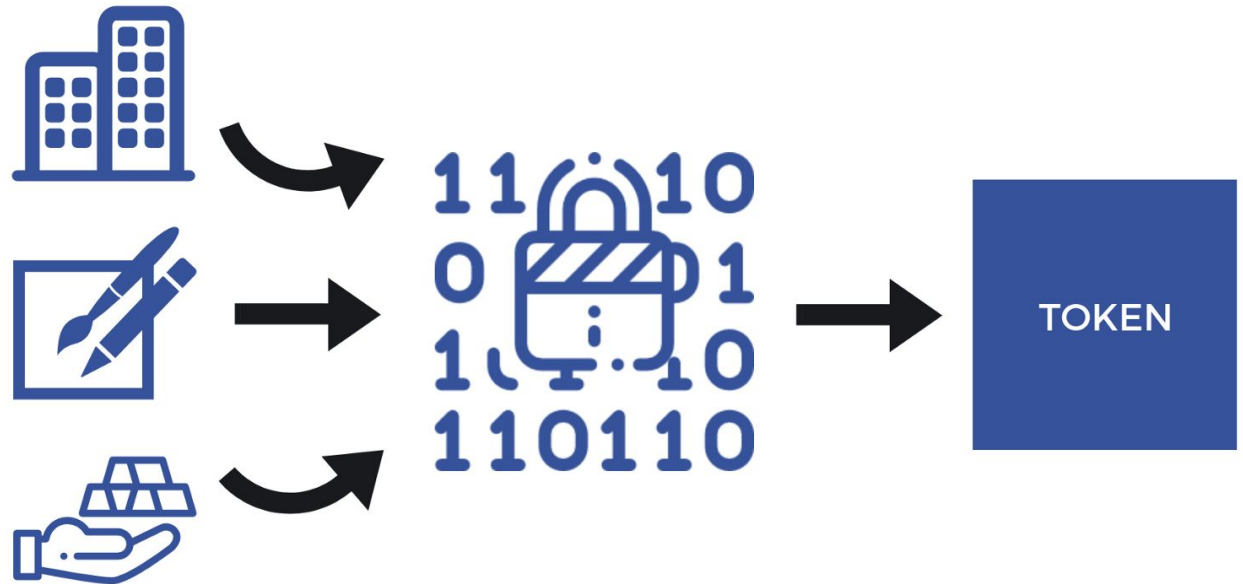


TOKENIZATION

Daniel Martins



CONCEPT: FUNGIBILITY

Property of an asset whose individual units are capable of mutual substitution

One unit of an asset can be substituted for another

Fungible:

- Bitcoins, gold ounces, oil barrels, dollar bills

Non-fungible:

- Cryptokitties, David statue, Copyrights, antique collectables

TOKEN: BEFORE CRYPTOCURRENCIES

Process of replacing sensitive data with unique symbols

They would only contain necessary information

No security data compromised

Use in e-commerce industries and credit card

Payment card industry + Point-of-sales

COIN X TOKEN

Coin

- Operates independently of any other platform
- Bitcoin, Ether, Litecoin, Waves
- <https://coinmarketcap.com/coins/>

Token

- Requires another platform to exist and operate
- Augur, OmiseGo, Golem (all 3 built on top of Ethereum)
- <https://coinmarketcap.com/tokens/>

YAP STONE

Micronesia

The asset: the big stone, hard to move

Ownership would change from person to person

[Article 1](#)

[Article 2](#)

TOKEN

Digital asset that can represent anything

Representation of something in their particular ecosystem

It needs to have some utility

- Casino
- Arcade games
- Night Club payment card
- Internet banking

UTILITY TOKENS

Right to goods or services

Data storage: Storj, Filecoin

Discount benefits: Binance coin

Voting rights: EOS

Smart contracts: Ether

SECURITY TOKENS

Fungible financial instrument that carries monetary value

Any kind of tradable asset

Investors expect profit

In terms of economic function, they are analogous to equities, bonds or derivatives

Exs:

- Apple stocks
- Most crypto tokens on the market

PAYMENT TOKENS

Bitcoin

DASH

Monero

ICO: INITIAL COIN OFFERING

Raising funds for projects

Way of doing so:

- Receiving money through cryptocurrencies
- Issuing tokens

[2017: boom of ICOs](#)

SEC: SECURITIES AND EXCHANGE COMMISSION

Main regulator of the stock market USA

Defines the rules for securities registration

Supervisor of financial activities

Responsible for implementation of laws on stock markets and securities

[Google news search: "SEC regulation ICOs"](#)

TOKEN ECONOMY

Everything can be tokenized

Assets that are paper-based should be tokens instead:

> stocks, bonds, mortgages, private equity, venture capital...

Investing in real estate: idea is to be easy for everyone

Vision:

- You scan a property
- Get its valuation
- Buy a chunk of it

ERC STANDARD

Authored by Ethereum community developers

Describes methods, behaviours, research or innovations

Simple set of functions a contract should implement

Submitted either for peer review or simply to convey new concepts of information

After core developers and community approval, it becomes a standard

ERC 20

Before ERC20 token standard, everybody had to reinvent the wheel

Idea: a standard with a single interface

Simple transferability among wallets and contracts

Exchanges and wallets just have to implement the code ONCE

[Github 1](#)

[Github 2](#)

ERC223

Improvement of ERC20

Before, tokens could be sent to a contract. And lost FOREVER

Millions of dollars lost to this problem in 2017

Eliminates the problem of losing tokens

Allows developers to handle incoming token transactions

Is ERC20 backwards compatible

ERC721

Free, open standard

Describes implementation of non-fungible tokens on top of Ethereum

Most famous success case: [Cryptokitties](#)

Use cases - represent real world assets:

- House, car
- Right of ownership
- Antique collectables

POLYMATH

Decentralized platform that makes it easy to

- raise capital
- create security tokens

ST-20 standard

[Polymath website](#)

USE CASES

Restaurant

Consulting

Company token : lunch

[Gold](#)

Real estate

Art

Bars, music festivals

CREATING AN ERC20 TOKEN

[MyEtherWallet](#)

[Remix](#)

[Token Factory](#)

USING CREATED TOKENS

MetaMask

App ERC20 Token

WAVES TOKEN

Cost of token creation: 1 Waves

Waves price 19/10/2018 = US\$ 2,00

[Waves website](#)

[How to: YouTube](#)

HOW WILL YOU HELP TOKENIZING OUR ECONOMY?