UNIVERSITÄT LIECHTENSTEIN

In a token sale offering, digital tokens are issued and distributed to a crowd of investors. Tokens are based on the blockchain technology, a decentralized, distributed and fully traceable peer-to-peer system, with no central, trusted counterparty (Adhami et al., 2018, pp. 2–4).

What makes Token Sales so special?

- The design of the token Issuance process is **hard coded (in Smart Contracts)**
- The wallets (investors) who buy the tokens are fully **traceable.**
- A very high number (>400) during a very short time horizon (<1 year) makes them **comparable**
- Between January 2016 and August 2019, over USD 31bn were raised via Token Sale Offerings (Howell et al., 2020, p. 3926) which makes them **relevant.**

Why ERC20 and which auction settings can be implemented?

- Ethereum allows to write Smart Contracts, a coded contract that follows arbitrary, pre-specified rules which will execute an automated sequence of code only if certain conditions are met.
- E.g. allowing to define under what conditions ownership of an asset is transferred
- Selected settings of a token sale auction: Funding Goal (Hard/Soft cap), Early Bird Bonus, Contribution limits, start and end time, Pricing Strategy, etc.

Example of a Smart Contract:

Acorn Collective Token Sale converted in UML.
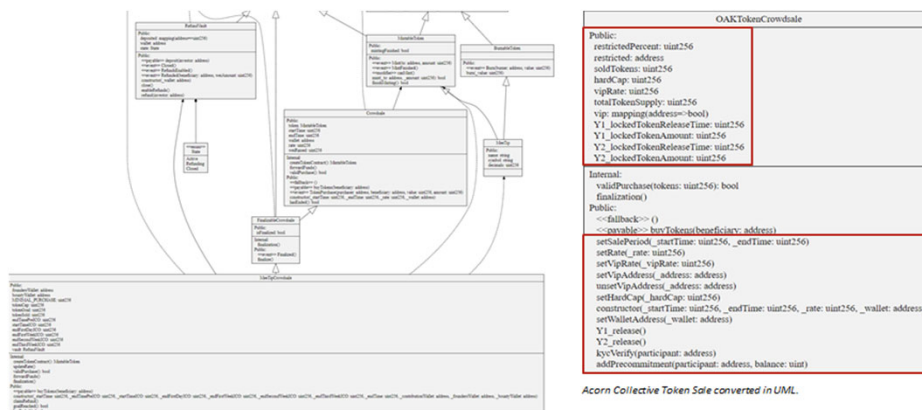
Data:

- **Primary data of more than 27,700 lines of code from 425 ICOs between July 30, 2015 and June 2019**

Preliminary findings:

- **> 25% of all ICOs implemented MultiSig**
- **> 20% of ICOs require KYC or/and Whitelisting**
- **> 19% have a pricing strategy**
- **> 20% have a hard cap and 6% a soft cap**
- **> 15% have implemented a referral or bonus program**

We also find that the quality of our data is much superior to databases such as ICO Bench which mostly rely on the issuer's whitepapers. We have even found contradicting information between secondary data and primary data to the advantage of investors.