

F-Project - 2020/21

KHHLVDDSSIRWKDW: Intelligent urban mobility, its impact and future

How Information and Communication Technologies (ICT) can shape urban mobility

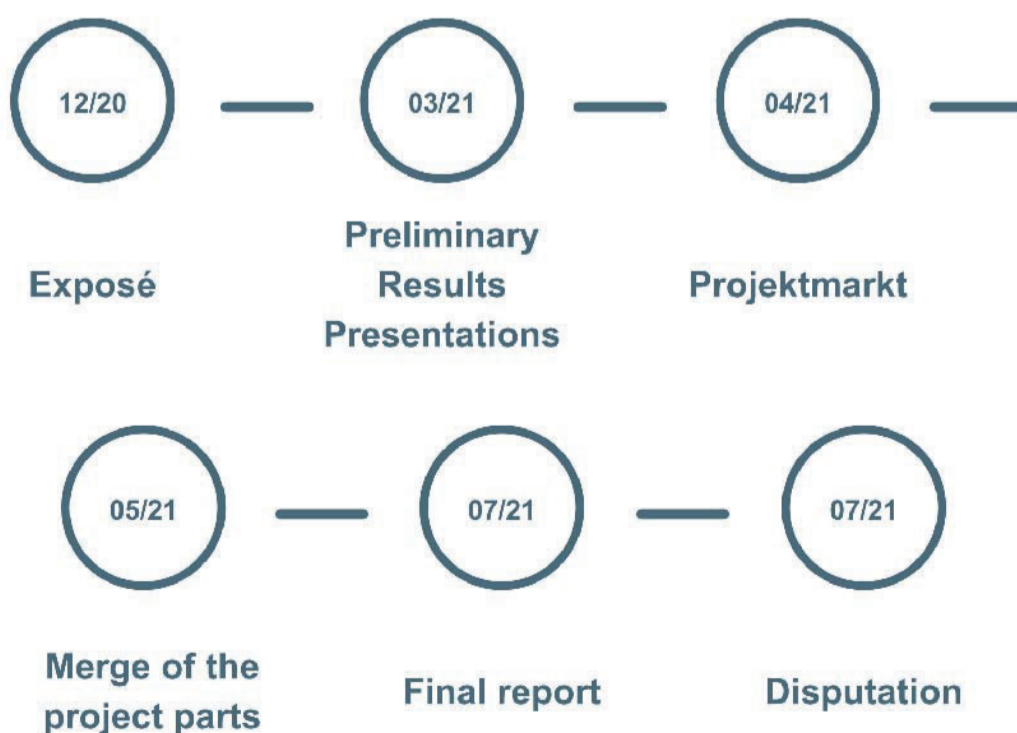
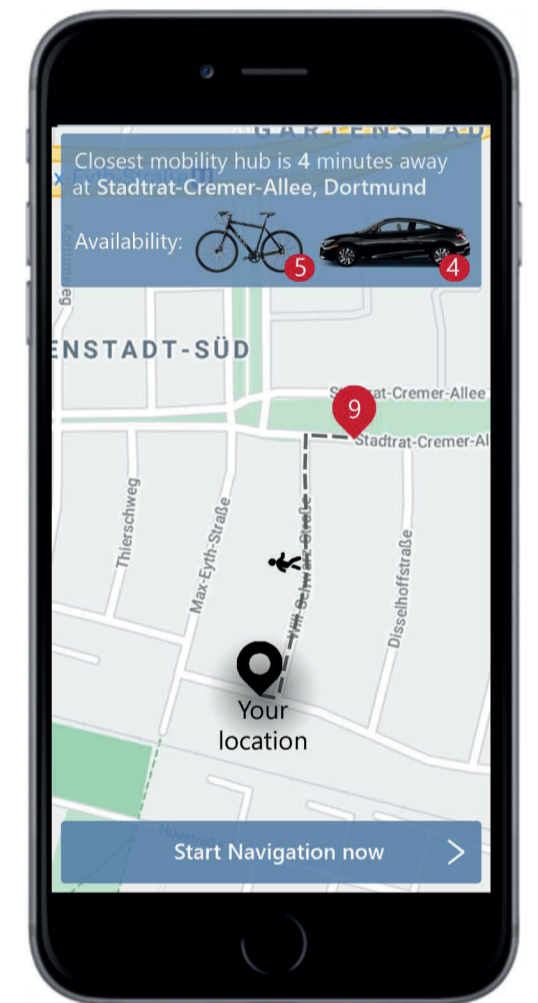
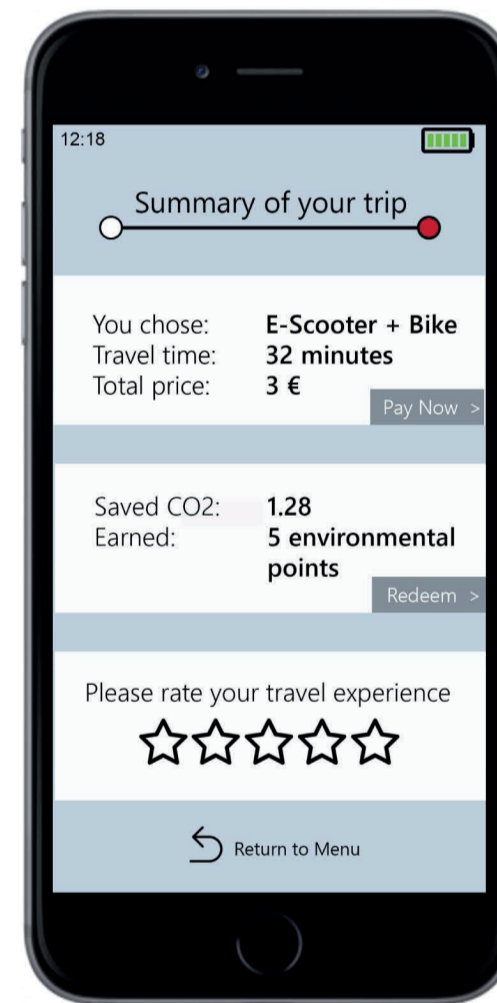
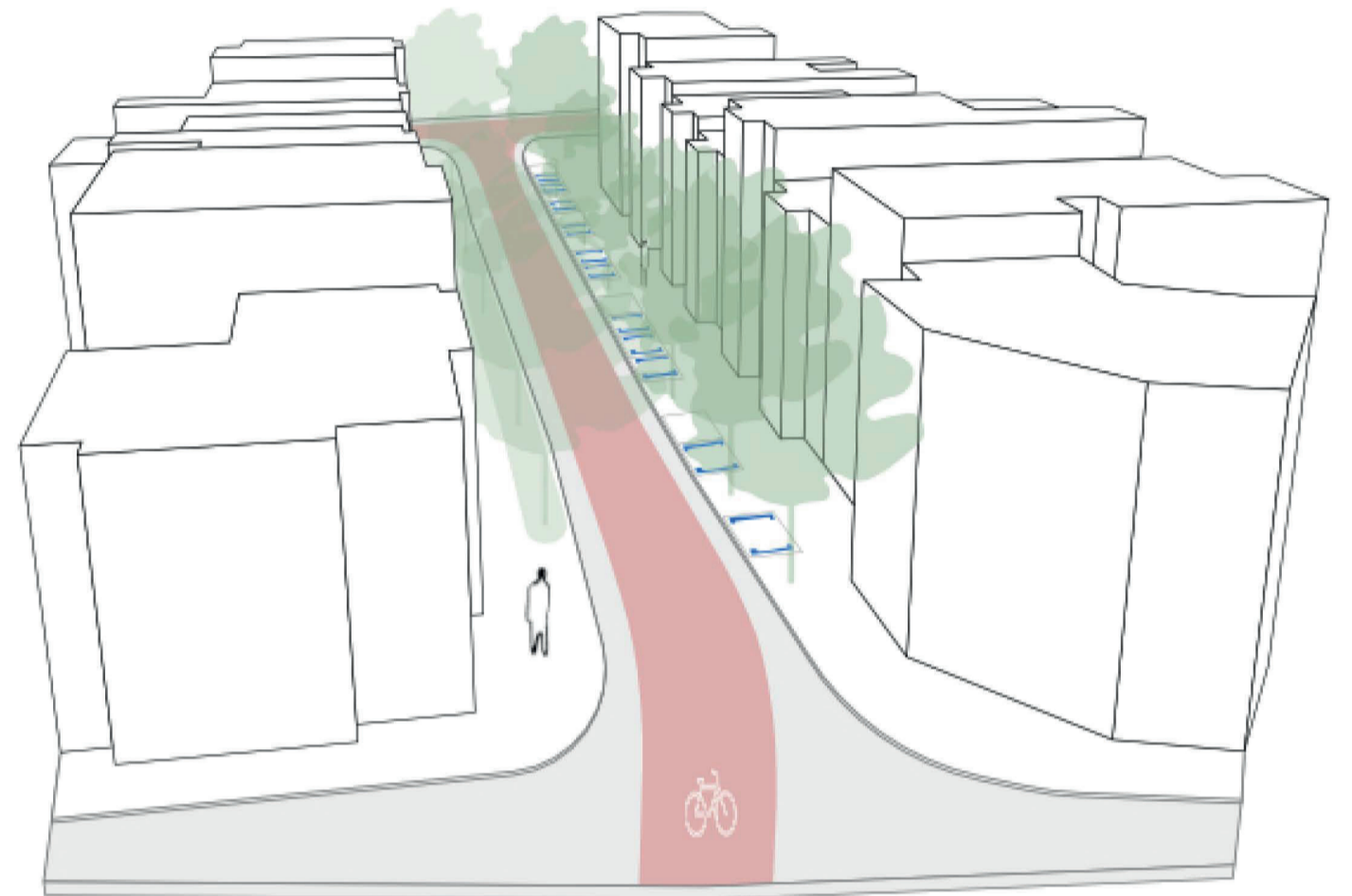
Cities face numerous urban challenges that could be eased with new technologies in the mobility sector. However, transport infrastructure and street space in Germany are often relics from the past, resulting in spatial conflicts between car- and non-car users. In addition, it remains a problem to link inhabitants of a city quickly and efficiently to their wider surroundings. Simultaneously, ICT is playing an increasingly important role for individual mobility and connectivity.

Our project elaborated what changes ICT-based sharing options could bring as an alternative to individual car use. We conducted our research with different methods such as field visits, quantitative surveys and qualitative interviews with residents, interactive online and offline tools and expert interviews.

One field of investigation was Gartenstadt-Süd in Dortmund, where the main goal was to explore which forms of mobility ICT options can be implemented in the area to create a future-oriented traffic concept. For the second field of investigation, Dortmund

Kreuzviertel, we researched about the justice of street space division and the opportunities of ICT and other mobility concepts so that street space can be more accessible to all road users. In order to bring the findings of the two subjects into one context, further research was conducted in Berlin, Papageiensiedlung (Zehlendorf) with similar methods applied.

The results of the research heavily pointed towards ICT-based shared mobility, which could reduce negative impacts of the private-car use and create more livable cities with diverse mobility options. It furthermore mirrors the importance of ICT for urban mobility and its role in creating new, individual solutions for urban areas. Focusing on certain parts of the city or streets, like our proposed mobility hub in Gartenstadt-Süd, or the parking restrictions in Kreuzviertel, provides place-specific solutions to local mobility problems and challenges.



Caption

Conceptionalisation of shared mobility in Kreuzviertel and Gartenstadt-Süd: Reallocated street & design of mobility app

Caption

Timeline with important milestones

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