Introduction to Smart Mobility Ecosystems and Services Minitrack

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This HICSS minitrack focusing on different aspects of Smart Mobility Ecosystems and Services is now organized for the second time. Advances in technology in terms of increased autonomy, connectivity, and electrification as well as diverse mobility business models of shared vehicles are changing mobility and transportation in profound ways. At the same time there is increasing demand for more sustainable transportation. Digital platforms and services are elemental in orchestrating sustainable smart mobility service ecosystems: data that represents accurately, for instance, location of passengers and service providers, weather, usage and maintenance is the basis for new service design. Identification and communication systems that link specific physical things to specific digital addresses offer possibilities to communicate, transact, pay, build trust, sense and activate “things” from the internet – and design novel services based on the data generated. Autonomous vehicles, electric cars and mobility related sharing economy services are all built on platform thinking - as are many services reducing the need for travel to begin with.

The two papers in this minitrack deal with services in this area from different perspectives.

In the **first** paper, “Monetizing Car Data: A Literature Review on Data-Driven Business Models in the Connected Car Domain”, *Felix Sterk, David Dann, and Christof Weinhardt* (all from Karlsruhe Institute of Technology, Germany), analyze the existing body of literature on data-driven business models in the context of connected cars. The reviewed literature is categorized along four dimensions of business models, i.e., value proposition, value architecture, value network, and value finance. In addition to identifying the four streams of literature in the topic area, the authors highlight

avenues for future research on data-driven business models.

In the **second** paper, “Resource Integration in a Vehicle Ecosystem”, *Awatif Alotaibi, Alistair Barros and Kenan Degirmenci* (all from Queensland University of Technology, Australia), build on the service-dominant logic and the enhanced antecedents–privacy concerns–outcomes model to study the concept of resource integration in terms of resource types, the influence of the level of responses, and how these resources are integrated. In the empirical study, the authors conducted interviews with Australian Tesla owners and analyzed their motivations, obstacles and how they evaluate their experiences. The findings are summarized as a construct model that focuses on private resource integration in vehicle ecosystems. The three main components of the model are Low-Level Cognitive Responses (Implicit Trust and Positivity bias), High-Level Cognitive Responses (Attitude towards EV, Altruism towards FSD capability, and Environmental concerns) and Privacy Concerns. Specifically, the findings indicate that users distrust vehicle manufacturers; environmental concerns lead to perceived benefits; altruism, implicit trust and positivity mitigate privacy concerns; and privacy concerns increase the perceived privacy risks. These behavioral responses influence the resource integration in vehicle integration.

Together, these two papers present a snapshot of the emerging issues relevant to the field. Furthermore, this minitrack is intended to provide a venue to present findings, create future research collaborations around the emerging phenomenon and initiate debate on the future of these services.