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This thesis proposes new ways of understanding and *designing smart things*, through a practice-based exploration of design practices that entangle material-oriented and strategic understandings of smart technologies. The central contribution of this thesis to the field of design research is the development of a new definition of smart things and how they relate to and differ from the things that design has traditionally made. A secondary contribution is the articulation of particular design concerns that surface concerning (and as a consequence of) the proposed definition. These ideas are developed in the thesis by reflectively discussing a portfolio of seven concrete design examples that were created as a part of a research program. These examples are conceptually located within and across the fields of interaction and strategic design. Through the examples and the proposed definition, the thesis outlines a design space of design practices that consider *both* strategic and material-oriented concerns related to smart technology. Finally, it outlines directions that could support the ongoing development of the theory and practice of designing smart things.

The main argument that motivates the thesis is that smart things simultaneously have a personal and infrastructural character that is fundamentally different from the standalone and self-contained objects that have traditionally been the focus of design activity. They are present in everyday life as objects like phones, speakers, and cameras that we act and perceive *with*. However, they also form the environment *within* which everyday practices and experiences take shape, like the networked infrastructure that is required by most apps on the smartphone to function. In addition, smart technologies both *shape and are shaped* by an organisation's practices, strategic vision, role, and identity, making organisations and the challenges they face more dynamic and fluid. This challenges the very notion of *things* in design and presents challenges that range from the need to understand how they can be shaped as material *things* through design, and how they, in turn, can implicate de-materialised *things* such as every day and work practices and experience, organisational strategy, culture, values, and vision.

The definition and conception of smart things introduced in this thesis can enable designers to develop frames that go beyond issues of functions, use, and usability and configure things through situated, materially informed, and strategic sensibilities.