

Distributed ledger technologies (DLT) are said to have great potential not only in the field of cryptocurrencies, but also in the context of enterprise solutions. With regard to the latter, research has been conducted and published on various possible fields of applications, including the field of supply chain management and logistics. Nevertheless, many projects are still in proof of concept and conception stage, not in production stage. As DLT solutions are almost exclusively located in inter-organizational settings, governance problems are one major driver regarding slow technology adoption. Although this problem is described in various studies, as well as scientific literature, there is a lack of concrete solutions and recommendations regarding governance development for enterprise DLT solutions.

The thesis addresses this gap by combining a participatory research approach with situational method engineering. All steps of the research project, from problem identification up to validation, are conducted together with a company from the logistics industry. As a research result, governance components for enterprise DLT solutions are identified first. Furthermore, design principles are elaborated, which need to be considered during the process of governance development. Both artifacts, governance components, as well as design principles are part of the main result of the thesis: a method, which systematically guides the development of a governance for enterprise DLT solutions. Finally, the iteratively developed and validated artifacts are used to create a governance for DLT solutions in the field of electronic transport documents.