

On the Move

Towards future-proof mobility

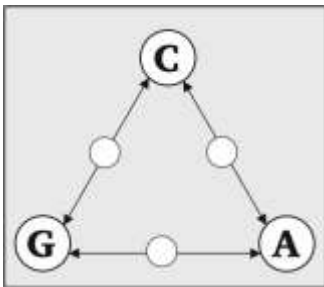
Mobility must become sustainable. But there is great uncertainty about the form this should take, ranging from electric to hydrogen, self-driving to collective, shared to as-a-service, or perhaps everything at once. But how? That is a question that can only be answered if you understand the positions of all relevant players: the service providers who innovate, the users who may adjust their behaviour, governments that want to shape a transition. Jointly, there are so many paths to lead them to the future.

This project introduces that integrated perspective and looks sharply at how to deal with uncertainty in such a dynamic field of players.

What is the right move to achieve a sustainable future for mobility?

Investigating the behavioural triangle

Our research focuses on the interactions between consumers, private parties and governments. Mobility is about the individual behaviour of travellers expressed in individual choices (demand for mobility) (C), the behaviour of private providers (including infrastructures and services) that results in innovations (supply of mobility) (A), and the behaviour of governments that is expressed by institutions (G).



The whole of the interactions, to be understood as a behavioural triangle, determines the development of mobility. At the moment, the triangle is imbalanced and the mobility transition hardly takes place, if at all. All parties are confronted with choices, whose consequences they cannot foresee, but in which the transition from the mobility system to sustainability depends on their collective selection behaviour. With regard to MaaS, for example, carriers are hesitant, due to uncertain markets (consumers) and government regulations. Governments are hesitant about adjustments to the infrastructure for (fully) self-driving vehicles because the technology has not yet been finalised (providers).

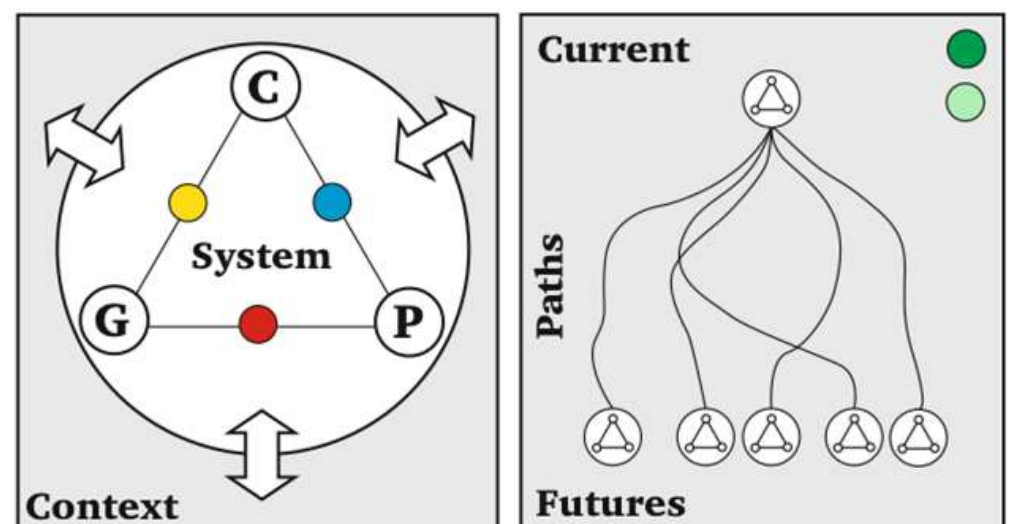
Looking for action perspectives to apply now

You need to have an action perspective now. Waiting is not an option for anyone. For example:

- consumers are faced with a decisive choice when their car is no longer satisfactory;
- private parties are faced with investment decisions and need to determine which collaborations can be useful;
- government parties face choices that are related to climate agreements and investments in infrastructure.

The highly uncertain future of the mobility system is shaped by your choices, in conjunction with those of others. There are still different development paths possible (figure on the right). This research aims to identify potential development paths, to indicate possible tipping points (e.g. a technological breakthrough), and to prepare choices to deal with these tipping points.

This creates focus and also allows us to recommend robust action perspectives (e.g. no regret) under different future circumstances. In other words, this approach better prepares you for an uncertain mobility future.



Will you join us?

We are looking for private and public partners from the industry who want to contribute to the research, for example by sharing their specific knowledge, attending interactive modelling and gaming workshops, participating in surveys and/or financially supporting the research. The project is an ideal opportunity for the partners to exchange views with other actors in the industry and to acquire scientifically sound knowledge. The results of the project can help your organisation to better determine its position and role on the road to new mobility.

Want to learn more?

Various experts are involved in the project, including the following: Prof. Rob van der Heijden, Prof. Vincent Marchau, Dr Els van Daalen, Dr Wijnand Veeneman, Dr Gerdien de Vries, Prof. Etienne Rouwette, Dr Jan Kwakkel, Prof. Henk Meurs, Prof. Alexander Verbraeck. You can contact them via w.w.veeneman@tudelft.nl, v.marchau@fm.ru.nl or c.vandaalen@tudelft.nl.

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