The Logistics sector is currently going through a disruptive change that originates in digitalization's continuous and all-penetrating nature. Digital technologies and the corresponding emergence of various data sources force enterprises to adapt and innovate accordingly. Leveraging data is not only relevant for designing new products and services but to stay competitive. The thesis presents three studies that investigate the use of data in logistical business models.

The dissertation develops two artifacts and one meta-artifact to address these issues. The first artifact is a taxonomy of digital business models in Logistics. It leverages public information from start-ups and systemizes them morphologically. Subsequently, it is a storage mechanism for empirical knowledge on designing digital business models in Logistics. Next, the dissertation derives archetypes from the taxonomy and proposes five superordinate business model patterns (e.g., data service provider) that foster innovation and enable distinction between types of business models.

The second artifact is a conceptually subordinate taxonomy of data-driven business models in Logistics that zooms in on the archetypical pattern 'data service provider'. Contrary to the first taxonomy, it enables in-depth analysis of data-driven business models of a narrow spectrum of objects of study (e.g., considering detailed dimensions such as APIs). Because of the above, the taxonomy provides descriptive insights into the morphological composition and specifics of data-driven business models in Logistics. Last, the dissertation shifts from the analytical descriptive domain to the prescriptive domain and develops design principles for data-driven business models in Logistics based on an interview study with 15 experts. For that purpose, it derives a set of meta-requirements that the design principles address. Ultimately, the design principles are categorized in an ontology of business models. The design principles are codified prescriptive design knowledge that researchers and practitioners can use to design data-driven business models in Logistics more efficiently.