

BLOCKCHAIN:

What's Defi?

How to build a defi app?

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PART 1

A BRIEF INTRODUCTION TO

A disruptive innovation - Decentralized financial

Cefi

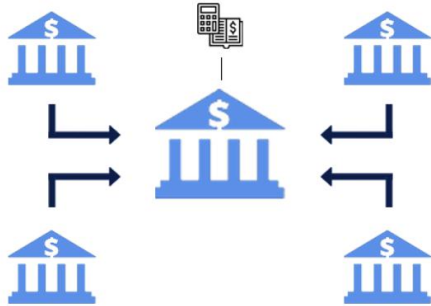
- ◆ CeFi consists of a financial system in which users trust their funds to **third-party entities**. Users of CeFi services essentially trust the people managing the businesses to uphold high ethical standards. This same trust feature is an import from the traditional financial space.
- ◆ **Binance, Coinbase, Kraken**

Defi

- ◆ DeFi is an acronym for decentralized finance - a movement that champions the provision of P2P financial services. DeFi solutions give users greater control over their transactions. They achieve this by eliminating centralizing authorities from the execution.
- ◆ **Compound**, **Maker** and **Uniswap**

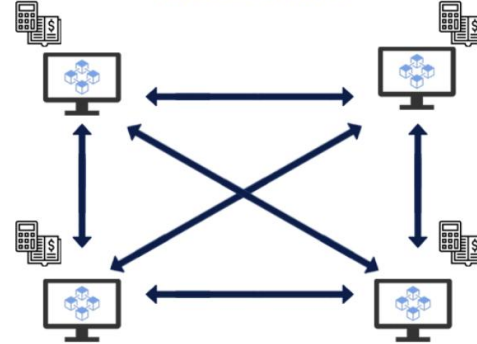
A disruptive innovation - Defi

**TRADITIONAL
FINANCIAL SYSTEM**



A centralized ledger tracks within the financial system

**DECENTRALIZED
FINANCIAL SYSTEM**



A decentralized / distributed ledger is held by all on the network eliminating the need for a central authority

Cefi VS Defi

Cefi

- ❖ Central authority
- ❖ Traditional database
- ❖ Third party involvement
- ❖ Lack of transparency
- ❖ Customer support

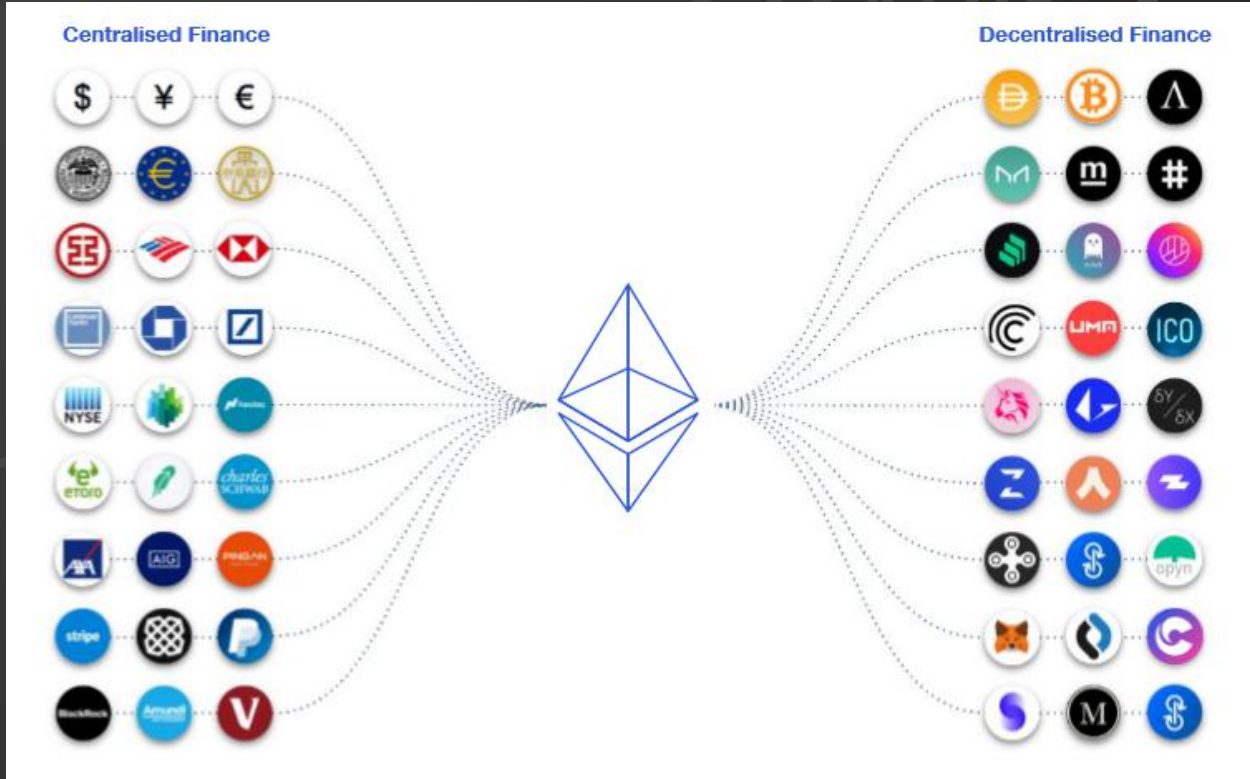
Defi

- ❖ No central authority/ Users have full control
- ❖ Based on Blockchain
- ❖ No- third party involvement
- ❖ Transparent
- ❖ Permissionless
- ❖ Less or no customer support

A disruptive innovation - Defi

The beauty of DeFi is that anyone with a device and internet can have access to financial products.

A disruptive innovation - Defi



A disruptive innovation - Defi

Fast-growing TVL

Total Value Locked (USD)


\$32.78B

Maker Dominance

18.10%

DeFi Pulse Index

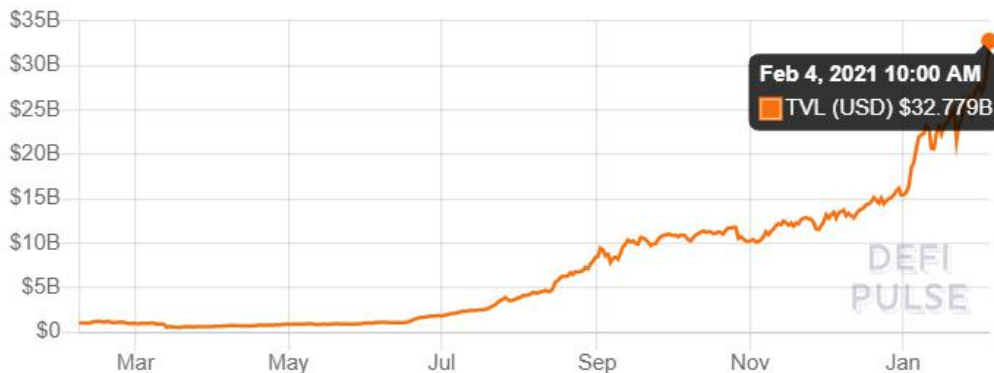
382.29 +44.46
(+13.16%)

Available from [IndexCoop](#)  **Index**

Total Value Locked (USD) in DeFi

[TVL \(USD\)](#) | [ETH](#) | [BTC](#)

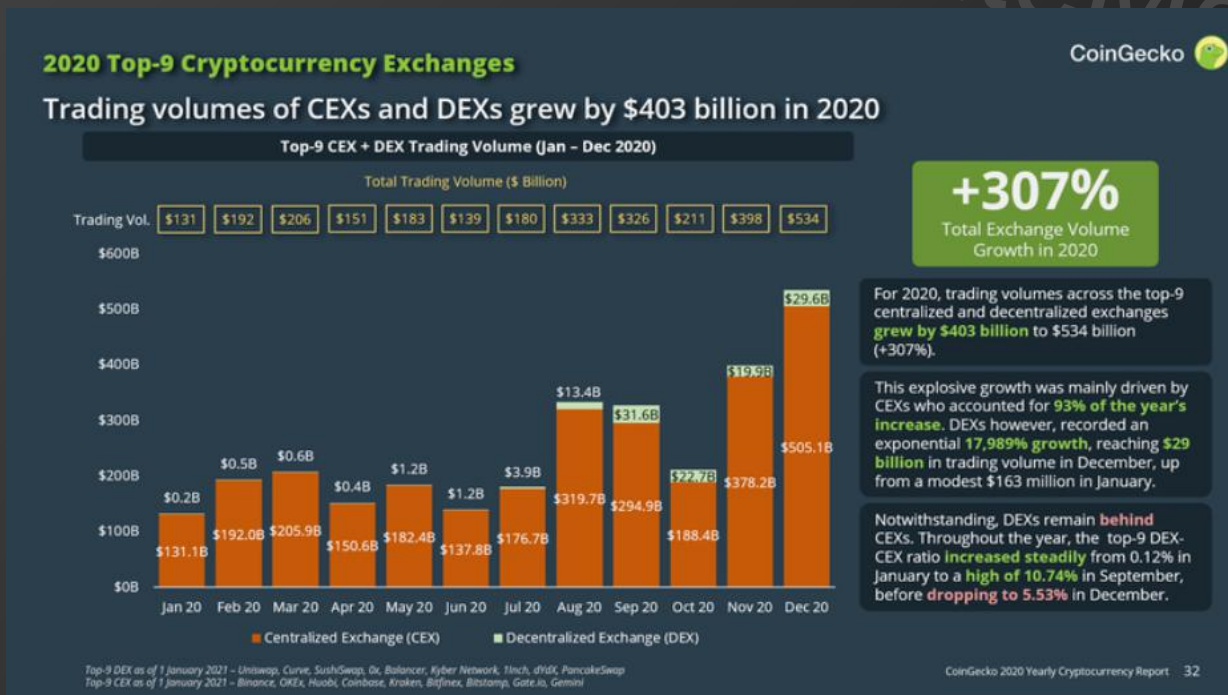
All | [1 Year](#) | 90 Day | 30 Day



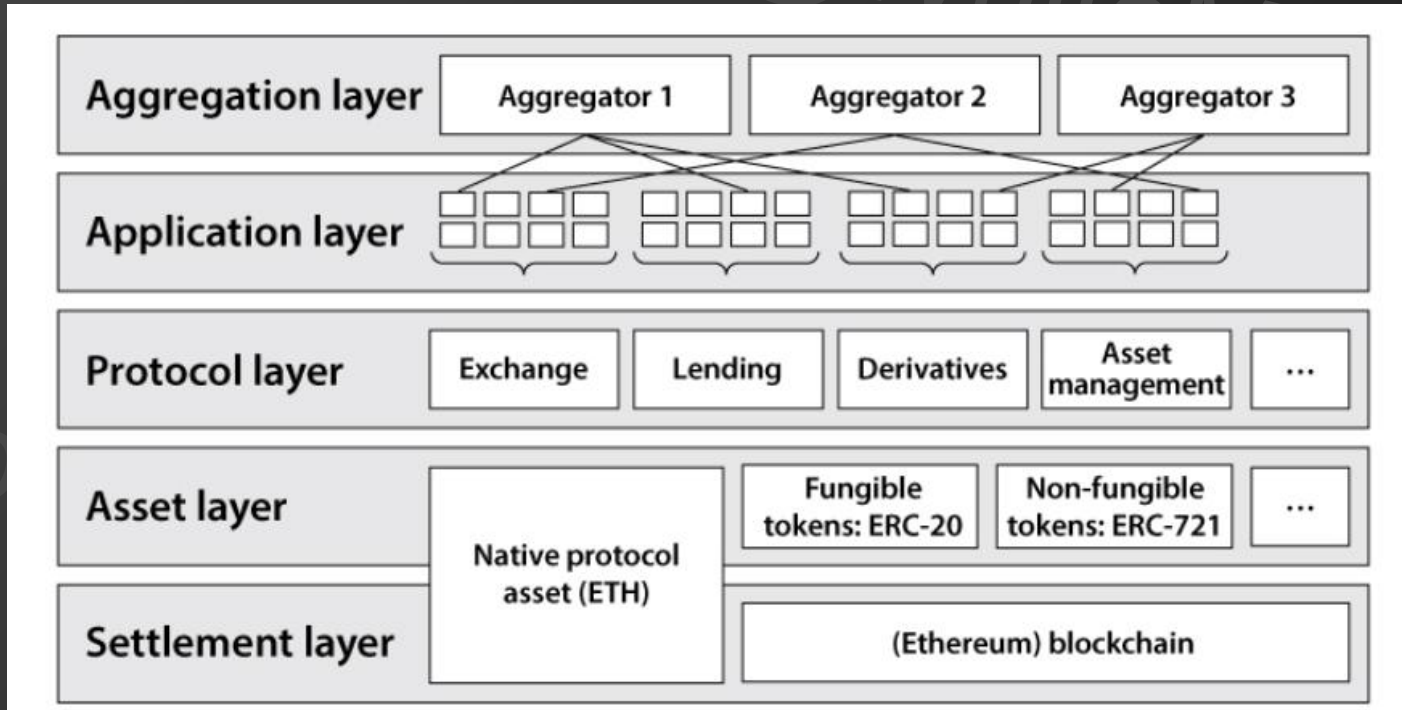
Alpha Homora V2 makes leveraged yield farming AMM pools ea... [Learn more](#)

A disruptive innovation - Defi

Trading volume



A disruptive innovation - Defi



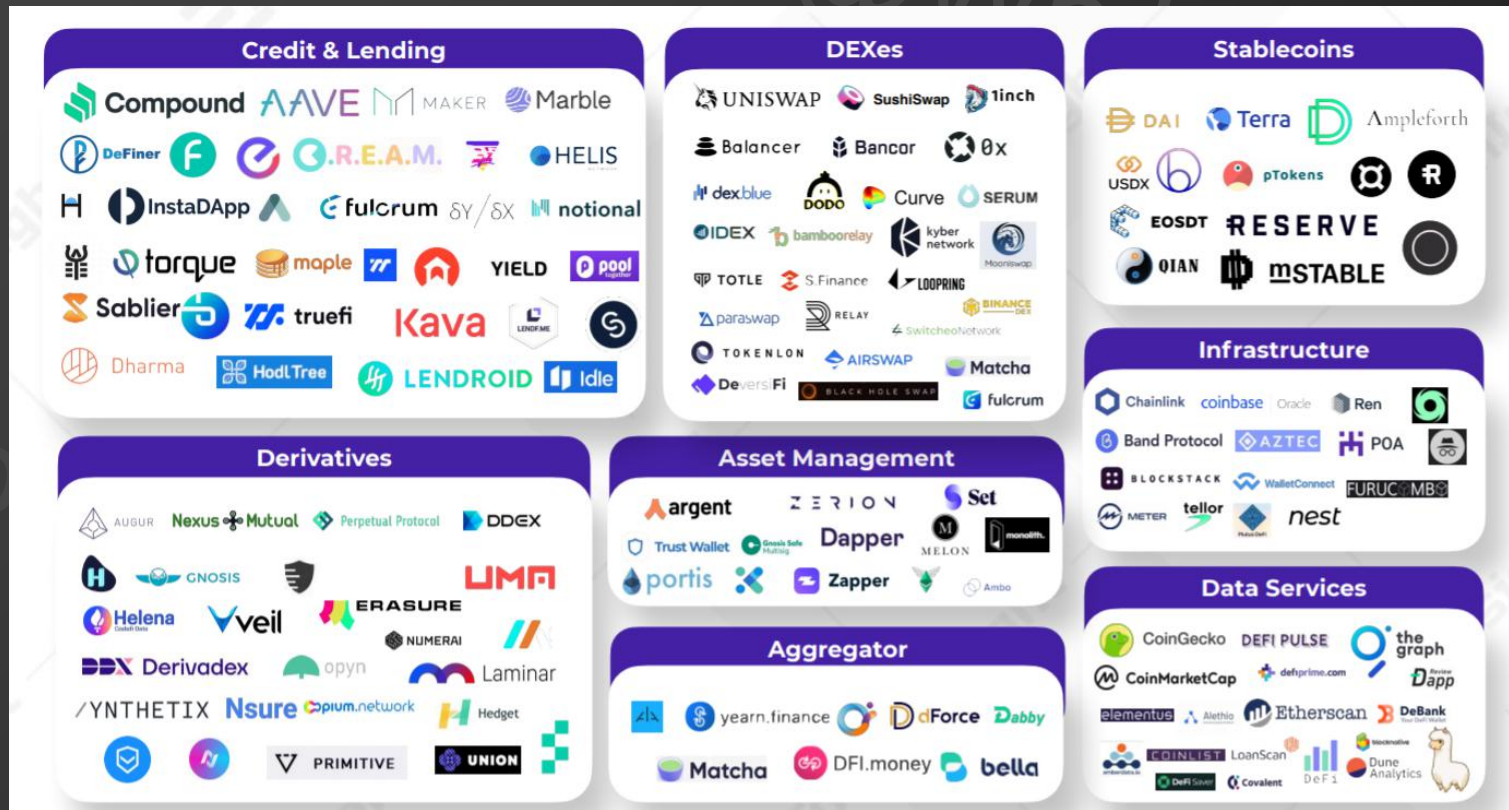
A disruptive innovation - Defi

The best thing about Defi is that you can put it on the chain without maintaining it.

Part 2

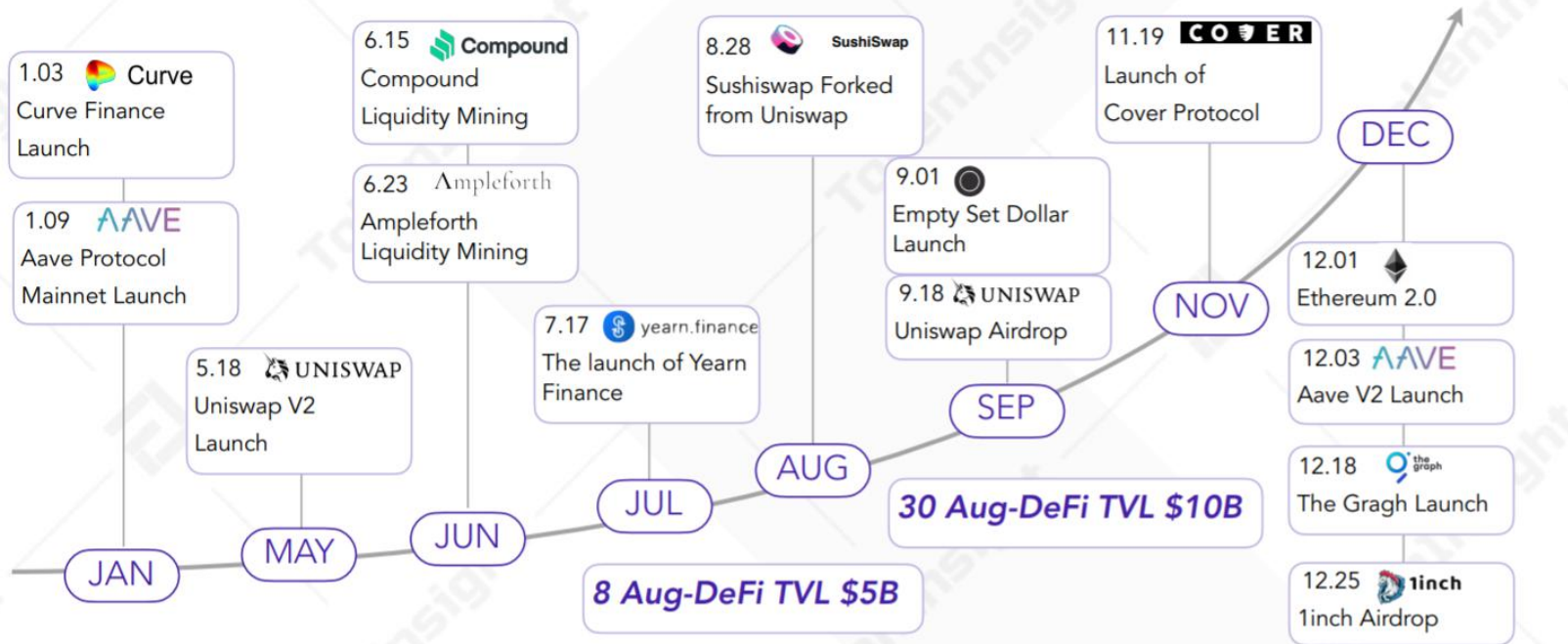
Defi products Introduction

Classification of existing defi products

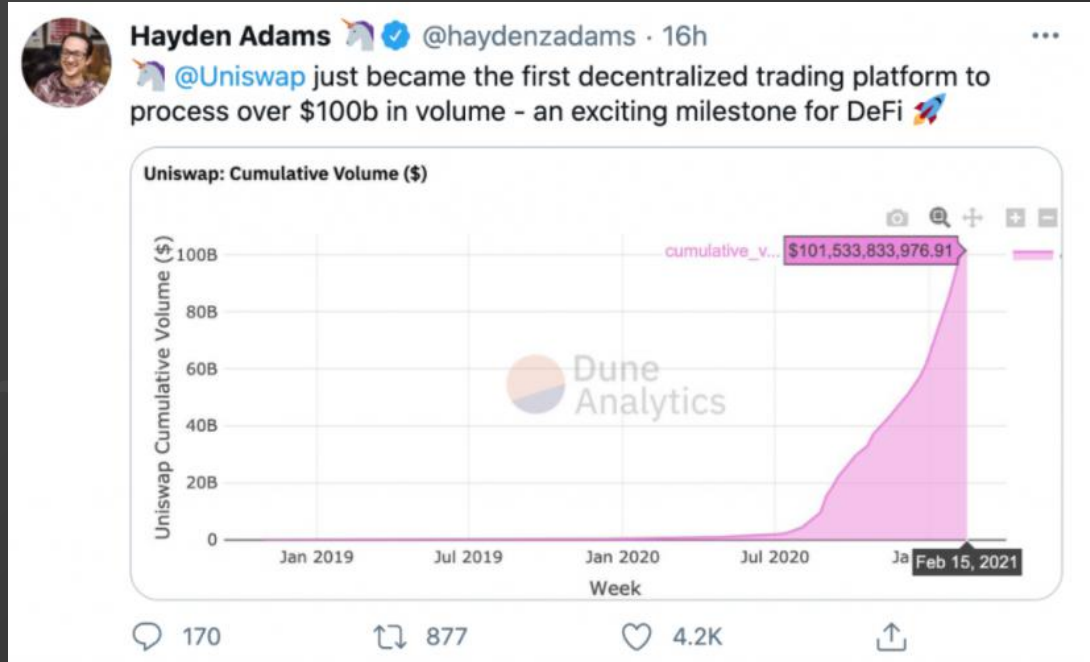


Classification of existing defi products

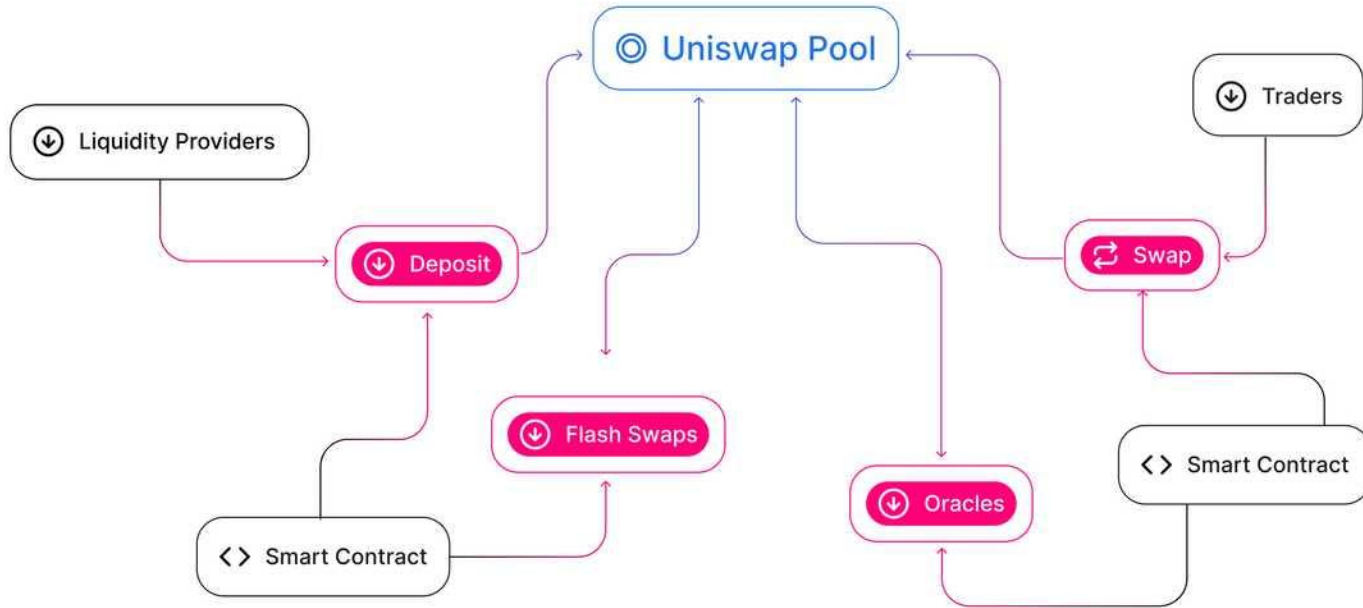
A lot of projects emerged in 2020, and the dynamics of projects are more frequent at the end of the year.



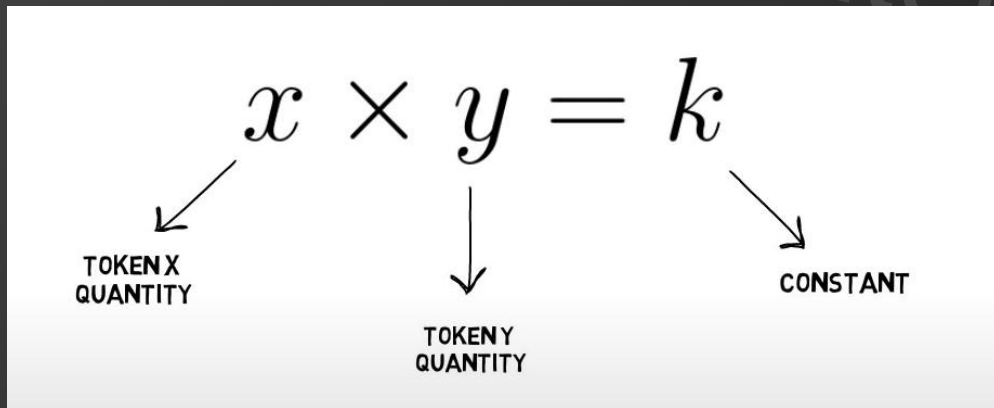
Defi products - Uniswap



Defi products - Uniswap



Defi products - Uniswap



1 400 1*400=400
2 400 / 2 = 200 400

Tom will get $400 - 200 = 200$

Defi products - Uniswap

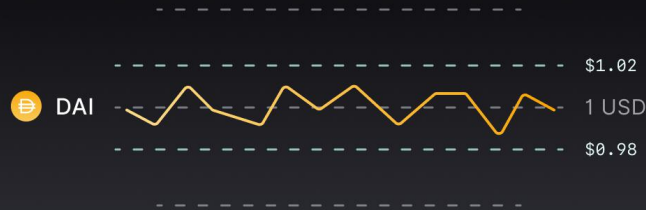


HOW MUCH THE PRICE MOVES?

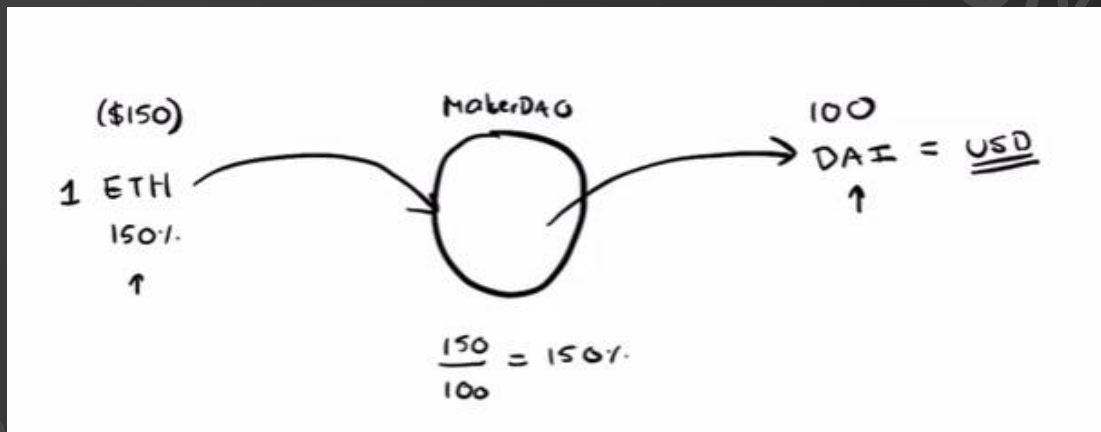
SIZE OF THE TRADE



Defi products - Maker



Defi products - Maker



Simply put, Dai is a stable coin minted from more than 100% of synthetic assets.

Defi products - Maker

Liquidation

Undercollateralized Vault

Each vault in the MakerDAO system has their own collation and margin requirements for liquidation.



Collateral Auction

Anyone can submit Dai bids to liquidate the vault. Within the specified time frame, highest bidder wins.



Auction result

The bid Dai should cover the Vault Dai and liquidation. Or the Vault will be punished, and if there is a loss, the person who holds MakerDAO needs to bear it.

Part 3

What will we build today?

ERC-20

One of the most significant Ethereum tokens is known as ERC-20.

The ERC-20 token standard is evolved from the discussion of the EIP-20 proposal, and gradually becomes the popular fungible token standard on ETH.



ERC-20

Contract content



Optional

name

symbol

decimals

Mandatory

balanceOf

transfer

transferFrom

approve

allowance



Mandatory

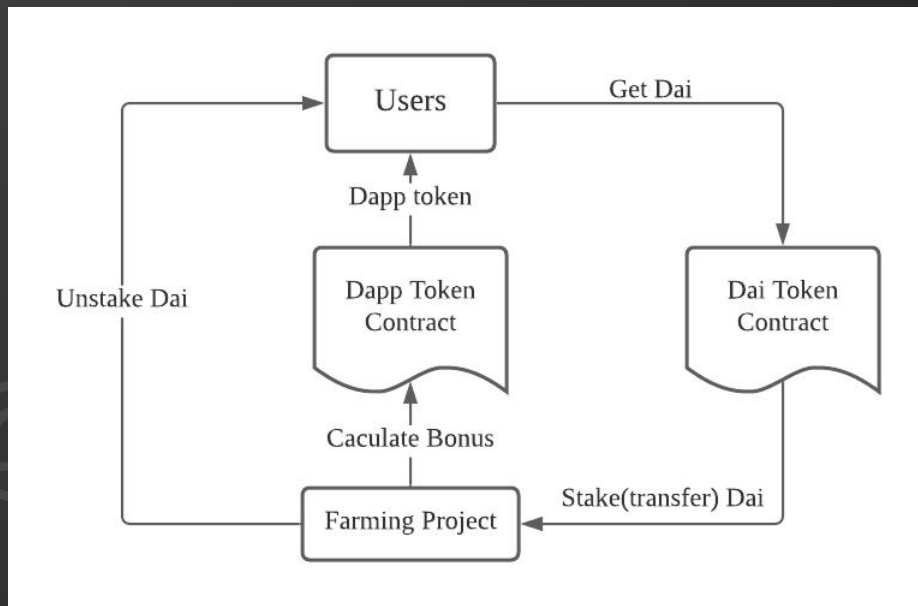
Transfer

Approve

Staking & Farming

Farming System Intro

Dai Token and Dapp Token are both ERC-20 tokens.



Staking & Farming

Farming Contract Function

stakeToken

Users transfer their Dai token from their address to the contract address. And the user's address will be added to the hasStake array.

issueToken

Project manager will interact with this function to distribute the dapp token. The number of dapp token received by the users is related to the number of Dai they staked.

unstakeToken

Users can interact with this function to withdraw their Dai token. And his isStaking status will be changed to false.

What's Defi?

How to build a defi app?

Thank you for your attention !

Yi Lei

**Community supervisor,
WhiteMatrix**



ChainIDE
Swift, Simple, Smart