Who is waiting at the gate? An analysis of European passengers

DATASET2050 (D3.1 & D3.2)

Ulrike Kluge
Motivation and objectives
Analysis demand side of European (air) transport system

Passenger at the centre
> Understanding current and future European transport system from passengers’ perspective
> Gaining insights into passengers’ expectations, needs, requirements and specific travel behaviour
> Door-to-door focus

Data-driven approach
> Analysis of existing data on passenger demand and travel behaviour
> Consideration of future demand changes using both qualitative and quantitative data

Development of passenger profiles (WP3)
> Six current and future passenger demand profiles and respective archetype journeys (2014 & 2035)
Passenger characteristics
Influenced by various factors

>>> Passengers' (air) transport demand and travel behaviour

> Depiction of demand for mobility in general and for air transport in particular

> Influenced by various factors:
  i. Demographical aspects
  ii. Geographical aspects
  iii. Socio-economic aspects
  iv. Behavioural aspects
  v. Mobility aspects

>>> Current status and future development of passenger characteristics

>>> Interdependencies between factors
Development passenger profiles

Approach in WP3

>> Passenger demand profiles

> Identification of six current and six future passenger demand profiles

1. Analysis of European data (EU28 + EFTA)
2. Using existing studies on passenger profiles
3. Characterisation according to
   > Main travel purpose
   > Age group and income level
   > Usage of ICT
   > Length of stay
   > Travel activity and travel party size
   > Luggage requirements
   > Value of time
   > Access mode choice
   > Etc.

Causal loop diagram
Exploring interdependencies between demand drivers

Complex nature that requires different approaches to explore

> Used approach: causal loop diagram (CLD)
> Each demand driver is depicted as a variable
> Identify behaviour of the system
> Identify relationships between factors
> Offers a graphical illustration at hand

Thorough set of demand drivers on air transport demand
Passenger cluster literature review
According to age, travel purpose and trips per capita

Age group and trip share by age group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
<th>Trip Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>14%</td>
<td>0.99</td>
</tr>
<tr>
<td>25-44</td>
<td>36%</td>
<td>1.13</td>
</tr>
<tr>
<td>45-64</td>
<td>34%</td>
<td>1.07</td>
</tr>
<tr>
<td>65+</td>
<td>15%</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Travel purpose:
- Bleisure passenger
- Conservative male business traveller
- Business travellers in leading position
- Business traveller in non-leading position
- Trendy business women
- Travelling worker

Private:
- Young party animals
- Young urban hopper
- Student traveller
- Screenagers
- Young travellers
- Millennials
- Holidays with families

Business:
- Cosmopolitan commuters
- Leisure and family tourists
- Culture and knowledge seekers
- Modern exclusives
- Mediterranean best ager
- Silver traveller
- Senior travellers
- Active seniors
- Grandparents
- Visiting family
Current demand profiles

2014

Travel purpose

- Business
  - Price-conscious Business Traveller
  - Low income
  - Age group 65+

- Private
  - Family and Holiday Traveller
  - Medium income
  - Age group 25-44 (+ children)
  - ≥ 3 travellers
  - Check-in luggage (several bags)
  - Airport access by public transport or private car

- Youngsters
  - Medium / high income
  - Age group 25-44

- Executives
  - Exclusive Experience Traveller
  - high income
  - Age group 65+
  - Low technological affinity
  - 1-2 travellers
  - Low value of time
  - Airport drop off by friends and relatives

- Best Agers
  - low income
  - Age group 65+
Future passenger demand profile 2035

Profiles developed within DATASET2050 project (D3.2)

- Cultural Seeker
- Best Agers
- Family and Holiday Traveller
- Environmental Traveller
- Single Traveler
- Digital Native Business Traveller

Profiles developed within DATASET2050 project (D3.2)
**Demand profiles in 2035 (1/3)**

### 2035 Digital Native Business Traveller

- **Main Travel Purpose:** Business
- **Predominant Age Group:** 24 - 64
- **Travel Activity:** 0.5 - 1.5 Trips / Year
- **Income Level:**
- **Expenditure on Transport:**
- **ICT Usage:**
- **Travel Party Size:**
- **Check-in Luggage:**
- **Access Mode Choice:**

### 2035 Environmental Traveller

- **Main Travel Purpose:** Business
- **Predominant Age Group:** 30 - 44
- **Travel Activity:** 0.5 Trips / Year
- **Income Level:**
- **Expenditure on Transport:**
- **ICT Usage:**
- **Travel Party Size:**
- **Check-in Luggage:**
- **Access Mode Choice:**
Demand profiles in 2035 (2/3)

**Cultural Seeker**
- **Main Travel Purpose**: Private
- **Predominant Age Group**: 15 - 65
- **Travel Activity**: 0.5 - 1.5 trips/year
- **Income Level**: €\(\text{€}\) €\(\text{€}\) €\(\text{€}\)
- **Expenditure on Transport**: €\(\text{€}\) €\(\text{€}\) €\(\text{€}\)
- **ICT Usage**: Smart phone, tablet
- **Travel Party Size**: Solo
- **Check-in Luggage**: Small
- **Access Mode Choice**: Public, Private

**Family and Holiday Traveller**
- **Main Travel Purpose**: Private
- **Predominant Age Group**: 30 - 50, including children (below 15)
- **Travel Activity**: 0.5 - 1.5 trips/year
- **Income Level**: €\(\text{€}\) €\(\text{€}\) €\(\text{€}\) €\(\text{€}\)
- **Expenditure on Transport**: €\(\text{€}\) €\(\text{€}\) €\(\text{€}\)
- **ICT Usage**: Smart phone, tablet
- **Travel Party Size**: Family
- **Check-in Luggage**: Medium
- **Access Mode Choice**: Public, Private
**Demand profiles in 2035 (3/3)**

### 2035 Single Traveller

<table>
<thead>
<tr>
<th><strong>MAIN TRAVEL PURPOSE</strong></th>
<th><strong>PRIVATE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREDOMINANT AGE GROUP</strong></td>
<td>44+</td>
</tr>
<tr>
<td><strong>TRAVEL ACTIVITY</strong></td>
<td>0.25 - 0.5 TRIPS / YEAR</td>
</tr>
<tr>
<td><strong>INCOME LEVEL</strong></td>
<td>€ € € € €</td>
</tr>
<tr>
<td><strong>EXPENDITURE ON TRANSPORT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ICT USAGE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TRAVEL PARTY SIZE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CHECK-IN LUGGAGE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ACCESS MODE CHOICE</strong></td>
<td></td>
</tr>
</tbody>
</table>

### 2035 Best Agers (Next Generation)

<table>
<thead>
<tr>
<th><strong>MAIN TRAVEL PURPOSE</strong></th>
<th><strong>PRIVATE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREDOMINANT AGE GROUP</strong></td>
<td>65+</td>
</tr>
<tr>
<td><strong>TRAVEL ACTIVITY</strong></td>
<td>0.5 TRIPS / YEAR</td>
</tr>
<tr>
<td><strong>INCOME LEVEL</strong></td>
<td>€ € € € €</td>
</tr>
<tr>
<td><strong>EXPENDITURE ON TRANSPORT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ICT USAGE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TRAVEL PARTY SIZE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CHECK-IN LUGGAGE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ACCESS MODE CHOICE</strong></td>
<td></td>
</tr>
</tbody>
</table>
Contact

>> DATASET2050: http://www.dataset2050.com/

>> Ulrike Kluge
Bauhaus Luftfahrt e.V.
Willy-Messerschmitt-Str. 1
82024 Taufkirchen, Germany

+49 (0) 89 3 07 48 49 – 41
Ulrike.Kluge@bauhaus-luftfahrt.net

>> Annika Paul
Bauhaus Luftfahrt e.V.
Willy-Messerschmitt-Str. 1
82024 Taufkirchen, Germany

+49 (0) 89 3 07 48 49 – 45
Annika.Paul@bauhaus-luftfahrt.net

http://www.bauhaus-luftfahrt.net