

Designing the S in MaaS: Behind the scenes and beyond the screens

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The knowledge gap

Current literature on MaaS focuses most often on technological, legislation, regulation and/or user adoption issues. However, less focus has been placed on the design of MaaS, i.e. the design of the actual service offer.

Purpose

This study reports on a MaaS development project,; a small-scale, local MaaS for employees at multiple organizations (B2B-E), all closely located in an urban area. With the service design process in focus, the following questions were posed: What were the key service elements of the service? How were these determined and implemented? What (if any) challenges were faced in the process?

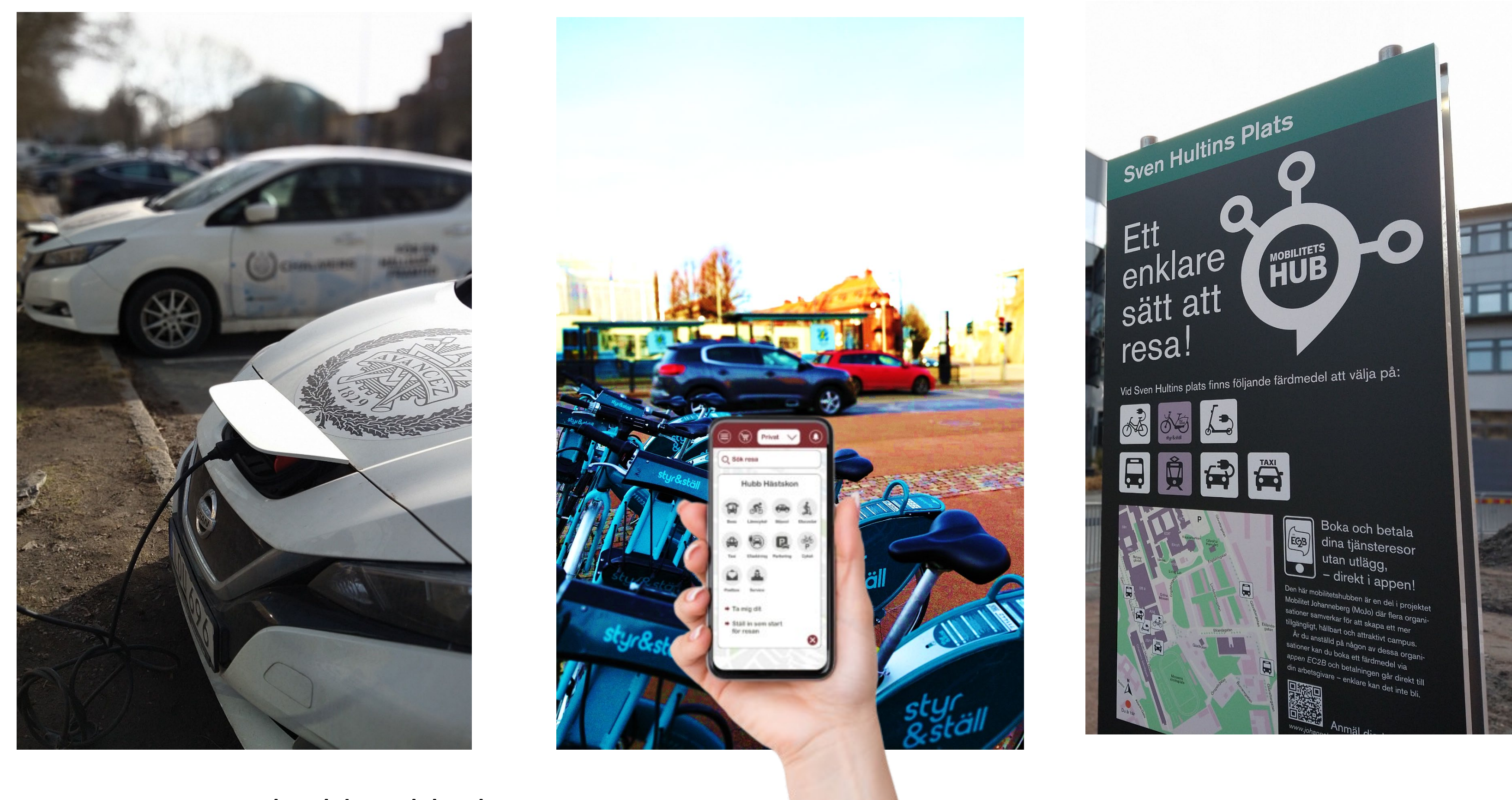


Figure 1. MaaS building blocks

Method

The design and development of the service were studied from the beginning until final implementation over the course of two years. Information was collected through participatory observations of project meetings, a series of stakeholder workshops reflecting on the MaaS design process (see fig 2) and complementary semi-structured interviews with stakeholders (project manager, service /mobility providers, customers) on the same topic.

Findings

- The design and implementation of the service were more complex than anticipated, involving multiple stakeholders with different goals, policies, etc.
- In retrospect, many steps in the service design process were found challenging (fig 2).
- Important steps in the service design process were found missing or completed in the wrong order; e.g. customers and user requirements were not thoroughly enough investigated at the beginning of the process.
- There were misfits between service offer and user needs, e.g. users' actual travel patterns differed from those designed for.
- Not all interaction points in the user journey were considered.
- There was a lack of alignment between the design and content of digital (app, web) and physical (hubs) touchpoints.

- Different actors and organisations - with different rules, policies, priorities, etc. - had power over different elements of the MaaS. Negotiations took considerably more time than anticipated.
- The app was often referred to as “the service” and who should be the MaaS provider became an issue.

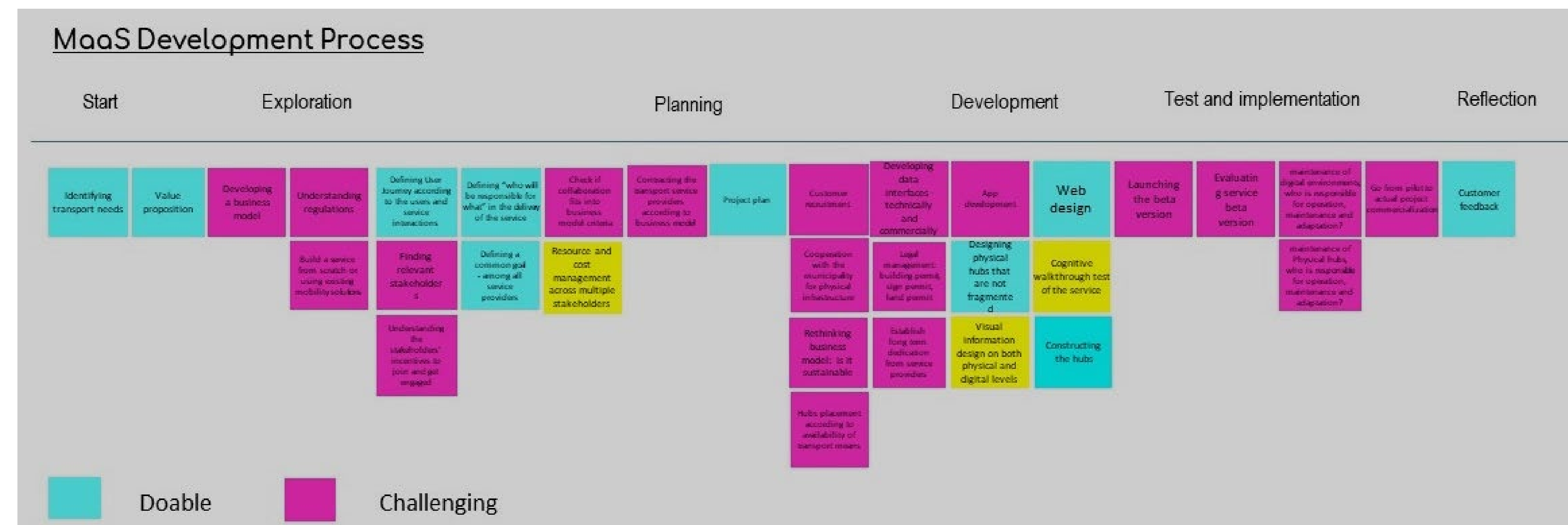


Figure 2. Results from workshop with stakeholders.

Implications

- Service design methods and models tailored for complex services are required for developing MaaS.
- There is a need for MaaS design guidelines with a focus on the service aspect, i.e., the S in MaaS.
- MaaS design should address high level design challenges including service ownership, stakeholder responsibilities, and evolving business models.
- To provide MaaS is beyond developing and administrating a mobile app or similar end-user digital touch points (fig 3).
- The different elements of the service (digital and physical) must be developed in an integrated process.
- Providing MaaS requires both digital and physical infrastructure (e.g. mobility hubs), and hence a unified information design of both.
- A MaaS provider has a wide range of responsibilities beyond developing an app:
 - Negotiating and coordinating regulations and policies
 - Maintaining MaaS physical and digital infrastructure
 - Ensuring universal provision of information

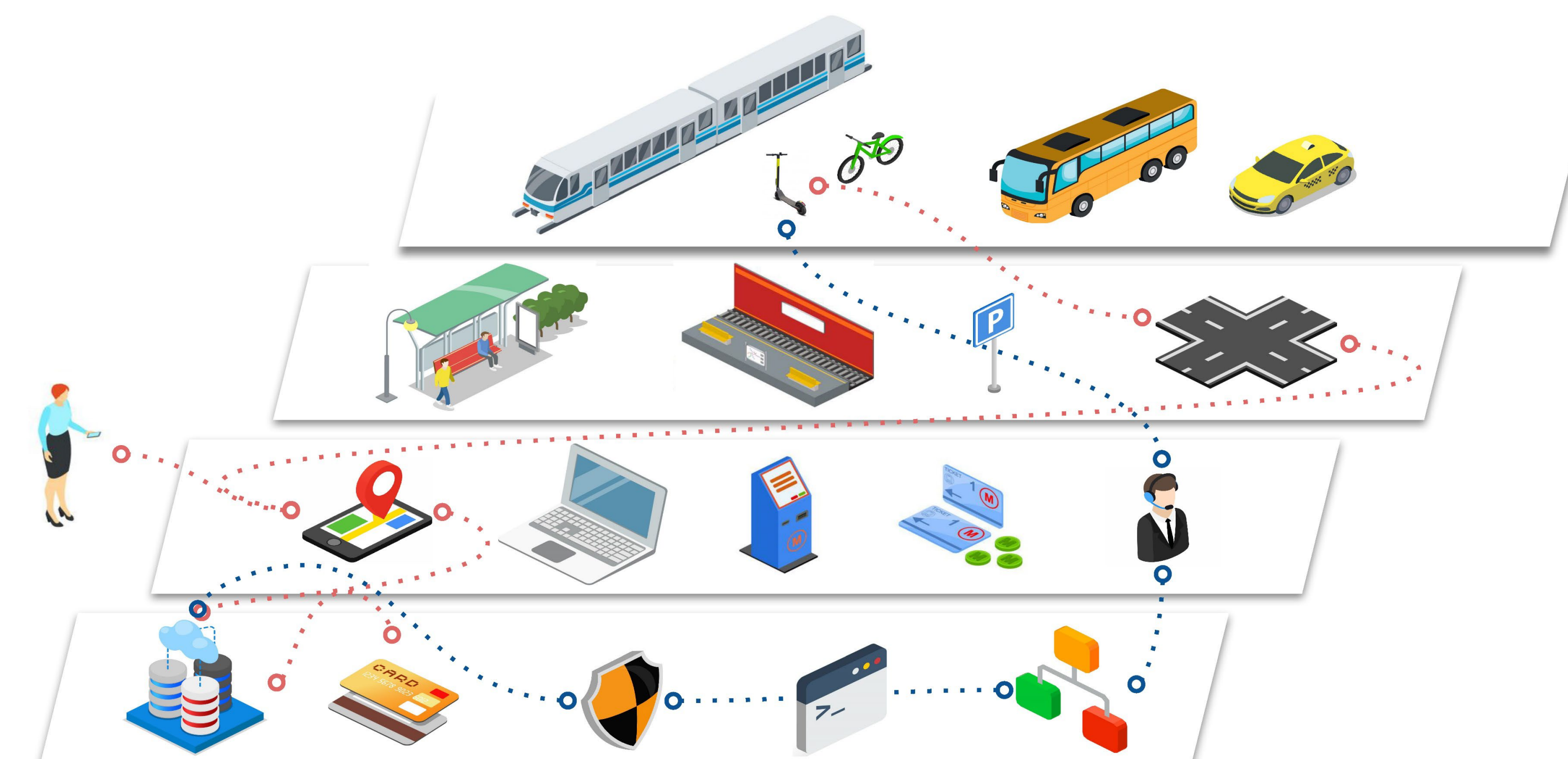


Figure 3. The user's interaction points with MaaS.