DeFi:or How I Learned to Stop Worrying and Love the Blockchain

Tejaswi Nadahalli

Finance

Finance

Money

Banks

Stocks

(Stock / Currency) Exchanges

PE / VC / Hedge-Funds

Decentralized Finance

Money	Cryptocurrencies/Tokens
Banks	Blockchains/ Lending Protocols/ Vaults
Stocks	Tokens / Synths
(Stock / Currency) Exchanges	Automated Market Makers
PE / VC / Hedge-Funds	Decentralized Autonomous Organizations

Decentralized Finance

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	...ins/ ...otocols/ ...its
	...Synths
(Stock /	Automated Market Makers
PE / VC / Hedge-Funds	Decentralized Autonomous Organizations

Expensive Inefficient Complex

So, why?

~~Decentralized~~ Finance

Permission-less
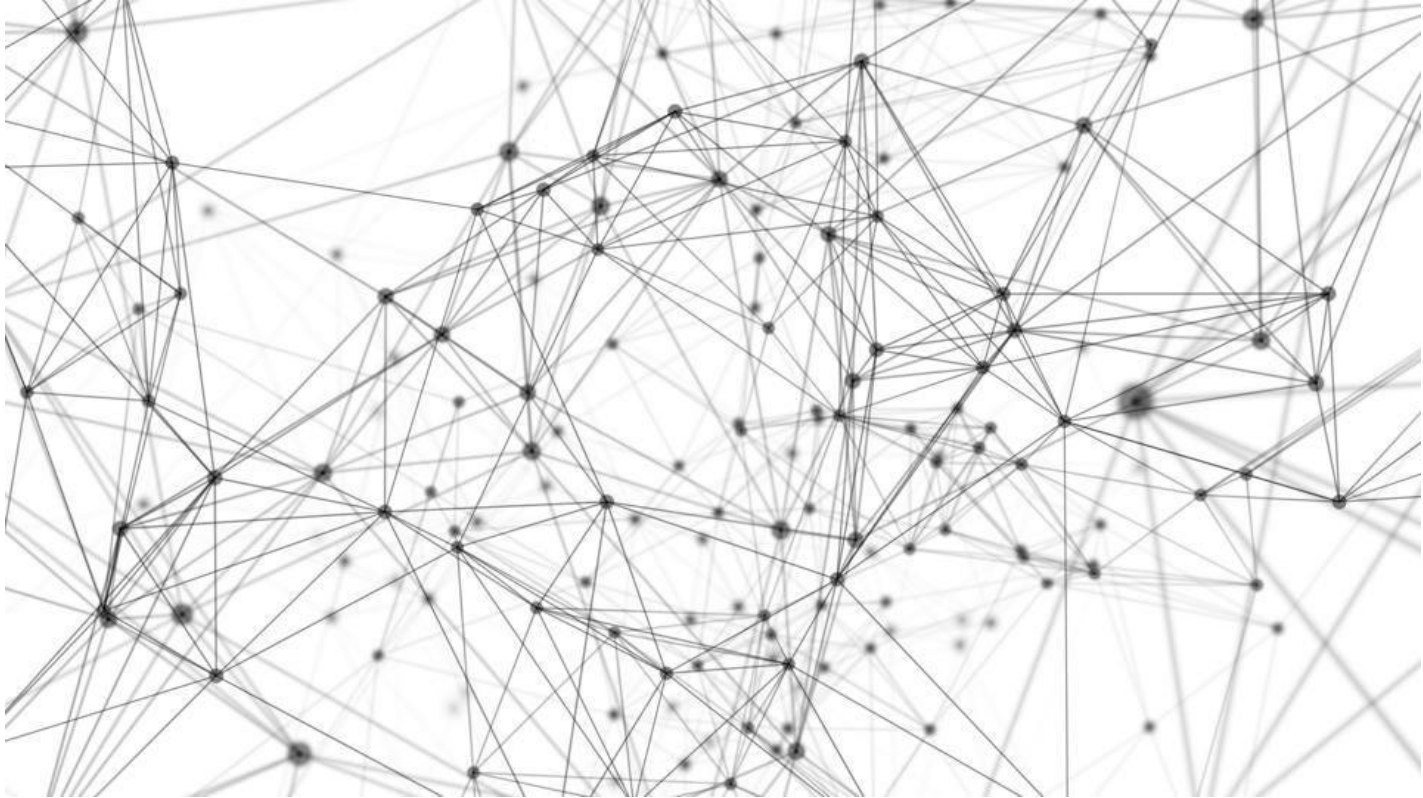
But where exactly?

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The Blockchain!!!

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No, seriously

But where exactly?

Uniswap V2 - 0x5C69bEe701ef814a2B6a3EDD4B1652CB9cc5aA6f

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0x5C69bEe701ef814a2B6a3EDD4B1652CB9cc5aA6f = Hash Key

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Hash Value = Contract Code

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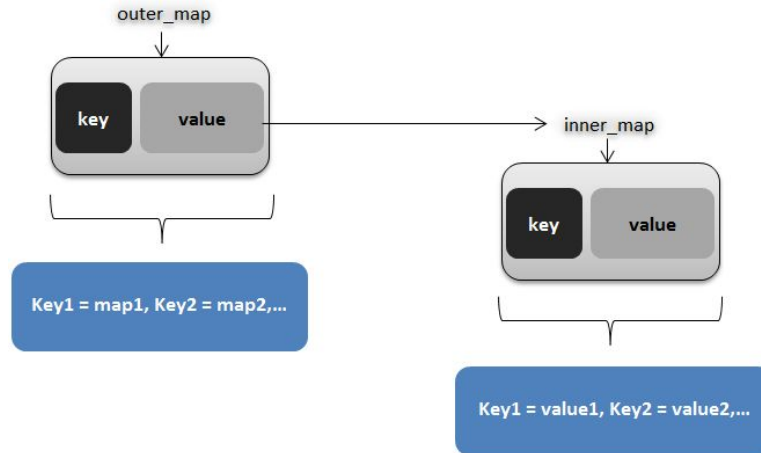Hashmap = Blockchain, which is everywhere

Money

Native to the Blockchain (first level hashmap)

Money

Native to the Blockchain (first level hashmap)

Token on the Blockchain == Nested Hashmaps

Money

Native to the Blockchain

Token on the Blockchain

Example: ERC-20 Token Standard

Money

Native to the Blockchain

Token on the Blockchain
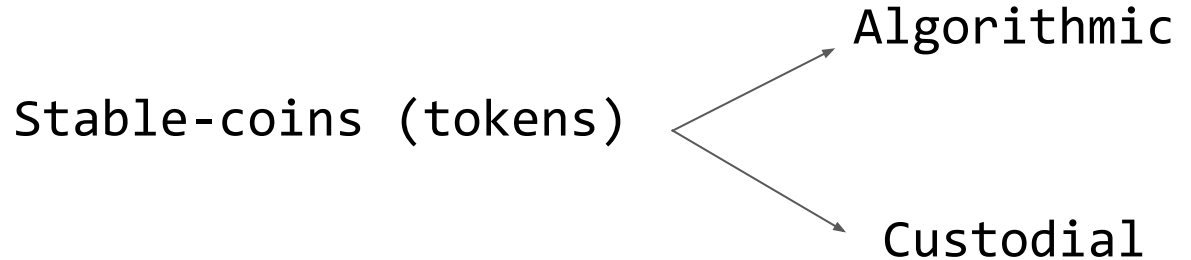
Example: ERC-20 Token Standard

Stable-coins (tokens)

Money

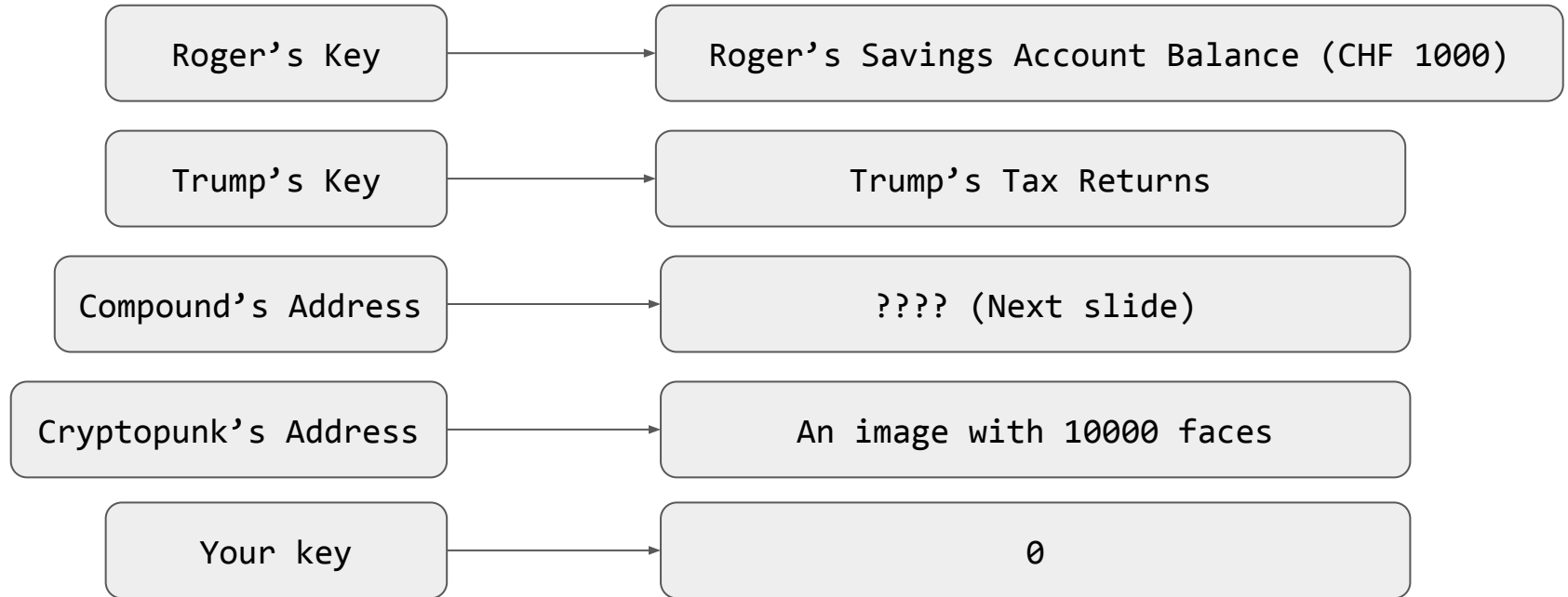Native to the Blockchain

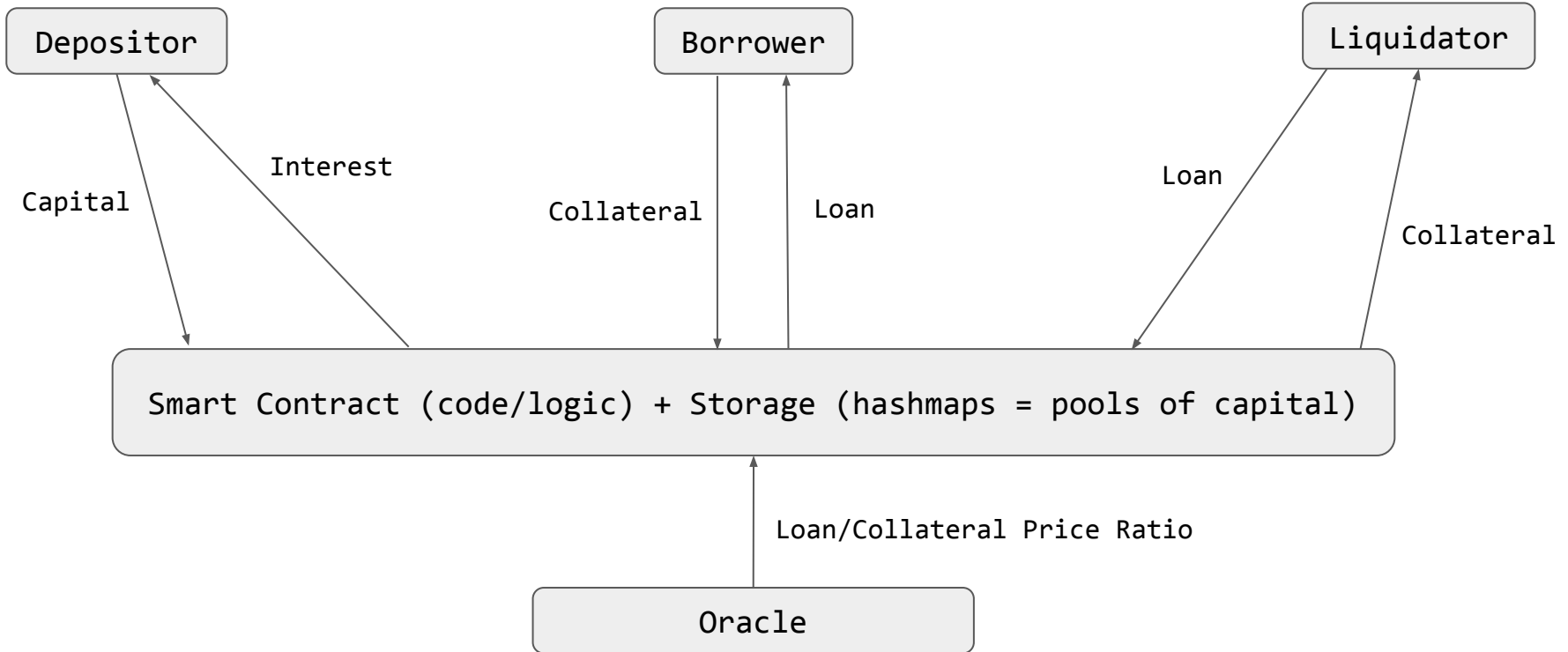Token on the Blockchain

Example: ERC-20 Token Standard

Algorithmic

Stable-coins (tokens)

Custodial

Banks

Blockchain/Smart Contract
or
Hashmaps/Nested Hashmaps

Root Hashmap

Roger's Key	Roger's Savings Account Balance (CHF 1000)
Trump's Key	Trump's Tax Returns
Compound's Address	???? (Next slide)
Cryptopunk's Address	An image with 10000 faces
Your key	0

Lending Protocol

Depositor

Borrower

Liquidator

Interest

Capital

Collateral

Loan

Loan

Collateral

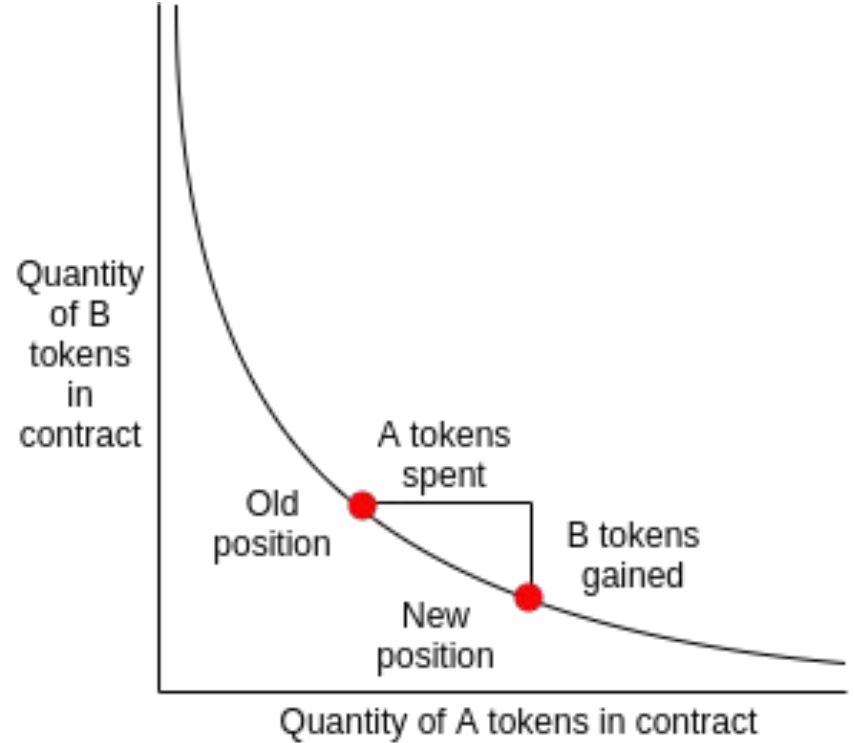Smart Contract (code/logic) + Storage (hashmaps = pools of capital)
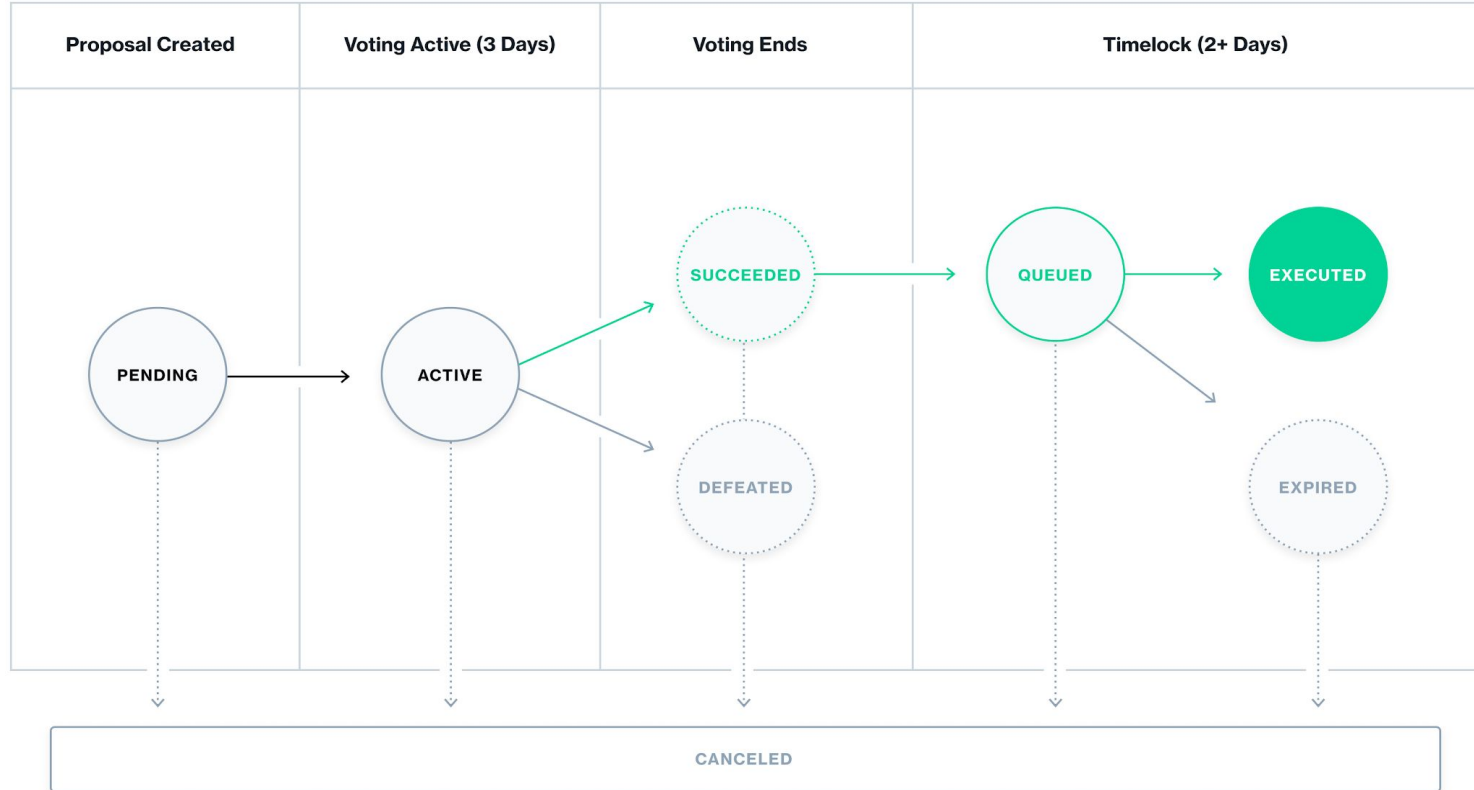
Loan/Collateral Price Ratio

Oracle

Constant Function Market Maker (Uniswap)

A*B = 2500

DAO

What can go wrong?

Trusted Third Party = 💀💀💀

Oracles

Contract Deployer

Stablecoins

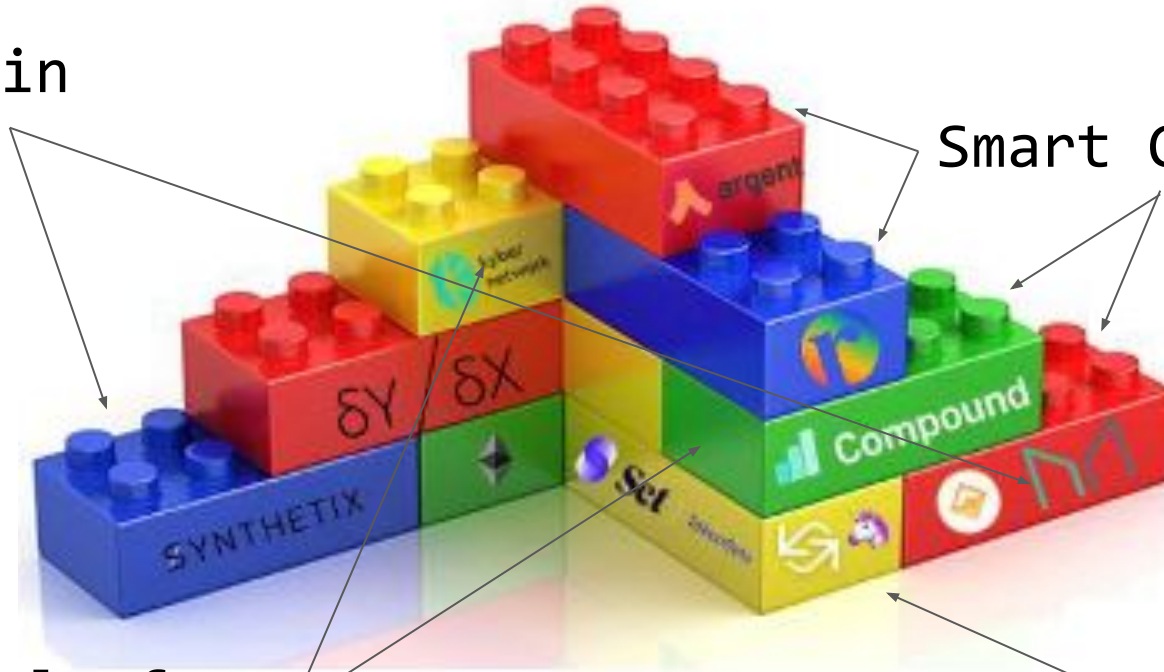# 2021 is the new 2008?

Stablecoin

Smart Contract API

Lending Platforms

Uniswap/DEX

Public Mempool

MEV