1st International Workshop on Conceptual Modeling for Distributed Ledger Technologies

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Distributed Ledger Technologies (DLT) have recently gained much attention in academia and industry. Well-known examples are blockchain-based approaches for cryptocurrencies or smart contracts for the automated, distributed and transparent execution of algorithms without intermediaries.

For introducing these technologies in real-life enterprise scenarios, it is however essential to align them with business requirements and show their added value. For this purpose, methods of conceptual modeling can contribute for enabling the communication in organizations, deriving and aligning requirements for technical implementations or even creating code that can be executed using DLT. In the workshop, we were able to bring together researchers working on the interface between conceptual modeling and DLT. For the workshop five peer reviewed, invited talks of well-known contributors in the field were accepted for presentation and inclusion in the proceedings.

The talk "Towards a Process-oriented Analysis of Blockchain Data" of Claudio Di Ciccio emphasizes the need for conceptual modeling to support ex-post analysis of processes executed on blockchains and presents the state of the art and future directions. Striving in the same direction, the talk "Trusted artifact-driven monitoring of business processes using blockchains" by Giovanni Meroni reports on process-monitoring on blockchains based on an extended artifact-centric process modeling language (E-GSM).

In the talk "Towards Modeling Privity and Enforceability Requirements for BPM-based Smart Contracts", Julius Köpke addresses the explicit modeling of privity and enforceability requirements of BPM based applications on blockchains and discusses potential implementation patterns.

On the one hand blockchain based applications can benefit from conceptual modeling. On the other hand, also the modeling lifecycle itself can benefit from DLT. This valuable aspect is addressed by the talk "Storing and Attesting Conceptual Models on Blockchains" of Hans-Georg Fill and Felix Härer. The workshop is completed by a use-case presented in the talk "Blockchain-based Decentralized Validation of Tax Processes" of Filip Fatz,

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Philip Hake and Peter Fettke providing valuable in-sights on real world requirements and applications.

We would like to thank all participating authors and the members of the program committee for supporting the workshop. It is planned to further advance this topic within the realm of conceptual modeling and adjacent disciplines.

<div align="right">Hans-Georg Fill and Julius Köpke</div>

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