

SMART CONTRACTS FOR ENTREPRENEURIAL COLLABORATION IN LOGISTICS NETWORKS

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Abstract. Smart contracts are transactional scripts on the top of the blockchain technology that are created for executing and enforcing legal contracts. Self-executable they check contractual pre-defined conditions and automatically fulfil respective actions or transactions, respectively. Through this form of automation, the layers of middlemen can be reduced or even completely replaced. Accordingly, smart contracts bear the potential to decrease transaction and enforcement costs. In addition to this narrow obvious characteristic, we argue that smart contracts encase the potential to foster entrepreneurial collaborations of cross-organisational business processes and enabling trans-national networks of entrepreneurs and SMEs to enter into new business sectors which are currently still closed due to high entry barriers or to domination of big players. Especially, the logistics sector is well-known for dominating global players that try to limit entrepreneurial activities of small companies by using closed organisational structures and dedicated IT systems. The foundation and the organisational support for entrepreneurial collaborations in such logistics-related networks can be realised by the implementation of decentralized autonomous organisations based on blockchain technology and smart contracting. Accordingly, this paper discusses the research question how smart contracting and blockchain technology can facilitate the implementation of collaborative business structures for sustainable trans-national entrepreneurial activities in logistics networks. Our research is based on expert interviews, surveys and case studies from several EU projects with a focus on the ongoing project “Connect2SmallPorts”. The research results will showcase and assess this potential of using smart contracting in the case of charter-parties.

Key words: *Entrepreneurial Collaboration, Smart Contracts, Blockchain, Logistics Networks*