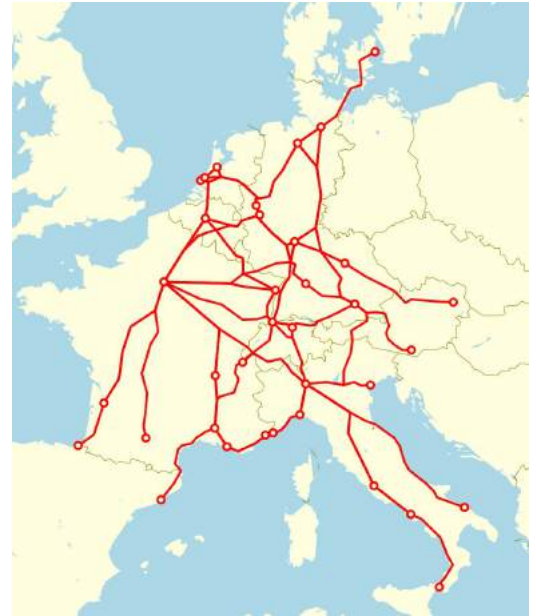


A design vision towards seamless European train journeys

Master thesis by Laura van Overhagen

50 years ago

European Travel



2X1 FLIGHTS



Vliegensvlug naar de sneeuw

enkele reis vanaf

€29



THE LOWEST FARES IN EUROPE



 **RYANAIR**
LOW FARES. MADE SIMPLE.

 ALLOCATED SEATING

 FREE 2nd CABIN BAG

 BUSINESS PLUS

 NEW APP

Today

European Travel



Negative impact on environment



Trains as a sustainable alternative

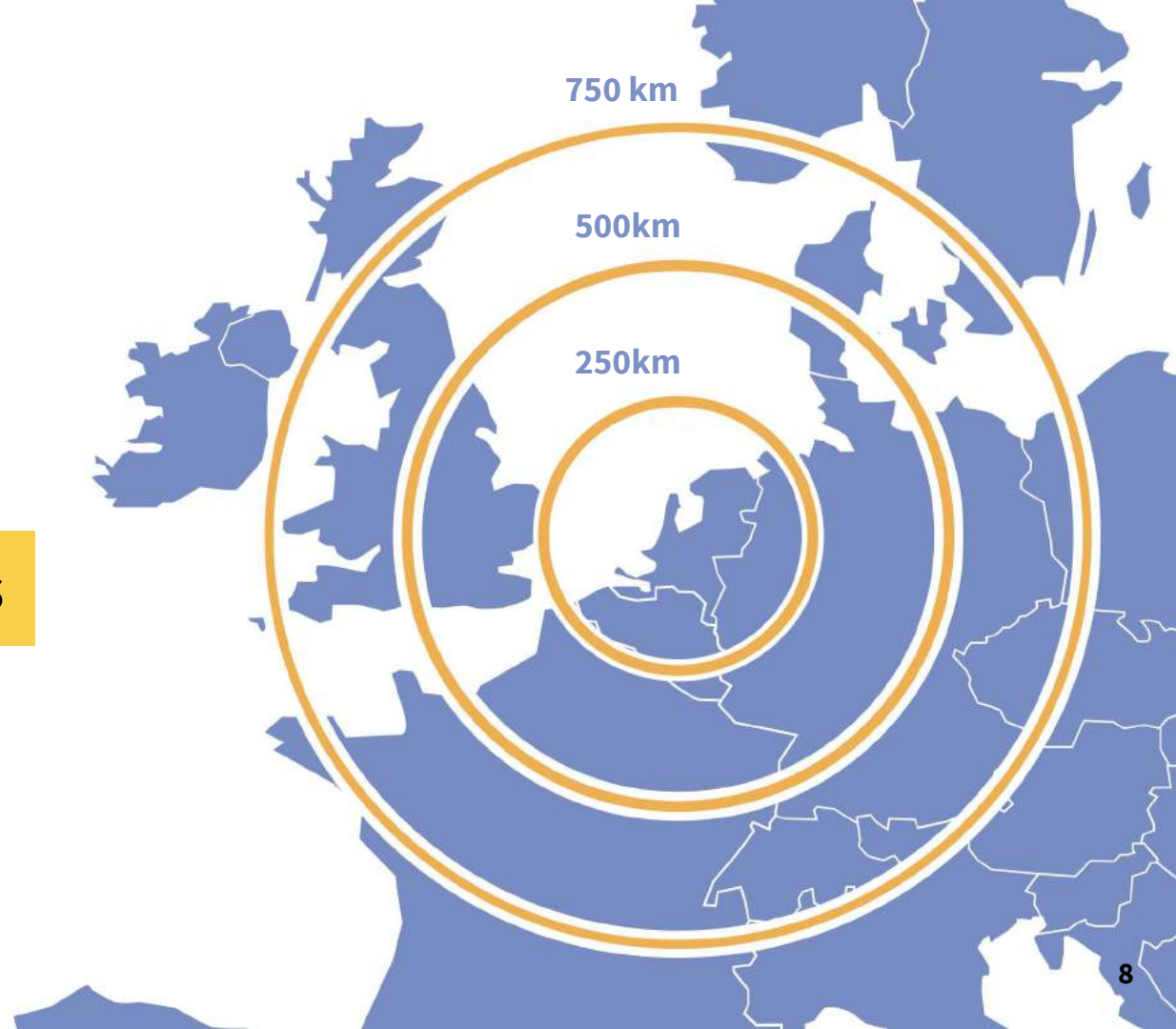




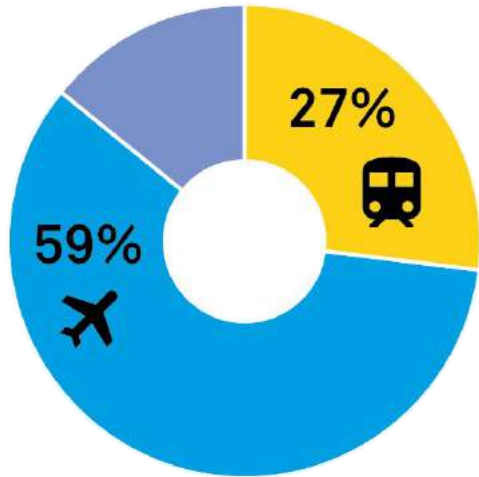
Research

Large impact area

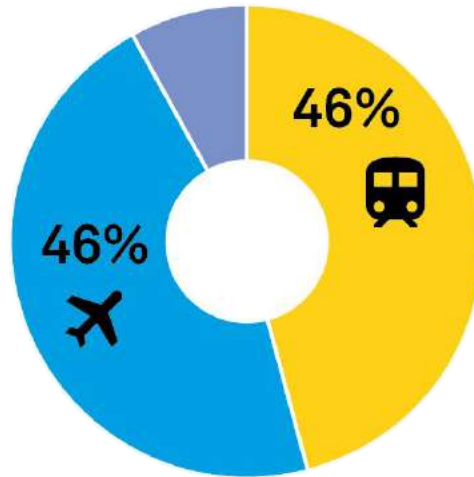
to substitute flights



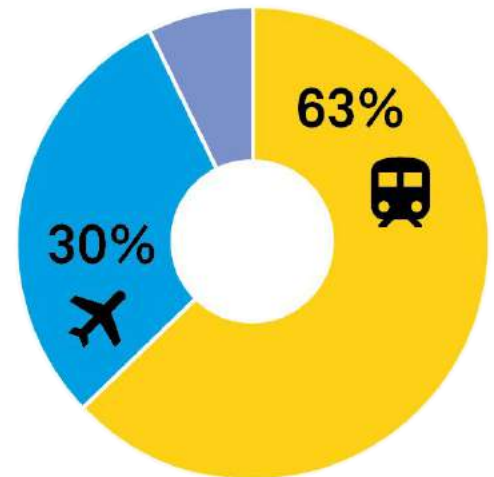
Potential market share of trains



Current

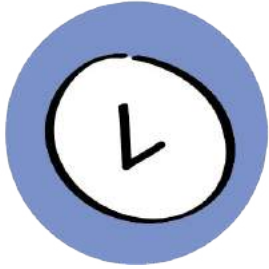


Scenario 1

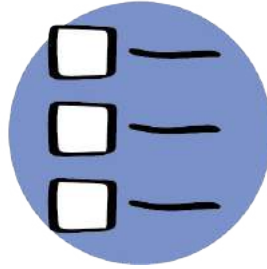


Scenario 2

Modality choice factors



Travel time



Travel
possibilities
per day



Ticket pricing



Ease and
comfort

Car travel comparison

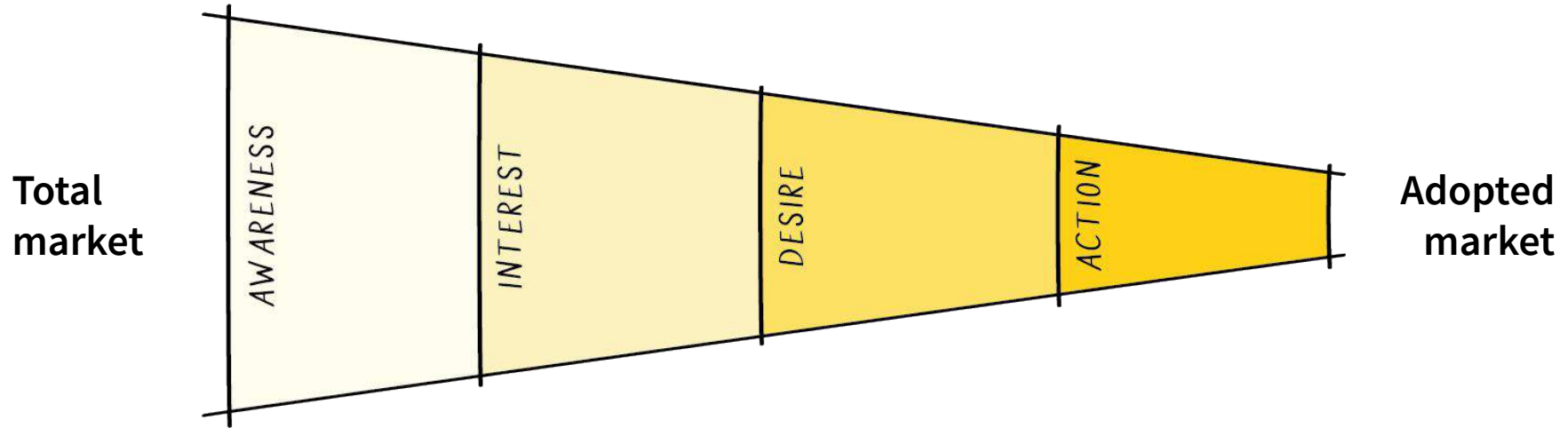


Preferred modality

per distance area

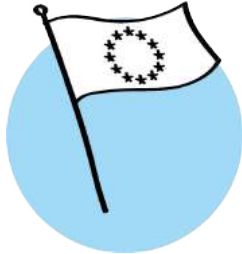


Customer adoption funnel



**So why are improvements to increase the
adopted train market not being made right now?**

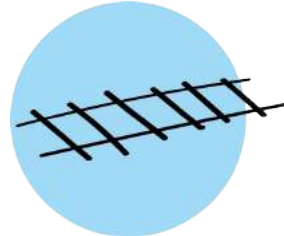
Many many stakeholders



European
Commission



Governments



Infrastructure



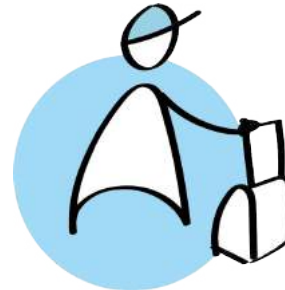
Stations



Carriers



Distributors

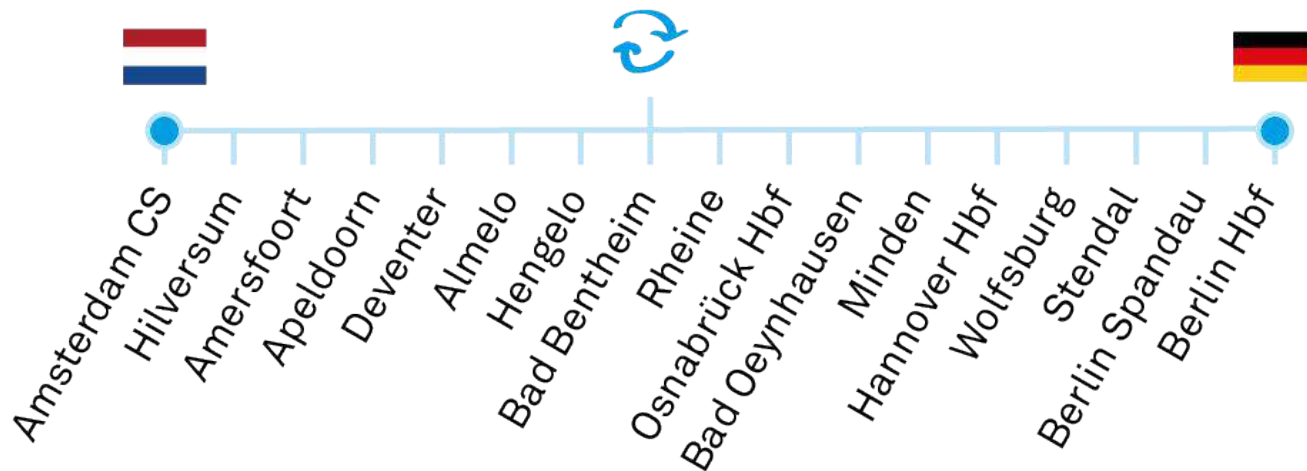


Travellers

National concern has priority



Carriers



Different business models



Carriers

Concession

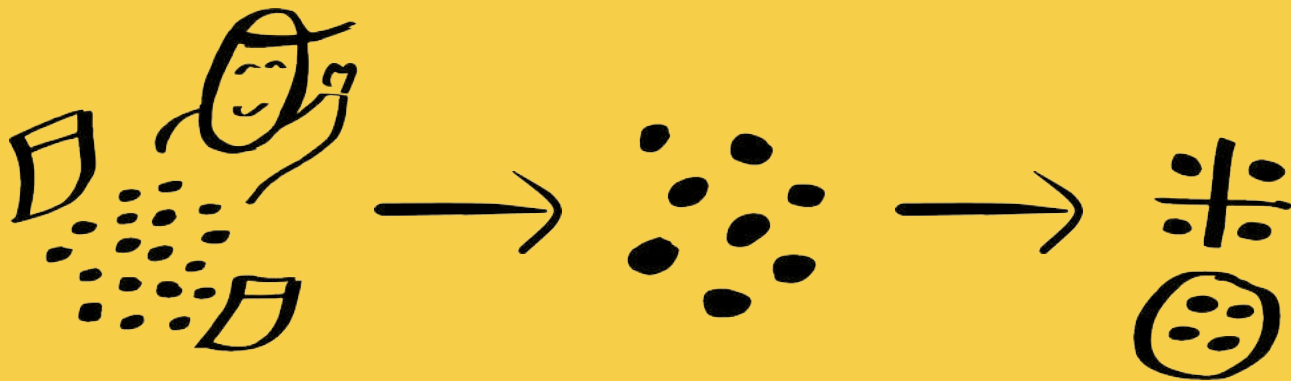


Open access

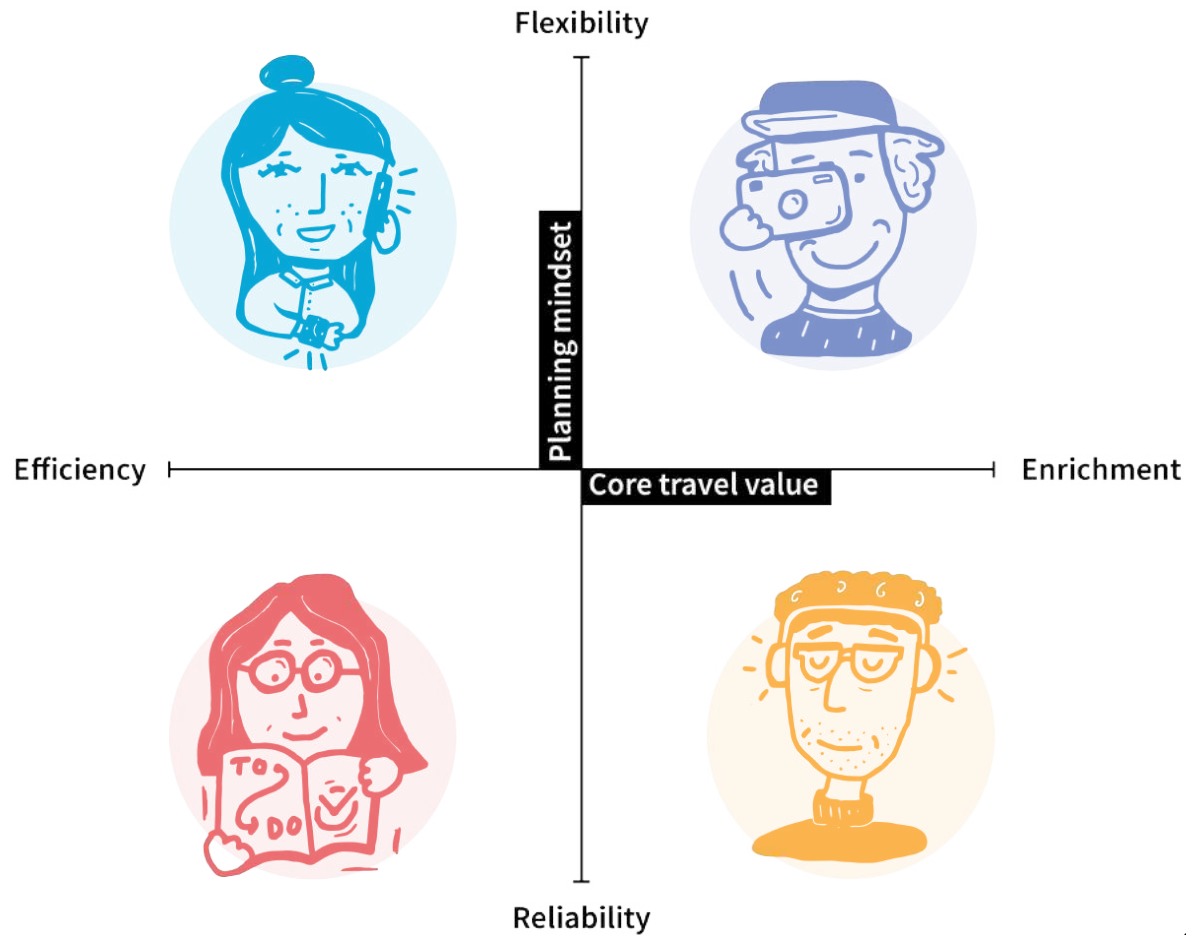


How could the future context look like of international travel in Europe in 2040?

ViP approach



Framework



4 travel attitudes



**Savvy
navigator**



Explorer



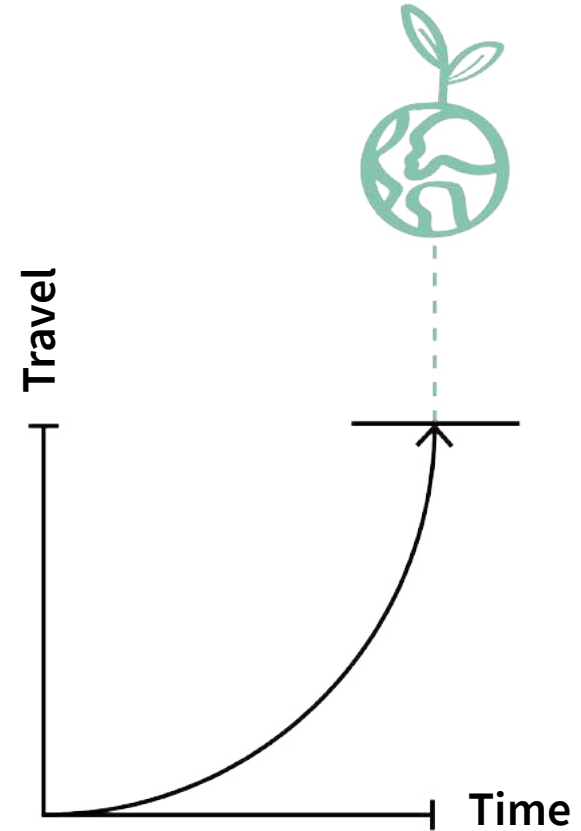
**Deliberate
planner**

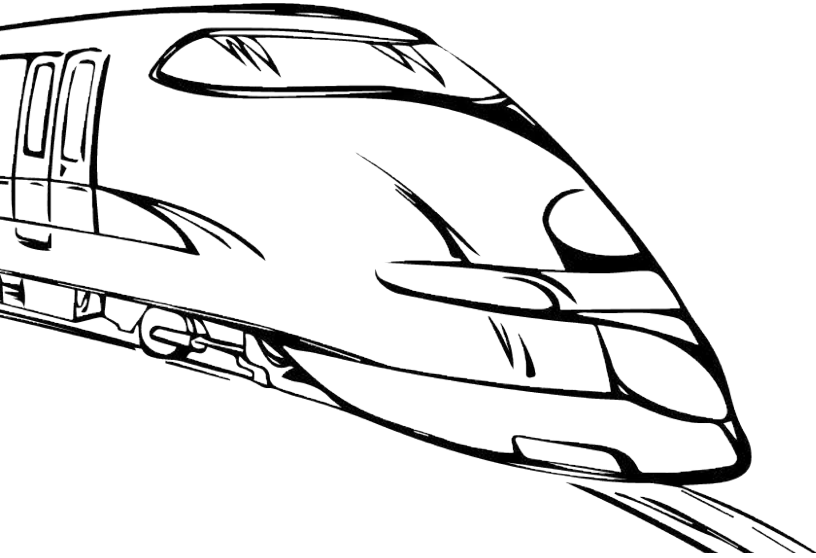


**Comfort
seeker**

2040

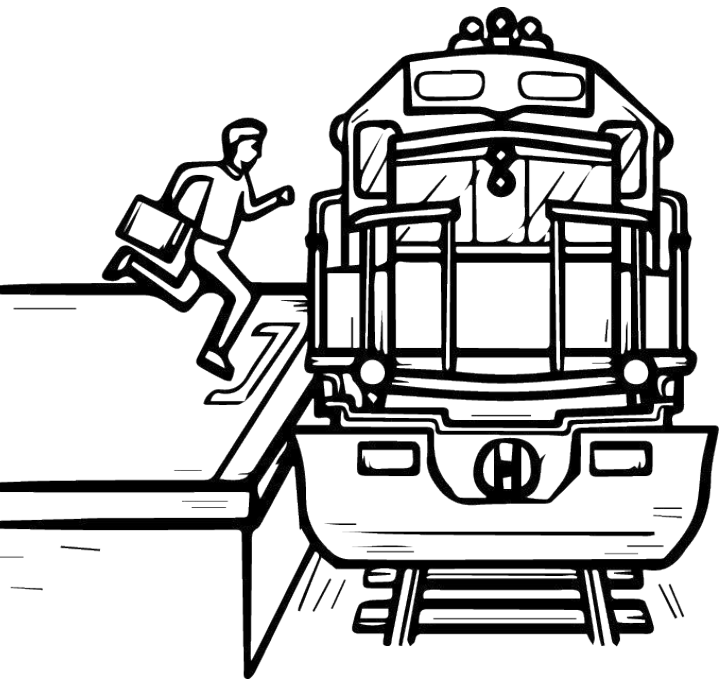
Sustainable travel transition





Design mission

I want to stimulate people who travel internationally to do so by train in order to reduce the carbon footprint of travelling.



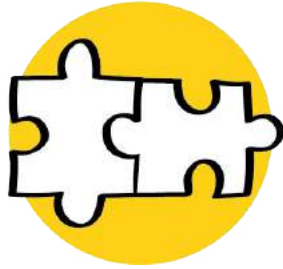
Design goal

Design a future **travel experience**
that makes European train journeys **as easy as**
air and car travel
and puts the train as **default option** for
European travel

Design criteria



Flexibility



Seamlessness



Control



Enjoyment



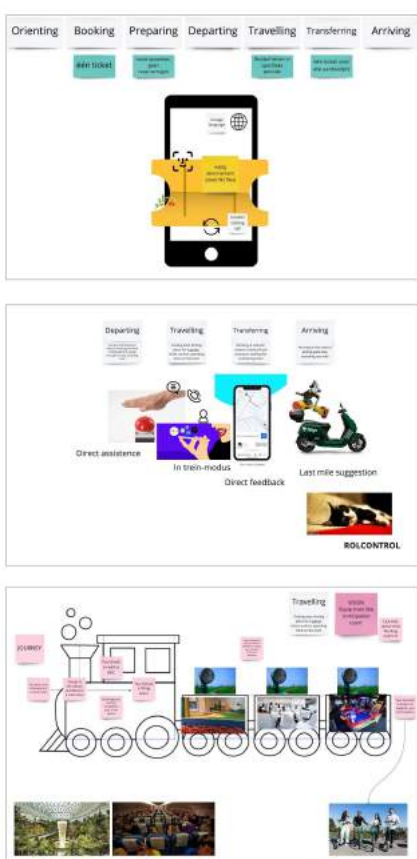
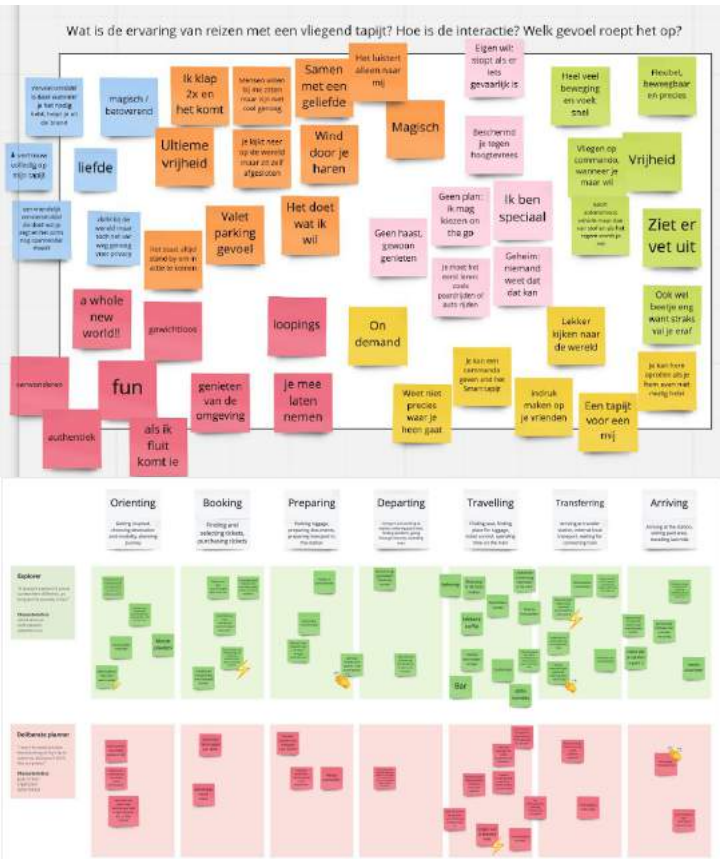
Design

Interaction vision



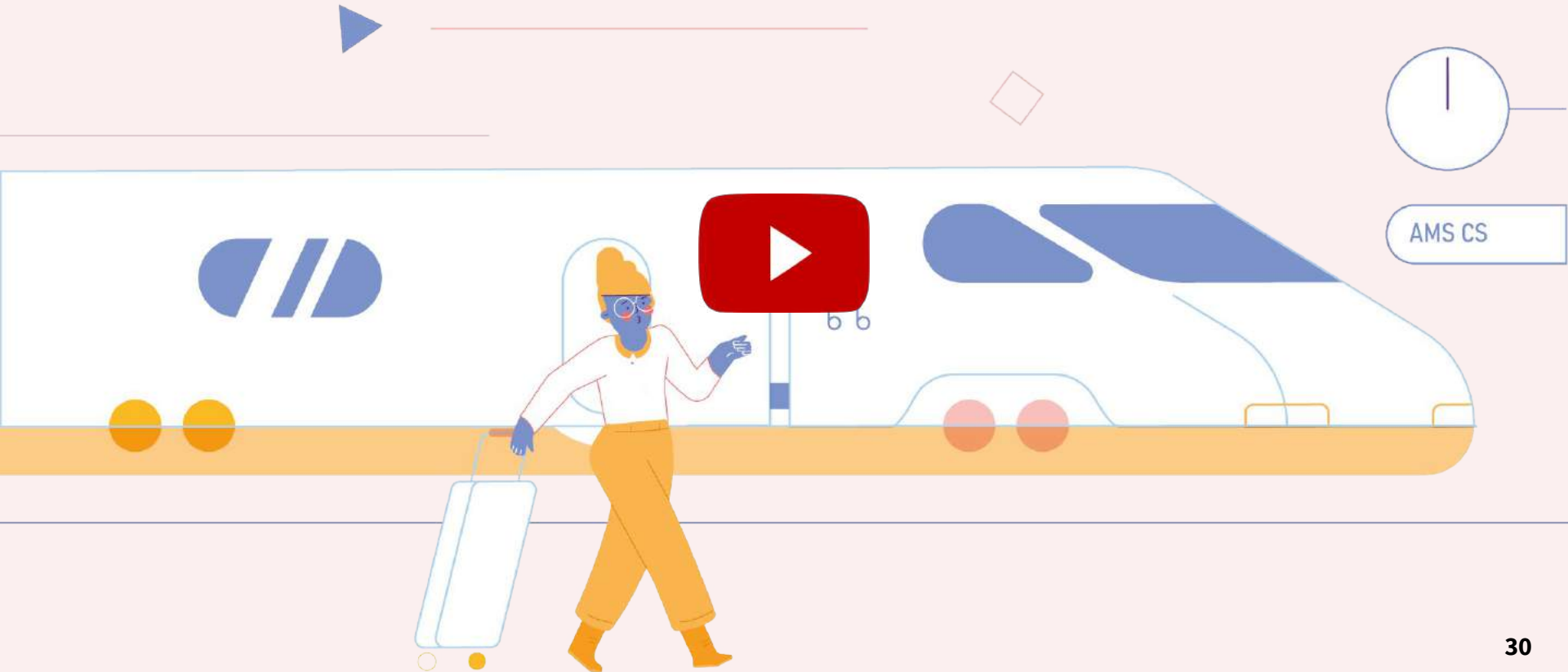
Travelling by international train
should feel like a magic carpet ride

Design phase



**So what could future European train
journeys look like?**

Seamless European train journeys



Vision elements



**Just hop on
the train**



Pay as you go



**Travel from
door to door**



**Information on
crowdedness**



**Standard
journey fares**



**Personal travel
overview**



Just hop on
the train



Pay as you go



Travel from
door to door



Information on
crowdedness



Standard
journey fares



Personal travel
overview



Flexibility



Seamlessness



Control



Enjoyment





Strategy

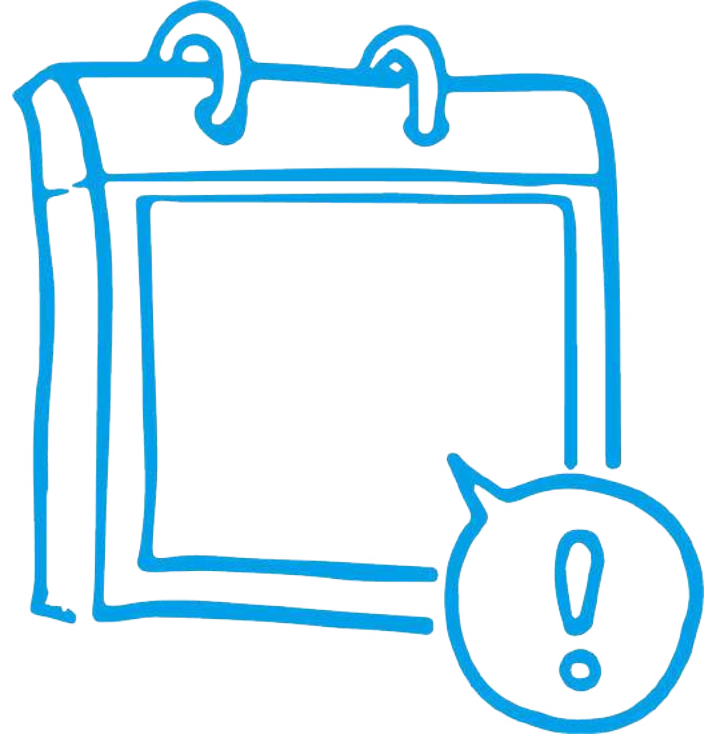
Required support systems

- ▶ Transparent European tariff system
- ▶ Location-based travel
- ▶ Be-In/Be-Out technology

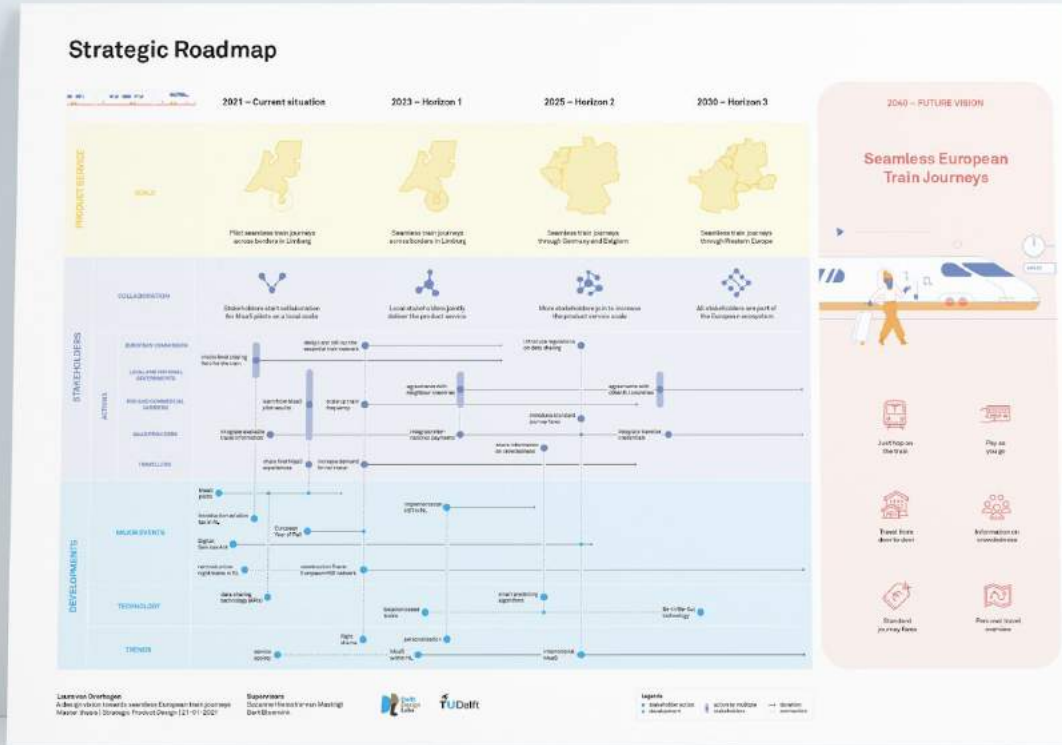


Required preconditions

- ▶ Yield ticketing removed
- ▶ Train frequencies scaled up
- ▶ International trains integrated in MaaS

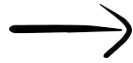


Strategic roadmap



Incremental scale increase

2021
Current
situation



2023
Horizon 1



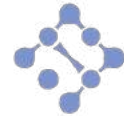
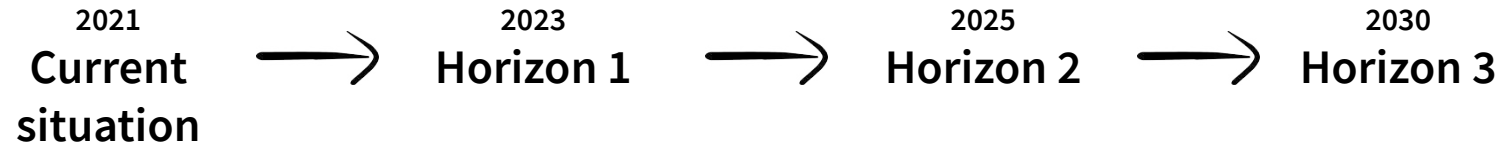
2025
Horizon 2



2030
Horizon 3



Growing stakeholder collaboration

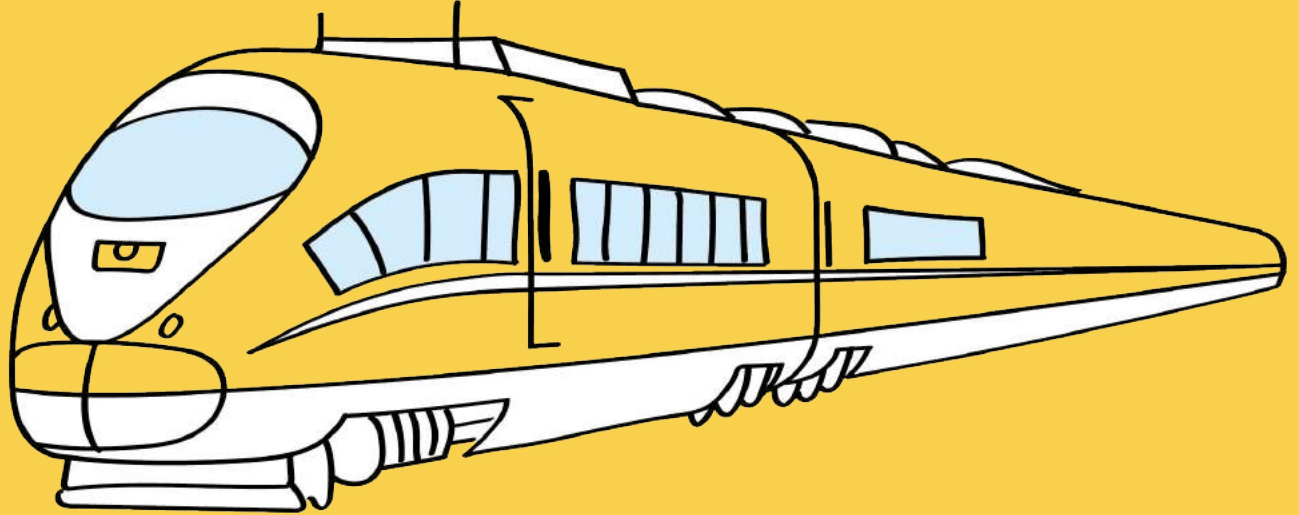


More active role for EC

- ▶ Create level playing field for air and train travel
- ▶ Design essential rail network
- ▶ Introduce regulations on data sharing



Thank you!



Don't hesitate to contact
me for further questions

lauravanoverhagen@hotmail.nl