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# BaggageLess – Customers' needs regarding Baggage logistic systems

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# Initial position

*„As long as the railway system is not able to replace the car boot suitable it will not be striking successful.“*

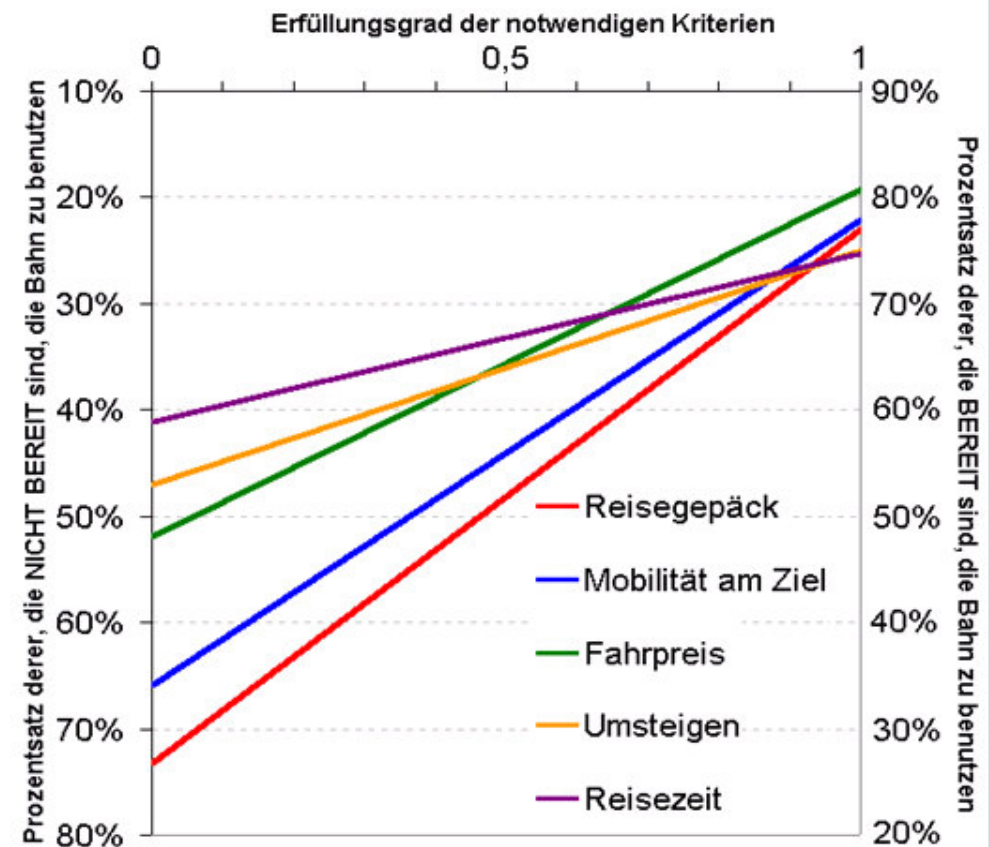
(cit. Univ.Prof. Engel)

Baggage is the main reason why cars are used instead of sustainable modes of mobility. This counts for travels as for daily mobility.

# Influence of baggage

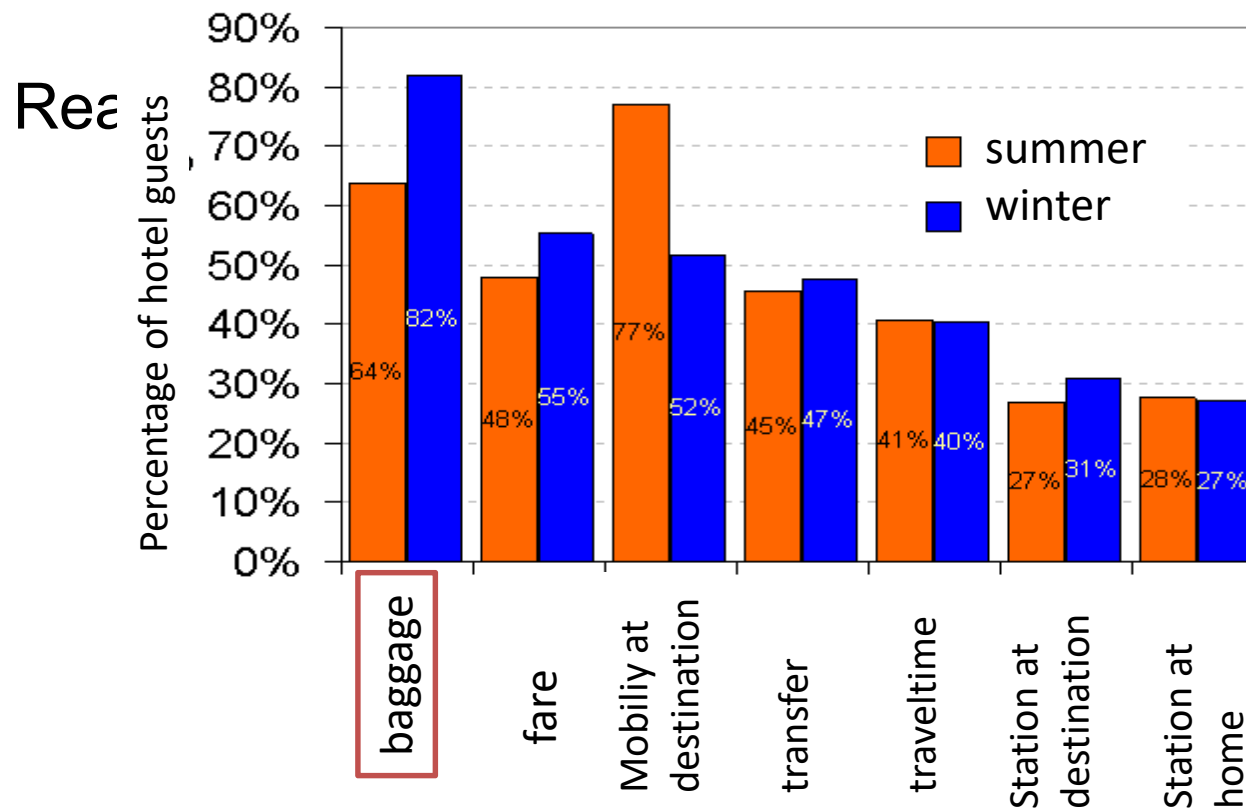
Baggage elasticity  
elasticity

Baggage	0,685
Mobility at destination	0,655
Travel fare / price	0,630
Transfer	0,469
Travel time	0,386



**GepäckLoS**

# Influence of baggage



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# Effects by baggage

**Journeys:** The train is often not taken because the baggage transport is felt too uncomfortable (also e.g. for way to airports)

**Daily mobility:** shopping, daily trips, taking along „bits and pieces“ → *car instead of sustainable mobility*

# Actual baggage logistic systems

## ***Journeys:***

- Baggage-Check-In (air travel)
- Rail-Air (baggage check in)
- Checked baggage between rail stations (CH)
- Door-to-door baggage service (home delivery/shops)

## ***Daily routine:***

- Delivery service (home delivery)
- Pick-up in partner shops, post shops etc.
- Pick-up machine

# Problemes of actual systems

- Unflexible
  - Large time slot
  - Personal presence required
  - Long transport duration
  - Not on weekends
- Expensive
- Actual systems are more or less „crutches“—therefor uneconomical

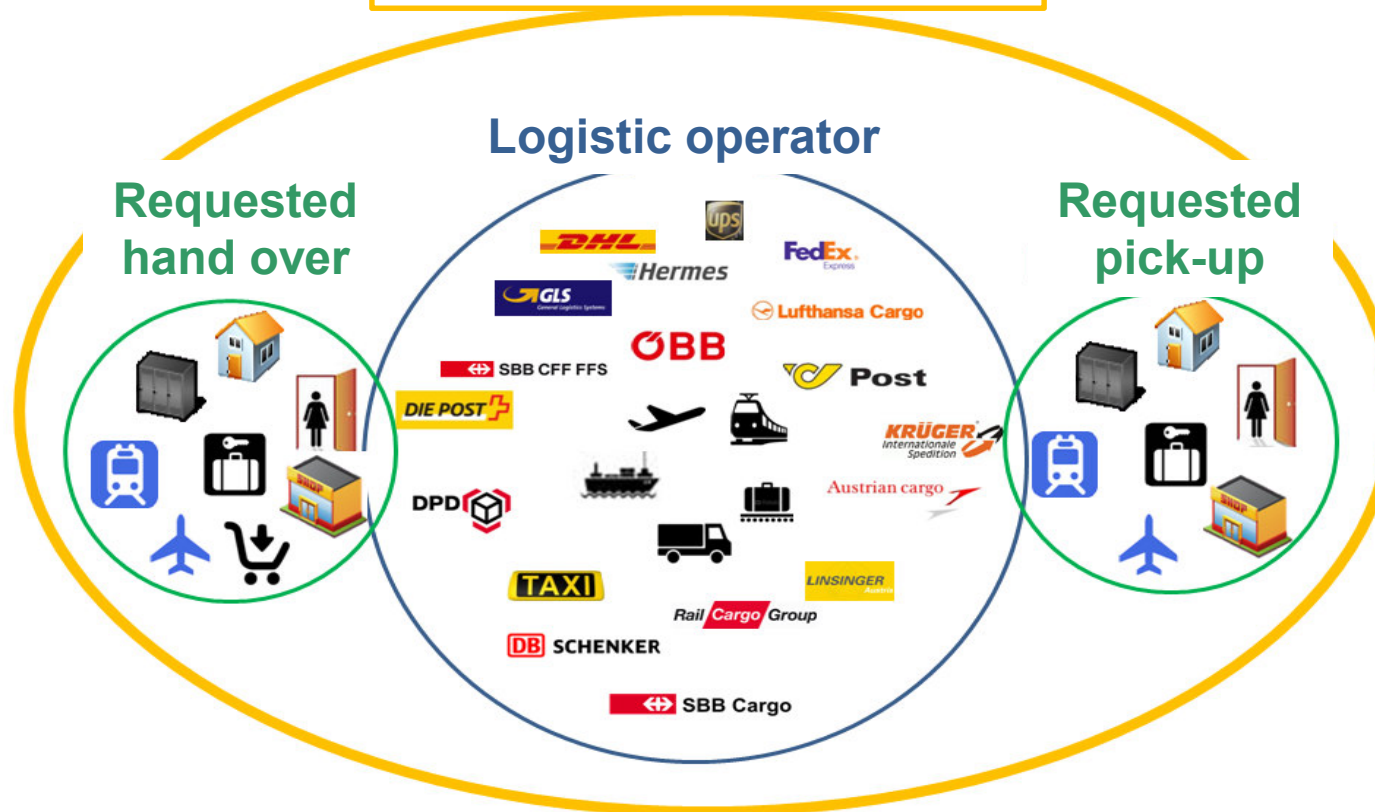
# Aim of project Gepäcklos

- **Conceptual design** different **scenarios** (also operation model)
- Definition of **customers needs** and **expectations**
- Definition of **technological** and **logistic challenges**
- Point out **IT-challenges** and solutions
- **Evaluation** of different systems regarding efficiency, customers benefits, feasibility, meaningfulness and general benefits
- Point out **technical challenges**, which are not or hardly realizable at the moment, show scenarios for **future developments**

# Operator model

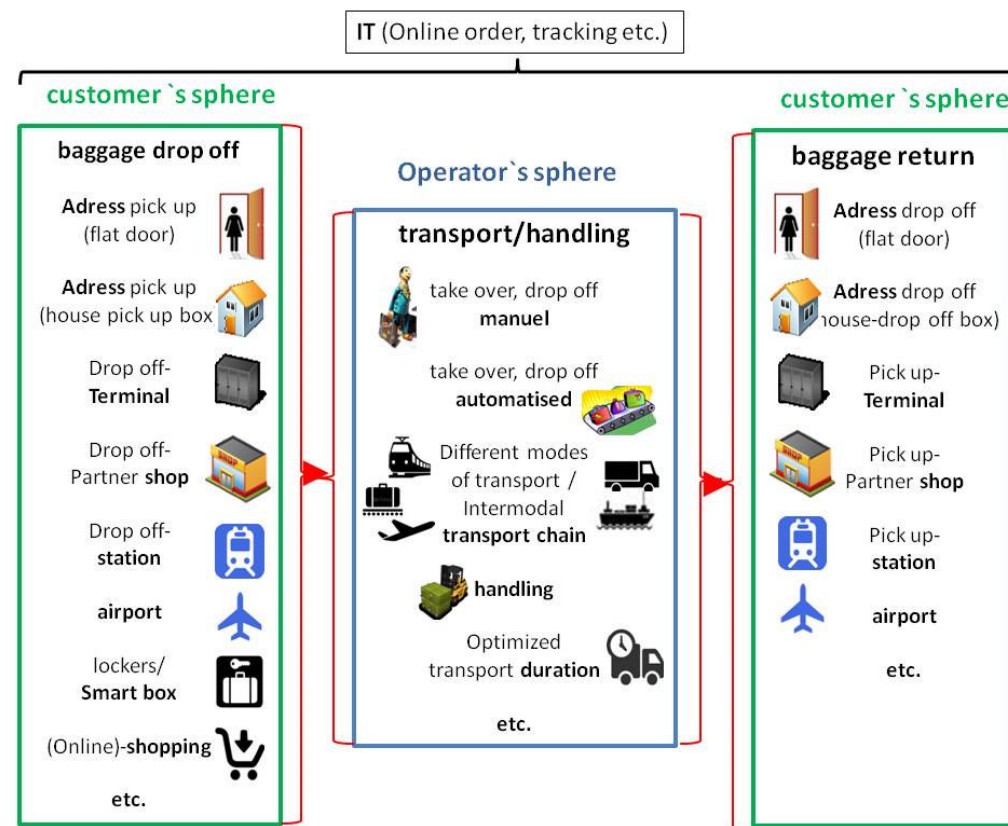
Baggage logistic operator as  
superordinate One-Stop-Shop

→ like transport association  
in passenger transport



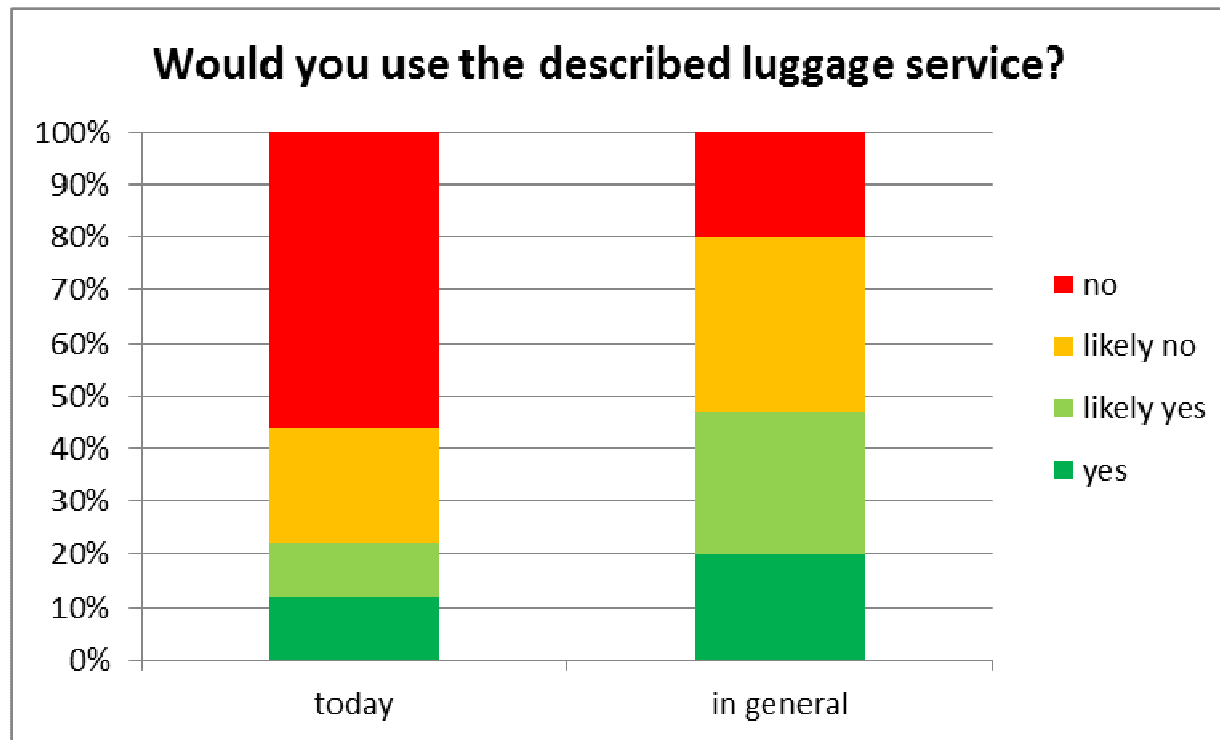
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# Challenges in customer`s & operator`s sphere



# Interest on a luggage service

On train journeys



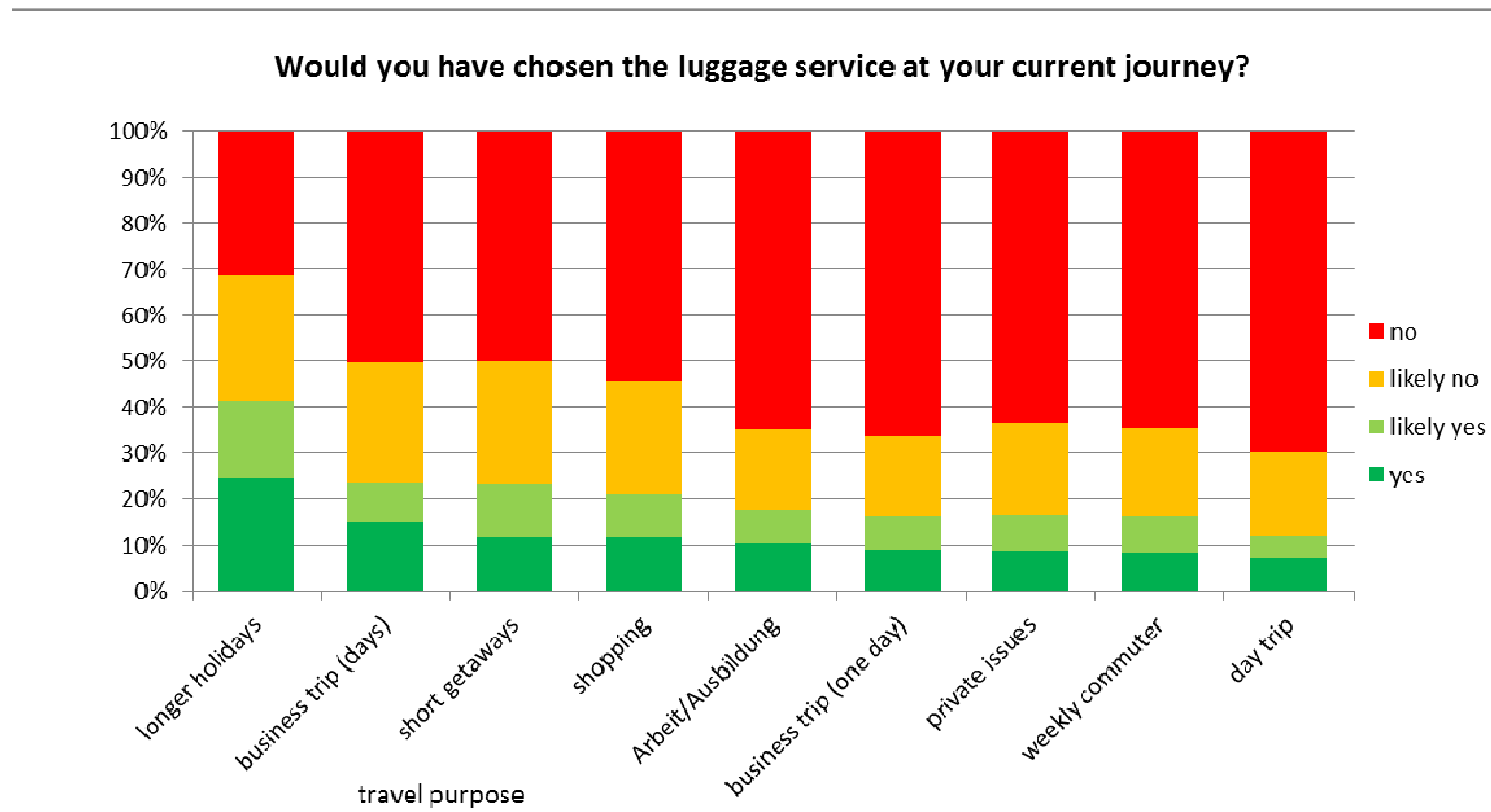
# Interest on a luggage service

On train journeys –depending on pieces of luggage



# Interest on a luggage service

On train journeys – depending on the travel purpose



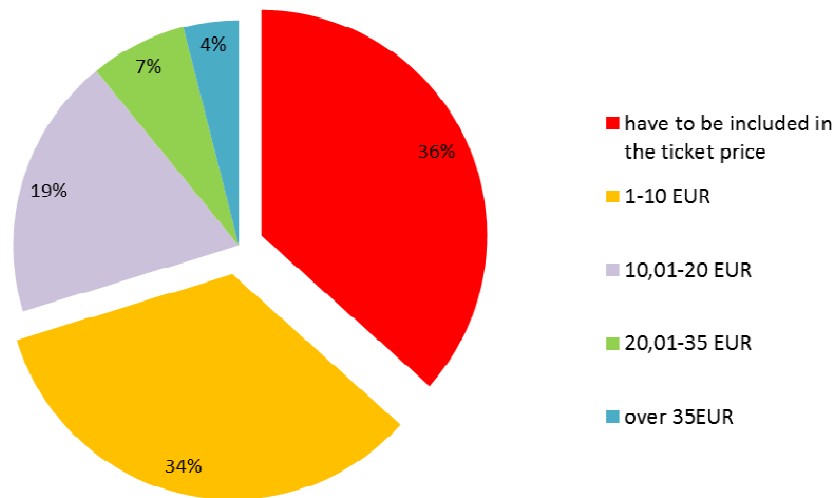
# Interest on a luggage service on train journeys

Higher-than-average interest:

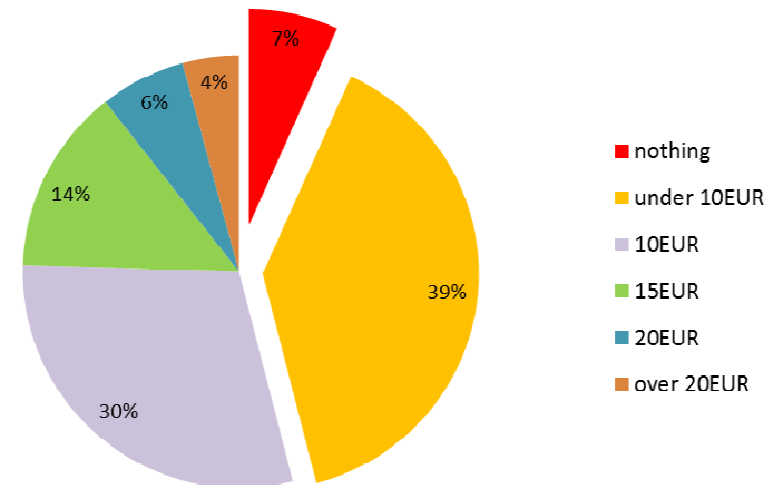
- Persons with hindrance because of their luggage
- Travellers with babies and children (between 1 and 6 years)
- Size and amount of the luggage
- Physical disabilities
- Arriving with the taxi at the train station

# Willingness to pay for the service

Willingness to pay on train journeys



Willingness to pay in the shopping malls and street



# Willingness to pay

Which groups had an higher willingness to pay?

- Travellers with a baby or children
- Travellers having bicycles with them
- Travellers with a higher number of large pieces of luggage
- Passengers travelling first class

# Needs and demands on train journeys

Delivery directly at the residence door [45%]

- Problem: Presence is necessary; destination adress is vacant
- Earliest pickup of the luggage: max. 6h before the start of the journey; only 25% accepted a pickup the day before
- Delivery the same time as the person is arriving; latest: the same day

Delivery at the train station [47%]

# Needs and demands on train journeys

## Flexible Pickup and delivery

- Chosen time slot (36% would pay extra)
- Size of the time slot: 2h
- Delivery also early in the morning, in the evening and at the weekends
- Technical systems for pickup and delivery (e.g. special boxes and delivery terminals) [50% are interested!]

# Conclusion

Luggage is a certain reason to use the car!

Surely, there is a well existing potential for luggage services! **But:**

- It has to be very flexible (delivery, pickup)
- The transport of the luggage should be at the same time as the traveller travels.
- The willingness to pay a profitable price is low.

# Thank you for your attention!



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