

# Data



Digital data are often thought of as objective, discrete information collected from real situations. But we need to ask questions about how to define, treat, store and use data.

Big data analytics do not understand data in context - how people feel, or what they are 'really' doing. Data-driven policy, design or regulation misses this important knowledge.

# Data

## **We need to ask questions about:**

- the ownership of data;
- the ethics of how data are produced;
- how should data be shared and stored;
- who should control data;
- how should data should be used and how to prevent its misuse;
- and data privacy and transparency.

# Data



In everyday life people continually produce and use data through fit-bits, traffic apps and when using internet search platforms.

For public and private sector organisations data opens up a set of new possibilities, questions and concerns. It means increasing capacity to collect, produce and use data for monitoring and analyzing human behaviour. This raises questions of power, trust, privacy and transparency.

# Data

## **What facets of data should we research to understand the future of Autonomous Driving Vehicles (ADV) and Mobility as a Service (MaaS)?**

- How can data be ethically and responsibly shared and used in future ADV and MaaS systems?
- How do future users of ADV and MaaS imagine their personal data and the ways it could possibly be used? What are their hopes, anxieties and feelings?
- How do data privacy and transparency intersect in ADV and MaaS futures? How can the relationship between the problems and benefits of both be resolved?
- Should we trust data? And do people trust others with their data?

# Trust



Trust is an anticipatory concept. It refers to our feelings about what will happen next. To trust is to feel confident enough to step forward in situations where the ultimate outcome remains unknown.

The concept of Trust helps us understand how and why people will use new technologies and services.

# Trust

## **What does it mean to trust?**

Trust is usually treated as if it was rational, interactional and transactional; whereby it involves a person trusting an object, interface, other individual or organization.

But trust is also a feeling. It is sensory and emotional. We trust when we feel confident in a situation.

To understand how and in what people trust when they use Autonomous Driving Vehicles (ADV) and Mobility as a Service (MaaS), we need to understand what 'feels right' for them.

# Trust



Trust is an anticipatory concept. It refers to our feelings about what will happen next. To trust is to feel confident enough to step forward in situations where the ultimate outcome remains unknown.

The concept of Trust helps us understand how and why people will use new technologies and services.

# Trust

## **What facets of trust should we research to understand the future of Autonomous Driving Vehicles (ADV) and Mobility as a Service (MaaS)?**

- The everyday contexts in which technologies and services are used, and where trust emerges;
- The social relations that surround situations of technology and service use;
- The institutional relations that situations of technology and service use are implicated in;
- The sensory and emotional (often 'invisible') aspects of trust;
- What a person needs to learn and know, to be able to trust.



# Commuting



Commuting is a mundane everyday routine. It includes being in modes of transport but also all the related things we do before, during and after the trip.

Commuting is a particular type of mobility which might involve more than one mode of transport, and that differs from other less mundane, longer or one-off trips.

Commuting is already part of everyday life: we can learn from existing examples to understand how Autonomous Driving (AD) and Mobility as a Service (MaaS) might transform it.

# Commuting

## **What does it mean to be a commuter?**

Commuting is routine but always has unpredictable and uncertain elements. People already use technologies, data, information and communication to cope with this (e.g. traffic apps, radio and other people).

When people commute the digital and their physical environments and activities become interwoven in complex ways.

# Commuting



Commuting is a mundane everyday routine. It includes being in modes of transport but also all the related things we do before, during and after the trip.

Commuting is a particular type of mobility which might involve more than one mode of transport, and that differs from other less mundane, longer or one-off trips.

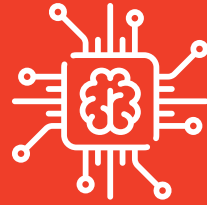
Commuting is already part of everyday life: we can learn from existing examples to understand how Autonomous Driving (AD) and Mobility as a Service (MaaS) might transform it.

# Commuting

## **What facets of commuting should we research to understand the future of Autonomous Driving Vehicles (ADV) and Mobility as a Service (MaaS)?**

- How do people anticipate and predict aspects of their commute? When do they gain a sense of wellbeing and when are they anxious?
- How does digital data impact how people commute? How do they feel about this? What are their hopes and anxieties for how digital data will impact on their future commuting?
- How do people combine different transport modes in commuting? What rational choices and what unspoken feelings are involved in this?

# Automation



Automation increasingly prominent in our lives in a context where technologies are now capable of making decisions and carrying out tasks without human intervention, or at least in ways that have been predetermined by human decision-making.

# Automation

## **What does automation mean in everyday life?**

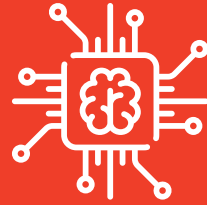
People have lived with automated technologies for a long time. Sometimes people improvise to manipulate automated technologies.

What everyday life will be like in automated futures? How will people use automation?

In utopian futures Autonomous Driving (AD) decreases the stress, increases road safety and saves energy.

In dystopian futures AD cars could be programmed to kill: who would be prioritized?

# Automation



Automation is increasingly prominent in our lives in a context where technologies are now capable of making decisions and carrying out tasks without human intervention, or at least in ways that have been predetermined by human decision-making.

# Automation

## **What facets of automation should we research to understand the future of Autonomous Driving Vehicles (ADV) and Mobility as a Service (MaaS)?**

- When should automation stop and when should human intervention start?
- How can people become involved in determining the abilities and priorities of automated systems?
- What automated functions would people prefer to control themselves? And how does this vary?
- How do people use automation? Will people work around automated functions?
- What human rights and regulatory frameworks need to be put into place?
- What power relationship could emerge? How can we prevent these from disadvantaging any social groups?



# Car sharing



Shared mobility generally involves shared ownership or access to the use of transport technologies owned by others. It is often viewed as a possibility for reducing environmental impact of urban mobility.

Car sharing is made up of various activities. It reflects on the shifting boundaries between ownership and access, private and public, shared and personal, responsibility and flexibility.

# Car sharing

## **What makes up car sharing?**

There are several reasons for and degrees of sharing. Some characteristics associated with sharing are non-reciprocity, inclusion, caring, creating links to others, reciprocal expectations, lack of alternatives, two-way exchanges, borrowing or lending. In car sharing, people can be positioned as receivers or providers (or both) of sharing services.

Ride sharing or car pooling can be informal (shared amongst close friends or colleagues) organised by individuals themselves or formal (app based paid services) connecting strangers travelling in the same direction.

# Car sharing



Shared mobility generally involves shared ownership or access to the use of transport technologies owned by others. Car sharing is often viewed as a possibility for reducing environmental impact of urban mobility.

Car sharing is made up of various activities. It reflects on the shifting boundaries between ownership and access, private and public, shared and personal, responsibility and flexibility.

# Car sharing

## **What questions should we research to understand how car sharing could be an everyday form of mobility?**

- How do different forms of car sharing fit different urban mobility landscapes? How could car sharing be part of commuting journeys, public transport, or an alternative to private cars and taxis?
- How might car sharing change the way we think about daily commuting, planning and time?
- What tensions does car sharing imply? What are the existing drivers and barriers to car sharing? How could different forms of car sharing fit into the ways people already commute?