time, cost, emissions, effort

What is needed

a) Change in mindset to take quality and performance as global and common goals
b) Toined target setting and measurement by industry (not by government)
c) Mutual support, rather than separation
d) Not responsibility should drive action but the best solution/provider
e) Technologies, which provide predictive information exchange and common situation awareness
f) Scientific research on understanding of complex systems interdependences not only disciplinary, physical research
High Quality Air Transportation is Process Orientation and Teamwork rather than Stakeholder orientation

Overall travel Expectation:
- Connectivity
- Travel times/Utilization
- Comfort/Safety
- Predictability/Reliability
- Fluency