A-SIT Technology

E-Government Innovation Center

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Technology Overview Blockchain

The full text is currently only available in the Deutsch version. A translation will follow.

Archived. This content is no longer updated. It remains available for reference.

Source https://technology2.a-sit.at/en/publications/technology-overview-blockchain/

As part of this project, a survey on Distributed Ledger Technologies (commonly referred to as Blockchain) was conducted. The attached document (available only in German) provides an extensive overview on the technological foundation defined as part of Bitcoin, its core functionality, potential applications for payment systems, as well as applications outside of core cryptocurrency use cases.

The blockchain was developed as a central, but decentrally managed, sequential, distributed ledger as part of the cryptocurrency Bitcoin. The blockchain technology enables transactions between parties which do not trust each other without the need for a central, trusted entity. Instead of trust, cryptographic algorithms and mathematical proofs guarantee correct transaction processing. However, the capabilities of blockchain-based systems go beyond cryptocurrency scenarios. Due to the versatility of the technology, the use of blockchain technologies in traditional payment systems, exchanges and foreign exchange markets could result in significant savings. The attached document describes the basics of the blockchain technology as well as potential uses outside cryptocurrency environment.