

Tool set

# Future of mobility

U4	Hölderlinplatz	2 Min
U2	Hölderlinplatz	3 Min
U14	Hauptbahnhof	10 Min
U9	Heslach	11 Min



We have developed a unique co-creation tool to explore how the evolution of current trends may affect the mobility sector, to help our clients define their role in the future.

Aviation

Train and rail

Scooter

Subway

Vehicle

Trucks

As part of the card set, we introduce various key passenger typologies with their key needs projected onto a mini journey map.



ONE-  
HANDED



SMART  
COMMUTER



UNGUIDED



SLOW  
CARE



# Passenger typology.

## One-handed is occupied

User with suitcases, shopping, pet owner or phone user.



# Main needs card.

## Phases



### **BEFORE**

Being able to organize their route without using their hands.



### **TRAFFIC HUB**

Access to services that free their hands and different wayfinding interface options.



### **PLATFORM**

Secure spaces for waiting and looking after their belongings.



### **ON/OFF BOARDING**

Easy and safe access to transport.



### **TRANSPORT**

Designated and visible space for belongings.



### **AFTER**

Access to services that free their hands and easy connection to other modes of transportation.

This enables us to include role mapping in the process, to empower our service design approach,





... which allows us to ponder complex questions and explore possible futures from a human-centered perspective.

The image displays five overlapping cards from the 'Future of Mobility Tool Set' by mormedi. Each card is designed to explore a specific mobility topic through a 'PRESENT' vs 'FUTURE' comparison and provides 'Idea starters' for future development.

- Co-creation with passengers:** Companies are gathering user feedback and inputs to improve services and products, so co-creation and crowdsourcing are playing an important role to generate value-added services. **Example:** Mexico City's mobility department launched Mapaton CDMX, a crowdsourcing app to map more than 1500 routes travelled by 30,000 buses, minibuses, and vans.
- Retail on-board:** Retail companies are getting into mobility to offer or promote their services on-the-go or bring their goods directly to their customers with drone or self-driving technologies. **Example:** Muji and Sensible4 created a pod that brings services and facilities, such as supermarkets or libraries, to areas with few services and public facilities.
- Full-service travel agencies:** Mobility companies are starting to look like travel agencies, suggesting recreational activities and services along the journey or at the destination using current mobility as a network. On the other hand, even companies like Airbnb are planning to offer transportation services. **Example:** Madrid Metro offers green tours for tourists.
- How do you imagine users will be involved in the mobility design process in the future?** **Idea starters:** Gamification will engage users in the design process. A voting system will allow users to like or dislike ideas. Mobility services will adapt to users' preferences per route e.g. food, beverages, retail and entertainment content on board.
- How will retail change the future of mobility?** **Idea starters:** Retail and mobility will combine to create autonomous services on wheels. More retail companies will start getting into mobility, perhaps via partners. Some products will be sold exclusively in transportation. Virtual and/or pop-up stores will allow you to buy whatever you want onboard transportation.
- Shaping the future: What travel services will mobility companies offer in the future?** **Idea starters:** Companies and start-ups will collaborate to offer a complete journey. Companies will create new business lines focusing on travel experiences. Offer 100% virtual travel experiences using digital images. Suggest destinations or routes based on customer preferences e.g. Self-driving vehicles could take adventurous travellers to unknown or 'surprise' destinations.

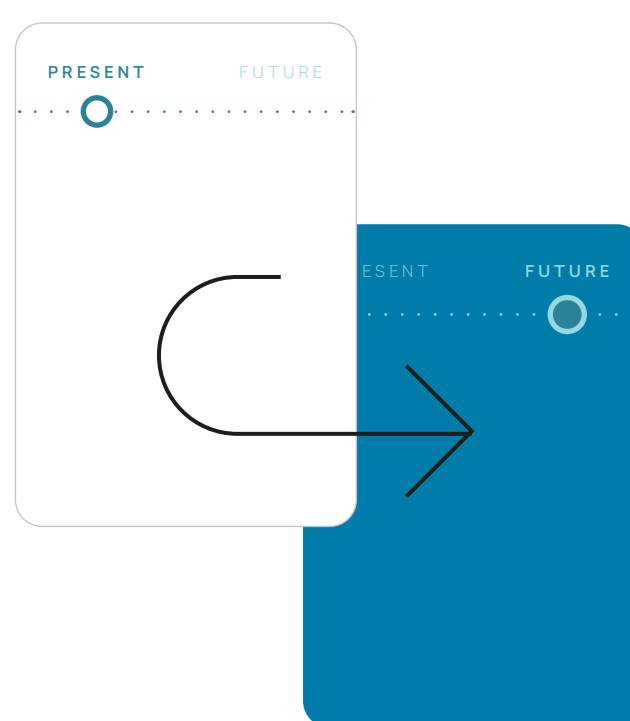
We use this tool to help our client teams explore possible mobility futures by reflecting collaboratively how trends might evolve and thus anticipating possible futures.



# How do the trend cards work?

## Side 1

The present.  
Start here.



## Side 2

The future.  
Imagine what's  
next.

### **Understand changes**

We select the trends that you think are most relevant to your organisation. Considering the macro trends that are driving these changes.

### **Imagine the future**

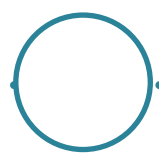
If these trends becomes more common and widespread, how will your world change?

Using your imagination and getting inspired by the idea starters.

Is this a future that you want? Try getting inspiration from other sectors, too.

PRESENT

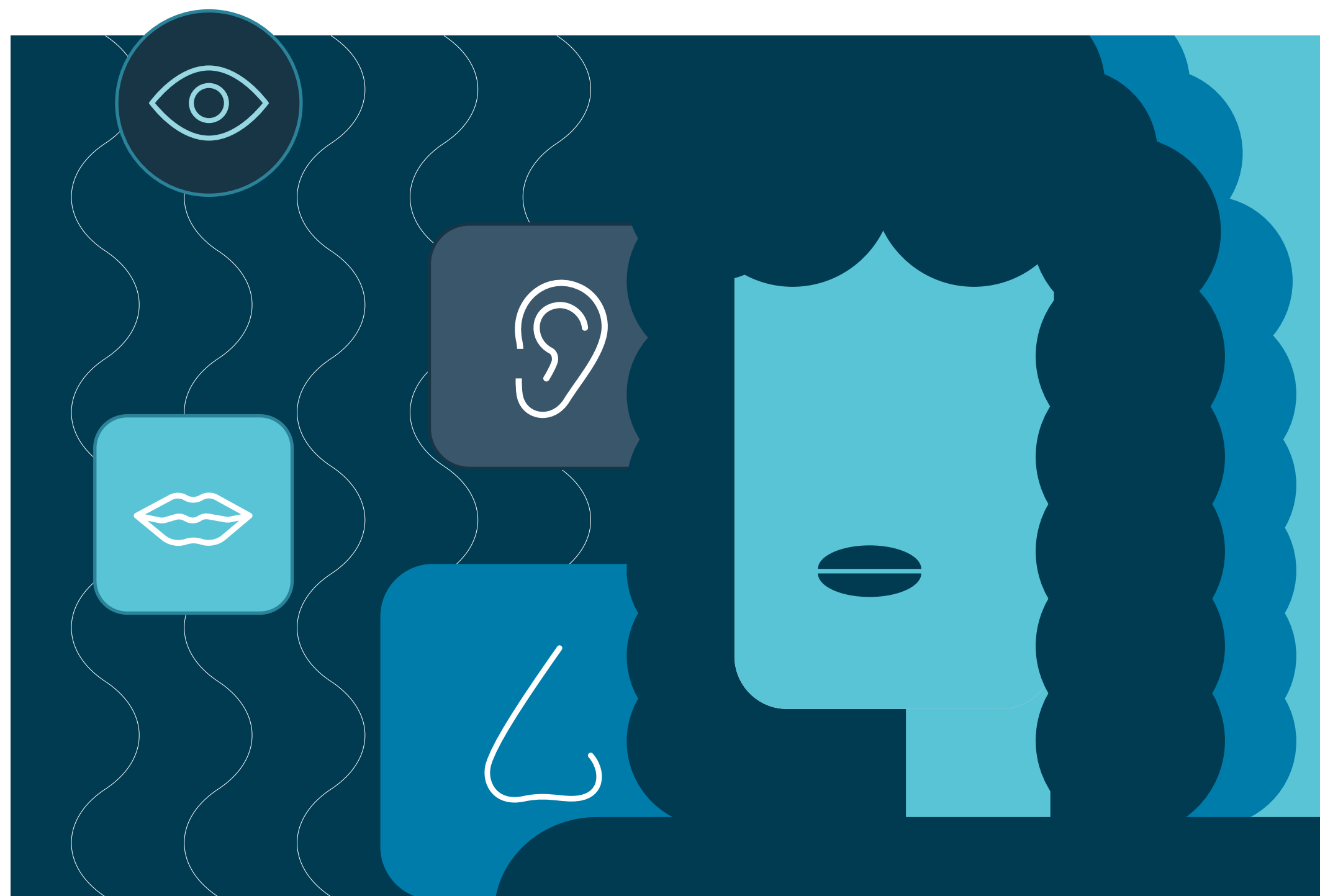
FUTURE



## Multi-sensory experience

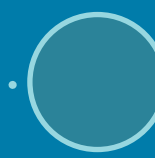
In order to raise brand awareness, companies are working to create emotional and memorable products, services, and experiences that touch all senses, through corporate scents, food that is designed to be “Instagrammable”, etc.

**Virgin Atlantic** offers ultra-British “Afternoon high tea” in all cabins in partnership with master pâtissier Eric Lanlard to create a unique, Instagrammable moment.



PRESENT

FUTURE



# How do you imagine sensory experiences will shape the future mobility experience?

## Idea starters



Brand identity guidelines will include aroma, food, gestures, music, etc.



Experiences will be boosted with new technologies like VR or AR.



Multi-sensory experiences will be omnichannel e.g. aroma via marketing materials, and even in the cabin.



PRESENT

FUTURE

## Intelligent safety

New technologies can monitor user behaviour in order to reduce incidents and provide solutions, such as alcohol tests, sleep alerts or anti-theft alarms.

**Volvo's** driver-monitoring systems monitors the driver for both intoxication and distractions to reduce traffic fatalities.



PRESENT

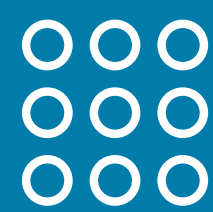
FUTURE



# How will intelligent safety impact the future of mobility?



Automatic connection to emergency services.



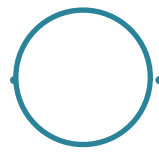
Different modes to leave kids, the elderly or pets safely inside the vehicle.



Legal implications will need to be considered once users rely on automated systems.

PRESENT

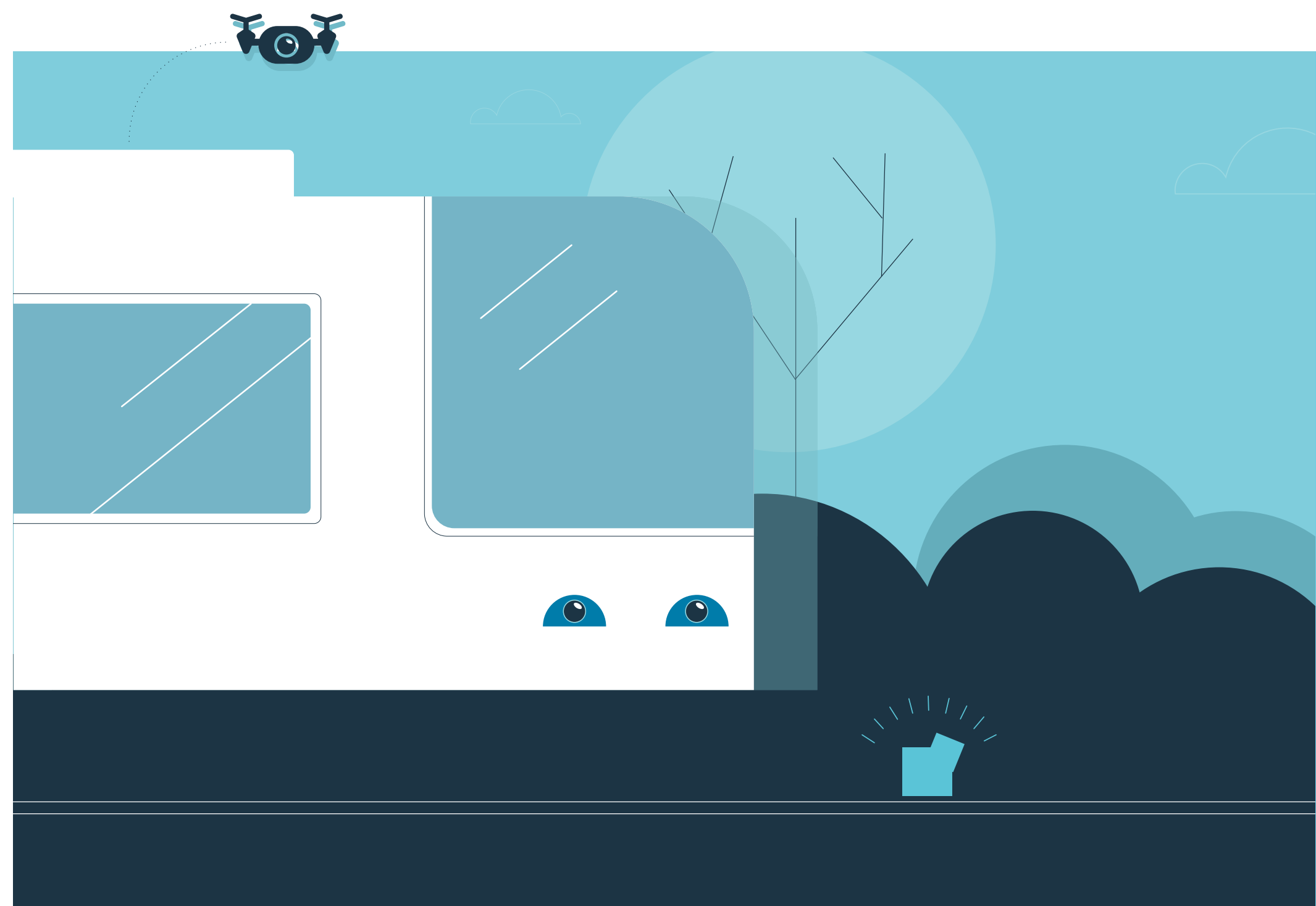
FUTURE



## Smart cities

Cities are using new technologies such as IoT and AI to manage resources, assets, and services more efficiently. Transportation services are starting to collect data to improve cities by sharing data between companies and the government.

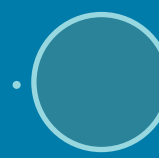
**Hubble** created a more efficient tree-trimming programme for railways using artificial intelligence to map trackside vegetation and identify trees liable to shed leaves.





PRESENT

FUTURE



# What will be the role of mobility in the future of smart cities?



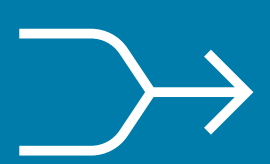
On-demand public transport routes based on passengers' requests.



Cyber-security will become much more important in connected cities.



Outdoor monitoring systems will improve maintenance.



Cities will start demanding more shared data from private companies.



Smart traffic lights will be used to improve transport flows, prioritizing public transport, e.g. buses.

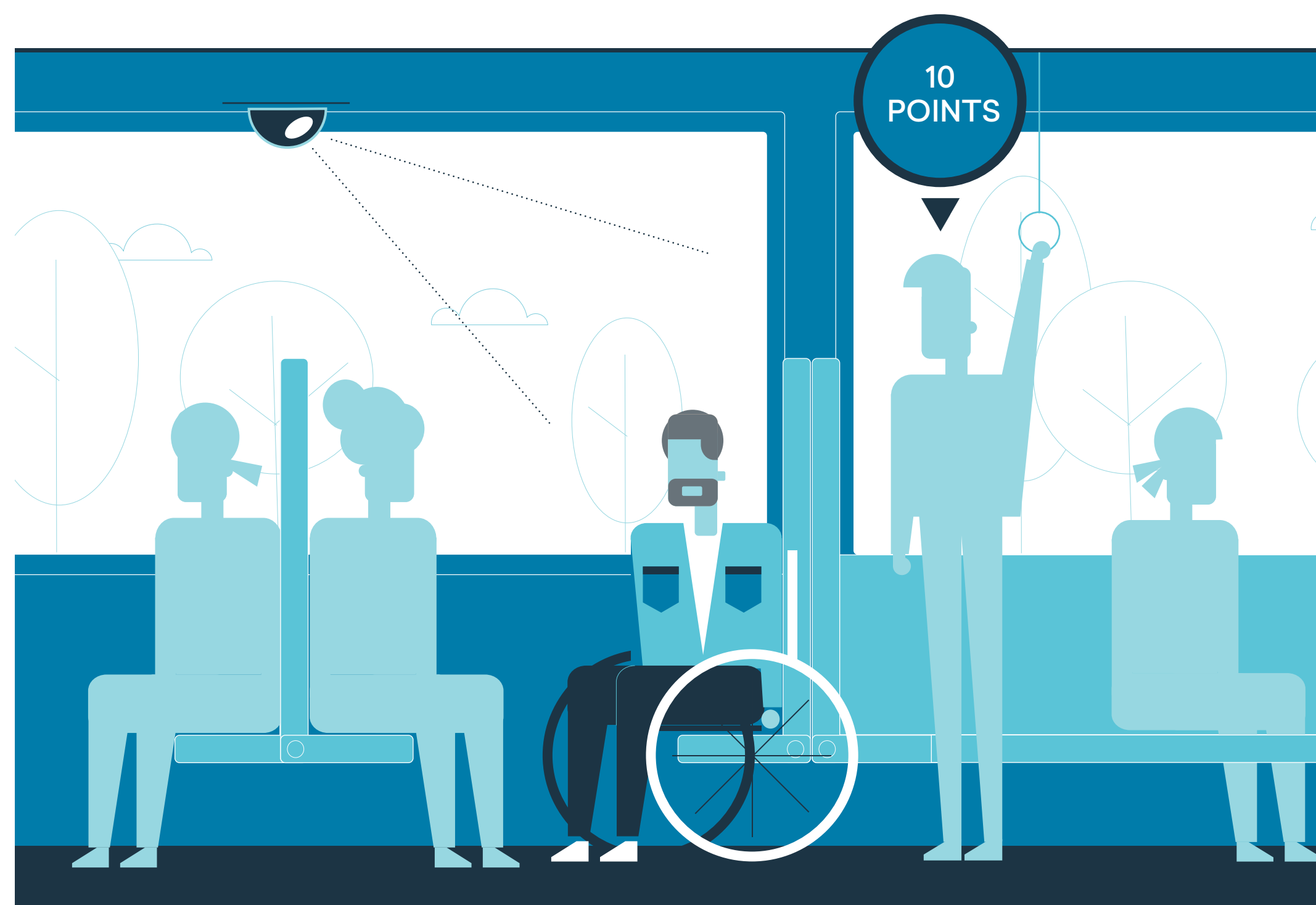
PRESENT

FUTURE

## Behavioural rewards

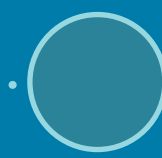
Organisations are promoting more sustainable and ethical behaviour and habits using new technologies like facial recognition and micropayments, combined with gamification tactics.

**Dovu** is a start-up with a blockchain-powered reward platform that incentivises changes in passenger behaviour by rewarding them with cryptocurrency.



PRESENT

FUTURE



# How do you imagine behavioural rewards programs will impact the future of mobility?



Social credit systems (like the one found in China) will expand to other countries.



Users will be able to report other users' behaviours to reduce incidents.

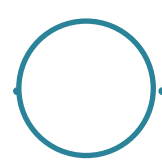


Could be used to boost accessibility e.g. users will earn points when offering their seat.



PRESENT

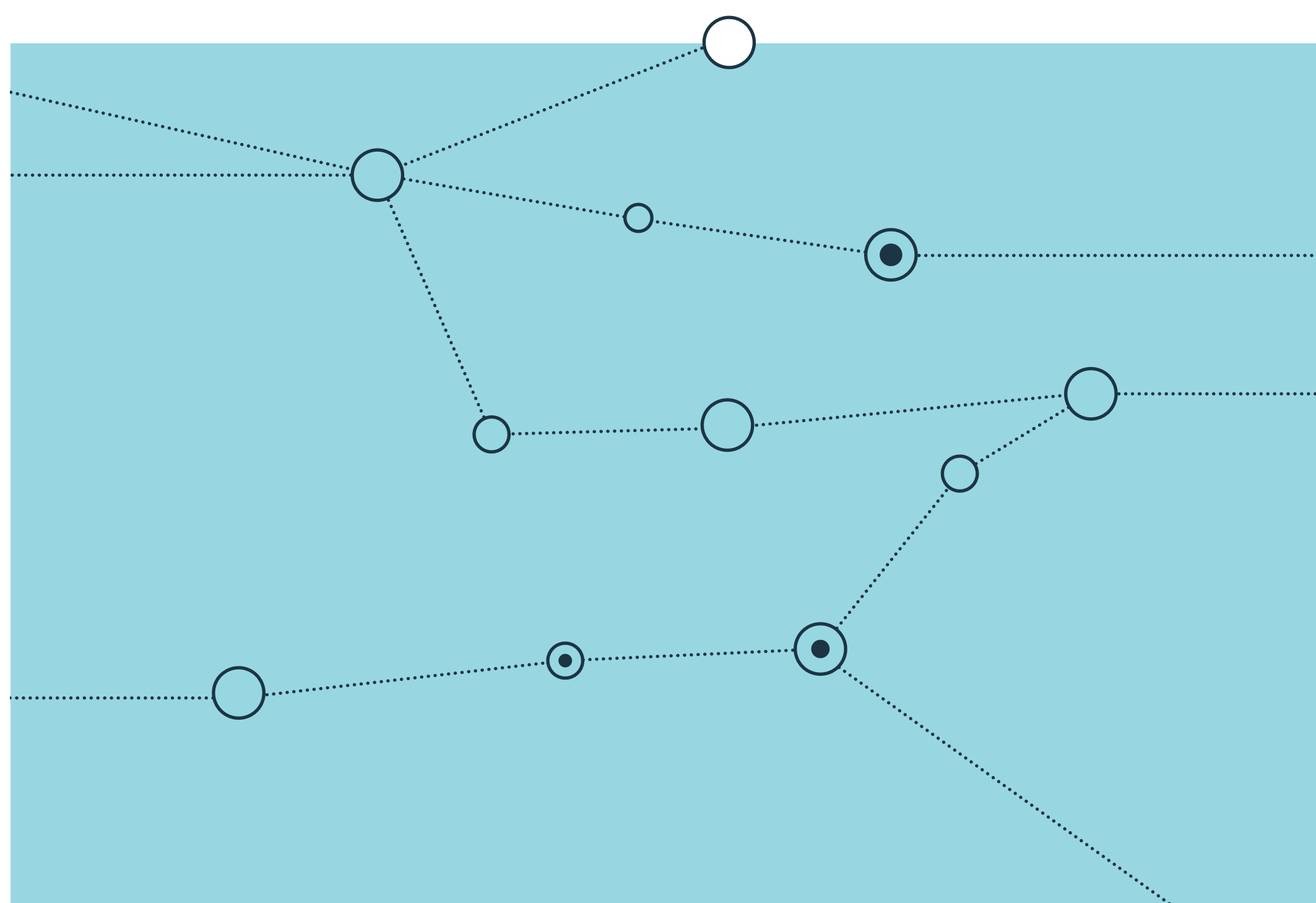
FUTURE



# Ambient intelligence

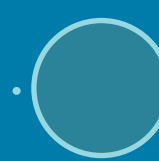
Modes of transport are becoming sensitive and responsive to human presence, bringing support to our everyday life. This enables more control over the space, such as humidity, temperature, lighting or security.

**Tesla** has rolled out a Dog Mode feature that uses sensors to maintain the perfect conditions for pets inside a vehicle, and it displays a message to passers-by who might become concerned for pets left inside.



PRESENT

FUTURE



# How do you imagine ambient intelligence will shape the future mobility experience?



Different ambient modes will be offered or suggested to customers.



Onboard maintenance will be done by integrated robots e.g. cleaning.



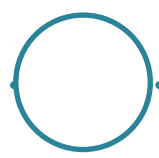
Options will be sold to users so they can customize their experience.



Travellers' stress or happiness levels will be measured and the ambience will be adjusted accordingly.

PRESENT

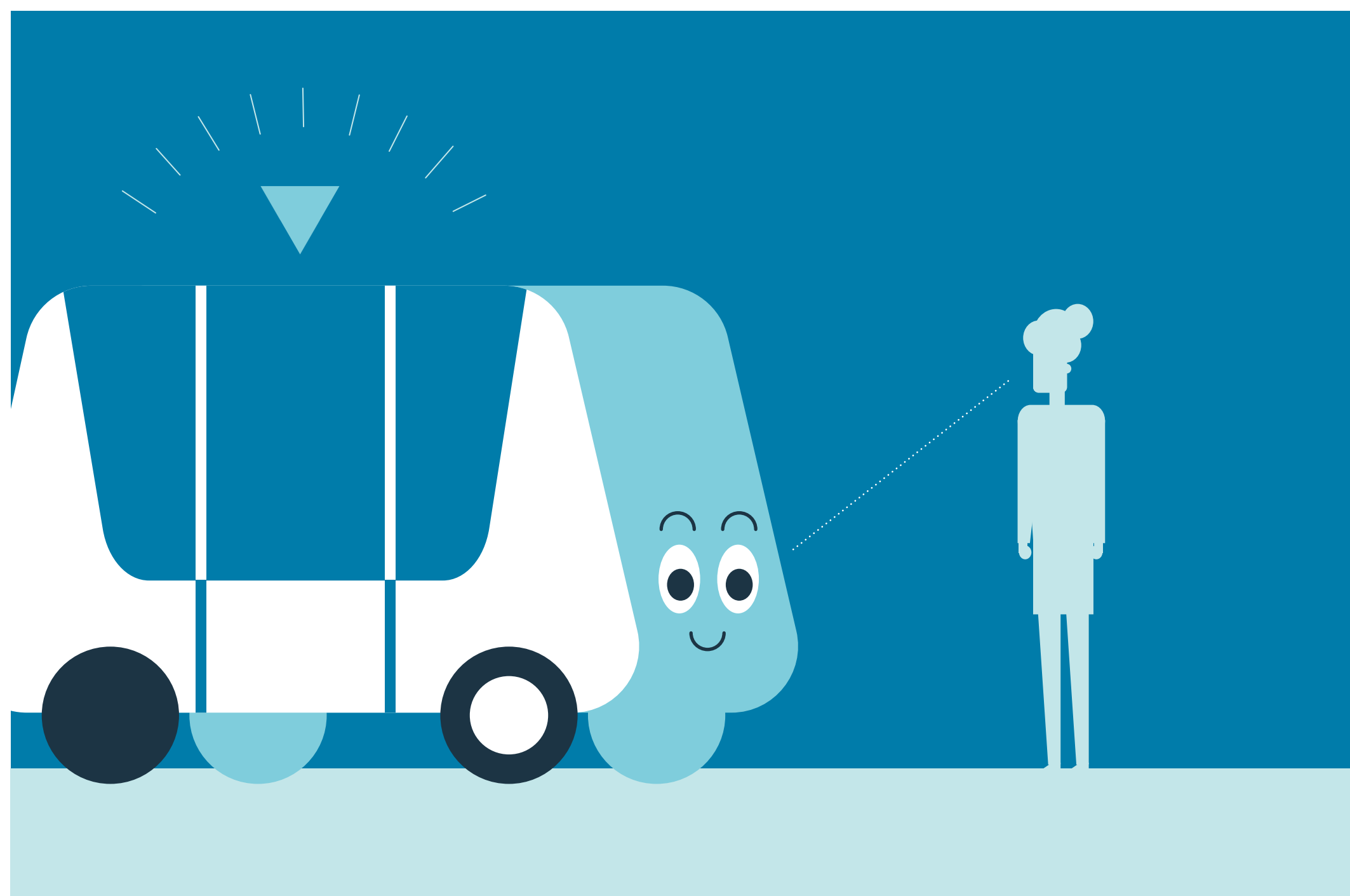
FUTURE



# Autonomous driving

As autonomous vehicle (AV) technology progresses, driverless cars are looking more likely to become a reality, with all their benefits, including increased personal safety and wellbeing, and reduced transportation costs. But they will also come with lots of challenges, such as cybersecurity.

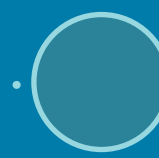
**IKEA's** innovation lab unveils self-driving vehicle concepts that offer services such as café, healthcare, farm, gaming, hotel and shop while transporting users to a destination.





PRESENT

FUTURE



# How do you imagine AVs will affect the future of mobility?



Development of new laws, e.g. driving manually in cities could become illegal.



AVs may attract passengers who have consumed alcohol.



New innovative uses will be sought for obsolete driveways and garages.



Services and retail will be integrated into vehicles.



New forms of human-vehicle interaction will be needed to make passengers feel secure and safe.

The result is a unique tool to identify new opportunities, collaborate and communicate complex questions, exploring possible futures from a holistic perspective that empower our service design approach.

If you are interested to know more about our approach, please get in touch.



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