Summary

This thesis investigates the design of Smart Product-Service Systems (Smart PSSs), defined as the integration of smart, connected products and e-services, presented to consumers as single solutions to satisfy their needs. The aim of the thesis is to provide designers and design managers with guidelines and insights, which can aid the design and implementation of Smart Product-Service Systems (Smart PSSs) with increased and lasting value for companies and consumers.

To achieve our research aim, two particular perspectives were followed. First, we investigated the aspects influencing the design and definition of Smart PSSs during the development phase. This perspective was further translated into two specific research questions: What set of design characteristics can designers use while defining Smart PSS value propositions? And, How can designers support the design process of Smart PSSs? The second defined perspective is the effect of design decisions on consumers’ experiences with Smart PSSs. The specific research question investigated for this perspective reads as follows: How can designers trigger positive consumer responses with Smart PSSs?

The thesis follows a multidisciplinary research approach, building from theories of different fields, such as operations management, design management, service design, and traditional PSS design. Furthermore, research findings are translated into ten design guidelines (practical Do’s and Don’ts) for Smart PSS design.