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BLOCKCHAIN AND SMART CONTRACTS FOR ENTREPRENEURIAL COLLABORATION IN MARITIME SUPPLY CHAINS

Robert Philipp[1, 2], Gunnar Prause[1, 2], Laima Gerlitz[2]

[1]TALTECH University
Ehitajate tee 5, 12616 Tallinn, Estonia
[2]Hochschule Wismar, University of Applied Sciences: Technology, Business and Design
Philipp-Müller-Str. 14, 23966 Wismar, Germany
robert.philipp@hs-wismar.de
gunnar.prause@taltech.ee
laima.gerlitz@hs-wismar.de

Smart contracts are scripts on the top of the blockchain technology. They represent a form of automation by what the layers of intermediaries can be reduced or even completely replaced. Accordingly, blockchain smart contracting systems decrease transaction and enforcement costs as well as process time.

Moreover, we argue, blockchain and smart contracts can facilitate cross-organisational collaboration and their underlying business processes. Hence, they are able to support the integration of entrepreneurs and SMEs into trans-national supply chains by reducing high entry barriers and weakening the dominating position of big players.

This paper discusses the research questions how blockchain smart contracting can facilitate the implementation of collaborative logistics structures and how the integration of SMEs into sustainable maritime supply chains can be safeguarded. The research bases on expert interviews and case studies. The results showcase the potentials of using blockchain smart contracting in the environment of trans-national and multimodal supply chains.

Keywords: Blockchain, Smart Contracts, Maitime Supply Chains, SMEs, Ports, Entrepreneurial Collaboration