

## Securing Automobility: Cyborgs and the Social Network of Things

Post-Conference Summary

## Workshop Summary

Attendees were prompted to generate new ideas for automobility in the 21st century, grounded in real-world use cases, and then take a first step in identifying the technology needs (including security) of a hypothetical automobility platform.

Skills leveraged in this activity include design thinking, group collaboration, grounding technology stacks in real-world problems, and translating between various stakeholders.

## Activities

- Attendees are presented with a fictionalized day in the life of a smarter city (focusing on transportation) as pre-conference reading
- Learning Lab begins with a brief presentation on the history of automobility, and introduces the key concepts of Multi-Sided Platforms and the Social Network of Things
- Teams are furnished with a variety of profiles (personas) detailing hypothetical human users
- In an interactive, group-work format, participants are asked first to outline what especially complex or challenging mobility needs the profiled users may have in a typical week
- Groups are then tasked with identifying technology solutions that could serve the use cases and user profiles presented
- Finally, groups identify the objects (non-human users) and platforms necessary to deliver those solutions, and discuss the security challenges which arise

## Lessons Learned

- By examining the needs of smart technologies and human users, it is possible to identify new, non-human, users whose jobs require a secure platform for shared decision making and data exchange
- Non-human users, such as machine learning algorithms and realtime location services, bring new needs and security risks to the platforms they rely on for collaboration and communication



[www.causeit.org](http://www.causeit.org)

[twitter: @causeit](https://twitter.com/causeit)

- Fundamental design decisions about orchestration of systems need to be made early in the engineering process
- Regulators and insurers need to be more involved in the process of designing digital mobility systems—and almost everyone needs increased digital literacy to understand how to create such platforms

## Key Insights

- A model of no-compromises shared ownership is possible with a true digital automobility platform, provided the right legal and technical infrastructure is in place
- APIs and common standards are a critical part of the automobility/smart city problem
- Real-time communication between cars is an incredibly difficult problem to solve with current networks
- Protections are needed against spoofing and brute-force attacks on digital automobility systems
- Digital disruptors in the automobility space need support from incumbents—and vice versa—to avoid unintended, potentially catastrophic safety consequences

**More information on the background of the digital automobility problem space is available at [www.causeit.org/automobility](http://www.causeit.org/automobility).**

## Feedback

“As a former product manager, it is interesting to see how starting from the user’s needs can be applied as an engineering exercise.”

“I think it’s really valuable to practice thinking differently like this. As an engineer I usually jump straight to a solution, but pushing myself to spend more time really thinking about the users and their problems got me to imagine more interesting solutions.”



[www.causeit.org](http://www.causeit.org)

[twitter: @causeit](https://twitter.com/causeit)