Every day, around 4,350 freight trains and over 1 million metric tons of goods by rail.

Around 7.4 million passengers a day on trains and buses in Germany.

On 33,200 kilometers more than 25,000 bridges and 700 tunnels in the railway network of the DB.

5,700 stations in Germany.

Data as of March 2018.
DB Resources

DB Rail Academy provides holistic training and education programs for the rail and transport sector.

DB Digital Ventures serves as the organizational umbrella for DB’s systematic investment in start-ups and leads entrepreneurs throughout the Group to success.

Beyond1435 is a platform that enables our partners to jointly develop innovative technologies or scale new businesses by getting access to the right combination of assets.

Skydeck at DB Systel, Deutsche Bahn’s IT service provider, searches for innovative business-wide IT solutions and helps employees make their ideas a reality.

d.lab is the innovation lab for passenger transport developing new digital products that benefit local and long-distance transport customers.

Ideenzug is a walk-in full-scale model of a double-deck coach which brings 22 themed areas to life and forms the basis for the development of redesigns and new rolling stock.

DB mindbox is Deutsche Bahn’s coworking space in Berlin. Startups and DB employees work together to develop innovations with a particular focus on digital technologies.

Together with our partners, we are pioneers in digitization and automation in the field of asset management and maintenance.
Three Types of Inclusion

1. Representation
2. Conversation
3. Observation
Rail Passengers = Humans
DB uses Personas to create a holistic and harmonized product experience for the customer - starting with advertising products until the journey.

E.g. Anna & Felix
Live 200 miles apart

E.g. Elvira
“Silver Traveler”

E.g. Sophia,
“Smart Urban Traveler”

E.g. Mario
“Business Traveler”
DB uses Personas or “Customer Groups” many ways

- The design of the equipment of trains and infrastructure
- Development of service concepts
- Design of sales channels and related applications (e.g. apps etc.)
- Conception of information (e.g. conversation templates, flyer etc.)
- Execution of advertising campaigns
Individual Characteristics, Needs and Habits

- Age, Gender, Income
- Expectations in Service and Sales
- Mobility Habits
- Digital Competence
- Comfort Expectations
- Price Sensibility
- Sales Channel Usage
- Traveller
Defining Customer Groups

- Business traveler
- Commuter
- Comfort Customer
- Price sensitive Leisure Traveler
- Family
- Elderly Leisure Traveler
- First time Customer
- Foreign Traveler
Journey Characteristics

- Where? How far?
- When?
- Why?
- Which transport mode?
- How often?
- With whom?

What is important?
Mobility-relevant characteristics, experiences and preferences

- Preferred means of transport
- Mobility on the daily bases
- Experience with regional transport
- Attitude regarding travelling
- Experience with long distance journeys
- Preferences Traveling Time
- Price Sensitivity
- Preferred Tickets (Train)
- Technical Affinity
- Social Media Affinity
- Environmental Awareness
- Need for Information
- Need for Security
- Need for Comfort
- Limitations during Travel
Hello, we are the B. family! Our primary goal is to reach our destination in a comfortable way. It is important to us that we feel welcomed as a family and that everyone feels comfortable. We value the independence from a car, but also imagine fun and flexibility with the train. Family time is important to us. That’s why we love to play together or read a book while travelling.

**Information**
- High level of information demand before the journey or during an incident.
- Would like to ensure that everything works according to schedule.
- Use the internet and mobile apps.

**Offer and Price**
- Pay attention to the ticket price.
- Travel only in second class.
- Environmental protection is taken into account when planning a journey.

**Comfort**
- Reserve seats (if possible) in the child-friendly car.
- Have enough space: children need space for playing.
- Need flexibility in their journey.

**Service**
- Children-friendly employees and service
- Noise-tolerant environment on-board
- High demand for storage and hygiene

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**Mobility Behavior**
They mostly drive because they have kids and lots of gear. For long-distance travel, comfort (few transfers) is more important than the travel time.

**Digital Behavior**
R.B. owns a smartphone that she uses for surfing on the internet and getting things done.

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**R.B. & A.B.**
36/34 years old
Married, 3 children (10 months, 5 & 13 years)
Visalia
Self-employed
Hello, I’m Julia! I like getting to work and back quickly and comfortably. Travel time is annoying, but I try to make use of it. I’m an experienced rider – I know my personal connections and train frequencies by heart. I require further information only in the case of an incident. In that case, they need to communicate as fast and reliable as possible. I would love to have a dedicated, acoustical shielded seat.

Information
- High demand in early and precise/reliable information in case of an incident (push information)
- Generally experienced rider, frequencies and connections are known (only in case of an incident verified with the app)

Offer and Price
- Owns a monthly BART pass.
- Doesn’t buy premium transportation products, wants to know what her trips will cost her.

Comfort
- Attaches importance to a quiet and comfortable journey – Travel time is both time to be used or to relax (reading, sleeping, researching, social media/email)
- High demand for a comfortable seat

Service
- Almost no demand for on-board service (prefers to be kept alone)
- Café car service is only randomly used (price/value)
Hello, I’m L.M.! I’m from China and currently travel around the U.S. together with my husband and child. The train system differs drastically from what I am used to. Since I speak only a little English, I am dependent on personal assistance when taking the train. The online ticket booking is almost impossible for me based on my language barrier – this is why I booked some of my tickets prior to my trip in China. I try to understand all other relevant information by communication with employees at the station, usually with my hands and feet.

**Information**
- L.M. is dependent on personal assistance/support
- She requests information in her hotel
- At the station she requests help from service employees at the counter or in a travel agency

**Offer and Price**
- L.M.’s salary is not very high, which is why she needs to track her budget throughout her trip. If possible, Mai-Lin purchases deals with differing zones and train types (long-distance, regional train, bus…) – these confuse her.

**Comfort**
- Comfort is not of high importance for L.M. and her family. Her priority is getting to her destination
- She enjoys gazing through the window during the ride to enjoy the California landscape. This is why she likes to reserve window seats.
- L.M. feels safe in trains and at stations. However, she finds it confusing that other travelers drink in public and on trains.

**Service**
- She speaks only a little English
- L.M. and her family travel with two big suitcases and a lot of hand luggage. This becomes a difficulty in the narrow train aisles.

**Mobility Behavior**
At home, L.M. uses the regional railway. Her experience from home is not comparable with the U.S. system. That’s why she is more dependent than others on multilingual and personal support.

**Digital Behavior**
L.M. owns several digital gadgets: smartphone and tablet. She is an extreme social media user and constantly available. Status updates are checked by her continuously and she posts hourly photos for her friends and relatives at home.
Hello, I’m E.B.! As I regularly use the train and transit, I’m an experienced train user. Nevertheless, personal service is of importance to me, in particular in case of incidents, where I need to get all relevant information. Only with a high level of information I feel safe and don’t start panicking. My comfort and quality needs are also high.

**Information**
- High level of information before and during the journey, high uncertainty in case of incidents
- Informs herself throughout the journey based on her printed out travel plan or through employees
- Clear and readable information is essential

**Offer and Price**
- Comfort is more important than travel time or price
- In case of special deals, she also likes using first class
- She owns a loyalty pass, hoping to earn discounts.

**Comfort**
- Always reserves a seat
- Comfort is important, high quality from door to door, needs time for her personal orientation when connecting (prefers to travel without transfers)

**Service**
- Usually books her trip through her computer or at the counter; often trips are booked as full packages (incl. hotels). She often gets help from family members to book.
- Bigger luggage is carried to final destination for longer trips
- High demand for security, needs reliability, short routes
Hello, I’m M.Y.! I want to pay as little as possible to get from origin to destination. For this reason, I always compare all mobility choices when planning my trip – starting with long-distance buses to the train. Based on the information, I always choose the cheapest option. Comfort or travel time are only of secondary importance to me, but not completely irrelevant. However, I wouldn’t pay more for either.

**Information**
- Informs herself through the internet/smartphone
- High demand for quick and precise information, in particular in the case of an incident

**Offer and Price**
- Price is the most important decision criteria
- If the price is too high or alternatives are missing, she rather avoids the trip

**Comfort**
- Comfort and travel time is less important to her than the price
- Likes to work, read, relax, listen to music or sleep during the journey
- Internet is considered as a basic and expected during the journey

**Service**
- Service is only used at times
- Friendly employees who can share relevant journey information are expected
H.P. – Business Traveler with mobility handicap

### Life circumstances

<table>
<thead>
<tr>
<th>Name:</th>
<th>H.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveller type:</td>
<td>Business Traveler</td>
</tr>
<tr>
<td>Age:</td>
<td>42</td>
</tr>
<tr>
<td>Martial status:</td>
<td>Married, 1 child</td>
</tr>
<tr>
<td>Lives in:</td>
<td>Fresno</td>
</tr>
<tr>
<td>Profession:</td>
<td>Senior Manager in an IT-Consultancy</td>
</tr>
<tr>
<td>Driver license:</td>
<td>Car</td>
</tr>
</tbody>
</table>

H.P. lives together with his wife Bárbara (41 years) and their son Enrique (6 years) on the outskirts of Fresno in a modern house with a small garden. Enrique started school this year and Bárbara works part-time as project manager in the personnel development department of a bank. H.P. himself has to travel almost every week professionally, because as a senior manager in a large IT consultancy he is usually with the customer from Monday to Thursday. H.P. has MS and is dependent on a wheelchair. As the impairment progresses, it becomes increasingly difficult for him to drive his manually operated wheelchair. That is why H.P. uses his electric wheelchair for longer journeys.
## H.P. – Business Traveller with mobility handicap

**Business Traveler | 42 years | married, 1 child | Frankfurt | IT Consultant**

### Mobility relevant characteristics, experiences, preferences (1/3)

<table>
<thead>
<tr>
<th><strong>Preferred transport mode</strong></th>
<th>Rail, Airplane or taxi. Rental cars cannot be used by H.P. anymore.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Everyday mobility</strong></td>
<td>Mobility is very important to H.P. as he travels to his current client every Monday to return on Thursday to his family. H.P. is perfectly organized now. For longer distances, he uses his e-wheelchair, for shorter distances his regular wheelchair. H.P. has stored a second wheelchair at the hotel he frequently uses for his business travel. On weekends, H.P. uses the re-modeled family car.</td>
</tr>
<tr>
<td><strong>Experience with regional rail</strong></td>
<td>H.P. is very familiar with the regional rail, as he uses it depending on the project to get from his hotel to the client. However, H.P. is not a big fan of the regional rail, as many of the smaller stations are not handicapped accessible. For this reason, he takes a taxi if possible.</td>
</tr>
<tr>
<td><strong>Attitude towards traveling</strong></td>
<td>Traveling is part of H.P.’s job and as with his job, H.P. has a professional attitude towards traveling. H.P. and his family leave for vacation 1-2 times per year. Once in a while, H.P. and his family spend a weekend with his parents or in-laws.</td>
</tr>
<tr>
<td><strong>Experience with long-distance travel</strong></td>
<td>Long-distance travel is part of H.P.’s job. His projects are focused on Hamburg, Berlin, Munich, Dusseldorf, etc., so that H.P. needs to travel long-distances every week. He knows almost all major central stations and the airports in Germany. He prefers traveling by rail, as he can make best use of the travel time. Depending on the project site, H.P. takes the airplane once in a while. With both railway and airplane travel, H.P. depends on the mobility assistance service. Thereby his flexibility limited that was of high importance to him in the past. Spontaneous changes of transport modes are hardly accomplishable and changes in travel times always require high efforts. Spontaneous traveling is not possible for H.P. anymore, as he always needs to request the mobility assistance service by 8 pm the day before the travel.</td>
</tr>
</tbody>
</table>
## H.P.—Business Traveller with mobility handicap

**Business Traveler | 42 years | married, 1 child | Frankfurt | IT Consultant**

### Mobility relevant characteristics, experiences, preferences (2/3)

<p>| | |</p>
<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Travel time preferences</strong></td>
<td>H.P. usually uses his travel time for working: preparing meetings, planning projects, etc. When H.P. wants to relax, he uses the on-board App to watch a movie. Once in a while, H.P. orders a beer when travelling in the evening.</td>
</tr>
<tr>
<td><strong>Price sensitivity</strong></td>
<td>Low. Trips are paid by H.P.'s employer. Therefore, ticket processes are irrelevant to H.P., as long as he sticks to his travel policy. When H.P. travels for private purpose, costs are less relevant to him.</td>
</tr>
<tr>
<td><strong>Preferred tickets (railway)</strong></td>
<td>Due to the high amount of travel that H.P. has in first class, he possesses the Premium Pass. He then books the standard ticket through the online business portal of his company. For the mobility assistance service, H.P. uses the online template. As a handicapped person, the reservation of a seat is essential and for free with his disabled person's pass. For regional transit, H.P. travels for free in second class with his pass. For longer journeys, he purchases first class tickets nonetheless.</td>
</tr>
<tr>
<td><strong>Technology affinity</strong></td>
<td>As an IT Consultant, H.P. has a very high technology affinity. He owns a company smartphone that he can also use for private purpose. He uses the mobile internet to check mails during the train ride or in the airport lounge, work or research. H.P. uses some apps that support him planning his trips. He still questions, why the mobility apps are still so fragmented and not comprised in one.</td>
</tr>
<tr>
<td><strong>Social media affinity</strong></td>
<td>As with technology, H.P. is also a proficient user of social media. He uses LinkedIn for his business contacts (so that headhunters can find him) and facebook to stay in touch with friends.</td>
</tr>
</tbody>
</table>
H.P. – Business Traveller with mobility handicap

Business Traveler | 42 years | married, 1 child | Frankfurt | IT Consultant

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**Mobility relevant characteristics, experiences, preferences (3/3)**

| **Environmental awareness** | H.P. has noticed that environmental awareness is omnipresent. Until the atomic disaster in Fukushima, H.P. never worried about atomic energy. Now he is more critical towards atomic energy. Of course, H.P. recycles his trash. Other than that, this topic does not concern him. |
| **Information demand** | H.P. is an experienced rider and therefore does not worry in case of incidents. The mobility assistance service at the station and airports is usually flexible enough to get him to his final destination. Nevertheless, H.P. constantly informs himself through various apps to coordinate with the mobility assistance service early enough if required. |
| **Safety demand** | H.P. keeps his delay alarm on when traveling and always ensures a time buffer for important meetings. |
| **Comfort demand** | H.P. is a frequent traveler. He usually travels in first class (rail) or business class (airplane). As first class traveler, H.P. enjoys the additional leg-room and ability to work. He also likes the free newspaper. A seat is required for H.P. |
| **Travel limitations** | H.P. cannot switch spontaneously between transport modes. Since H.P. needs to travel with his wheelchair, he cannot take long-distance busses. Rental cars are also not an option, as he depends on specific car modifications. When ordering a TNC or taxi, H.P. indicates his preference for larger cars. When travelling with his e-wheelchair, the transport service requires a ramp. |
F.R.—Urban Traveler with visual impairment

Urban Traveler | 33/32 years old | living in partnership, no children | Stockton | Insurance Expert

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<thead>
<tr>
<th>Life circumstances</th>
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<tbody>
<tr>
<td>Name:</td>
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<tr>
<td>Traveller type:</td>
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<tr>
<td>Age:</td>
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<tr>
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<td>Lives in:</td>
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<tr>
<td>Profession:</td>
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<tr>
<td>Driver license:</td>
</tr>
</tbody>
</table>

Since his college graduation (business administration), F.R. lives together with his girlfriend A.M (32) in Au-Haudhausen. A.M. works for a marketing agency and currently informs herself about part-time work models. Felix is a risk manager with a big insurance company.

Since his birth, Felix is blind and relies on the eyes of third people, mostly on his guide-dog Caeser, but in the future on Google. Felix is a beta-tester of the Google-Glass with haptic navigation signals and text-to-speech features.

A.M. and Felix haven’t owned a car for years.
JM – Rural Traveller with heavy visual impairment

Rural Traveler | 49 years | married, 1 child | Hoppenrade | Sales person

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<tr>
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</thead>
<tbody>
<tr>
<td>Name: JM</td>
</tr>
<tr>
<td>Traveller type: Rural Traveler</td>
</tr>
<tr>
<td>Age: 49</td>
</tr>
<tr>
<td>Martial status: Married, 1 child</td>
</tr>
<tr>
<td>Lives in:</td>
</tr>
<tr>
<td>Profession: Sales person</td>
</tr>
<tr>
<td>Driver license: She returned her driver license. B. and S. own a car</td>
</tr>
</tbody>
</table>

JM. lives together with her husband B. (50) and their daughter S. (19) in their parent’s house in XX. S. currently completes professional training as a hair dresser master in Tracy. B. works as a mechanical engineer in Livermore. JM. stopped working for a few years when S. was born, but has returned to working as a sales person in a drugstore in Tracy.

Due to an unsuccessful eye surgery, JM. is left with minimal vision. She therefore depends on a white stick and can only recognize outlines or read with specific vision aids from very near distance.
EB—Silver Traveler with wheelchair

Silver Traveler | 73 years | divorced, no children | Buke | Retired

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</table>

E. lives in her birth place Buke, between Paderborn and Bad Driburg. E. is a retired elementary school teacher and well integrated in her community. E. has just undergone a hip surgery and has trouble hearing. The hip surgery affected E. in a way that she can now only walk a few steps without assistance. For longer distances, E. uses her foldable wheelchair.

She collects bahn.bonus points (loyalty program of DB) and redeems them in the café car. E. has a high pension and lives in her own property (parent’s house), that she currently gets renovated to accommodate her special mobility needs.
Ratna Amin
Principal / DB Engineering & Consulting

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