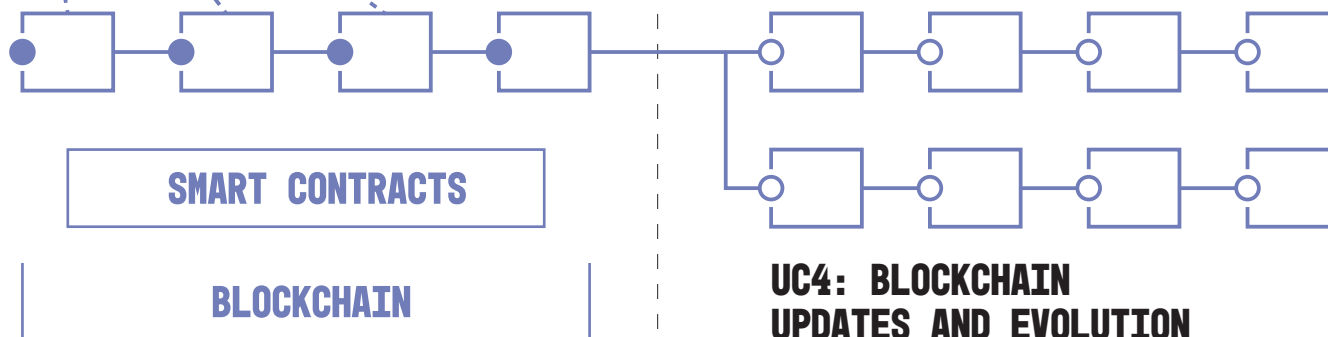


PRIViLEDGE addresses four concrete applications of cryptographic schemes and protocols for privacy and security, on blockchains and distributed ledgers:

UC1: VOTING DATA
UC2: INSURANCE CONTRACTS
UC3: UNIVERSITY DIPLOMAS



Use cases 1–3 use the immutability of DLT for storing data. Use case 4 enhances DLT with mechanisms for consistent updates.

UC1 Verifiable online voting with ledgers
Verifiable online voting with a secret ballot in Estonia, led by Smartmatic-Cybernetica Centre of Excellence for Internet Voting OÜ.

UC2 Distributed ledger for insurance
Private transactions for DLT solutions in the insurance industry, led by Guardtime.

UC3 University diploma record ledger
Authenticated blockchain record for Greek university diplomas, developed by Greek Research and Education Network and Academic Network.

UC4 Cardano stake-based ledger
Stake-based cryptographically secure consensus for decentralised blockchains, led by INPUT OUTPUT RESEARCH LIMITED.

UC4: BLOCKCHAIN UPDATES AND EVOLUTION

PRIViLEDGE

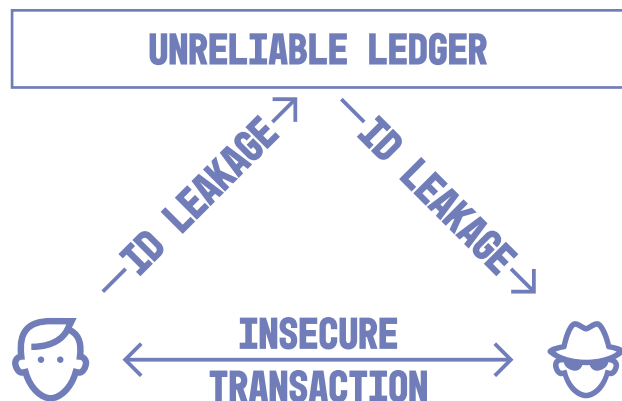
PRIVACY ENHANCING CRYPTOGRAPHY IN DISTRIBUTED LEDGERS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780477.

The PRIVILEGE project aims to develop cryptographic protocols supporting privacy, anonymity, and efficient decentralised consensus for distributed ledger technologies/blockchains. In PRIVILEGE, several European key players in cryptographic research and from the fintech and blockchain domains unite to push the limits of cryptographic protocols for privacy and security. To show concrete examples of the validity of the developed technology four ledger-based use cases have been chosen.

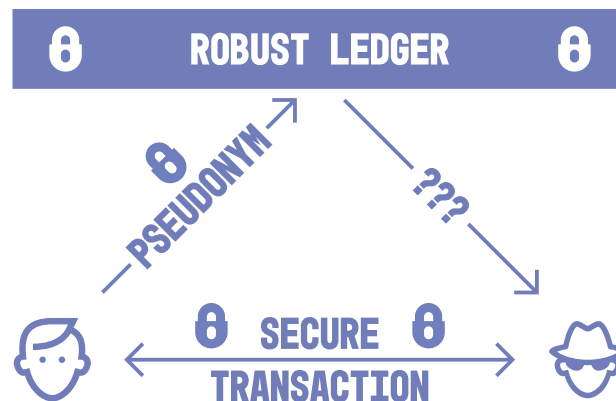
BEFORE PRIVILEGE



PRIVILEGE enhances DLT by improving user anonymity, ledger robustness, and data privacy for the transactions stored on the ledger.

The selected use cases are diverse and represent the principal application domains of DLT; this ensures wide reach and impact of the techniques developed in PRIVILEGE beyond the immediate scope of the project.

AFTER PRIVILEGE



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