



Appendix

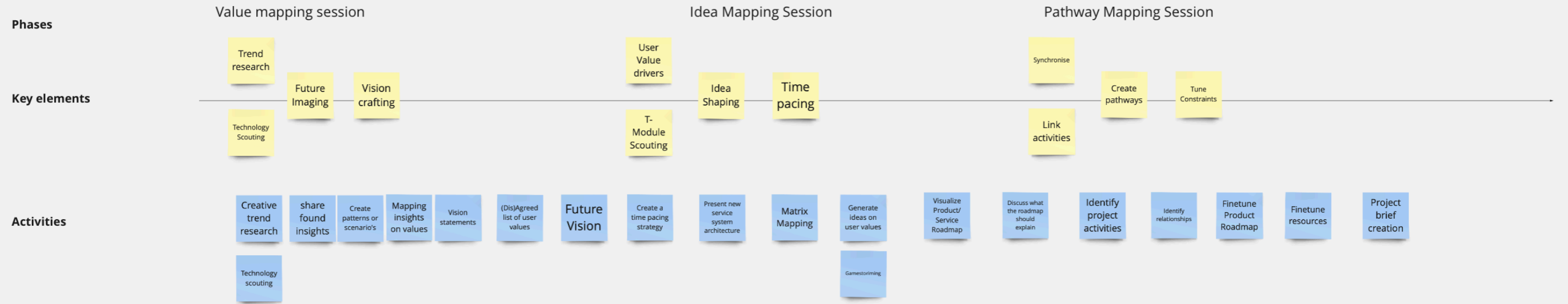
Celine Tesselaar

The Long Now:
Strategic Design Workshops for
Non-Designers

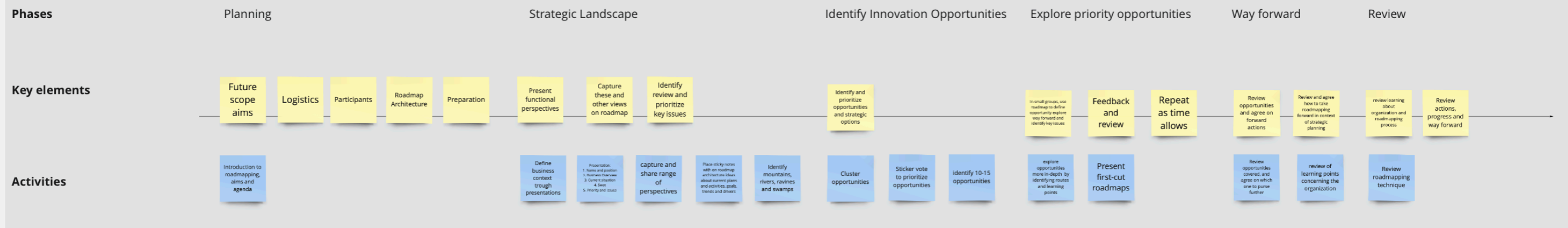
Appendix A

(Design) Roadmapping Workshop approaches

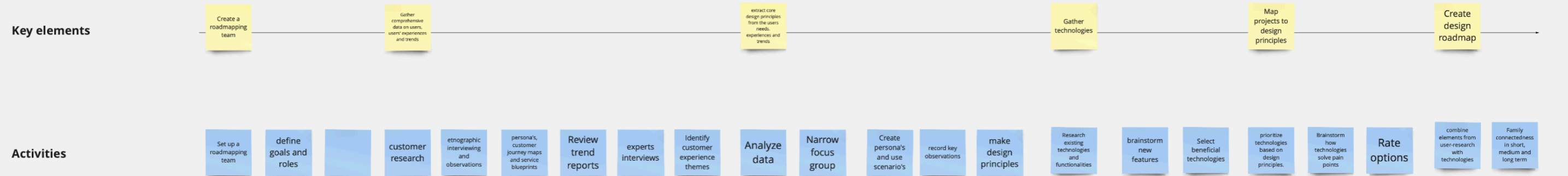
Design Roadmapping By Lianne Simonse (2018)



Phaal (2007)



Kim et al. (2018)



Appendix B

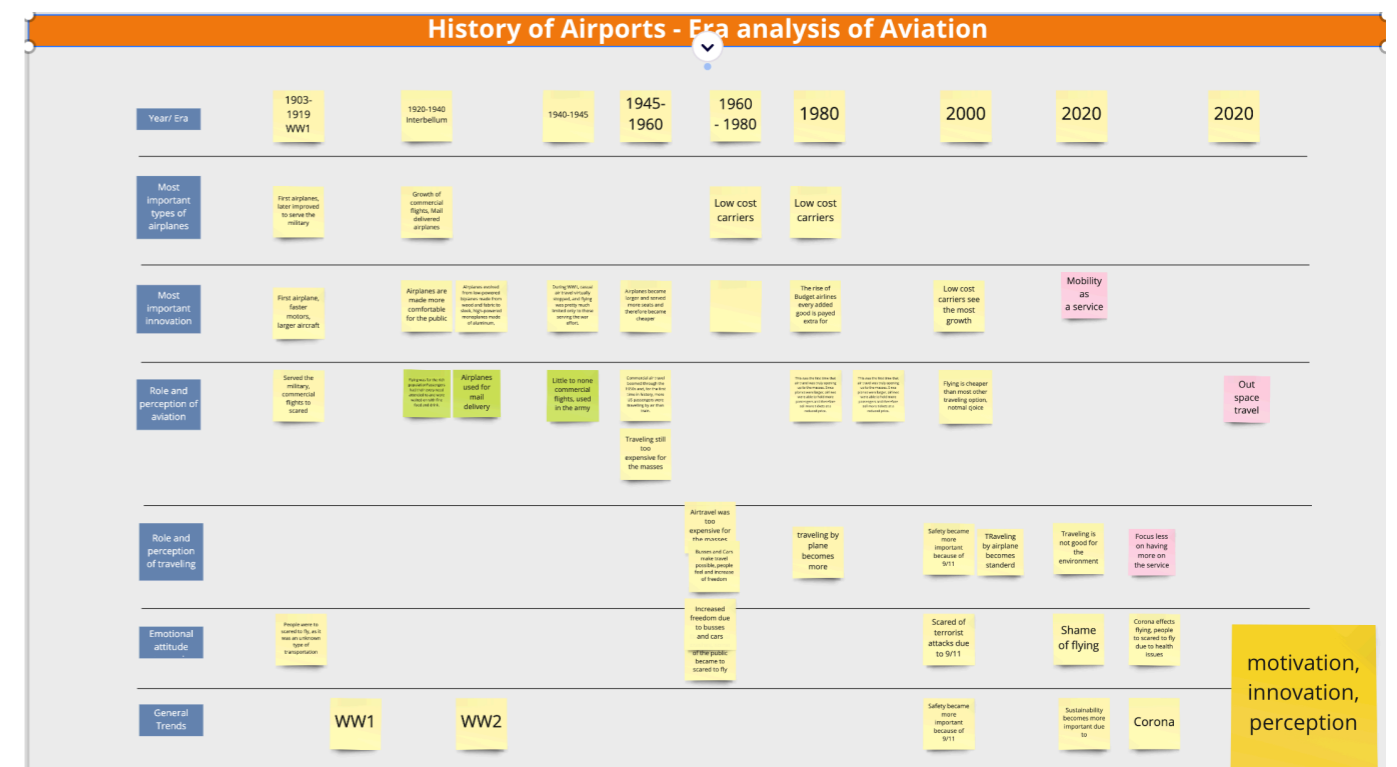
Era Analysis

Appendix A Design roadmapping workshop approaches:

Simonse (2017) outlines the design roadmapping process in three phases: value mapping, idea mapping and pathway mapping. Each step is shaped like a diamond, which shows the converging and diverging steps, with a direction outcome of each step. The process has a strong focus on creating a future vision as a point on the horizon, building up out of interesting trends and developments in a relevantscope for the company.

Kim et al. (2018) explains a five steps roadmapping process: The creation of a design roadmapping team, identifying and prioritizing customer experiences, identifying technologies and mapping them towards design principles and the creation of the design roadmap. In this roadmapping process there is more focus on user-research to establish user- experiences and finding technologies that support those experiences. It moves away from being feature-driven to experience driven (Kim et al. 2015). By focussing on user research, organizations develop stronger capabilities in design research, e.g. interviews and observations, but also in representing the users needs to the rest of the organizations. In these representations, often techniques derived from service design are being used (Kim et al.2018);

Lastly, Phaal, Farrukh and Probert (2007) make use of a workshop based approach to create a strategic roadmap. There are 6 stages in the S-plan: Planning, strategic landscape, identifying innovation opportunities, exploring priority opportunities, way forward and review. Although this workshop does come from a market-driven perspective, there are interesting elements in this approach. The key reason for success in these workshops is considered in using the roadmap continuously throughout the workshop as a reference point and as common language. Also did the participants add in every step to this roadmap, creating their own visual representation.



motivation, innovation, perception

Appendix C

Interview Guide Experts in mobility

Introduction

Zou je mij ook iets kort over uzelf vertellen:
Welke richting werkt u ?
Betrekking tot het onderwerp

Trends en Ontwikkelingen

Zijn er interessante trends of ontwikkelingen gaande binnen het domein waar U werkt?
Zijn er projecten waar u nu aan werkt waar interessante ontwikkelingen in zitten?
Welke ontwikkeling ziet u over de afgelopen tijd?
Zijn er ook constante?
Zo ja welke?
Waarom zijn die dan constant?

Reisbeleving

We hebben het veel en vaak over de reiziger ervaring maar:
Hoe ziet de ideale reizigers ervaring eruit (Op airports, met railway solutions)
Wat is uw visie op die ideale reizigers beleving
Welke manieren wordt dat nu al gerealiseerd ?
Op welke punten zou dat nog verbeterd kunnen worden?

Toekomstvisie

Hoe denkt u dat we reizen 30 jaar van nu?
Welke middelen van transport gebruiken we?
Hoe ziet het begrip “vakantie” er dan uit?
Welke manieren van reizen zullen verdwijnen?
Hoe bewegen we ons voort in die nieuwe wereld?

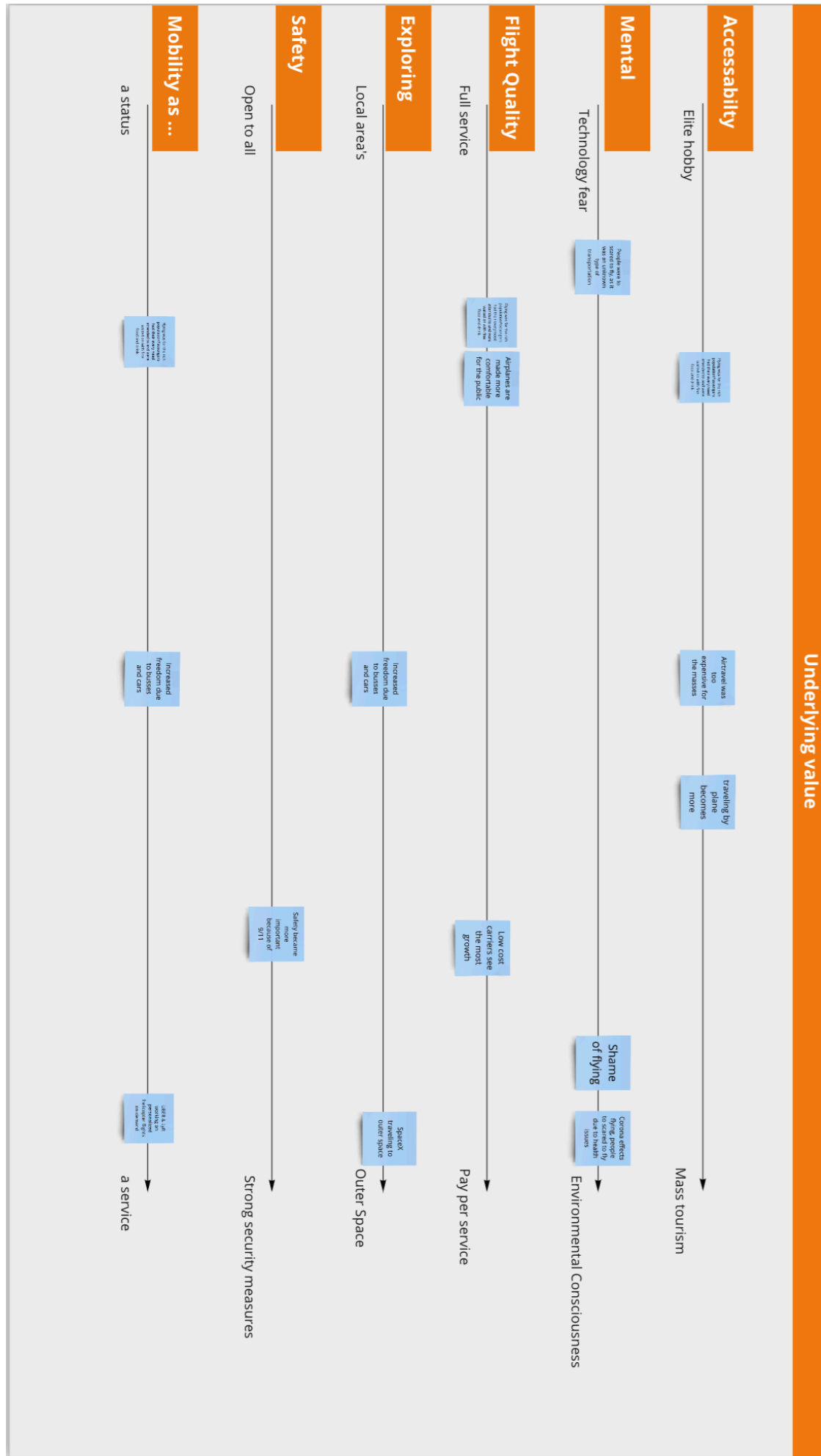
Betrekking tot vaderlande

Vaderlande zit natuurlijk in de logistieke afhandeling en bagagesystemen op airports, maar ziet u ook nog concrete kansen voor dit logistieke stuk in die visie?
Hoe zou bagage of cargo in de toekomst kunnen zijn?
Welke markten of ontwikkeling zouden hiervoor interessant kunnen zijn voor vaderlande?

Afsluiting

Wat zijn de belangrijkste take-aways van dit gesprek?
Is er nog iets wat u de deelnemers wil meegeven in het ontwikkelen van een nieuwe strategische future vision voor vaderlande Airports?

Heel erg bedankt voor uw tijd!



Appendix D

Trendkaarten



VR Travelling

Traveling from your home to anywhere in the world through 1 click. Due to immersive technology, we can be anywhere in the world with the blink of an eye.

VR-trip tours musea and VR holidays



Exploring the Unknowns

Traveling to unknown places or even further, to space. Nothing seems impossible.

Space X



On-demand Delivery

Packages are getting no longer delivered to your house, but to you. No matter where you are or what time, you will get your package right where you want it.

Sidewalk robots and Drone delivery



Traveling adds to Life Values

More companies see that traveling should not only bring you from A to B, but should also provide with a service that enriches your life and values

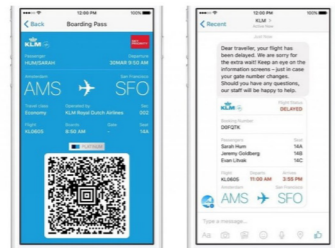
"Passenger for example say they want to travel on-time, but what they really care about is being acknowledge and have freedom" - Head Innovation NS



Flexibel Travellers

We become more flexible in choosing different modes and choose the one that fits our journey of that day the best. Also the amount of modalities to choose from increases.

Modalities like Car to go, Felyx or Public transport



A Personalized Travel

Personalization will be the key, providing passengers with what they want. Unique travelers call for unique experiences.

Travel assistance
Personalized chatbots



Baggage as a Service

Get your luggage picked-up from your home and delivered at your final destination. No more check-in, carrying your heavy bag or waiting at the reclaim carousel

Baggage as a Service at Corendon
Inhouse Design Team



The Return of the Train

Growing investments and interest in an European Railway Network, making traveling by train more attractive

European trainnetwork



Touch Free Travelling

No more frictions in the journey. No more queues and crowded terminals, all existing issues will be eliminated due to new technologies

Digital queuing
Biometrical face recognition



Vehicles become Greener

Vehicles of the future will no longer make use of fossil fuels, but of other more sustainable resources.

Electrification of vehicles, Renewable energy



Expansion of Import of Goods

We are buying more than ever of the internet, all these products need to come from somewhere. Passenger planes have recently been filled with goods instead of passengers due to COVID-19.

Virgin Atlantic has increased its cargo-only flights by one-third



Multilocal Production

We are going to produce products more local. Leading companies are reassessing their sourcing and manufacturing networks and rebalancing their supply network strategies in favor of multilocal design, supply and support.

Multilocal companies like nestle alter their products to the domestic market



Growing Corporate Social Responsibility

More companies are aware of climate change, making sustainable choices and caring about the environment

KLM Fly Less Campaign



We Care about the Environment

We have a growing awareness of climate change. The younger generations take the problem seriously by actively changing their habits to more sustainable ways.

Greta Thunberg



No Travel at all by Airplane

We are looking for more sustainable ways of traveling than with airplanes, even with the reconsideration of not traveling at all anymore

People reconsider their flights



The Creation of New Modalities

New types of modalities are being discussed and work on, to set a new norm of transportation. These new modalities are driven to be more sustainable alternatives for the polluting airtravel.

Hyperloop
Flying V airplane



Clothes as a Service

We already wear second hand clothes and sleep under hotel sheets. We can borrow clothes on the destination of our holiday, making our luggage obsolete.

"Hotels will become like B&B's, clothes already hang in the closet and a laptop will be provided" - Prof. Mr. Dr. Ir. Santema



Flying becomes a scarcity

A possibility is that traveling will be for the rich again. The effects of corona may cause the ticketprices to rise making it too expensive for the mass.

"Flying to expensive for the mass, is a possible scenario after COVID-19"- Prof. Postma



Local Traveling

Local traveling has become more populair. We explore closer grounds through roadtrips or exploring the local area's

Staycations



The Entertainment Airport

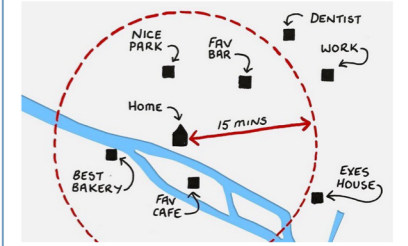
Airports become centra of entertainment. They serve more than your flight, for example restaurants and cinema's. Also shops at airports become experience stores, where you buy the product and it gets delivered at home

Singapore Airport



Less Luggage per Person

The amount of luggage we bring has decreased over the years. We are aloud to bring less by policy, but also we go more on short trips.



15 minute Cities

The concept is to improve quality of life by creating cities where everything a resident needs can be reached within a quarter of an hour by foot or bike, even the Ikea.

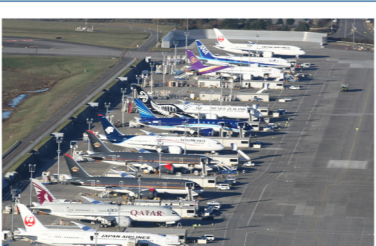
Cities like Paris have adopted the 15 minute city



The Recovery of (Air)travel

Airtravel will recover, how ever this can take up to five years. We are eager to travel again, people have already started booking their tickets. Also looking at past pandemic or crissises we can see that airtravel is most likely to recover

Looking at past pandemics



Traveling is a Natural Habit

Over the last decenia we have seen that traveling in itself is a natural habit. We will always travel a consistent amount of time.

"Over the years we see that our traveltme has remain consisten of 60-75 minutes" Prof. Dr. van Wee



Blockchain to Decentralize the Travel Industry

The travel landscape is dominated a few companies who act as third party player in the booking industry. By decentralization, the third-party is taken out, resulting in more secure and safe booking and more transparancy for every party.

Blockchain-based startup Winding Tree



Low Cost Carriers make Cities Overflow in Mass Tourism

Flying has only become cheaper, due to low cost carriers. They travel mainly from city to city and therefore facilitate mass tourism of citytrips

Ryanair 20 euro flights to London



Mobility Hubs

Hubs at the border of the cities where all types of modalities come together. You can easily switch from modality to another. Small electronic vehicles can than be used for the last mile of your journey.

Mobility hubs, similar like Q-park



Carless Cities

More municipalities are focussing on creating carless cities,

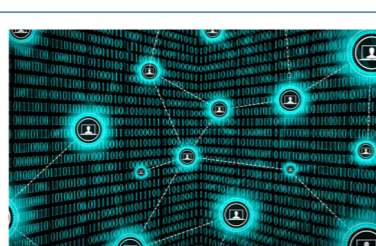
Sharing of a parkingspot in different area's around the Netherlands



Traveling On-Demand

Start the journey whenever you want to. This means no more waiting at airports or busstops as you can travel whenever you want.

Virtual Busstops
Personal Rapid Transit, PODS



Data Sharing as Collaboration in Ecosystems

Data sharing between different parties has become the norm in order to perform the most optimal way. Also to create personalization and deliver the full service.

OV Chipkaart



Collaborative Effort Through Ecosystems

More companies are starting to focus on creating ecosystems in order to create better products for their final customers. Question remains on who the orchastrator is?

OV Chipkaart



No more place for you in the City

In 2030 we will be with 8.6 billion people, and with the trend of urbanisation our cities

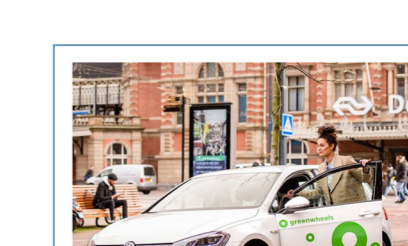
Urbanisation and Population growth



Data Privacy of the Individual

Our data has become an important part of our identity. We want to know what is happening with our data.

We care more about our data and privacy



Shared Mobility

The sharing of vehicles has become more normal. People care less about the possession of the vehicle and more about the use.

Felix, Green wheels, LeaseCars



The Experience Journey

The journey itself becomes an experience adding to the destinations. This makes the journey no longer a waste of time, but adds purpose and enjoyment.

"During the journey I already experience the destination, so it brings me into a certain state of mind" - Prof. Mr. Dr. Ir. Santema



Giving the journey out of hands

We want to give things out of hands, if know they are safe and reliable. This lowers our hurdles while traveling.

Self-driving cars, BaaS



The Track and Tracibility of everything

We can see every bit of information regarding our journey, package of any other moving instance, from getting live info to where your suitcase is to seeing the exact amounts of CO2 emission of your journey.

Apps for your car and to check your baggage



Physical Health Fear

Due to COVID-19, we are more aware of our physical health. We do not want to unnecessary risk when it comes to it.

"Corona crisis makes people scared to visit airports"- Dr. Kim



Mental Health Awareness

Our mental health has become more import. More people experience burnouts and depression than ever before.

Growth of apps like Headspace



Technological Safety Scare

When we first start flying we were scared of new crashes, with upcoming ways of transportation we could experience the same thing. But also other things that scare us today with technology, like leaking our private data.

Flying in 1920 was to scary



Pay per Use

By Pay per Use of our transportation we can make better use of the current system. If we pay more per use in peak hours of traffic we can manage overcrowded trains and traficjams better and make them become obsolete.

Rush hour charges
Pay per KM



Socializing Digitally

Social interaction cannot (yet) be replaced by digital interaction, but new alternatives are rising. Multiplayer gaming has for example become more popular over the last years.

Gaming (Animal Crossing)



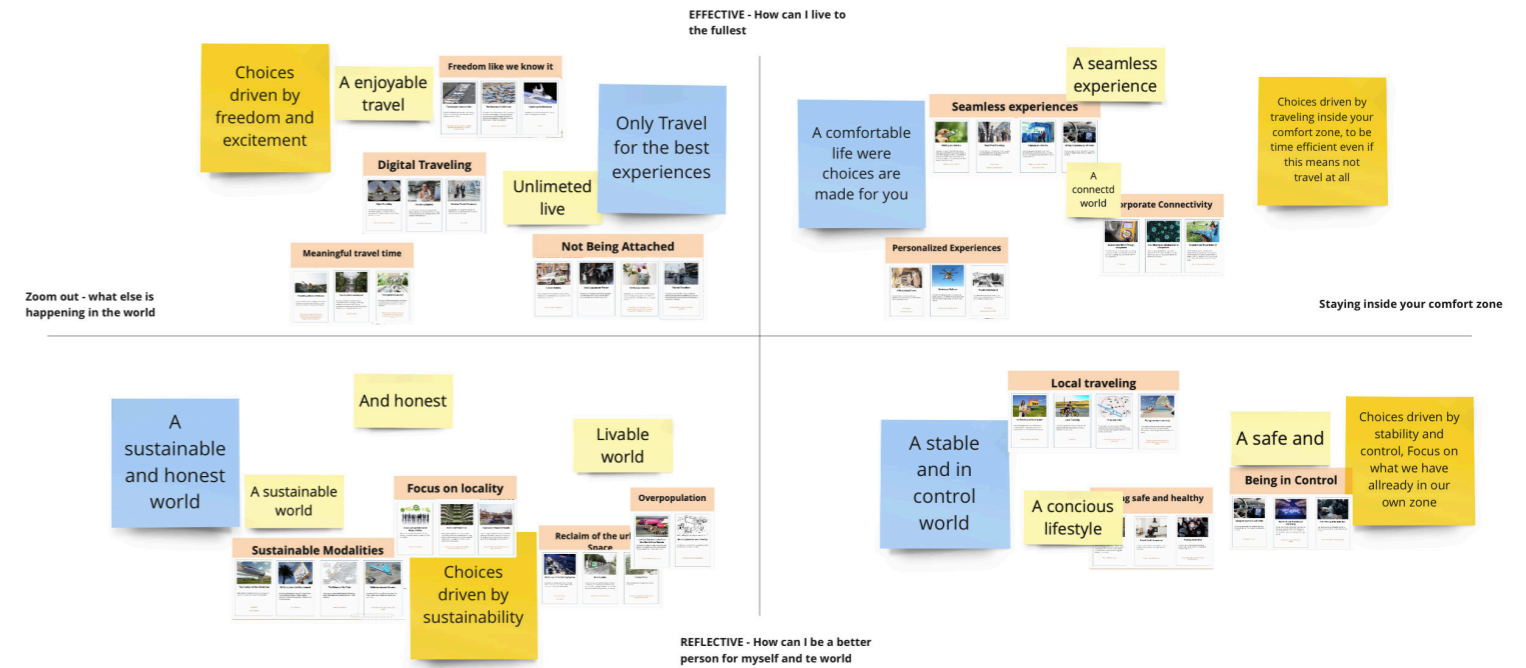
Business Travel Dissapears

business travel will be absolete as result of COVID-19, we have discovered new methods in which we can work remotely.

Zoom, Miro

Appendix E

First Draft Future Worlds



Based on all trends, 4 trendScenarios have been created which could serve as content in the workshop.

On the x axis is about the view on the world, with on one side staying inside your comfort zone and on the other side zooming out to the (outer)world.

On y axis is the mentality that we have. On one side we want to be reflective with a strong focus on self development but also conciousness of our surroundings. On the opposite side we want to be effective, while living life to the fullest.

Appendix F

Interview Guide Design Frames

Questions Workshop 1:

Research goal:

To investigate the quality of the boundary objects projected
Whether the knowledge “crossed boundaries” (Systemic inertia)
Clearness and novelty of information
Whether the knowledge is interpreted truthfully and adopted by
the participants.
actionability and ownership

To discover the growth of end-user perspectiveness generated
throughout the workshop/ boundary objects. (Socializing, empathy)

Boundary objects used:

[Fill in for every workshop]

General Questions:

What were your thoughts on the workshop?
Where there any aspects that stood out for you?
What is your top of mind?
Wat is je het meest bijgebleven?

Could you explain to me in your own words what we did during the workshop?

Boundary objects:

general:

Could you tell me if you gained any knowledge from this workshop?
If so, can you describe what this knowledge was? And from who?
and how you gained or expressed this knowledge?

During the workshop, we used several tools, to which we are
curious how you felt about them and what effect they had on the
workshop. We will go over them

What did you think of the preparing materials, were they helpful?

Boundary object 1:

How would you describe the object
Could you explain what role the object had in the workshop? And
what effect they had on you
Did this design object contribute to better understanding the future
of traveling, if so, how?
Did this object change your perception of traveling in Europe?

Did you feel engaged with the knowledge expressed with this
boundary object? If so, how? Did you feel inspired by the boundary
objects?

Would you use this again?

What are your learnings, what do you recall?

How could this boundary object be improved for the next series of
workshops?

Boundary Object 2

How would you describe the Miro activities?
Could you explain what role the Miro Activities had in the workshop
for you?

Did these boundary objects contribute to better understanding the
future context, if so, how?

Did the boundary object contribute to better understanding the
future end-user? if so, how?

would you use it again?

What are your learnings, what do you recall?

Was the structure clear

How could this boundary object be improved for the next series of
workshops?

Closing questions:

Is there anything you think could be improved in the workshop?

Is there anything you would use again from this?

Is there anything you would like to add?

Thank you for your time

Appendix G


Cards Mapped to Values



Appendix H


Future Personas

Business Traveler

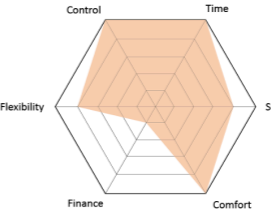


Travel Behaviour

- Travels for her work only when highly necessary
- 1 time a month
- Hand luggage only
- Travels alone most of the time



Travel Values



Values

Prefers efficiency the most. This means either being fast or having time on board to do some work. Comfort is also important.

The journey is paid by the company who value sustainability.

Future modalities

- (Electric) airplane
- Hyperloop or High speed train

Biography

- Name: Julianna
- Age: 38
- Occupation: Sales manager
- Location: Copenhagen
- Hobbies: Running & Tennis
- Media:

Pains and Gains

Pains (now)

- Not receiving enough information beforehand
- Waiting and delays
- Bad wifi

Gains


- Working space inside they modality
- Seamless experiences in the priority lane save time

Profile

- Early adaptor
- Tech savvy
- Eco-conscious


MOVING YOUR BUSINESS FORWARD

Relaxed Travelers

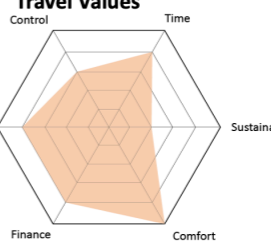


Travel Behaviour

- Travel to relax and escape daily routines
- 1 time a year to sunny destination
- Hand and Hold Luggage
- 2 children



Travel Values



Values

They want to experience things that are not possible at home. They want to relax, this means receiving comfort and enough time beforehand.

They usually go to destinations in the sun close to the beach

Future modalities

- (Electric) airplane
- Electric Car

Biography

- Name: Naomi & Lars
- Age: 43 and 46
- Occupation: Hairdresser & Account manager
- Location: Purmerend
- Hobbies: Ajax supporters

Pains and Gains

Pains (now)

- Too crowded places
- The stress of customs
- Not knowing where to go

Gains

- More comfortable and personalized travel journey
- No more hassle with luggage (waiting and carrying)

Profile

- Late majority
- Tech-savvy

MOVING YOUR BUSINESS FORWARD

Citytripper



Biography

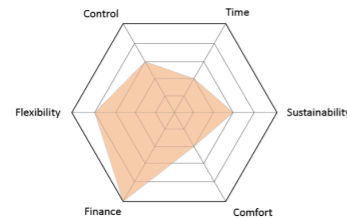
- Name: Sofia
- Age: 25
- Occupation: Economic Student
- Location: Salamanca
- Hobbies: Social Media, Dancing
- Media:
 - Instagram
 - Tiktok

Travel Behaviour

- Travels to visit new places
- 2-3 times a year
- Hand luggage only
- With Friends



Travel Values



Values

Values price over comfort and time. Sustainability is important, but she does not act always in that way. Does not value the ownership of a vehicle, but the freedom to choose one for any type of purpose

Future modalities

- (Electric) airplane
- High speed train
- Sharing Modalities (e.g. E Scooters)

Pains and Gains

Pains (now)

- Overpriced tickets making traveling exclusive
- Bad connection between airport and city

Gains

- Affordable personalization
- Mobility as a Service to make the journey a whole

Profile

- Early majority
- Tech savvy
- Eco-conscious

MOVING YOUR BUSINESS FORWARD

Conscious Traveler



Biography

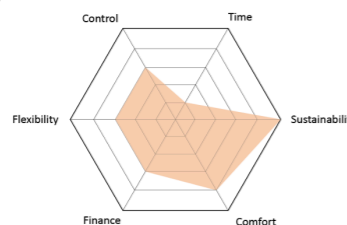
- Name: Mika and Jessy
- Age: 34 and 32
- Occupation: Innovation Consultant and digital marketer
- Location: Berlin
- Hobbies: Vegetarian Cooking, Skating
- Media:
 - Instagram

Travel Behaviour

- Travels to visit new places and to stay for longer periods of time
- 1 time a year
- Hand + Hold luggage



Travel Values



Values

Conscious in decision on travel purpose and type of modality. Wants to invest time and money into making sure it is the most sustainable option. Makes the journey part of the experience. Travels from home

Future modalities

- Electrical Vehicles
- Shared mobility
- Hyperloop

Pains and Gains

Pains (now)

- No strong sustainable alternative for flying
- Mass consumption of the earth

Gains

- New sustainable modalities
- Experiences in the journey

Profile

- Early adaptor
- Tech savvy
- Eco warrior

MOVING YOUR BUSINESS FORWARD

Visiting Family Friends



Biography

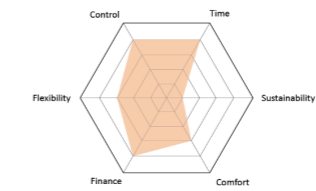
- Name: Nia & Amir
- Age: 60 & 62
- Occupation: Housewife & Construction Worker
- Location: Lagos
- Hobbies:
- Media:
 - Facebook

Travel Behaviour

- Travels to visit their children who have moved to another country
- 1 time a year
- Hand and Hold luggage
- Travel together



Travel Values



Values

Travel needs to be comfortable and reliable. Prefer a shorter time when possible. They want to be assured during the journey that they are making the right decisions.

They want a larger quantity of things they bring, this means they also value access to this.

Future modalities

- (Electrical) Airplane
- Electronic Car

Pains and Gains

Pains (now)

- Not receiving enough information beforehand
- Stressful security and customs
- Overcrowded places

Gains

- Information throughout to the journey
- Affordable personalization
- Seamless and hassle free experiences

Profile

- Late Majority

MOVING YOUR BUSINESS FORWARD

Luxe Traveler



Biography

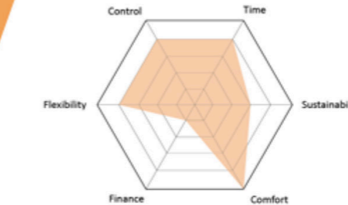
- Name: Lotta & Anders
- Age: 37 & 41
- Occupation: Entrepreneurs
- Location: Gothenburg
- Hobbies: Sailing
- Media:
 - Facebook

Travel Behaviour

- 2-3 times a year
- Hand and Hold luggage
- Travel together



Travel Values



Values

Being comfortable is the most important journey. They want to pay extra to receive the best services. They want their journey to be taken care for. They value flexibility of the vehicles and traveling efficient, this includes individual modalities

Future modalities

- (electrical) drone taxi or airplanes
- (electical) private airplanes

Pains and Gains

Pains (now)

- Overcrowded places
- Low service quality
- Waiting

Gains

- Highly personalized services and modalities
- Comfort and seamless
- Individual or private transportation

Profile

- Early adaptors
- Climate adaptors

MOVING YOUR BUSINESS FORWARD

Appendix I

Future Newspapers

Better Times Editor in Chief: Lotte & Victor
News for our next generation 31-05-2050

10th anniversary EU zero-emission mobility network

10 year ago the first seamless EU-trip between Eindhoven and Barcelona took place. Travelers from Eindhoven were able to travel to Barcelona as they were used to travel to Amsterdam. Now, 10 years later this network is extended to all main cities in Europe, being completely zero-emission.

Traveling from EIN-BCN is like traveling from EIN-AMS

Baggage Service from door to door


Seamless connected EU mobility system

EU ID Card


Train rails EU unified

One mobility system with multiple type of transport

Emission free/net zero




Travelling experience at your living room



for 25,9€/month subscribe now at Virtual Travel
Next travel scheme:
June: explore the Philippines
July: enjoy Mexico
August: Sidney and a special tour at the opera

Unified Travel going bankrupt due to security bridge - Passenger data was stolen from the server and the company couldn't recover user trust

Unified TRavel docs Provider (the company that is getting all travellers docs, tickets, at one central spot) is bankrupted. Due to security bridge




Column (from out travel specialist: Lotte)

The new service offered by Vanderlande has reached 80 million users. Enabling a total reduction of 1 million tones of CO2 emissions. The way Vanderlande achieved this is a true example of how business in 2021 should be done.

Example role Vanderlande in enabling seamless and sustainable travel


Lead role and responsibility in building an ecosystem between research-government-companies



Better Times Editor in Chief: Joost, Ruud, Bart
Vibes for our next generation 31-05-2050

Swap fiets, Amber, NS and KLM to join forces in offering Mobility-as-a-Service via Vanderlande smart mobility hub

Vanderlande equips Mobility Hubs but also orchestrates the ecosystem platform to manage all value transactions between involved actors. Passengers lured with Personalized Services




Google teams up with Vanderlande to offer free travel in exchange for your personal data



Vanderlande launches smart baggage logistics ecosystem handling door-to-door services in Major European cities.

Vanderlande is operating SmartBaggage Logistics Ecosystem handling door-to-door services.




Amazon adds 20 more Boeing H880 aircrafts to its logistics fleet

Amazon is scaling up its high-capacity Amazon Prime Air delivery network. Delivering Amazon.com orders.



YES you can! Travelling Europe luxurious and cost-efficient is possible

I recently travelled Europe and can confirm it is possible to travel on a shoe string budget and in a convenient manner thanks to XYZ.




Better Times Editor in Chief: Peter & Gijb
News for our next generation 31-05-2050


Personalised air travel by eco-friendly PeopleAirPod

A big success in 2049 was the massive breakthrough of multiple competitive propositions to book a seat on a PAP which will guarantee smooth, flexible travel to your destination in Europe. The vertical take off/landing feature of these Pods makes it possible to reach many locations.

By the FlyUber app you book your flight sharing opportunity, small groups (4-10 persons) can join the flight which has his pilot on board.




Toyota PAP Mirai



The new Toyota PeopleAirPod Mirai is hydrogen driven and can transport up to 5 adults and can carry up to 1,000 kg of cargo. The PAP can be rented on a daily basis starting from 0.5 bitcoin/day. All self-driving features are included to comply with SAE 5 level.

1,000th earthling arrived at Mars



Yesterday, Starship no. 13 arrived at Mars with 87 passengers, totalling the red planet's colonists to 1,000 inhabitants. Xion-F Smith was the lucky who was personally welcomed by 78-year old Elon Musk who is enjoying a marital retirement. Musk is currently making plans to make the planet also a holiday destination

Column (from out travel specialist: ...)

No coverage, guaranteed!

No Wifi, no 7G, no internet. These are some of the promises provided by the new Off-Grid travel trend that has become increasingly popular recently.

