ABSTRACT

As blockchain is praised being one of the upcoming game-changing technologies of our time, which leaves marks on various industries, actors of the supply chain are more and more occupied with its unique features, such as transparency, data immutability and data security. Likewise, various stakeholders along the supply chain were affected in different ways by the paradigm changes blockchain can bring to lower existing limitations and simultaneously strengthen trustworthiness within the supply chain. However, in order to be a reliable means of choice for supply chain business models, blockchain needs to improve on its maturity of technological development. This especially applies to limitations on its scalability and network capacity. This thesis follows the multiple case study approach based on the framework of Yin (2014). Two case studies deal with projects from Austria, but from different perspectives on blockchain utilization in the supply chain. While the case study of 'Blockchaininitiative Logistik' is about the digitalization of freight documents, the Rotharium case study focuses on a decentralized track and trace solution. Nonetheless, both cases mostly agree with the stated case propositions, which derived from literature-based theory. This thesis serves as a guide for practitioners interested in applying blockchain solution in their logistics environment and equips the reader with theoretical and practical recommendations.